Wednesday, 21 July 2021

(10.00 am)

DR DIANA MARION WALFORD (continued)

Questions by MS RICHARDS

MS RICHARDS: Good morning.

Yesterday when we were looking at the special meeting of Reference Centre Directors on 13 May, I think we explored the fact that the Galbraith letter and recommendation hadn't been circulated to those directors.

Can I then just ask you about its circulation more widely. It would appear from the documentation and evidence that the Inquiry has that Dr Galbraith's recommendation and report never reached ministers. First question: whose decision would it have been as to whether to provide that to ministers or not, both in terms of division and hierarchy?

A. Well, I'm not clear whether actually somebody would have taken a view that ministers needed to see that document until it had been discussed in the Committee on Safety of Medicines Biological Subcommittee because basically ministers would obviously have wanted to see what the experts were going to be saying about it.

It would have been for Med IMCD to make sure that the paper went to Medicines Division. Now, this

was in a position to comment on the paper fully before the experts had had a look at it.

Q. Then, just going back to the question of whose role it might have been to alert ministers, if you can just help us understand what the process might have been. So Medicines Division you think would have been the part of the Department that would have been seized with thinking about that?

A. Well, not necessarily. I mean, I think that Med IMCD -- Dr Field at Med IMCD could well have decided that it would be a good thing to put it up. I guess one of the problems is that there's obviously a gap in the correspondence. I don't know about the discussions that Dr Field purported to have with doctors, the *ad hoc* discussions. I just have this lacuna in the evidence and I really can't help you very much more with that, I'm afraid.

Q. Can I then ask you to look at ARCH0002544.

Now, this is a document from Dr Peter Foster to Mr Watt dated 15 July 1983. There's no evidence to suggest that this is a document that would have crossed your desk in 1983 --

A. Right.

Q. -- or, indeed, I think the Department's desk at all, but I just wanted to draw your attention to it and

thought had occurred to me as well when I was going through the papers, and I didn't see, in any of the correspondence from Mary Sibellas which reached me, that the paper had been copied, when Dr Galbraith sent it, to anyone in Medicines Division. So I don't know if Medicines Division was aware but I would certainly say that that would have been the place that it should have gone and that obviously, after discussion in the CSMB, ministers should have been told what the outcome was. I haven't found any papers which suggest that they were.

Q. That I think is certainly where our understanding is, Dr Walford.

Looking at it now, do you think that ministers should perhaps have been told what a leading public health doctor working within the Public Health Laboratory Service was saying to the Department?

A. I think it would be perfectly reasonable to have told them, yes.

Q. But actually, more than perfectly reasonable, the right thing to do to tell them?

A. I think it would have been difficult to tell them without some sort of forward advice, if you will, and basically I don't think any of us was in a position -- even had I been in charge of giving it to ministers,

then ask you about it.

So we can see Dr Foster is seeking to summarise "key points concerning AIDS" from the meetings that had taken place in Stockholm -- so that's the World Federation of Haemophilia.

He refers to information presented by Dr Evatt of CDC. At paragraph 1 we can see he refers to the total number of confirmed cases in the States being "marginally higher than would be predicted from an exponential growth", so to be "consistent with the view that AIDS is a transmissible agent".

Point 2:

"Epidemiology strongly suggests a transmissible agent ..."

He refers to transmission between spouses, et cetera.

He then refers to there being evidence, epidemiological evidence, of "three stages to the disease". So essentially a long latency period.

If we go further down the page, we can see then, in paragraph 5:

"Predicted mortality is 100 per cent in 3-4 years for those with Kaposi's sarcoma and 100 per cent in 25 months for those with opportunistic infections.

"6. Haemophiliacs are in the group which develops opportunistic infections."

So a very bleak picture indeed in terms of mortality.

Then he refers, at paragraph 7, to cases of confirmed cases of haemophiliacs, said to be 16 in the USA, half of whom are now dead. Then five in Europe, although he seems to refer to Canada as part of Europe, but in any event five cases, and he refers to the three Spanish, the one Welsh. He refers to other delegates, seeming to think there may be more cases than this outside the USA.

Point 8 refers to, of the 16 cases in the States, one being a mild haemophilia B case, and that the haemophilia A cases encompass mild, moderate and severe.

Then if we go over the page, he refers to AIDS still being located mainly in key urban areas in the USA but:

"... the haemophilia cases are generally located in non-AIDS areas. This is strong evidence for transmission by [Factor] VIII.

"10. Common lots of [Factor] VIII concentrate seem to be 'rare or non-existent'."

Then he refers to the Welsh case having received

products from Armour and Immuno as well as NHS. That is paragraph 11:

"Other suspected European cases had received products for Hyland ... and Hyland and Immuno ..."

Then if we go to what he says after paragraph 12, he says this:

"My general impression was that there was a concentrated attempt from USA delegates to play down the situation. The risk to haemophiliacs was said (a number of times) to be one in a million (though simple arithmetic suggests 1 in 1000). It was stressed that the causes of death for USA haemophiliacs is ..."

Then we can see the figures there set out.

"... ie. keep on taking concentrates.

"However this data is for 1982; data for 1983 could well be different."

Then if we look at the last paragraph:

"With the first haemophiliac case only 12 months ago and a possible incubation period from 1-3 years a number of delegates (mainly European) were clearly uneasy and felt that we may still only be seeing the tip of the iceberg."

Obviously, as things turned out, that was

a correct feeling.

First of all, would it have been helpful for information of this kind to have been shared with the Department, because this is an on-the-ground update of what's being said, perhaps in a more informal setting, by CDC?

A. Yes, obviously.

Q. Do you think if it had been made available to the Department it might have shaped or influenced your thinking to any different extent?

A. I honestly can't tell. Basically, it still remains the case that the situation is, as it were, unproven, but there's a strong epidemiological evidence that AIDS is transmissible and I'm not sure, because we've just gone through this again quickly, what it was saying about Factor VIII concentrates. Is there some sentence in there specifically?

Q. Well, I think if we just go further up the page -- sorry, I don't have my hard copy to hand --

A. Oh, yes.

"Common lots of [Factor] VIII concentrate seem to be 'rare or non-existent'."

Yes.

SIR BRIAN LANGSTAFF: It's the last sentence of paragraph 9, isn't it?

MS RICHARDS: Yes, "strong evidence for transmission by [Factor] VIII".

A. Right.

Q. We'll come later in the course of the morning to the line that the Department used, the line to take the "no conclusive proof".

A. Yes, indeed.

Q. This might, for example, have caused, earlier than in fact happened, a shift in that thinking, did it not?

A. And the date of this Stockholm conference that was reported here by Dr Watt?

Q. I can't remember the date off the top of my head without looking. His memo is 15 July 1983. I think the chair is going to be able to tell you momentarily what the exact date of the World Federation of Haemophilia conference was.

SIR BRIAN LANGSTAFF: I'm just looking to see. I'm not sure I have it noted -- it's June '83. 30 June.

A. The reason I was asking about the date is because -- I mean, this was information which we didn't have but there was information in an article in The Lancet, or at least an editorial in The Lancet, about April 1983. I've been provided with that by the Inquiry and I think -- I don't have the reference immediately to hand --

MS RICHARDS: I can find it for you if you'll give me just a minute.
A. It's the words "tip of the iceberg" that reminded me that I've seen that Lancet article which actually refers to the "tip" of the "iceberg", but then goes on to cast quite significant doubt on how certain matters were in relation to transmission.
Q. It's PRSE0002723, and it's the column on the right-hand side. I think you might be referring -- well, the last sentence of the first paragraph refers to:

"... the T cell population abnormalities commonly seen in haemophilia may be the submerged part of an iceberg of which AIDS ... is the clinically obvious 'tip'."

Then if we go to the last paragraph on that column there's reference to Desforges in the middle paragraph and then I think you may then be referring to the last four lines:

"The links suggested by the American workers must be regarded as not proven. Whilst careful surveillance must continue, the reported cases do not constitute a strong argument for a change in treatment policy."

A. Yes.

Q. So that -- our understanding is that that's an editorial written by Dr Peter Jones in fact.
A. I didn't know that.
Q. I think that's what --
SIR BRIAN LANGSTAFF: There is, just if you remove the -- that's it. Thank you. The actual phrase "tip of the iceberg" is used, isn't it, higher up? Yes.
MS RICHARDS: The end of the first paragraph.
SIR BRIAN LANGSTAFF: It's talking about -- can we just get rid of the -- thank you. It's:

"In the March issue of Annals of Internal Medicine three articles describe further cases ... An accompanying editorial by White and Lesesne suggests that the T cell population abnormalities commonly seen in haemophilia may be the submerged part of an iceberg of which AIDS (they mention 7 cases altogether) is the clinically obvious 'tip'."

So that may be where that editorial mentions "tip" of the "iceberg".
A. Thank you.
MS RICHARDS: This is, I think, early April; so 2 April 1983.
SIR BRIAN LANGSTAFF: 2 April.
A. Yes.
MS RICHARDS: It obviously pre-dates any knowledge of the

Bristol case, which we'll come on to later. It pre-dates the World Federation of Haemophilia meeting that Dr Peter Foster was talking about.
A. Right. That was in Stockholm.
Q. In Stockholm. So if we just go back to Dr Foster's memo, ARCS0002544, if we go to the second page, three points I just wanted to emphasise from this. First of all, Dr Peter Foster's assertion this is strong evidence for transmission by Factor VIII; secondly, his impression that there's a concerted attempt by the American delegates to play down the situation; and then, thirdly, his sense, shared sense of some of the delegates, that this is the tip of the iceberg.

That, coupled with what is reported as being the very high mortality rate -- and we see the mortality rates, at that stage, in the cases of haemophilia patients -- might that not have led the Department to take a different view?

A. I can't say. I really can't say. But I wonder if I could actually draw your attention to a paper that the Inquiry gave me last night, amongst the papers that I sometimes get at the end of the day.
Q. Yes, I'm sorry about that.
A. I have it here because I think this is a very interesting paper. It's July 19, 1983, so almost

contemporaneous if you will, and it's a paper from -- which was a meeting of the Blood Products Advisory Committee of the National Institutes of Health in America, a very prestigious organisation.
Q. Just pause there. I'm going to try to ascertain what the URL is. I don't recognise it ... oh, yes, I know what you're talking about, Dr Walford, my apologies. So it's a document, in fact, I think the Chair wants to ask you about. BAYP0004674.
A. I thought -- as I say, I read it for the first time last night -- I thought that this was quite a comprehensive exchange of views between relevant experts in America. It didn't certainly convey to me the impression that there was some sort of concerted attempt to play down the potential dangers, if you will, more the amount of uncertainty that existed between all these experts.

And I seem to recall in the summary -- yes, I've highlighted it for myself.
Q. Page 3.
A. Paragraph 9.
Q. Bottom of the page, Soumik.
A. Would you care to read that out?
Q. Yes.

"It was very clear that confronted with this

complex problem the Committee felt that balance must be struck between theoretical risk of the product to recipients against the need for an uninterrupted supply of a life-sustaining therapy. As several members of the panel stressed, it would be undesirable to distribute and use a lot of product which incorporated plasma from a donor with a definite diagnosis of AIDS. However, signs and symptoms suggestive of AIDS (eg persistent lymphadenopathy, night sweats, etc) would not be persuasive enough to dictate a recall of product. Enough concern was expressed about the question of supply that the Committee was unwilling to advise the agency to take an unalterable regulatory position calling for an automatic recall which would likely jeopardise product availability. Adding to the uncertainty with regard to the decision of whether to quarantine or recall a product lot, several Committee members and other participants expressed the opinion that the risk of AIDS from transfusion of plasma derivatives or use of AHF concentrate has not been definitely established. They cited the fact that nearly all the haemophiliacs with AIDS had used material from differed lots, and that many other haemophiliacs receiving these same lots had not developed AIDS. They stressed the need

for studies to followup recipients of blood products derived from AIDS patients. The consensus of the Committee was that the action to be taken for each incident of inclusion of plasma from a donor who might have AIDS into a product pool should be decided on a case-by-case basis."

A. So I merely recall this because I read it so recently and there is quite a dense discussion between the various participants. There's a participant from the National Haemophilia Federation, there are some fractionators, there is Dr Bruce Evatt of CDC, a very influential character and I think that this certainly doesn't suggest that there was a well-formed view that the personnel in America knew what they should be doing about it and they have a degree of uncertainty that we ourselves were under at that time.

SIR BRIAN LANGSTAFF: Certainly, as I read the paper, the issue there was whether or not there should be a requirement for any product made from plasma, to which someone suspected of AIDS had contributed, should be recalled, and it might be thought, mightn't it, that the earlier decision taken in March, when the FDA recommended to pharmaceutical companies that they did not distribute any product which had been made from plasma collected before 24 March in the USA,

the international implication of that, I suppose, would be any product made before 24 May should be recalled, one would have thought.

A. Any product made before --

SIR BRIAN LANGSTAFF: 24 May -- March.

A. March.

SIR BRIAN LANGSTAFF: Because --

A. One assumes much of it would actually have been, by then, in patients rather than be available. I think the sort of gravamen of what they were wanting to say in relation to those new regulations was we have instructed the fractionators to do this far more testing sort of surveillance of their donors making sure that the donors that belonged to high risk groups, and so on, are excluded and -- so that they hoped that their product would thereby be safer after 24 March than it had been before then.

But there wasn't a suggestion here that necessarily a particular batch might be withdrawn. I have found this really quite interesting because, I don't know if I can refer to -- I did refer to the NIBSC report of February 1984, where they were still considering whether a batch, which was thought to have had product -- a donor in it who had either developed AIDS or had possibly developed AIDS should be

withdrawn.

I mean, it seemed to me absolutely axiomatic, if you had the slightest suspicion that a product might have had in it a donor who had either developed AIDS or might well be suspected of having AIDS, that you would absolutely withdraw that batch wholesale. I think there could be no -- really, I don't think there was a discussion about that.

It was a bit surprising to see in America that they suggested that patients who had quite suggestive indicators that they might be incubating AIDS, if you like, they didn't think that was sufficient grounds for withdrawing a batch. I personally think that seems to be a mistake but it's interesting that the matter was still being debated by NIBSC in 1984.

SIR BRIAN LANGSTAFF: The question which I was going to ask you, let me ask you it now, as we're talking about this document, was really the basis upon which -- or part of the basis on which the committee reached its conclusion because this, of course, was reflected in the Congress decision which you knew about by the -- Congress didn't go down the road of saying you've got to withdraw all product --

A. That's right.

SIR BRIAN LANGSTAFF: -- or you have got to ban, and the

reason for not automatically requiring recall, in part, may have been, perhaps, the contribution made at paragraph 6.

MS RICHARDS: Bottom of page 2 please, Soumik.

SIR BRIAN LANGSTAFF: That's bottom of page 2. There's a contribution from someone who represents the Pharmaceutical Manufacturers Association and the summary of this -- it's a bit dense in this text. We can look, please, Soumik, at the start of the next page, top of the next page. Thank you.

What he -- the point he was making in arguing against, as I understand it, the idea that should be a recall of product was set out there. The best way perhaps to summarise it is to draw from the work of Mr Justice Krever in his report on the Canadian blood product situation.

What he said about this was in July 1983, Dr Michael Rodell, the Vice President Regulatory and Technical Affairs of the Armour Pharmaceutical Company, Armour, one of the four US fractionators, described the possibility of large scale contamination at a meeting of the Blood Products Advisory Committee of the Center for Biologics Evaluation and Research, a standing committee that advised the US Secretary of State for Health, the Assistant Secretary of Health

and the Commissioner of the FDA. Dr Rodell said that, on average, persons who were paid for their plasma had it collected 40 to 60 times per year. I think you mentioned this yesterday and made a slightly disparaging comment about that practice.

A. Absolutely.

SIR BRIAN LANGSTAFF: He then estimated that, at that rate, and, given the pool sizes used in the United States, four infected persons could contaminate the entire world supply of Factor VIII concentrate. I think this is the Americans thinking that they were the sole source of Factor VIII in the world. That's what comes out there but, be that as it may, certainly they were the major commercial providers.

His conclusion was based on analysis that were confined to concentrates made from USA plasma but they were exported to many countries, including Canada.

So, really, the implications of what he was saying, that if you have -- if you are going to go down to the road of saying because someone's got AIDS you've got to bin the batch which is formed from it, you would inevitably be binning a quarter of the production if you found one of these regular donors who suffered. That would follow and one way of looking at that might be, mightn't it, that simply the

pool sizes were so big that you couldn't let the system fail?

A. Undoubtedly, the pool sizes were massive and they were far bigger than the pool sizes in the UK.

SIR BRIAN LANGSTAFF: But it would -- it's a stunning -- it may be a stunning comment for him, stunning argument for him to put forward, mightn't it, that essentially the pharmaceutical companies' method of production had become so efficient in the commercial sense they couldn't be allowed to fail because they might be contaminated with something that could kill.

A. Well, that's absolutely true, sir, but on the other hand, if you think about a pool size of whatever size, one infected donor which -- a donor unknown to the manufacturers, unknown to themselves because they're incubating in an asymptomatic fashion, one infected donor in a pool of any size will contaminate the pool, and, of course, in one blood transfusion can contaminate the pool.

If you have an organism which you cannot detect, which is potentially in blood and plasma, then potentially it will contaminate whatever size pool you put it in.

SIR BRIAN LANGSTAFF: So the task is really minimising that risk, isn't it?

A. It is minimising that risk and finding a way in which you can inactivate the virus if there is a virus.

SIR BRIAN LANGSTAFF: Yes, thank you for that.

MS RICHARDS: Dr Walford, can I now ask you about something you say in your witness statement. It's paragraph 80.4, I think.

So, Soumik, WITN4461001 and it's page 182.

Now, you were, at this point in your witness statement, talking about that note from Dr Sweeney to Ms Fraenkel that we discussed yesterday. I'm not going to ask you to go back to the note but it is your understanding of what the consequences would be for those with haemophilia if there was a reversion to cryoprecipitate and reduced usage of Factor VIII concentrates that I wanted to ask you about.

You say this:

"My view ..."

That's the view about the value of the clotting concentrates far outweighing the possible transmission of AIDS:

"My view will have then been based on the fact that, whilst the introduction of cryoprecipitate in the 1960s had been highly beneficial for severe haemophiliacs and significantly improved their life expectancy, they still suffered a life constrained by

pain, disability and the need for frequent hospital admissions and, in many cases, premature death. With the advent of Factor VIII concentrates both life expectancy and quality of life were greatly improved."

You also, I think -- just for the sake of completeness, if we look at paragraph 86.34, page 198, and we look at the last sentence of that paragraph, and again the context here is you expressing your views to Dr Field about Dr Galbraith's call for action on AIDS. You say here:

"The lack of information [that's the lack of information about AIDS] needed to be set against the very well-known and severe harms that would be caused to haemophiliacs if American Factor VIII concentrates were withdrawn or curtailed without any realistic replacements."

If we just go back to the paragraph 80.5 on page 182, you yourself hadn't been involved as a clinician in haemophilia care, other than the period of time you told us about when you were a Senior House Officer earlier in the 1970s?

A. That's right.

Q. So your view about the impact of concentrates or not having concentrates, as opposed to cryoprecipitate, on patients would not have been based upon your own

clinical experience?

A. Of my limited experience, which was not actually to be the person who was treating the patients, but I did see patients quite a lot, simply because I was going there with the thawed cryo and helping maybe to put up the drip, for example. So, basically, I didn't actually treat the patients but clearly some of the patients were wheelchair-bound, some of the patients were obviously -- had obvious manifestations, if you will, of having had bleeds.

Now, of course, I don't know first hand but I had read quite extensively about haemophilia and I would suggest that what I'm describing there is probably realistic. Certainly it was so much more difficult if a patient was receiving cryo and couldn't rapidly get to a hospital. The bleed would be continuing, obviously, damage would be being done, damage which was sometimes irreversible. Certainly the major cause of death in patients with haemophilia at the time we're writing about was bleeding and usually a cerebral bleed, but not exclusively -- it could be a bleed into the gastrointestinal tract or other organs.

So I don't think what I'm describing is incorrect but, of course, I would stand to be

corrected by people who treat haemophilia if they were to say, well, this is actually overblown. I would not myself think it was.

Q. Paragraph 80.4. My apologies.

What you appear to be saying was that, even with cryoprecipitate, there would be many cases of premature death. What was the factual basis for that understanding?

A. Well, I think basically before cryoprecipitate the life expectancy for haemophiliacs was -- I think the median was about 37 years before cryoprecipitate. I think was about 1964, Judith Pool produced cryoprecipitate or showed the method for producing cryoprecipitate.

After that, obviously there were clear improvements but the main cause of death remained, and everything that I've read suggests that this is true, that the main cause of death, premature death, in haemophiliacs was bleeding.

Q. The vast majority of haemophiliacs receiving treatment with Factor VIII concentrates on a day-to-day basis, and I'm just talking for the moment about severe haemophiliacs but, of course, there are haemophiliacs with mild and moderate haemophilia --

A. Yes.

Q. -- as far as the evidence the Inquiry's heard seems to establish, they are receiving treatment for -- largely because of their joints --

A. Yes.

Q. -- an ankle bleed, elbow problems and the like. That's not life-threatening. It can, if untreated, of course, have significant adverse consequences for the patients. But it might be said that what's being painted here in paragraph 80.4 is a picture that if you remove cryoprecipitate -- if you remove Factor VIII concentrates, and use cryoprecipitate, even for six months, a year, 18 months, two years, for a temporary period, there's going to be multiple cases of disability and death. Was that not an overstatement?

A. You've just mentioned potentially removing Factor VIII concentrate for a period of, I don't know, six months or -- I don't think six months would obviously have -- not going to do the trick here but maybe two years. That's removing concentrate.

The problem was that we didn't have enough cryoprecipitate. If there had been copious supplies of cryoprecipitate readily available, then you would have reverted to the *status quo ante* before concentrates came into manufacture and that would have

not been ideal for patients with haemophilia, but it would have obviously been better than if there had been a very clear view that everybody was going to get AIDS if you didn't do that. I mean, that would have been a quite clear and dichotomous decision and you could see what the way forward was.

But there wasn't anything like enough cryoprecipitate and it could not have been made quickly. It would have had to restart over time. You then have the problem of making sure that you've got enough cryoprecipitate supernatant to BPL to make the Factor IX that patients with haemophilia B needed so that they didn't suffer as a result of what you had done in relation to haemophilia A patients.

So my sort of question would be: how could some 40 million international units of Factor VIII be rapid replaced by cryo? Now, you said to me yesterday, and I think it's a very valid point, you wouldn't necessarily replace it all, you'd stop home treatment, you would stop prophylaxis, you'd stop elective surgery. I have to say, if one had -- I think if the Haemophilia Society at the time had been told that that was what was going to happen there would have been huge concern and complaints from patients that their entire lives were going to be turned upside

down. That was on the basis of the fact that, by May, we had one patient who had developed AIDS in the UK and it is the case -- and we possibly come to it later, I hope we do -- but I see that the CMO letter, which was ultimately written in 1985, refers to the fact that there had been three cases in the UK, three cases of AIDS in haemophiliacs.

So you would have made a massive transfer of, as it were, risk of bleeds, and so on, however severe -- and actually one ought not to minimise the awful bleeding into joints, really painful, really sometimes irreversible, and if you can't then do surgery because you haven't got the concentrate to do the surgery -- I feel I shouldn't, in a sense, be advocating for patients with haemophilia, they can speak absolutely for themselves, and if it's felt that I am exaggerating the problems that they might have experienced from a sudden massive shortage of Factor VIII in one form or another, then I obviously stand corrected. I just don't think I am exaggerating, and it's interesting that the Committee on Safety of Medicines, when it came to look at -- in the Biological Subcommittee, was referring to these Factor VIII as being life-preserving, if you will. I forget the exact words they used.

So it was an awful conundrum to be faced with and I don't think there was any particular right answer. But to suppose that you could absolutely rely on cryo to replace the needed amount, not the desired amount or the demand, it wasn't feasible at that time.

Q. We'll come on to the Committee on the Safety of Medicines Subcommittee meeting later in the course of the morning but it's right, isn't it, that none of either the measures that I mentioned yesterday, and you've summarised a number of them, neither those nor what would need to be done, what could be done within RTCs was ever actively explored at the time by the Department?

A. At the time to revert to cryo?

Q. Yes.

A. Well, it was actively explored not within Regional Transfusion Centres but Dr Gunson, who was the chair of the Regional Transfusion Centre Directors, said it was not feasible, Dr Lane said he could not produce small pool cryoprecipitate freeze-dried. I wrote a paper for the CBLA specifically asking whether we could do something about that, whether we -- BPL could produce small pool products to replace the larger pool intermediate concentrate, and the answer was he couldn't do it on logistic grounds.

So it was not *not* thought of, it just seemed totally impractical and impossible.

Q. In terms of what Dr Lane was saying about BPL's ability -- you have referred to that in your statement and you have accurately summarised it, I'm not proposing to go to it -- what is the material that you're relying on and, if you can't find it now, by all means come back after one of the breaks and let me know what it is, because I'm not trying to put you on the spot. But when you're talking about Dr Gunson, as it were, representing the position of RTCs, what particular interactions or reports or views of his do you have in mind?

A. The one I can sort of immediately call to mind now is that he wrote to the Chief Medical Officer because he was the consultant adviser and he had heard that there was going to be a meeting of all the relevant consultant advisers, there was only one in blood transfusion and that was him, that there was going to be a meeting and he thought that all these consultant advisers needed to be aware of the problem, which had arisen and he'd just come back from the Council of Europe meeting, I think, at that time, where he had pointed out that it was obvious that Council of Europe was beginning to talk about moving to cryoprecipitate.

This is what they were thinking was a good thing to do. He also pointed out that that was actually the main product used in quite a number of countries and he talked about the downsides of some of those products but, nevertheless, he pointed out that it looked as if there was going to be a push towards using cryoprecipitate.

He didn't think that that was something that could be done at the moment. He didn't think that that was going to be practical and he wrote accordingly to the CMO.

So that was a reliance on Dr Gunson there, who would have taken the temperature, if you will, of regional transfusion directors.

Q. I know the document you are referring to. I haven't got the reference to hand but it is in here somewhere.

A. It's in here.

Q. We may come back to that, in that case, perhaps after the break.

Can I then just come on to the issue to which the chair was alluding when we looked at the Rodell observations. The concern about the dumping --

A. Yes.

Q. -- of pre-March 1983 plasma in the UK.

A. Yes.

Q. So if we just pick it up, first of all, at DHSC0001204. So this is and one of the communications from the States, the Department of Health and Human Services, Public Health Service Food and Drug Administration, 24 March 1983, and it sets out -- I won't go through the detail of it -- but it sets out the steps that were advised should be taken by all establishments collecting blood for transfusion or for use in plasma pools.

Do you recall whether this document or a summary of it came to your attention at this stage, in March 1983?

A. No, it didn't, and what I have seen from looking at the papers is that Dr Joe Smith of the -- Director of NIBSC, sent it through to Medicines Division, I think to Dr Fowler, and I was not aware of this, of this paper. Of course, I knew that regulations had been introduced. I can't remember exactly when I learnt -- I think in April, something like that -- but I didn't see the detail.

I subsequently, when I had been shown the detail, reported that in one of my briefings and spelt out what the details were.

Q. If we then go to an exchange of correspondence you had on the subject with Professor Bloom, it's

HCDO0000003_122, and we can see this is now in May 1983. It's following the meeting of Reference Centre Directors on 13 May, and he says:

"... there is one outstanding point which I do not think was finally [closed]. This refers to the possibility that some of the American factor VIII manufacturers may consider it advantageous to export products which were made from plasma collected before March 24th rather than retain them for domestic use."

Then he refers to the FDA guidelines, and says:

"I have some misgivings concerning the possibility that stocks held by the manufacturers and source plasma collected before that date will be preferentially exported. Whilst I do not wish to overstate the risk from imported American factor VIII concentrates, nevertheless I think that Haemophilia Centre Directors would wish to be reassured that factor VIII concentrates imported are at least up to the standards recommended for use in the USA. I was glad to learn ... that you intend to take this up with the Medicines Division ... I hope that is will be possible rapidly to vary the Product Licence for relevant imported products to take account of these recent developments."

So Professor Bloom is sufficiently concerned to

write in these terms. If we look at your reply DHSC0001206, 16 May, you have obviously had a telephone conversation with Professor Bloom and then you say:

"I have today both spoken to and minuted Dr Keith Fowler of Medicines Division to draw his attention to the possible need to institute new labelling requirements for [Factor]VIII concentrates derived from plasma taken before the new FDA regulations came into force.

"I have also asked him whether, for products currently available in the UK, it would be possible to find out the period in which the donors were bled and whereabouts in the USA the donor centres supplying each manufacturer is situated.

"I have asked if he will treat this as a matter of the utmost priority."

We'll come on to your exchange of minutes with Dr Fowler. Did you understand Professor Bloom to be advocating, actually, some form of ban, stop order, whatever the mechanism might be, on pre-March products, because your response appears to be about the possibility of addressing the concern in a rather less radical way by labelling?

A. Of course, we wouldn't have known about when the

plasma was taken from the donors without labelling, without being able to identify. Sort of *a priori* we needed to know how we could identify such material. So the first thing was -- I mean, I totally agreed with Professor Bloom that we might be faced with a dumping situation, so obviously wanted to avoid that, but how do you avoid that if you don't know when the plasma was taken? And we didn't know, as it turned out. We didn't have any way of identifying the date on which the plasma was taken for the product. Obviously, you knew the date that the product was actually manufactured but not when the plasma was withdrawn from the donors.

So my first concern was, well, you know, a diagnostic, if you like, how would we know when the plasma was taken? He then came back to me, and I'm sure you will probably take me to this, to say that actually we don't know when it was taken but we could make it a condition.

Q. So if we go then to your communications with Dr Fowler, DHSC0001394, this is 16 May 1983. "We spoke", and then you refer to the FDA new requirements, and then you say, this four lines down:

"However, the UK product licences do not contain this requirement [that's the labelling requirement]

and there are fears among haemophilia centre directors that the more 'dangerous' material may be dumped in the UK. You may like to consider whether there is a need to make a similar labelling requirement for material imported into the UK?

"In relation to the whole issue of the transmission of AIDS in blood products, several questions have been put to me ..."

Then you raise four matters:

"Is it possible to obtain concentrates made from plasma which does not come from [the] centres ... with the highest numbers of AIDS cases?

"2. Is it possible to accept only concentrates made from plasma taken after 24 March regulations were published? If so, would sufficient finished product be immediately available?

"3. Can we find out, for each manufacturer, the date of plasma collection in relation to each batch of concentrate in current use in the UK?"

Then 4 was whether Immuno or other European manufacturers could produce sufficient material derived from European plasma.

You say that these matters have been raised with you essentially by both Professor Bloom, as chair of the Haemophilia Centre Directors, and the Director of

CDSC, and to be investigated as a matter of the utmost priority.

If we look at, first of all, a comment from Dr Oliver, DHSC0002227_052. So he circulates your minute more widely, says the questions you have posed are:

"... clearly of considerable importance and have wide implications for the Licensing Authority, Supply Division and of course for HS. It seems to me important that our activities are fully co-ordinated so that we safeguard our own supply position and if possible obtain Factor VIII from the safest available sources. Ideally I suppose we would like to see any imported Factor VIII which is derived from American material to be manufactured after 24 March ..."

Then there's a suggestion of a meeting. Then he says:

"Whatever we do we must not take any precipitate action which might affect the supply of necessary Factor VIII."

Then just so that we see the full exchange of correspondence, we get to Dr Fowler's replies at DHSC0002229_006. This is the first of two minutes from Dr Fowler, dated 23 May. In the first paragraph he says:

"... manufacturers are certainly able to identify ... batches of plasma collected after 24 May *(sic)*."

So manufacturers should be able to identify pre- and post 24 March -- sorry, I think I said May --

A. Yes.

Q. -- plasma. Whether or not they would be prepared to release this information is another matter.

Then he talks about the stop order procedure which requires:

"... manufacturers to submit protocols and samples from every batch they propose to sell in the UK, to Dr Duncan Thomas's department at NIBSC. The content of an individual manufacturer's protocol is very much a matter for agreement between Dr Thomas and the company. I do not think that date of plasma collection is a requirement at present, but I see no reason why it should not become so if it were thought desirable. The Licensing Authority would then, on the advice of Dr Thomas, be able to reject those batches which did not comply.

"The practical and legal aspects of this suggestion would, of course, have to be checked beforehand, but even the threat of such action might be sufficient to persuade to manufacturers to comply

voluntarily."

So is this right or is this what you understood from Dr Fowler's first minute, he is essentially saying there is potentially a way of dealing with this --

A. Yes.

Q. -- the USA manufacturers can identify the difference, as it were, and there is a mechanism, the stop order mechanism, which could be introduced by the Licensing Authority?

A. That's right.

Q. Then if we go to the second page, we see his second minute. In his second paragraph, he says:

"Your suggestion that USA manufacturers ..."

Sorry, can we go slightly up the page:

"... may try to 'dump' pre-24 March 1983 material on the UK market has to be taken seriously."

Then he refers to the stop order process and says if that's a non-runner then we'll be wholly dependent on the manufacturers. Then he answers your other questions. Point 1, he doesn't know whether it was possible to obtain concentrates made from plasma which doesn't come from the highest risk areas. He doesn't know the position about adequacy of post 24 March 1983 supplies -- that's paragraph 2. But he

does say, essentially, there probably is an issue in relation to there being pre-March 1983 concentrates effectively already in the UK awaiting clearance by NIBSC, and then he doesn't think that the European option is a runner essentially.

A. No.

Q. Now, I'll look in a moment with you at 3 June 1983 interdepartmental meeting.

A. Yes.

Q. But, broadly speaking, as far as you're aware, was any particular action taken in relation to pre-24 March concentrates?

A. Well, I sent another minute which I hope somebody can lay their hands on to Dr Fowler, asking even more questions to be put to manufacturers, and so there was a list of long questions that I thought that they should be asked and, of course, the question that I was also asking, and again I can't remember whether it was in the same minute or another minute, was tell me about the stocks. What have we got? You know, what is available? Could we have material only made from post 23 March plasma, as it were, made in conformity with the regulations of 23 March.

He then describes the stocks in one of my -- one of the minutes to me, where there is substantial stock

of material made beforehand but no suggestion that this any stock of post 23 March regulation. That's hardly surprising when you consider, you know, the length of time it was taking to make a batch of product but, essentially, within the country, there were some tens of millions of international units of Factor VIII made from before those regulations came into force, though I should actually caveat that by saying a number of the manufacturers, and in fact, sir, Ms Richards, you gave me a paper last night from Alpha Therapeutics, who had introduced their own and actually possibly even, if not more stringent, as stringent, controls on their donor selection before the 23 March FDA regulation came into force.

So there was some material within the stocks in the UK that was potentially usable, if you like, if you only wanted to use material that was made in conformity or approximately in conformity with the 23 March regulation, and we did get a list of that and Medicines Division provided me with a list of the material that was available.

So you had the stocks where actually plasma had been obviously just taken before the regulations came in, and then the manufacturers who had introduced their own and quite stringent requirements before the

23 March regulations.

So we had that information and there was some material which could be used if all you were concerned about was that it needed to have been after the 23 March regulations came in.

But the question, I suppose -- and this was again something the Committee on Medicines dealt with, at least not at length but a little -- was how effective the 23 March regulations were likely to be because they did rely quite considerably on a degree of donor honesty in terms of their health. They relied also on some kind of actual physical examination by personnel in the plasmapheresis centres, which sounded interesting but kind of, you know, how realistic was it?

So I think the question was how much difference it was likely to make to the safety of any Factor VIII and, obviously, any improvement is better than no improvement but it was not necessarily going to be, well, if we simply take the post 23 March regulation material, that material is likely to be substantially safer than material taken beforehand. I don't think you could conclude that but, obviously, it would have been good to have been able to use that material in preference. But this wasn't a question of we're

stopping all American Factor VIII, it's just you wanted -- if you were going to get American Factor VIII, it needed to have been in conformity with the FDA regulations.

Q. I mean, you're rightly explaining that there are a number of considerations, and absolutely there's further exchanges of minutes and we'll look at some of them, I think. My question is: ultimately, was anything done, whether by NIBSC in terms of labelling, or by providing information about what batches were known to have been produced in conformity with the manufacturers' own internally imposed standard, sharing that information to Haemophilia Centre Directors so that they could say, "Well, I'm not going to use those but I will use those"; was anything actually done in the end?

A. Yes, I looked at all the papers that I was provided with and I couldn't see that.

One of the things that I saw was, in the June 3 meeting of officials, there was a Miss Spencer from Medicines Division and there was a question asked about the issue of could we stop this material made from before the March 23 regulations, and she seemed to think that legally it was going to be difficult.

Q. We'll come to that in just a moment. But is this

right then, that as far as you know from your own knowledge and from the documentation that you have seen --

A. I haven't seen it --

Q. -- there's nothing to suggest that ultimately any steps were taken in relation to limiting or providing information or imposing requirements on pre-March 1983 plasma?

A. I haven't seen that but obviously if you are going to speak to anyone from NIBSC they may be able to provide much more information.

Q. Yes, absolutely. Yes, indeed, it may be that Dr Thomas will be able to assist in that regard.

Let's come then to 3 June meeting.

So if we start with the agenda, which is DHSC0002353_038.

So on 1 June -- is it Dr Green?

A. No.

Q. Mr Green?

A. No.

Q. Ms Green?

A. Mr.

Q. Mr Green circulates an agenda and papers for the meeting and, if we go to the next page, we can see what the agenda was for that meeting:

"1. To consider whether there is any further action the [National Blood Transfusion Service] or Haemophilia Reference Centres can take, and whether any further assistance or complementary action by the Department is appropriate ...

"2. To consider what action can be taken by Medicines Division and Supply Division to minimise risks in the light of the new FDA requirements ...

"3. To consider what action is appropriate with regard to the implications of the introduction of heat-treated [Factor] VIII concentrates ...

"4. To consider what should be done further to encourage research into AIDS."

Just go further down:

"5. To consider the implications for NBTS of the line taken by the Council of Europe.

"6. To consider the implications for CBLA ..."

So that that's Central Blood Laboratories Authority.

"... and the plans for the redevelopment of BPL.

"7. To consider what action is needed by DHSS in respect of homosexual rights groups."

And:

"8. What further action should be taken with the Haemophilia Society?"

So there's the agenda. Now there were a number of papers prepared for this meeting, I think most of which were prepared by you?

A. Yes.

Q. So if we just look and see what those are, they are at DHSC0002229_019 to start.

So we've got paper 1, which is a background paper. I'm not going to ask you to go through the detail of it but we can see, bottom of the page, we've got the question:

"Is it transmitted in blood or blood products?

"As yet there is no conclusive proof that AIDS is transmitted by blood as well as by homosexual contact but the evidence is suggestive that this is likely to be the case."

Then you refer to the cases in the States and in Spain and the transfusion cases.

A. Yes.

Q. Which no doubt includes implicitly a reference to the San Francisco baby case.

A. Yes.

Q. Then, over the page, we can see the second heading is "AIDS in haemophiliacs in the UK". You say:

"There is one suspect case in Cardiff. Although CDSC states that this case meets the USA criteria for

AIDS, the clinician in charge does not consider that either should be regarded as a confirmed case."

Just pausing there, you must presumably have got that from Professor Bloom?

A. I don't know about getting it from Professor Bloom but he seemed to consistently -- he seemed to consistently say that this may be a case that he had in Cardiff but was -- although CDSC very clearly stated that it was a case according to the criteria that they used, and I was in no doubt whatsoever that it was a case, it was -- I simply maintain that the clinician in charge didn't consider it to be regarded as a confirmed case. That was the fact of the matter.

Q. You presumably were not aware that Professor Bloom had described it as a probable case in his notification to CDSC?

A. No.

Q. Does it --

A. I didn't know he'd notified CDSC actually.

Q. Does it cause you concern, thinking about it now, that he was -- seems, on a number of occasions, essentially -- arguably, it might be said, underplaying whether this was a true case of AIDS?

A. It seems to be the case that he was very reluctant to actually confirm that he agreed it was a case.

Q. And we can see now there's reference to a possible case in Bristol. So you've become aware of that. So that's paper 1.

Paper 2, which is the next page:

"Action already taken by relevant authorities outside the Department."

Again, I'm not going to go through the detail of it but we can see you identify the leaflet proposal by Regional Transfusion Directors, and we'll look at that later, at paragraph 1.

At paragraph 2 you refer to the Haemophilia Reference Centre Directors' recommendation. Again, I'm going to come back to that in a little while.

At 3 you refer to the FDA regulations.

Over the page, at 4, you refer to the Council of Europe and its draft recommendations, and again I'm going to come back to that.

So that's paper 2. Paper 3 is the next page. Just so that we can see what material was at the meeting. So this is looking specifically at the dumping issue, and you pose a number of questions such as that at paragraph 2 on that page:

"Should we accept only 'post 24 March' products? Would there be adequate supplies?"

You refer to the possibility of using stop

orders and labelling and so on.

So you pose essentially the same questions or similar questions to those you had posed to Dr Fowler?

A. Yes.

Q. Paper 4, which is the next page, we can simply note it's looking at the possibility of heat-treated Factor VIII concentrates. I'm not going to ask you about the detail.

Paper 5 I won't trouble you with. You didn't write, I think, paper 5, and it was concerned with research, in any event?

A. That's right.

Q. Then paper 6 is at DHSC0002229_020.

Now, this was about the "Implications of AIDS for production of [Factor] VIII at BPL". You refer to -- point 4:

"The more [cryo] a Region produces, the less plasma it can send to BPL ..."

You talk about the advantages of cryoprecipitate in paragraph 5.

Then, if we go down to paragraph 7, you talk about disadvantages to cryoprecipitate: convenience, possible allergic reactions, et cetera.

Then over the page, at paragraph 9, you say:

"... haemophilia centre directors in the UK are

not advocating a change in the pattern of treatment of haemophiliacs which would require increased production of cryoprecipitates."

That, presumably, is a reflection of the 13 May Reference Centre Directors' meeting?

A. I'm assuming so, yes.

Q. Then paragraph 10:

"If there were to be a significantly increased demand for cryoprecipitate, this would pose major operational and financial problems for RTCs and would reduce significantly - or even totally - the amount of plasma sent to BPL."

That's based, is it, essentially, on your understanding from Dr Gunson that would be the problem?

A. Dr Gunson and Dr Lane I think, both together.

Q. Yes, sorry. In relation to BPL, absolutely Dr Lane. In relation to RTCs, Dr Gunson's essentially your source of information?

A. Yes, although there were various meetings of regional transfusion directors and I can't tell whether or not they came, you know, before all this or not, but Dr Gunson was a very good source of information which, I believe, he'd fully reflected the views of his fellow transfusion directors, in most cases.

Q. Then you explain in paragraph 11 that:

"The preceding paragraph describes a worst-case situation."

So effectively an all or nothing situation.

"Nevertheless, the demand for cryoprecipitate could well increase to a certain extent and we need to know what contingency plans to the CBLA has - or is in the process of developing ..."

So those are the papers. Then if we can just look at the minutes --

SIR BRIAN LANGSTAFF: Just before you do that, can I go back up the page? Thank you.

It's paragraph 9. I'm just a little puzzled by the last sentence there. Referring to what the Haemophilia Centre Directors were deciding, it suggests that the decision "could well change if a haemophiliac who had received only BPL concentrate were found to have developed AIDS".

So I can understand that that might make them reluctant to use BPL concentrate but why not -- or did the logic apply to commercial concentrate?

A. Basically I suppose that the thinking would be that if a BPL concentrate was found to have transmitted AIDS, then there was AIDS in the UK donor blood population. That would mean that, obviously, large pool products,

such as concentrate, would be capable of transmitting if a single donor was infected.

At that point a reversion to cryoprecipitate, which -- if you could do it -- where you are really only using a far smaller number of donations -- you may be using 20 or 30 bags of cryoprecipitate at a time but nevertheless it's much smaller than the pools that were being used in BPL to make intermediate concentrates -- it might have been felt to be safer. But it wouldn't have been entirely safe.

But clearly at the time I think that -- I can't totally answer your question because it's absolutely fundamental to what does this sentence mean.

At the minute they were not satisfied, I suppose, that there was a significant risk to the haemophiliacs from American Factor VIII. They needed to go on using American Factor VIII. But the whole scene would have been transformed if there could have been proof, if you will, that a patient who'd only ever had UK Factor VIII at that point in time had developed AIDS, because -- I mean, it would have thrown us all into the most terrible confusion because it would suggest that AIDS was in the UK blood supply, and at the time that wasn't thought to be the case.

SIR BRIAN LANGSTAFF: I follow that, but the reason for

asking the question is the first sentence is talking about whether to increase the use of cryoprecipitate or not. Now, at that time there was roughly twice as much commercial concentrate being used as domestically produced concentrates, was there not?

A. About half and half, I think. No, you're right about concentrate, but we had about half and half in terms of cryo plus concentrate. You're right.

SIR BRIAN LANGSTAFF: So the question might be thought, if commercial concentrate was shown to have produced --

A. AIDS.

SIR BRIAN LANGSTAFF: -- AIDS, that might have implications for the continued use of commercial concentrate?

A. Absolutely.

SIR BRIAN LANGSTAFF: So I would understand the last sentence if it said "this could well change of a haemophiliac who had received concentrate -- or commercial concentrate -- were found to have developed AIDS, even more so if only BPL concentrate". But what the -- it's the comication of the two, that's why I'm asking you.

A. It's another *non sequitur* here presumably, sir.

SIR BRIAN LANGSTAFF: It is.

A. Yes. Well, I accept that.

SIR BRIAN LANGSTAFF: I appreciate you're only reflecting what you've heard from what the doctors were saying. Were they really saying that or were they saying, "If we actually had proof of a death from someone who has only ever had concentrate or had a lot of concentrate, commercial concentrate", that that would be what was necessary to change their practice?

A. I'm not sure I entirely follow that but, basically, I mean, one was looking at cases as opposed to deaths in this instance --

SIR BRIAN LANGSTAFF: Yes, AIDS. I'm sorry.

A. -- and essentially they were aware of the potential of the hazard from American Factor VIII concentrates. There was no indication at this point in time that UK-derived concentrates actually could transmit AIDS.

It would have been so fundamentally unsettling, if you like, to the situation that if it were shown that somebody who had only received UK concentrate had developed AIDS, it would have no doubt promoted an entire rethink of where we were.

But I guess, I like to think, that even if it's not particularly well expressed here, and maybe it isn't a particular -- doesn't follow on from the previous sentence, that I was reflecting what I had heard from others.

SIR BRIAN LANGSTAFF: Yes. So what you had heard from others was, in effect, expressed in a *non sequitur*, but there we are.

A. I would like to think it was others that expressed it as a *non sequitur*, not myself. Yes, thank you.

MS RICHARDS: Sir, I was going to move to then look, having very quickly skated through the papers (I know Dr Walford is familiar with them) to look at the minutes of the meeting for which the papers were prepared but, given the time, perhaps it might be better to do that after the break?

SIR BRIAN LANGSTAFF: Yes. We'll take a break then until 11.45.

(11.15 am)

(A short break)

(11.46 am)

MS RICHARDS: Dr Walford, just before we look at the minutes of the 3 June meeting, you had referred to Dr Gunson's letter to the Chief Medical Officer.

A. Yes.

Q. So just for the sake of completeness and not to leave that as a loose end we'll just look at that. It's NHBT0001067.

It's 9 June 1983 and it was copied to you at the time so it would have come to your attention. It sets

out various matters relating to AIDS. The second paragraph begins:

"The etiology of the disease is not known, but there is a strong possibility that the syndrome is caused by a transmissible infectious agent and in this context it has been implicated in transfusion of blood and blood products."

Then he refers to other cases and the two potential cases within England. Then he says:

"Although relatively few cases of AIDS have, as yet, been reported in this country, the significance of the condition with respect to the transfusion of blood and blood products are two-fold."

The first point he makes then is in relation to trying to prevent high-risk donors and refers to the leaflet, and I'll come back to that. You had some involvement, I think in the early stages, of the preparation of the leaflets, and we'll come back to that.

A. Yes.

Q. Then over the page, and this, I think, may be what you had had in mind earlier, his point 2 is this:

"Approximately one-half of the Factor VIII concentrate used in the treatment of haemophilia in England and Wales at present is derived from plasma

imported from the USA.

"The Press have been keenly interested in this aspect and there is, in my view, no alternative to the continuation of this policy in the short-term."

Then he refers to the new post March restrictions in the States. He says:

"... the importation of the product prepared before April, 1983, is being carefully monitored."

Do you know what he's referring to there?

A. I don't entirely know but of course we were looking at that through Medicines Division to try and see what the stock position was.

Q. Then he says:

"In the medium term, [BPL] is being rebuilt ..."

and refers to self-sufficiency.

"The necessity of an adequate supply of plasma from our volunteer donors to the new laboratory from the regional transfusion centres cannot be over-emphasised."

Then he goes on to talk about the Council of Europe -- I'll come back to that -- and press publicity.

Now, it's clear from this letter that Dr Gunson wasn't advocating a change of approach; indeed, on the contrary, he sets out his view: no alternative to

continuation of the policy in the short-term.

My question is a slightly different one, which is not to cast any doubt upon what you were saying Dr Gunson's view was as expressed contemporaneously to you at the time, my question is this: is there any material of which you are aware from this time in which the actual ability of Regional Transfusion Centres to produce increased volumes of cryoprecipitate was assessed or investigated?

In other words, is there anything in which someone's gone to each Regional Transfusion Centre and said, "What's your capacity to produce cryoprecipitate? How much do you produce? Could you produce more? If so, over what period of time? Would you need new equipment or have you got the right equipment?" Those kind of questions.

Are you aware of that exercise having been undertaken?

A. No, I'm not directly aware of that having been done. Clearly, if that was done, I would suppose that the NBTS would have records of any requests that arrived or any discussions that were held but I'm not personally aware.

Q. Thank you.

So if we then go to the meeting of 3 June which

is at DHSC0002229_030.

Dr Walford, I'm conscious I went very quickly through the papers but that's really in the interests of getting through your evidence. If there's any bit of the papers that we would need to go back to, do please let me know.

A. Thank you.

Q. I'm conscious you are familiar with them, not only having authored them at the time but having recently reread them for the purposes of your evidence.

So this is the meeting. Can I just ask, because we'll see what Ms Spencer's intervention is, she's recorded as being from MB. What was MB?

A. It was part of Medicines Division.

Q. So if we look further down, paragraph 2 says:

"Mr Parker explained that the meeting had been reared to consider the implications for the Department of recent media reports on AIDS and to examine possible courses of action."

The first then is the "AIDS Leaflet", and we'll see in the second part of paragraph 3 --

SIR BRIAN LANGSTAFF: Just take a moment.

A. Thank you.

MS RICHARDS: I'm sorry, Dr Walford.

SIR BRIAN LANGSTAFF: Do you want to just repeat that

question to make sure that Dr Walford heard it.

A. Thank you.

MS RICHARDS: Yes, sir.

We were just looking at paragraph 3. It refers to the leaflet, which I'll come on to, and then it says, in the second part of the paragraph:

"... it was felt that more positive steps should be taken at donor sessions and it was recommended that RTDs [so Regional Transfusion Directors] should be asked to reconsider their decision not to question potential donors about the presence of symptoms such as night sweats, weight loss etc."

If we go to the next paragraph, we can see that the minuted action is you'll approach the chair of directors to ascertain their views?

A. Yes.

Q. We'll look at your subsequent letter in a moment. I just want to see what the action was.

I don't think I need to trouble you with looking at the liaison with the Medical Gay Society.

We then come, bottom of the page, "Control of imports". Paragraph 7 looks at this issue of the dumping of pre-March concentrates.

Then we see:

"Miss Spencer explained that the effective

application of legal restrictions would present significant practical difficulties ..."

My understanding, Dr Walford, from your statement is that you don't know now what those practical difficulties were that she was referring to?

A. No.

Q. Then it said:

"... suggested that informal discussions with companies concerned were more likely to lead to successful control."

Now, we'll look very shortly at the minute you produced setting out a range of questions that could be posed of companies and the answer that came back. Was that the action that was taken in relation to this suggestion of informal discussions or were there --

A. I don't know. I mean, I believe my minute asking all those questions was really simply probing, as it were -- as a result of all the discussions we were having, I just felt that there were a series of questions that we needed to know the answers to. Miss Spencer would have been in a position to know what the legal problems were. I have no idea.

Q. If we go to the top of the next page, we can see:

"It was agreed that Medicines Division and Supplies Division should instigate such discussion."

So those are not your division, as it were?

A. No.

Q. Do you know what steps either of those divisions took?

A. Well, they were having discussions with the pharmaceutical companies, and I wouldn't have been privy to that unless somebody had chosen to give me some information as to what they had found and it may be that in the answers to my email -- sorry, again, my minute -- wish there had been emails -- it may be that in the answer to my minute from Dr Fowler or Mr Egerton that actually that was a result of some of the conversations. They had obviously held conversations, yes.

Q. Yes and that's really what I was getting at. Did you understand there to be something more by way of discussions being proposed here --

A. Yes.

Q. -- or just the kind of discussions we see reflected in Mr Egerton's response to you?

A. No, I would have thought that that was just the discussions that they were having with the pharmaceutical companies.

Q. Then we get to paragraph 9, where you talk about -- and I think we've really covered this territory already, Dr Walford -- your concern or the concern

about the consequences of controls on supply.

Heat-treated products, the agreed action -- at paragraph 11 -- is to "keep a close watch on developments".

And then under the heading "Plasma supply and Factor VIII production in the UK", there's a discussion about self-sufficiency and an action that is writing to the administrators of Regional Health Authorities pressing -- reminding them of the benefits of self-sufficiency, pressing them, essentially, to keep supplying plasma. Is that a fair summary?

A. Yes.

Q. Then if we go down to the bottom of the page, we can see there's reference to research. I don't propose to ask you anything about that.

Then if we go to the top of the next page, we can see there's a discussion about the Council of Europe. There's a reference to Dr Gunson's reports. We'll look at all this shortly, Dr Walford.

The agreement is:

"... that when the opportunity to comment arose the potential problems to the UK created by small pool production and the ban of imports should be brought to the Council's attention."

As we'll shortly see, you made comments on the

draft recommendations --

A. Yes.

Q. -- for Dr Gunson to pass back to the Council of Europe delegates.

Then there's a very short discussion recorded in relation to the redevelopment of BPL at paragraph 21. Again, I don't think I need to ask you about the entry under the heading "Homosexual rights groups".

Then "Haemophilia Society: "

"The meeting acknowledged the part played by the Society in keeping AIDS in perspective."

Are you able to assist us with what's meant by that comment?

A. Well, it seems to be self-evident that essentially the Haemophilia Society was communicating with members and presumably trying to give them the information that they have and, indeed, to keep the problem in whatever was the right perspective. But since I wasn't involved at all with what The Haemophilia Society were saying and this is reported by somebody else, I really can't comment any further.

Q. You yourself weren't involved in looking at the materials that were being produced by The Haemophilia Society which, to some extent at this point in time, was based on what Professor Bloom was producing. You

weren't involved in looking at those yourself?

A. Well, not -- I don't think I ever received anything really contemporaneously. I wasn't involved with The Haemophilia Society. There will have -- presumably if any of the Haemofact documents I have now seen were around in the Department, I might well have seen them, but I wouldn't know when I had seen them.

Q. Then we can see paragraph 26:

"Miss Spencer reported that the Sub-Committee [of the Committee on the Safety of Medicine] would be discussing AIDS ... [on] 13 July."

Those are the matters that were discussed, the plan being to examine possible courses of action. I just want to explore with you two matters to see whether you accept that these were not discussed and if you can assist us with why.

A. Right.

Q. The first is this, that there's no discussion evident from the minutes about any different approaches to the treatment of haemophiliacs. So there's no discussion about whether different policies should be adopted for those -- for different categories of haemophiliacs, there's no discussion about whether treatment should be minimised or no prophylactic treatment or cancelling non-elective surgery. It's right, isn't

it, if there had been such a discussion we'd have seen some reflection of it in the minutes?

A. I would suppose so, but of course we would have been aware of any material that was being put out by the UKHCDO to its members to minimise. So, for example, not to treat mild haemophiliacs with concentrate, not to treat von Willebrand's disease with concentrate, and to treat children again with cryo if at all possible.

So I think we will definitely have been aware that The Haemophilia Society was -- sorry, the Haemophilia Centre Directors were putting out that material and it really would not have been for a meeting of officials to suggest any change in policy for treatment.

Q. Does that -- in terms of why that's the case, does that go back to the discussion, Dr Walford, we had on the first day of your evidence --

A. Yes.

Q. -- the clinical freedom and the view that was taken, rightly or wrongly, and that may ultimately be a question for the chair, that it wasn't the role of the Department to issue guidance or advice to clinicians?

A. That was exactly the situation on the ground at the

time.
Q. Then the second matter that we see no reference to in this meeting, or at least in the minutes, is any consideration of what patients were being told, other than perhaps that oblique reference to "the part played by the Society of keeping AIDS in perspective"?
A. I don't think -- I mean, I'm relying on the minutes in the same way as you are here, because I don't have anything else to go on, and obviously it's not particularly reported here.
Dr Gunson said in his letter to the CMO that patients were being informed and one of the things that we do know about is that it was a question of informing those individuals who needed to know. The need to know was fundamentally with haemophiliacs as opposed to anybody else by way of patient group and, essentially, it would have been our understanding that the role of the Haemophilia Centre Directors in looking after their patients would be to discuss this matter with them. So it wouldn't have been at all for the Department but it would have been for the Haemophilia Centre Directors.
Q. Again, I will want to come back to that issue and we're look at what Dr Gunson said.
There's no discussion also of Dr Galbraith's

paper to Dr Field in this meeting. Are you able to assist us why?
A. No, it seems not.
Q. Are you able to assist us with why that's the case?
A. No. Was -- Dr Sibellas was at this meeting, was she not?
Q. She was indeed.
A. So basically that would have been an issue which, if it was going to be raised, I would have expected her to raise.
Q. Then in terms of actions following this meeting, I just want to pick up on two of them then. The first is the suggestion that you'd approach Regional -- or the chair of the Regional Transfusion Directors to ask them to reconsider what had been, I think, a very strong reluctance to be questioning donors.
A. Yes.
Q. We can see that at DHSC0002231_051.
This is a minute from you dated 6 June, and you are updating Mr Winstanley on the actions that fell to you from that meeting.
A. Mm-hm.
Q. The first paragraph says:
"I have done the following:
"i) Spoken with Dr Wagstaff about

re-ascertaining Directors' views about the desirability or otherwise about symptoms such as night sweats, unexplained weight loss etc. He promised to write to all Directors immediately to obtain their views. I explained that if Directors still felt such questioning to be inappropriate, we would need to have a note of the reasoning which had led to this conclusion. Dr Wagstaff felt that a possible compromise would be to add these questions to the list of questions which the donor reads from a card and then signs. The objection to this Dr Wagstaff felt, is that in his experience donors either do not read or do not take in what is written on the card."
Just pausing there, do you know what then happened in relation to this issue?
A. As far as I'm aware, they didn't ask questions about symptoms. I can't understand personally the reluctance but, nevertheless, there was a very strong feeling amongst the Regional Transfusion Directors that they wouldn't -- not only would they not ask about any possible symptoms they also very particularly would not ask about any sexual habits or orientation.
Q. Do you know whether you received the note of the reasoning that you had requested?

A. No, I think I had if we -- is there anything else in this document?
Q. Not on that issue.
A. Right.
Q. There are some other issues. Again, it may simply be the volume of material hasn't been picked up but I don't think you've referred to it, there being such a note in your statement. Again, I'm sure I'll be corrected if I'm wrong.
A. Could I ask you also, this meeting is 3 June, was that after the meeting -- was a meeting in May of Regional Transfusion Directors that I attended about 18 May, something like that?
Q. We're checking all the Regional Transfusion Directors meeting minutes in the course of the morning, Dr Walford. So if there is anything which casts any further light on this issue, we can come back to it in the course of the day.
The next paragraph, you flag up the issue of how leaflets would be distributed. It's going to be a relevant issue when Lord Glenarthur gives evidence later in the week, so I just want to note that you've asked the question, Dr Wagstaff prefers the handing out leaflets rather than having them available and he says: I'll canvass directors' views on that alone.

Then we can see in the next paragraph, Dr Wagstaff asks about the possibility that Liberton, so the Edinburgh centre, might be able to process some English plasma if American imports were to be restricted. Again, I'm not going to read everything out there but there's a discussion about that and then further down that paragraph you say to Mr Winstanley:

"Doubtless you will wish to pursue this possibility with [the Scottish Home and Health Department]."

Obviously, we looked at the earlier issue in relation to Liberton, yes?

A. Yes.

Q. Do you know whether anything further came of this suggestion that -- on a temporary basis, because of the situation in relation to AIDS, there might be the possibility of some additional processing of English plasma being done in Scotland?

A. I don't know as a result of this. Obviously, the action fell to Mr Winstanley.

Q. In that case, we'll try to take that up elsewhere.

Then if we then -- so those were some of the actions that fell to you from the meeting of 3 June. In terms of the discussions with pharmaceutical companies, if we look at your minute at

DHSC0002229_041. It's a minute of 14 June 1983 from you to Mr Egerton. In which department or branch was Mr Egerton based?

A. I think he was Supply.

Q. I'm not going to go through each and every question but you have set out there a range of questions that could possibly be posed of pharmaceutical companies?

A. Mm-hm.

Q. Then if we look at a response at DHSC0002229_055. It's dated 28 June 1983 and it's from, I think, Mr Wrigglesworth, copied to you, and it refers to HSIB, so that's Supplies, is it --

A. Yes.

Q. -- having circulated the questions listed in your minute to suppliers and possible suppliers of coagulation factor concentrates. Then there's a summary of the replies, and we'll just look at the most material one. So paragraph (d) identifies the five firms supplying blood products in the UK and paragraph (e) sets out the rough volume of annual imports. (f) says:

"With the exception of Immuno the firms state that they do not or have ceased to collect in 'Epidemic' areas. All state that their collection centres are FDA licensed.

"g. The plasma in each case is pooled prior to processing. In the case of Immuno products, European plasma and USA plasma are pooled separately.

"h. The origin of all plasma is identifiable."

Then:

"i. Each has given the assurance that future sales will comply with FDA guidelines. However, Miles Labs state that [Factor]VIII manufactured from plasma collected since March '83 will not be available until August, and Immuno in September '83."

Then it says:

"The tenth company, Cutter International Limited, have not yet replied."

There's a table over the page I'm not going to go through it, but just so we can see that that's some of the information that was summarised on the previous page.

So is it right to understand that the outcome of these informal discussions was with the qualification set out in paragraph (i) on that previous page, if we just go back to it, the companies are saying that their future sales will be compliant with FDA guidelines, which might be thought to be a statement of the obvious, but it doesn't really address the issue of what had already been --

A. No.

Q. -- supplied to the UK and what might still be held either --

A. That's right.

Q. -- in NIBSC or in Regional Health Authority areas?

A. Yes. I mean, in essence, it's telling us that actually there is no such plasma -- no such product derived from post 23 March plasma in the UK at the time and that there are significant stocks amounting to many millions of international units of Factor VIII that are in the country either waiting NIBSC clearance or ready for use.

Q. So as a matter of fact, the overwhelming probability is that haemophilia centres continued to treat patients with pre-March plasma for a period of time?

A. That's right.

Q. You previously pointed out that a number of the companies said that they had voluntarily adopted --

A. Yes.

Q. -- FDA-type regimes prior to 24 March 1983 --

A. Yes.

Q. -- and it's right to say the second page of this document has got some of the specific dates for some of the companies.

A. Yes.

Q. Again, I'm not going to go through the detail but just to complete the evidence you gave on that.

Can we then come to the meeting on 13 June 1983. Just to explore how that meeting came about, if we look at CBLA0000043_034. This is Dr Joseph Smith's letter of 28 March 1983 to Dr Keith Fowler in the Medicines Division at the DoH. He says that he thinks it would be advisable to consider at a meeting of the CSMB (and that's the Biological Subcommittee of the Committee on the Safety of Medicines) the problem of AIDS in relation to licensed blood products, and he suggests it would be very helpful to have Professor Bloom there. Then there's a reference in the second paragraph to the action of the FDA. Then the request in the third paragraph to Dr Fowler is to prepare a brief paper on which the discussion might be based.

I think you say in your statement you didn't see this at the time.

A. No.

Q. But you subsequently became aware, I don't think we need to look at it, in the latter half of April --

A. That's right.

Q. -- of this proposal.

It doesn't appear, and I know -- I think you have had the opportunity to read the statement from

Dr Smith, now Sir Joseph Smith?

A. I got it late last night. I have glanced, no more than that.

Q. Well, just to make it clear, I think we haven't asked you to read it because we're conscious of how much material that you have already processed but, again, it would appear from Dr Smith's, Sir Joseph's, statement that Dr Galbraith's Action on AIDS report to Dr Field was not the trigger for the meeting and, indeed, was not the focus of the meeting, albeit that Dr Galbraith himself was present at the meeting.

A. That's my understanding too from looking at this.

Q. So if we then look at the materials that were available at the meeting, first of all -- so the written materials -- there are, I think, two documents that you have referred to in your statement and Sir Joseph Smith confirms in his statement appear to have been the available documents.

The first is a paper from Dr Fowler at DHSC0002229_059. You referred, to this yesterday or the day before, Dr Walford.

A. Yes.

Q. But we didn't I think, in fact, look at it.

A. Yes.

Q. So we can see it's headed "Acquired Immune Deficiency

Syndrome; A new hazard for haemophiliacs?" by Dr LK Fowler. I can't remember if I've asked you this, Dr Walford, and apologies if I have, what was Dr Fowler's area of clinical expertise, do you know?

A. Yes, I think -- clinical expertise, I don't know, but I think his responsibility in Medicines Division was to report to Dr Holgate on blood and blood products.

Q. But you don't know what his clinical background is?

A. No.

Q. Then if we go over the page -- we just ask you to note and you've reflected it in your statement, at the very bottom of the second page, and then where he refers to, the last two lines:

"... the most convincing hypothesis so far for the aetiology of AIDS is advanced by Sonnabend et al ..."

Then, top of the next page, in that first paragraph, he expands upon that and, at the end of the first paragraph, he poses the question:

"In a word, is it not possible that 'haemophiliac' AIDS may be a function of the concentrate itself rather than a specific agent transmitted by homosexuals with or 'incubating' AIDS?"

So he was, if I can put it this way, speculating that AIDS might not be caused by a transmissible agent

and a viral infection, a different cause, albeit still linked to concentrates?

A. Yes.

Q. Be that as it may, he then goes on to say:

"Having said this, one cannot ignore other views and hope that the problem will go away. The media concept of ticking time bomb is a very real one for haemophiliacs and no effort should be spared to protect them by all practical means."

Then he refers to the precautions taken so far based upon a single unknown virus hypothesis. The presumed agent is unknown, can't be tested for. He refers to:

"Exclusion of blood from donors with positive tests will remove many homosexual donors who, it is said, tend to be good citizens ..." and suggests there could be an appeal to homosexuals to exclude themselves voluntarily from blood donations, and so on, and expresses a concern about the alienation of donors.

Then if we go to the next paragraph, he says.

"There is some evidence that cryoprecipitate made from single donations or very small donor pools, is safer than concentrate made from pools of thousands of donations" and then says the evidence is "scanty".

Was there any real doubt that cryoprecipitate -- certainly if there was -- the transmissible agent view of aetiology was the correct one, was there any real doubt that cryoprecipitate or very small donor pools were significantly safer than pools of thousands of donations?

A. I can't answer for whether there was any reasonable doubt. I think probably there were certainly publications about patients who had been maintained on cryoprecipitate, who also seemed to have abnormalities of their immune system, so that the T4/T8 lymphocyte ratio was not necessarily totally reversed but was actually not what you would expect if the immune system was entirely intact.

So there was a lot of information flying around as to whether or not patients maintained on cryoprecipitate were likely to be -- less likely to be affected and whether their immune systems looked as if they were or were not being affected. But, of course, Dr Fowler has said this and not me, so --

Q. No, and I'm asking you, Dr Walford, frankly, because you were present at the meeting as an observer not as a participant and most of the people present at the meeting are not people -- who were involved and taking a decision are not people we can ask about it, so I'm

afraid it's by default really that I have to pose these questions of you rather than the central decision-makers at the meeting.

Anyway, if we pick it up at the bottom of the page, he says:

"Even so, if a haemophiliac can be managed on cryoprecipitate alone, it clearly makes good sense to do so, since it will minimise the number of donors the patient is exposed to."

Then, over the page, he then goes on to talk about the problem of imported concentrate:

"More than half of the Factor VIII concentrate used in the UK is imported from the US. How do we ensure that the risk of transmission of AIDS to haemophiliacs is kept as low as possible?"

Then he refers to the FDA regulations and, picking it up about halfway down that paragraph, he says this:

"... it behoves us to ensure that concentrate imported from the US was not prepared from plasma obtained prior to the implementation of FDA recommendations."

Then he says:

"Probably the best means for accomplishing this is by the system of stop orders."

So that is consistent with his response to your minutes in May.

So that's one of the two documents before the committee on 13 July.

The second document is at DHSC0001209. It's -- well, it might be said it's a somewhat curious document, and I am going to explain to you why I put it in those terms, Dr Walford, in a moment, but we can see it is called a "Suggested 'agenda' for discussion on AIDS in relation to licensed blood products", and it's authored by Dr Smith dated 28 June 1983. He says:

"The aim of the discussion is to help the sub-committee to formulate advice to the CSM on whether any action is needed, and if so what action, in respect of AIDS and blood products licensed under the Medicines Act."

Then he refers to the various products. My focus, as you will understand, is going to be on factor concentrates as opposed to immunoglobulin, albumin and hepatitis B vaccines.

We can see who is going to be invited to attend the committee in addition to its members, so it's Bloom, Craske, Galbraith, Gunson and Mortimer.

Paragraph 3 is the assumption:

"... that participants will be familiar with the problem and with at least a proportion of the many publications."

And then this:

"This 'agenda' suggests headings for the discussion and a suggested first speaker is given. As a target for discussion, brief possible conclusions are indicated - doubtless these will be changed radically."

Then what we can see then set out, as he says, is there's a subheading, there's a suggested speaker, and then there is what appears to be a conclusion, formulated perhaps consistently with what he said in paragraph 4 as a target for discussion, but a suggested conclusion formulated by Dr Smith.

Now, I know you weren't involved with putting together of this document at all so it may be that you can't assist, but you were previously in the Medicines Division and I think you had previously prepared material for assessment of other products?

A. Yes.

Q. Was this a normal way to proceed? Was this how meetings would normally and discussions normally be structured?

A. It's difficult to say for me because basically, as an

assessor, I would be -- it was quite a formulaic way of preparing your document for the Committee to consider. It was set out under certain set headings, if you like. So they would always have a well-prepared paper in front of them so that they didn't have to do -- you know, one got over all the having to talk to individual bits. So it's not totally abnormal to have something like this. I don't necessarily recall under each heading there would be a suggested conclusion, although he does say he suggested the conclusion which he thought might potentially be changed, but I -- I mean, this is a fairly unusual format, I would say, but I can't just extrapolate from what I did, because what I did was actually to a formula in terms of how I presented cases to the Committee on Safety of Medicines.

Q. Just so that we can get the flavour of how it's structured, if we go to page 3 -- and I take your point, Dr Walford, that the assistance you might be able to give us in relation to this is limited, but we can see -- so that others following can understand -- if we look at paragraph 4, for example, under the heading "Consideration of the different operational 'possibilities' for reducing the risks from clotting factor preparations", that the proposition is:

"Withdraw ... concentrates (i.e. use only cryoprecipitate ...)."

The proposed speaker is Professor Bloom, and then the putative conclusion is:

"This step cannot at present be recommended ..." and reasons given.

Then we can see, if we look down the bottom of the page, under the heading -- so (iii):

"Use US blood products as sparingly as possible."

So this might be the treatment techniques -- or treatment policy strategies that I've been ventilating with you in my questions, Dr Walford.

"NOTE: This possibility is largely a matter for physicians treating haemophilia, but it could in theory be decided to modify product licences, e.g. 'not for use in children with mild haemophilia'."

The proposed speaker to this proposition, as it were, is Professor Bloom, and the suggested conclusion is:

"The uncertain balance of risk/benefit considerations in various categories of patient are too finely balanced to justify action via licensing: the matter should be left to clinical judgement."

So, in any event, those are, as far as I think

you understand, as far as we understand, the only two documents that the subcommittee had on 13 July?

A. As far as I'm aware, but I wonder if you could just take us to the section on epidemiology, because it says Dr Galbraith to speak to that and I think I ought to look and see --

Q. It does. We pick it up at the bottom of the first page.

A. The reason I'm asking is I notice, having seen the paper then from Dr Smith, he asked for a paper on epidemiology to be produced by CDSC, and I'm surprised that the only paper that went was the Dr Fowler paper, which is obviously not an epidemiological paper, and Dr Smith's own paper, but Dr Smith did ask for a paper on epidemiology to be produced, and he suggested, I think, that maybe Dr Pollock of CDSC could produce it. And Dr Galbraith was at this meeting. I cannot remember and I haven't seen anything which allows me to remember what the conversations were, what was said, because there is none of that in any of the papers that I've seen.

But Dr Galbraith would have been at that meeting and expressing a view on the epidemiology. So I thought it would be quite interesting to see --

Q. Absolutely. So the heading is "Epidemiology. Current

position. Assessment of risk from Factor VIII". You are right, the suggested speaker is Dr Galbraith.

If we go over the page, the suggested conclusion is:

"Recipients of clotting factor concentrates are at risk. The degree of risk cannot yet be quantified. The risk is likely to be greatest from products derived from the blood of homosexuals and IV drug abusers resident in areas of high incidence, and in those who repeatedly receive concentrates in high dosage."

So I'm afraid that's all we have and you are absolutely right to point out that Dr Galbraith was there. The evidence doesn't appear to suggest that the paper that he had sent to Dr Field was expressly considered. Why I think must remain a mystery.

A. Shame, yes.

Q. Now can I then take you, because I want to, again, really ask you about it because you were there and there are very few people I can ask, but I just want to take you then to the record of the conclusions, which is at DHSC0001208.

Dr Walford, we haven't given you the minutes as well but the content of the conclusions here is identical to the matters set out in the minutes.

A. Mm-hm.
Q. The minutes simply record, in addition, the formalities of who was present and who was observing and so on, and those representing you, in any event, have the minutes.

But this is the document that then went to the Committee on the Safety of Medicines when it was effectively asked to say whether it agreed.
A. Yes.
Q. So it's entitled "Summary of main points from a consideration of AIDS and licensed blood products by CSM(B) 13 July 1983".

Then if we go down to where it says "The following conclusions were reached", and I don't need to ask you about all of them, one is about aetiology so:

"The cause of AIDS is unknown but an infectious aetiology seems likely. A previously unrecognised or new agent may be responsible ..." and so on.

So I don't think -- I'm not going to ask you to go into -- to look further at the detail of that.

"(2) Patients who repeatedly receive blood clotting-factor concentrates appear to be at risk, but the evidence so far available suggests that this risk is small."

Now, you, I know, were at the meeting as an observer. Do you have any independent recollection of what the content or shape of the discussion was on that occasion?
A. Absolutely nothing.
Q. We see reference to the risk being small, however, appearing in other material including some of your own background papers.
A. Yes.
Q. Is it right to understand, at least from your perspective --
A. Yes.
Q. -- you can't speak to what was in the mind of the committee members, I accept -- that that's based upon the numbers, was it, the numbers of known cases, and the relatively small number of cases?
A. Yes. I think one can only say that's all we had to go on. It was a very data-poor position to be in. The only thing we knew at the time was the number of cases of AIDS -- not the numbers of cases of infections but the number of cases of AIDS -- that had appeared in the haemophiliacs in America and our own experience of the one case so far. I don't think we knew even about the man in Bristol at this time. We didn't know until September I don't think.

So that was effectively all there was to go on. We had no information about any level of infection. That was not manifest as yet as AIDS, for example, nor, indeed, how many people who had become infected, if they had become infected, would ultimately go on to develop AIDS.

So it was -- really, we had next to no information to go on.

I suppose the thing -- obviously, I've thought about this an awful lot, and we're probably going to come on to it in terms of things that I may have said at some stage later, but the one thing that is very interesting about this, and it is certainly interesting in relation to the information that was given in Spence Galbraith's paper, which is that AIDS appeared to have been diagnosed in America in a number of people in the late 70s, '78/'79, and yet by the time I think this group was meeting, I think there may have been 11 cases, some small number of cases in America in patients with haemophilia, and we had the one case in the United Kingdom.

Given the ubiquity, the millions of units -- as you've pointed out, sir -- that were actually going into patients with haemophilia, it seemed extraordinary, even allowing for a long incubation

period, that there was such low numbers.

Now, when I talk about "such low numbers", nobody should take it as assuming I think that a few here and there was not significant. It was of colossal significance to the individuals concerned. But, in looking at the data that we had, it was quite extraordinary so much American Factor VIII having been used over the years and yet so few patients actually manifesting as cases of AIDS.
Q. In terms of basing an assessment of risk on numbers of cases, albeit with the qualification or explanation that you've just given, do you accept there's a possibility of conflating incidence with risk or --
A. Totally and it is what happened. It is what happened. I think you might say: yes, but what else was there to do? I mean, clearly a caveat should have been entered in each case, and I think quite often it was, but -- "this may be the tip of an iceberg", "this may be something which is going to explode and be an enormous problem", but it would have to be a caveat since one didn't know (a) the level of infection that was around, (b) how many infections would actually go on to become AIDS or manifest themselves in any of the symptoms that might be considered to be AIDS. So it was a total vacuum of information and the only

information that we had was numbers, totally inadequate though it was and, you're right, the risk and the numbers were conflated.

Q. If we just continue with that same paragraph, it talks about the risk being:

"... appears to be the greatest in the case of products derived from the blood of homosexuals and IV drug abusers resident in areas of high incidence ... and in those who repeatedly receive concentrates in high dosage. Balanced against the risk of AIDS (and of other infections transmitted by blood products) are the benefits of their use; in the case of haemophilia they are life-saving."

Now, it's right, of course, to say that concentrates could be life-saving in the case of haemophilia, but are you able to assist us with understanding whether the Committee thought that was, as it were, almost invariably the position, because the majority of treatment, as I think we've already discussed, were to alleviate pain, joints, et cetera, but it's not an invariably life-saving treatment, is it?

A. I can't interpret for you what the Committee thought but I would -- if I might suggest, I know that this Inquiry has a group of experts on haemophilia who

should be able to assist you with that and should be able to go back in history and in time to show you what the consequences of untreated or sub-optimally treated haemophilia were.

I think that inadequate treatment of haemophilia, severe haemophilia, was life-threatening. It didn't always mean that the patient would ultimately succumb but there was a potential. I don't think that that is an exaggeration but I do feel that I'm not well placed to tell you, whereas I do think, sir, you have a committee of experts on haemophilia who should be able to assist.

Q. The third -- actually, sorry, just before I move on from that, of those participating in the meeting, whether as members of the Committee or the handful of expert advisers, as they were termed, would it be right to understand that the person who would have been in a position to provide information to the committee about benefits of treatment would have been Professor Bloom?

A. He was the haemophilia expert that Joe Smith actually chose to assist the committee.

Q. And the only haemophilia expert who participated in that meeting?

A. That's true. Though Dr Lane, who was a member of the

Committee, knew an awful lot about haemophilia.

Q. Paragraph 3 then talks about:

"The possibility ... of withdrawing clotting factors concentrates ... replacing them with cryoprecipitate. It was concluded that this was not feasible ... on grounds of supply."

And I've canvassed that with you already, Dr Walford.

Top of the next page talks about the possibility of withdrawing US preparations from the UK, so there's an element of repetition there.

In any event, it goes on to talk about:

"... the perceived level of risk does not at present justify serious consideration of such a solution. Efforts are however being made to secure UK independence of foreign suppliers of clotting factor concentrates. This should reduce markedly, although not eliminate, the risks to recipients of these products, and the Sub-Committee strongly supports this aim."

Now, that's talking about achieving self-sufficiency, as I understand it:

"Efforts ... being made to secure UK independence of foreign suppliers of clotting factor concentrates."

A. Yes.

Q. I don't know whether, in the limited time you've had to look at Sir Joseph Smith's statement, you picked up upon this, but his statement records his understanding that self-sufficiency was something that was going to be achieved within a matter of months?

A. Oh, yes I did see that. I did see that and it was a great surprise to me.

Q. That, on any view, was incorrect.

A. Yes, yes.

Q. So either his recollection is wrong, although it's right to note, and others can read Sir Joseph's statement, it's a matter -- he explains why it's his recollection and it's consistent with evidence he gave us elsewhere, but either his recollection is wrong or the Committee was misinformed. There's no other way of looking at it; would you agree?

A. I don't understand why he came to that conclusion and what apparently -- I mean, you have some minutes and so on, but I don't know who would have said that. I can't think actually of anybody who knew anything about the position that we were in, given that we were reliant for 50 per cent of our Factor VIII concentrates on imports, how anyone could have included -- concluded that self-sufficiency was just

a matter of months away I don't know, and I would be astonished if anybody in the Department at official level would have said that.

Q. Then I just want to look at the last sentence of this paragraph, paragraph 4:

"The Sub-Committee was also informed that the UK Haemophilia Centre Directors have adopted a policy for use of US Factor VIII in order to minimise risks as far as possible."

Now, just pausing there, any information about that, would you agree, is most likely to have come from Professor Bloom? That would have been the source of the subcommittee's --

A. Yes, I expect so, yes.

Q. Then I just want to put up on screen -- Soumik, can we do this side by side? So could we have that page on one side and then WITN -- ah, you are ahead of me. Thank you so much. You read my mind.

A. Right.

Q. So we've got there the letter of 24 June 1983, which I know you're familiar with.

A. Yes.

Q. Indeed, we can see the top of the page it says:

"Please copy to Dr Walford for info."

Handwritten at the top of that page.

A. Yes.

Q. This is the only policy for use, as far as we understand it, and I think as far as you understand it, adopted for use by UK Haemophilia Centre Directors.

A. Yes.

Q. You have referred to these recommendations that we see at 1 and 2 in your witness statement, and I think in the context of discussing clinical freedom. You referred to them, I think, as weak recommendations or words to that effect?

A. Well, I think, by definition, because they were recommendations and not guidance or anything more formal, then inevitably that was weak. Essentially people were free to take or leave the recommendations, But you would have thought that, given a letter like this, a great deal of account would be taken of it. I would be -- I would have been surprised if that were not the policies adopted by the Haemophilia Centre Directors.

I personally think the most problematic thing is what about people being treated outside haemophilia centres, and how far did this set of recommendations emanate to places where the haemophiliacs were not known and were -- only occasionally had to visit for

concentrate or other preparations?

Q. In any event, if we just look at the terms of the recommendations on that right-hand side, we can see in the paragraph numbered 1, which is concerned with mild haemophilia, von Willebrand's, and it's simply consider treatment with DDAVP --

A. Yes.

Q. -- and a reference to that being, in any case, the usual practice of many directors and, I should say, Dr Walford, the Inquiry's heard inconsistent evidence in relation to usage of DDAVP even by 1983.

A. Yes.

Q. So that's consider DDAVP for those categories. Then 2 is children and mildly affected patients or previously untreated patients, all it says is:

"... many Directors already reserve supplies of ..." and I think we need to read that as "NHS concentrates or cryoprecipitate".

A. Mm-hm.

Q. "... and it would be circumspect to continue this policy."

So, at best, it's a good idea to carry on doing this if you're already doing it?

A. That's right.

Q. Now if we just look then on the left-hand side, to

what the subcommittee's understanding appears to be -- and there's no evidence the subcommittee had this letter to consider for itself?

A. No.

Q. The subcommittee says -- it's paragraph 4 on the left-hand side, last sentence --

Sorry, no, it's paragraph 4, Soumik, so top of the page.

"The Sub-Committee was also informed [by hypothesis by Professor Bloom] that the UK Haemophilia Centre Directors have adopted a policy for use of ... Factor VIII in order to minimise risks as far as possible."

I'm really asking for your view as an informed observer, as I say, because you weren't a decision-maker in this regard. Do you think that the policy that, as a matter of fact, had been adopted by Haemophilia Centre Directors could accurately be described as a policy for use of Factor VIII concentrates that would minimise risks as far as possible? Because the actual policy didn't go very far at all, did it?

A. No, it was advisory, it recommended, it was in no way mandatory, and I think I stick by the word that I used in my statement which said that it was weak.

Q. Because a policy, to use the subcommittee's words, "for use of US Factor VIII in order to minimise risks as far as possible", bearing in mind the subcommittee's already recognised that those at greatest risk are those who receive high amounts of concentrate, who are most likely to be severely affected haemophiliacs who are not covered by the policy in the letter of 24 June at all, unless they are newly diagnosed patients.

A policy to minimise risks as far as possible -- sorry, minimise use -- use concentrates to minimise risks --

A. Ah I see what you mean.

Q. -- as far as possible for severe haemophiliacs would have to be different, wouldn't it? It would have to be something along the lines of no prophylaxis, reduce home treatment --

A. I understand what you're saying now --

Q. -- treat in emergency circumstances --

A. Yes.

Q. -- cancel elective surgery, single batch single concentrate dedication policies?

A. Absolutely. But that of course was not what the meeting of 13 September concluded, and there they were suggesting no change for people who had been,

obviously, severe haemophiliacs, and that consistently appearing to be the policy of the UKHCDO for quite a long time.

So I guess I had assumed, and you are quite right to say it doesn't say that, that what they were talking about here is: how do you stop people who shouldn't be getting concentrate, because they are not severe, from getting concentrate? Well, there's a set of recommendations, if you like, and asking people to consider what you should do. It doesn't relate to the severe haemophiliacs, and my understanding at the time was that because they were all maintained on concentrate that there was no change in the policy of the UKHCDO.

Q. So that it's clear -- I am fairly confident you understand this, in any event, Dr Walford -- the concern I am ventilating through this line of discussion with you is a concern that the subcommittee may have proceeded on a degree of false reassurance or mistaken reassurance that things were being done in terms of treatment policies that were not being done. That's the reason for raising it.

I suspect you can't assist us any further with that because you don't have an independent recollection as an observer --

A. I have no independent recollection of this meeting.

SIR BRIAN LANGSTAFF: If I may, this particular paragraph is all about risk, isn't it?

A. Yes.

SIR BRIAN LANGSTAFF: It talks about the "level of risk not at present" justifying withdrawing US product.

A. Yes.

SIR BRIAN LANGSTAFF: Then the next three sentences deal with risk, and they throw into the equation to assess what the risk actually is, the sense that when and if we become self-sufficient in making our own concentrate, then the risks of US concentrate will, by definition, fall away: we have our own risks but we won't have the USA's risks.

A. Yes.

SIR BRIAN LANGSTAFF: The second part is that there's been a change of policy or a policy which ensures that the risk is kept as low as possible.

In terms of the first of those two points, the context was that of what was possibly a transmissible agent that was thought to be the most likely cause -- you yourself thought it was the most likely cause.

A. Yes.

SIR BRIAN LANGSTAFF: -- which, if it was something which had a long incubation period which, was understood at

the time, might take a while to manifest itself in the way that epidemics do.

A. Yes.

SIR BRIAN LANGSTAFF: So the sense that in a year or two or three or four's time there might be sufficient production domestically really had nothing to say about that risk, did it?

A. No, the risk as they were defining it was what they perceived as the risk at present time, yes.

SIR BRIAN LANGSTAFF: And the future production of self-sufficiency, enough quantities, unless it was very, very imminent --

A. Yes.

SIR BRIAN LANGSTAFF: -- would have nothing to say on it?

A. No, it does appear to be another *non sequitur*.

SIR BRIAN LANGSTAFF: So it's -- yes, it's another *non sequitur*.

A. Yes.

SIR BRIAN LANGSTAFF: The last looks like misinformation, the sense that there's been a change when there hasn't been a change.

A. Yes.

SIR BRIAN LANGSTAFF: Because the general message being sent out from -- as I understand your view of -- and at the moment it may well become my own view, of what

is said in the letter of 24 June, is that the UKHCDO weak recommendations really were: business as usual.

A. Or slight improvement on business as usual, if you like, emphasising how best practice --

SIR BRIAN LANGSTAFF: It gives a nudge.

A. Best practice.

SIR BRIAN LANGSTAFF: Yes, thank you.

MS RICHARDS: Then if we just go back to the document on the left-hand side and look at paragraph 5, and it's the last paragraph in the subcommittee's conclusions I need to ask you to look at, so this is dealing with the dumping issue, the March 1983 FDA regulations, and the Committee say this:

"It is advisable that all clotting-factor concentrates derived from US plasma sources and intended for use in the UK be prepared only from material manufactured from plasma collected after new regulations were introduced by the FDA on March 23, 1983. These regulations were introduced specifically to minimise the likelihood of collecting blood from affected donors. This step is recommended notwithstanding the possibility that its practical value may be relatively small. It cannot, however, be taken until supplies of post-March 23 material can be assured. It is recommended that close contact is

maintained between the Licensing Authority and Supplies Division with the aim of introducing this step immediately it becomes feasible."

So is it right to understand that what -- the subcommittee wanted action to be taken, in relation to not having pre-March 1983 concentrates in use with UK, but were articulating the view that there needed to be sufficient supplies of post-March material for that to happen?

A. Yes. I mean, I think they were still making the point that, really, potentially, the benefit of that might be marginal but, notwithstanding that, it would be a good thing to do but you could only do it once you knew you had adequate supplies, so that you didn't get the threat that I have been referring to of problems for patients with haemophilia who were not going to be adequately treated if we didn't have enough Factor VIII.

Q. Now, I then just want to pick a handful of bits and pieces of material that follow on from this in terms of chronology before lunch, and then I'll come to some other topics after lunch. If we go to DHSC0002229_097, this is a minute from you, dated 20 July 1983, to Mr Wrigglesworth and Miss Spencer. It refers to a telex received from the British Embassy

and questions have been raised in America that were then being passed back via the British Embassy to the International Division within the Department of Health about was the UK going to ban American concentrates.

If we need to pick that up we can do so in due course. I just want to ask you about the fourth paragraph that we see on the page:

"Incidentally [you say], are you happy with the assurances so glibly given by the manufacturers that 'future' supplies of [Factor]VIII will be derived from plasma taken in accordance with the 23 March regulations?"

Then you ask whether more information should be obtained. So it would appear that you're expressing a degree of -- cynicism may be an unfair word --

SIR BRIAN LANGSTAFF: Scepticism.

MS RICHARDS: -- scepticism, that's the word, thank you -- as to whether the assurances given, that we looked at in that exchange of communications with Mr Egerton -- could simply be taken at face value.

A. Yes, I mean, I thought it would have been helpful for them to have told us when we could have supplies actually in the country from material produced in compliance with the FDA regulations and I was simply probing the issue and asking for it to be probed.

Q. Then if we could go to DHSC0002353_020. This is a minute from you dated 25 July 1983, again it refers to a telex from the British Embassy in Washington. We've got various of those materials but I don't think it's necessary to go to them with you, Dr Walford, in order to understand the issues you were raising.

You say this:

"I suggested we should ascertain the outcome of a recent FDA meeting ..."

Just pausing there, do you think that's a reference to the 19 July meeting that we looked at earlier?

A. I can't be sure. What was the date of this?

Q. This is 25 July.

A. It could be, it could be.

Q. In any event, you carry on:

"... which was, I believe, to discuss the problem of plasma/finished product which pre-dated the 23 March regulations."

So still concerned with the, as it were, the dumping issue:

"If there is to be no restriction on the use of this material in the USA, I suggest that we should follow the same line. If, however, use of this material is restricted in some way (eg by the

imposition of a quarantine period), then, provided supplies are not prejudiced, the UK should presumably refuse to accept material that is not considered acceptable for use in the States. You agreed to take this forward with Dr Fowler."

Why was it your view that the UK should follow the US line rather than ploughing its own furrow?

A. Now, of course, trying to think what I may have thought at the time, but I suspect that what I thought was, if the FDA, which had introduced quite stringent regulations to control a product, if you like, and in America they were seeing far more cases, still not a huge amount, but maybe up to maybe 17 or something around this time, of cases in haemophiliacs, I took the view, I believe, that the FDA would not continue to allow the use of product that they thought to be unsafe, that it would be rather odd if they did because I knew them to be a very stringent sort of regulator.

So if they were saying we still think you can use this material, well then, we did not have more evidence than they had that we shouldn't go on using that material.

The big problem is if they restricted it in some way, the chances were that they would be dumping --

there would be dumping of their material into the UK. So we really needed to be very careful if the Americans were not going to use this product it certainly couldn't be allowed to find its way into the UK. But I think that would have been part of my thinking.

Q. I understand, absolutely, the second part of what you've said, if the Americans think it's unsafe we certainly shouldn't be using it. But can I just put this to you: just because the Americans think it's safe doesn't mean that the UK should reach the same judgement?

A. Of course it doesn't mean the UK can't have its independent judgement but, thus far, and the date of this is 25 July, the Committee on Safety of Medicines Biologics Subcommittee, on which one relied, however much in looking back now you feel it was a flawed meeting, I had nothing more to go on, and neither did anybody else, than their recommendation that actually the material should continue -- well, not continue in use, it wasn't specifically said, but that it would not be restricted until supplies could be, as it were, confirmed.

There was nothing else, apart from the CSM's decision that I or any of my colleagues could possibly

have gone on. They were advising the Licensing Authority. The Licensing Authority did not say we will withdraw this product. So that was all one had to go on.

Q. Just on the question of what steps might practically have been available, and subject to whatever the unknown practical difficulties were that Ms Spencer referred to in the Department's own meeting of 3 June, but on the question of labelling, stop orders, the kind of issues floated by Dr Fowler, there's no express reference to them obviously in the Committee on Safety of Medicines conclusions on 13 July. So we don't, I think, know whether any consideration was given to the specifics on that occasion.

Who might be able to cast further light on that matter, Dr Walford? Would it be a question for Dr Duncan Thomas at the NIBSC, do you think?

A. NIBSC could say whether or not any restrictions, any new labelling requirements were placed on the products, and the Medicines Division would have been the division to pursue this, to actually push if they felt that it was the thing that they wanted, that they needed to do.

I would not have said that for Med SEB, and me in particular, that I had a particular role in

following up this state of affairs. Clearly somebody asked my view and my view was: if the Americans weren't going to use it, we certainly shouldn't, but if they were prepared to and knowing the FDA's rigour, or what I believed to be the FDA's rigour as a regulator, I thought that it was reasonable to go on using it ourselves.

Q. Then if we just pick that up with a slightly later minute from you, 3 August 1983 at DHSC0002351_017, so we can see in the first main paragraph that information's been gathered about the extent of manufacturers' stocks in the UK, and it's recorded that, in the case of three of the manufacturers, all or a substantial proportion of the stocks:

"... has been manufactured from plasma collected in accordance with the special precautions instituted by the manufacturers themselves, albeit prior to the March 1983 FDA requirements."

So there's an -- is this right, there's a substantial proportion of pre-March plasma in the UK --

A. Yes.

Q. -- not yet used?

A. Yes.

Q. Your suggestion is, because three of the manufacturers

are saying that they had their own regime of measures --

A. Yes.

Q. -- someone should do the exercise of seeing whether what they were doing that as good as --

A. That's right.

Q. -- the FDA recommendations or not?

A. Yes.

Q. Then the next paragraph, you then say:

"The question then is, what, if any, action is required in relation to stocks pre-March 1983 material which have not been collected under the manufacturers' own special requirements? Clearly, it is crucial to know the results of the Congressional hearing before making any decisions."

You obviously knew by then that this was a matter that was going to be considered by Congress in the States:

"If, by some mischance, the hearing should overturn the FDA decision, we shall be on the horns of a very nasty dilemma."

Can I ask you, please, why you characterised it in those terms "mischance" and "horns of a very nasty dilemma" because Congress might overturn it because it thought that was the right and safe course to take for

the protection of its citizens.

A. I, of course, now don't know precisely what I was thinking but my thought, I suspect, will have been we have just had a decision by the Committee on Safety of Medicines and the Licensing Authority, which says do not withdraw. We have just heard that the FDA is not proposing a withdrawal, as it were, and it's now going to be debated in Congress. Congress is, of course, full of politicians, it's not actually full of experts, and they may choose to overturn something that an expert group has decided and our own expert group has decided.

In that case, we would be finding ourselves, if the -- my thesis was if the Americans won't take this material then neither should we, if that would have been based on the science. Here, we were having congress coming in on whatever basis, I don't know, but definitely a political decision and, potentially, we would find ourselves with a whole new area of problems that we had to deal with.

I think that's all I was probably saying. I couldn't get my head around what we were going to do if Congress decided something different from what had already been agreed.

Q. Then, just finally before lunch, to round off this

issue, DHSC0000207 is a minute written by you on 20 September 1983. The second paragraph refers to the Congressional hearing, which has now taken place:

"It did not give rise to any alteration in the position in USA what FDA decision to allow the use of such material still stands. There would therefore appear to be no reason to change our policy over the use of such material in the UK."

So you're essentially consistent with what you've previously said: will follow the US line.

Just bearing in mind that what the Biological Subcommittee on 13 July had actually said was it did want steps to be taken to prevent the use of pre-March plasma, provided the position of supply could be secured.

A. Yes.

Q. Did that ever get resolved, to your knowledge?

A. Well, we know that the position -- the supply couldn't be resolved, though, of course fortunately there was some material that was made by manufacturers according to their own specifications, which -- you sent me last night the Alpha Pharmaceutical manufacturer's press release on this, and so on, where it was saying how it was taking its steps to protect -- to, as it were, follow the FDA guidance, although it was before the

FDA guidance was actually promulgated.

So there was some material which could have been used as safely as the FDA mandated material would be. But, basically, the supply position remained exactly as it was when the CSM considered it. We had something like 40 million international units of Factor VIII in the country, some of which had been, it seems, manufactured in a way which was, to a degree, if not compliant with the FDA, actually possibly even more rigorous in the case of some of the manufacturers, but the rest wasn't, and so that was the supply that we had, and the Committee on Safety of Medicines, and therefore the Licensing Authority, had not said that we shouldn't use that material.

Q. Would it be right to understand that in the absence of a labelling process or something equivalent, the haemophilia clinicians who were actually using these concentrates to treat their patients would have no means of knowing whether it was pre or post March pre or post the manufacturers' own internal regime?

A. Yes.

Q. Then, just finally, we see you say this:

"Incidentally, if you haven't already heard, a haemophiliac in Bristol has died of AIDS."

Then you refer to material, Alpha and Immuno,

also BPL, also cryoprecipitate, and you say that he was a mild haemophiliac.

You'll recall, Dr Walford, when we looked at the Reference Centre Directors' meeting of 13 May, the reference in the minutes to keeping the matter under constant review, or words to that effect, and you'll recall Dr Craske saying in his letter to his colleague at the PHLS, well, if another case comes along then perhaps the balance of risk, as it were, would change.

Did the Department's approach or the steps that it was taking change at all, once the Department became aware, as you obviously were by this time, that a haemophiliac had died and, no doubt -- from this minute there doesn't appear to be any doubt in your mind that the cause is AIDS as a result of treatment with concentrates?

A. My understanding about this unfortunate man was that he had died in August. CDSC had not been informed and, therefore -- I'm not sure what the date of this thing is.

Q. 20 September.

A. Right. So, by September, CDSC had heard about it. I then reported it or mentioned it at -- I've forgotten whether it was HCDO meeting or a transfusion director meeting, but certainly it was discussed and,

of course, then you are probably going to come on, this afternoon, to various reports in the press, but what this case was was a patient hitherto unknown to us at all, as actually potentially ill with AIDS, not having been notified, came to CDSC's attention in September and was immediately reported to -- I think it was the HCDO meeting -- I think it was.

So the fact of the death, unfortunate though it was, was not the newsworthy -- if I can put it that way, without giving any possible offence -- it was not -- that was not the issue. The issue was there was a patient with AIDS that we hadn't known about who had obviously been ill for quite some time. The actual fact that he had unfortunately succumbed to his illness didn't change the issue. It was the fact that there was a case of a haemophiliac and, as we can see, alas, a mild haemophiliac who had actually developed AIDS. There was the important issue and then the question, I think -- the question you're posing to me is, well, I had said previously if there is a single case of a patient but it was, in fact, who had received NHS concentrate that was the concern that I'd expressed in that earlier meeting. Here we see that he had received both Profilate and Kryobulin and he's also had some BPL Factor VIII but, clearly, we would

implicate the American Factor VIII.

So I'm not sure that the situation then materially changed because what I was saying in the earlier correspondence was that if there is a case that has only received BPL Factor VIII, then that would probably change the whole complexion of things.

Q. I understand that this might have -- why this raised questions for the adequacy of the surveillance because it wasn't known by CDSC?

A. Yes.

Q. Just as a matter of fact -- you've answered the question why but just to get it on the record as a matter of fact -- this information about what was now obviously a second confirmed case --

A. Yes.

Q. -- whereas previously it had been identified as a possible case, that didn't lead to any particular meeting, discussion, consideration of any new or different policy, did it?

A. No.

SIR BRIAN LANGSTAFF: May I just ask in the same vein, the Inquiry not long ago was examining the Treloar's School and one of the pieces of information which I picked up was that on 29 June Dr Hill at the Birmingham Children's Hospital was told that one of

his patients who was at Treloar's was exhibiting the stigmata of AIDS.

A. Right.

SIR BRIAN LANGSTAFF: Did that information ever reach you?

A. No.

SIR BRIAN LANGSTAFF: Should it have done?

A. Well, it shouldn't necessarily have reached me, it should have reached CDSC and CDSC should have reported it to IMCD.

SIR BRIAN LANGSTAFF: So there may be a problem for us to look at as to the extent to which the surveillance was actually picking up cases that it should have picked up?

A. Absolutely.

SIR BRIAN LANGSTAFF: Thank you.

MS RICHARDS: Sir, I've trespassed into everyone's lunch, I'm sorry, but now is obviously the right moment to take a break for lunch.

SIR BRIAN LANGSTAFF: Yes, it is. So we'll take a break until 2.15.

(1.10 pm)

(Luncheon Adjournment)

(2.15 pm)

MS RICHARDS: Dr Walford, I'm going to ask you to look next at CBLA0000060_067. This is a document I think

you saw yesterday evening.
A. Yes.
Q. It's a letter to Professor Bloom from Alpha Therapeutic, March 1983.
If we go over the page it's a press release saying:
"Alpha Therapeutic acts to protect haemophiliacs from AIDS epidemic."
Then it talks in the end of the first paragraph about Alpha having taken steps to exclude from its donor pool persons who may be at high risk of transmitting the disease to others and, if we go down towards the bottom of the page, we can see the penultimate paragraph says:
"The evidence suggests, although it does not absolutely prove, that a virus or other disease agent was transmitted to them [that's referring to established cases] in the Factor VIII concentrate, derived from pooled human plasma which they rely on for life - and for sustaining a relatively normal lifestyle."
Then it goes on to talk about some of the steps that were being taken.
Now, I'm not in fact going to ask you about the content of it. It's really a question of process.

Would you have seen a document like this at the time?
A. No.
Q. In Medicines Division, and I know you obviously were no longer in the Medicines Division in 1983, but from your experience there previously, would this kind of material, press releases with important announcements, normally come across the desk of the Medicines Division?
A. I should think so. I can't be certain but I would have thought. So it's appropriate.
Q. We can take that down, thank you.
I want to move now to ask you --
SIR BRIAN LANGSTAFF: Did Dr Bloom ever mention to you that he had received a press release from Alpha which said that it thought that AIDS was highly likely to be caused by a virus?
A. No recollection of hearing that from him.
MS RICHARDS: I'm going to ask you next a series of questions about the Council of Europe recommendations. Again, if we can just set the scene with some of the contemporaneous documents.
DHSC0000716.
This is a letter from Dr Gunson to you, 16 May 1983, and he says:

"As promised I am writing to let you know what has happened regarding AIDS at the Council of Europe Meeting."
I don't need that paragraph, thanks, Soumik.
If we go further down -- thank you -- he says there:
"There is going to be a resolution put to the Ministers of the Council of Europe and while this has not yet been finalised I can give you the gist ..."
and he then sets that out.
Then below numbers 1 to 5 he says this:
"You can see that what they're leading to is the greater use of cryoprecipitate, and we saw two years ago that this tends to be the standard product in many European countries. Although I put forward the UK view of this product the consensus was against us. Like you, I do not think BPL could change to freeze-dried cryo rapidly and the logistic problems would be considerable."
So that's Dr Gunson alerting you in the middle of May to these recommendations.
A. Yes.
Q. Now, if we then look at WITN4461129, please, we can see that on 1 June 1985 a number of people within the Department, including you -- your name has been

handwritten on at the top in addition to the other recipients -- were sent the draft recommendation to the Council of Europe's -- sorry, the draft recommendation that was going to be submitted to the Council of Europe's Health Committee, and then the second paragraph says:
"Foreign and Commonwealth Office have asked for briefing on the text indicating its acceptability to the UK and any amendments we propose, together with supporting arguments. Dr H Gunson, our representative on the expert committee, has already accepted the main principles of the draft recommendation."
So you and others were being asked to comment?
A. Yes.
Q. Then if we can see your comments they are at DHSC0001659?
SIR BRIAN LANGSTAFF: Just one question. You say that's 1 June. Can we look at the date at the bottom. It may be the 7th.
MS RICHARDS: It may be the 7th, you're right.
SIR BRIAN LANGSTAFF: Particularly when it talks about next Monday or Monday morning in the text, I suggest it probably is the 7th.
MS RICHARDS: Yes, I think that probably does fit with what we know about timing. We can double check that.

SIR BRIAN LANGSTAFF: Thank you.
MS RICHARDS: Then if we go to DHSC0001659, this is your response, Dr Walford, of 13 June 1983. You say you have asked for comments:
"Our main difficulty is with the first paragraph of recommendation I. Whilst we would agree that it is theoretically desirable to avoid the use of large-pool coagulation products wherever it is medically appropriate to do so, this is only feasible if a satisfactory alternative product is available."
You then set out a breakdown of the material used for treatment, and we see the proportions there set out. Then you say:
"From these figures it can be seen that there is no option but to treat the majority of our haemophiliacs with large-pool products and thus it could be argued that the use of such products is specifically indicated for medical reasons since the risks of non-treatment are greater than the risks of treatment. However, this is a rather dubious 'let-out' and I think we should prefer to see the recommendation re-worded ..."
Then you give your suggested rewording, which is:
"To avoid, wherever possible ..."

Or wherever practicable, you give that an alternative I think:
"... the use of coagulation factor products prepared from large plasma pools: this is especially important for those countries where self-sufficiency in the production of such products has not been achieved."
So I think it's probably going to be slightly easier for people to then follow if we look at what the text was of the draft and then we can see how it changed.
A. Yes.
Q. If we look at DHSC0105313.
If we look at the date -- so this, I think, makes sense of it being the 7th rather than the 1st, sir -- we've got 3 June 1983 there, towards the top. We can see that you are -- a list of handwritten recipients "Copies to" and then the fifth name down is "Dr Walford" and then someone's handwritten on:
"Do you have any comments that you would like me to pass on to the UK delegation in Strasbourg, please?"
Then bottom of the page says:
"The text is as follows ..."
Top of the next page, draft recommendation. I'm

not going to ask you to reread all the preliminaries on that page.
If we go to the third page, if we look at 1 and the first insert, so 1 says:
"To take all necessary steps and measures in respect to AIDS and, in particular ..."
Then this was the draft that you were commenting on?
A. Mm-hm.
Q. "To avoid the use of coagulation factor products prepared from large plasma pools except when such a product is specifically indicated for medical reasons ..."
Now, as I understand the minute that we just looked at, you were recommending the insertion of the phrase -- either "wherever possible" or "wherever practical"?
A. Yes.
Q. And to put that and then take out the words "except when such a product is specifically indicated for medical reasons"?
A. Well, that was almost tautologous, wasn't it? Because basically you avoided it wherever possible or practical but if you had to use it it would be for medical reasons. No other reason for using it.

Q. Yes and I understand the logic in relation to that last bit. Perhaps the more significant amendment is the suggested insertion of the "wherever possible" or "wherever practical"?
A. There's an exception made. I mean, it seems to me it's saying, broadly speaking, the same thing, although what I think it's saying there is not terribly sensible, because why on earth would you give anybody a large-pool product or, indeed, almost any product unless it was indicated for medical reasons? So, in a sense -- so obviously avoid except when it's "specifically indicated". Well, I think -- I suggest -- that my suggested amendment, which was, "Well, look, try your best to avoid large-pool products, but it may not absolutely be possible always to avoid" -- and I don't -- and of course they would only be taken for medical reasons.
So I'm not sure I understand the significance that you appear to be putting on the change that I was suggesting.
Q. The suggested significance -- if we leave aside completely the phrase "except when such a product is specifically indicated", so forget that. That did come out but let's leave that aside.
A. Mm-hm.

Q. You suggested the insertion -- and, as we see when we look at the final text, this was adopted --
A. Which I didn't know incidentally --
Q. You suggested insertion of the phrase --
A. I didn't know I had such influence.
Q. -- "wherever possible", and the reason you were suggesting that, as I understand your minute, was not because of concerns about products being used when there wasn't a medical indication to do so -- as you said, in a sense, it's obvious it should only be used in those circumstances -- it was because the UK would find it difficult to comply otherwise because you were reliant on large-pool concentrates?
A. Are you suggesting that that's what I was thinking?
Q. Yes.
A. I don't think that that's the case. Well, I don't know that that would have been the -- what I was thinking. I was thinking that we would avoid if we could but obviously you couldn't avoid in our circumstance and it seemed to me we were being asked how does this fit with the UK situation. The UK situation was that 80 per cent of the product we were using was large-pool. From the UK's point of view, totally accept that the avoidance of large-pool a very good idea, but you do that wherever practicable.

So -- and because, in fact, the "except when such a product is specifically indicated for medical reasons", I don't think you can dissociate the two phrases because clearly we were using -- the country was using large-pool products specifically indicated for medical reasons.

Obviously, that wouldn't necessarily have been the case for a mild haemophiliac. Clearly we know that that was not the appropriate way of treating patients with mild haemophilia, but the generality of the use of the concentrates was obviously for patients with severe bleeding disorders, and I don't really see -- I think it's a kind of a semantic proposition, that you're possibly putting more emphasis on than I necessarily intended. I said something in my previous minute about something being a "dubious 'let-out'".

Q. Yes.
A. It might be better to look at that because I can't remember what it was I --
Q. Yes, of course. DHSC0001659 again.
A. Oh, I know now.
Q. My reading of this, Dr Walford, and if you say it's wrong, then please say so, but my reading of this was you were saying -- you've given the figures as to what

material was as a matter of fact used in the United Kingdom, and then underneath that you said:

"From these figures it can be seen that there is no option but to treat the majority ... with large-pool products ..."

Because that's what you had?

A. Yes.
Q. It's the supply issue again.
A. Yes.
Q. Then you refer to that wording of the exception, and you say, well, "it could be argued that the use of such products is specifically indicated for medical reasons", and that's what you describe as a "dubious 'let-out'", and you suggest then the insertion of either "wherever possible" or "wherever practicable", and that's why I'd -- I'd read this as you suggesting that because the supply situation meant that the UK had no choice but to treat with large pool concentrates.
A. My understanding was that the UK was -- the UK was being asked, comment on this, how would this recommendation affect your situation, as they were asking other countries, of course, not just the UK. We were asked to comment from the point of view of the situation in the UK. One could have said well let's

accept that one because you've got this exception, if it's indicated for medical reasons, you can go on using it. I thought that that was bit tendentious, that was a dubious let-out. So to be more precise, from a UK point of view, and I didn't know that actually this resolution that had been adopted, actually, at the end of the day, it would be more honest, if I can put it that way, to just say wherever you can avoid, but not to rely on the let-out that naturally it's being used for medical reasons.

So I suspect I was trying to use -- I was trying to not to rely on what I thought was a rather stupid sub-clause and to try and say, well, for us, that is the practical situation.

SIR BRIAN LANGSTAFF: May I perhaps suggest that, being semantic, the problem might be the word "specifically" because, obviously, the use of products is indicated for medical reasons but the "specifically" might suggest that it is an exception, that there has to be an exceptional reason for a particular case, as opposed to a generality where as far as practicable, as far as possible, you try to avoid use of the product.

Might that have been what was in your mind?

A. Well, I couldn't necessarily say but, as far as I was

concerned, we had some 2,000 or so patients with haemophilia, which was severe. I didn't see, given the state of the supplies that we had, that we had any alternative but to give some 2,000 or so patients, and maybe more, I don't know the exact numbers, large-pool products and, therefore -- I mean, whilst you could see that if only exceptionally you had to give one or two patients for medical reasons this material, then the use of the word "specific" would be perhaps helpful.

But this was across the board for the patients who were coming to haemophilia centres. The vast majority of those who attended haemophilia centres attended because they were severe haemophiliacs. Otherwise, they were not going to be constantly being reviewed by the centres.

So there were large numbers of patients who needed to have this material and my thoughts, rightly or wrongly, at the time is this is a really silly form of words that was being proposed and I thought that I was being helpful in making it what I thought was a more accurate form of words as to how the UK responded to this particular recommendation.

MS RICHARDS: Before we look at the text of the final recommendation, because there's then a separate issue

I want to ask you about arising from that, can I just ask you this: what was the general approach within the Department, if you are able to speak to that, to something like this, a Council of Europe recommendation? Was it something that was seen as important to comply with or was it seen as something that was aspirational -- I'm talking generally here, rather than necessarily this very one -- or, indeed, was it just seen as something to pay lip service to?

A. No, I would think that would be -- that latter point would be a misrepresentation of the Department. If there was a Council of Europe series of recommendations on something and they wouldn't be recommending on something trivial, I would suggest that the Department would do its best to take things seriously.

But we need to bear in mind that there had been a recommendation for self-sufficiency going way back, albeit from the WHO to the early 1970s. People -- the Department tried to comply. It would certainly not seek to do other than comply but, clearly, our country, just as other countries, were always given the option to comment and, at the end of the day, a recommendation might well be amended in the light of the comments received from countries that had been

asked to comment.

Q. Then if we look at the final text, it's MACK0000307, if we go to the second page, we can see it there set out, that there's the heading, recommendation number R(83)8 of the Committee of Ministers to Member States, et cetera, et cetera.

If we just go down that page, I'm not going to ask you anything about the detail here but there's some basic principles set out and then, if we go over the page, thank you. So we see there the recommendations:

"Recommends the governments of member states:

"I. to take all necessary steps and measures with respect to [AIDS] and in particular:

"-- to avoid wherever possible the use of coagulation factor products prepared from large plasma pools; this is especially important for those countries where self-sufficiency in the production of such products has not yet been achieved ..."

So the UK's suggested rewording is what was adopted in the final recommendation, as you'll see. But it's the next bit I want to ask you about. You will see that the third recommendation is about blood donors -- providing blood donors with information?

A. Yes.

Q. That's the leaflet issue --

A. Yes.

Q. -- which I will briefly ask you about.

A. Yes.

Q. The second recommendation is, with that preface of taking "all necessary steps and measures ... and in particular":

"-- to inform attending physicians and selected recipients, such as haemophiliacs, of the potential health hazards of haemotherapy and the possibilities of minimising these risks ..."

So it's a recommendation to tell two different cohorts, clinicians, the treating clinicians and patients, and to tell them about, as it were, two things, potential health hazards and possibilities of minimising these risks. That's what I want to ask you about.

Did the Government take any steps to provide, first of all, the treating clinicians the attending physicians with information about hazards or the possibilities of minimising the risks?

A. As far as I'm concerned, and I think a key word in there is "selected recipients", we are -- in terms of large-pool products, we are only talking about patients with coagulation disorders and specifically

haemophilias A and B. So, essentially, it was well known in the UK that the UK Haemophilia Centre Directors, who were treating such patients, knew all about large-pool products and they knew all about, as much as anybody else did, about the risks of AIDS from there.

So they would be what I would describe as the attending physicians and the selected recipients, in my view, would be patients with haemophilia who needed to know.

Q. I don't dissent from that but the question is, did the government -- did the Department, to your knowledge take any actual steps itself -- and if you can deal with clinicians first of all and then patients separately -- any steps itself to inform clinicians about either of these matters, the potential health hazards in relation to AIDS, because that's what, we're talking about we're not talking about broader health hazards, or to inform clinicians about the possibilities of minimising those risks?

A. Well, as I've mentioned before, it was not the role of the Department to inform physicians or recipients about a specific risk or hazard. That was left to the relevant medical professionals. Dr Gunson, who was the consultant adviser in blood transfusion to the

CMO, wrote to him to say that patients are being informed.

Q. I will look at that with you in a moment.

A. So why would there have been -- I mean, you're going to propose the reason to not --

Q. Am I right in understanding the answer to my question, did the Department do anything to inform clinicians of these matters --

A. No.

Q. -- the answer's no?

A. That's right.

Q. The reason is, I think is what you are saying, if I paraphrase, because you expected they would already know it?

A. Well, expected they would be told by their treating clinicians.

Q. Sorry, I'm just talking -- I'm not making myself clear enough, it's my fault, Dr Walford. Leave aside what patients are told for the moment, completely. I'm going to deal --

A. Oh, the consultants? Well, we knew the Haemophilia Centre Directors knew very well what was going on. They were telling us very often, so we knew.

Q. Forgive me, how did you know? You knew -- you yourself may well have known what the Reference Centre

Directors -- or got a good sense of what the Reference Centre Directors knew because you'd attended that meeting, for example, in May 1983 but if we look at what was known by the much larger number of haemophilia directors and other clinicians because --

A. Yes.

Q. -- there were haemophilia clinicians who are not themselves members of what you have correctly pointed out was a directors' organisation.

A. Yes.

Q. They had met in September of 1982 at a point in time at which AIDS is mentioned in passing and Dr Craske is going to look into it. Obviously, there's then the correspondence from Dr Craske --

A. Yes.

Q. -- and I accept you're aware of that being sent out, and then they don't meet again as a directors' organisation until September or October 1983. So are you essentially relying upon the letters sent by Craske, Bloom, Rizza in March and June 1983?

A. Well, that would have been one source. I find it quite difficult to believe that although you talk about the Reference Centre Directors knowing, Craske had put out a report himself and he was doing the surveillance for the UKHCDO, not for the reference

centres specifically, so they had a mechanism. The mechanism was the surveillance by Craske and the reports -- or the reports that he made and also the fact that it's inconceivable to me that people treating patients with haemophilia would not have been aware by that stage that AIDS was an issue and was an issue for haemophiliacs.

Therefore, I would have expected that they would have all been aware, not specifically of this directive, for sure, but of the concern that there was about potential transmission of AIDS and also would, when relevant, speak to their patients about it.

Q. But the second limb of the category of information which it's said the Government should pass on is about possibilities of minimising risks.

A. Yes.

Q. Now, other than the letter of 24 June 1983 which -- the weak recommendations which I won't put up on screen again, is there any other evidence that the Department or that you at the Department were aware of which would show that clinicians -- haemophilia clinicians as a cohort had information about different ways of minimising risks?

A. I think to answer that question I might have to say, well, in September, when the HCDO met again, if it was

in September, you would need to remind me what was said then, but this is June, I think.

Q. Yes.

A. Right. So in September there was probably further discussion at that HCDO meeting. I cannot believe that there wasn't, actually.

Q. It was an October 1983 meeting and I don't think you were present at that one, as a matter of fact. We have looked at it on a number of occasions.

Dr Chisholm says let's revert to cryoprecipitate and Professor Bloom says no, let's not.

A. Yes, so they are all talking about it they are, they are definitely all talking about it.

Q. Let's -- sorry, just before I turn to the question of information to patients, did the Department ever take any steps to contact relevant professional bodies, medical Royal Colleges or anything like that to see what information was being provided by then?

A. I'm not aware that we did.

Q. Can I then turn to the question of the provision of information to patients, and I absolutely accept your premise that we're talking about patients with haemophilia --

A. Yes.

Q. -- for the purposes of what's set out here.

Obviously, there may be a wider question about the provision of information to patients receiving transfusions.

A. Yes.

Q. I think it's right to understand from everything that you've said, and from all the material we've looked at and from the discussion in your statement, that the Department did not itself take any steps either to provide information to haemophilia patients or to ascertain itself what haemophilia clinicians were, in general, telling their patients?

A. I think that's probably right. I don't have -- I can't provide evidence in one direction or the other. I have no knowledge of -- if you are perhaps proposing that, maybe, a CMO letter should have gone out, if that's the proposition, well, obviously I can talk to why CMO letters didn't tend to go out on this sort of matter but -- and, in fact, the very first CMO letter that did go out about AIDS went out in 1985 --

Q. Yes.

A. -- so not around about this time. That was in many respects for a different reason and under a different CMO.

But, as far as I'm aware, and there may be others in the Department who could help on this,

basically I don't think we put out specific information either to Haemophilia Centre Directors or to patients.

Q. You have referred, I think, on more than one occasion to what Dr Gunson had said, and so I think, in fairness, we should look at that, which is at CBLA0001710. So this is Dr Gunson's report of 13 June to the Central Blood Laboratories Authority and it's a report on the discussions that had been taking place in the Council of Europe. If we go to the second page, he says three lines down:

"I think that it is important to comment on these recommendations since although these recommendations can be supported in principle, there are certain problems in implementation."

Then he deals with the first one, and I've canvassed that with you already, Dr Walford. Then he says, in relation to the second one, he says this, and I think this is what you had in mind in your earlier evidence:

"Physicians and patients, especially haemophiliacs, are being informed of the risks of AIDS."

Then he goes to talk about the leaflet for donors.

A. Yes.

Q. So it's a single sentence, which asserts:

"Physicians and patients, especially haemophiliacs, are being informed of the risks of AIDS."

A. Yes.

Q. How would Dr Gunson know, he's not a haemophilia clinician, he's not a member of UKHCDO, I think he may well be able to know what Regional Transfusion Directors are doing, how would he know what the practice was amongst haemophilia clinicians in relation to providing information to their patients about the risks of AIDS?

A. And the date of this --

Q. June 1983.

A. The reason I asked for the date is that, of course, he was working together with quite a number of Haemophilia Centre Directors and others on the plasma supplies. He had a working party, so he was certainly in contact directly with some Haemophilia Centre Directors, whether or not -- and that he reported. I think in about June 1981 his report came out. So it's roughly of the same order.

So he was in contact. It's of great sadness to me actually that Dr Gunson, who was a marvellous man,

and I never knew him to say anything that he didn't believe to be true, isn't here, because of course unfortunately he died, but basically he would not have said that if he didn't know. I don't know how he knew but he would not have said it if he didn't know.

Q. The evidence that the Inquiry has received overwhelmingly from individuals and, it has to be said, largely, I think, corroborated by those clinicians from whom the Inquiry has been able to obtain evidence, would indicate that patients were not given that information.

A. Well, the only thing I can say is that, as I said before, Dr Gunson will have been of the view, and under the firm view, that actually patients were being informed, but he might have thought about it in some sort of general way as opposed to was every haemophilia clinician making sure they called up their patients and talked to them. That may be a difference. He was talking about the generality, I would suggest, not the experience that sadly seems to have occurred with a number of patients we've heard during the Inquiry.

Q. Was it the Department's -- again, I'm now using that in a very loose term, and you're an individual not a representative of the entire Department, but you

have said in your statement that the prevailing culture at the time was, it wasn't the Department's job to become involved in what was seen as a matter, again, of clinical freedom, it was for the clinician to decide what information to give to his or her patient?

A. Yes.

Q. Again I don't know whether you can answer this or not. Was the assumption that was made by you, your colleagues, that clinicians would be telling their patients about risks and possible ways of minimising those risks because that was the right, ethical thing to do, or was it something that you just didn't think about because the Department's culture was "We don't get involved in this, it's a matter for clinical freedom"?

A. From this remove, I have no idea what I was -- may have or may not be thinking about that. Certainly I would have known that this was a matter for the field authorities, if I can put it that way, to deal with and not the Department of Health, and it may have been -- in many respects, if there was going to be some sort of broadcast information to doctors, this would have been a matter for the Chief Medical Officer who would have, in discussion with his consultant

adviser, decided to take steps to make sure that patients were being informed.

It would not have fallen necessarily to me or to anybody in Med IMCD to make that proposal.

Q. Do you recall if you ever asked Professor Bloom -- because there'd have come a point in time when you were conscious of an issue because of the Council of Europe recommendation. Did you ever, do you think, ask Professor Bloom, "Are patients being given this information?"

A. I didn't have that degree of close contact with Professor Bloom. You've seen pretty well all the correspondence that I'm aware of and telephone calls, so I was not in frequent discussion with Professor Bloom at all.

Q. Looking back now, do you think it was a failure on the part of the Department -- and I use that term deliberately now, I'm not talking about you individually, because there were a whole range of civil servants and doctors with differing responsibilities -- a failure on the part of the Department not to take some steps in accordance with the council of Europe recommendation to ensure that patients had the requisite information to enable them to make an informed decision about balance of risks?

A. It would only have been a failure if it had been the normal process, the normal procedure, for the Department to intervene in this sort of way, with -- after all, there was a plethora of conditions, in each case, important findings, important developments taking place. The Department could not -- and did not -- provide relevant information to clinicians about clinical matters of that kind. It was simply not set up to do and it did not do it.

So if you're asking me was that a failure, we should have done it because that's what we normally did, the answer is it wasn't a failure because it's not what we normally did.

Q. But the plethora of conditions probably didn't have a specific Council of Europe recommendation which the Department had signed up to or that the Government had signed up to, with the Department's knowledge, which included a recommendation that the Government take all practical steps to inform patients both of the risks and of the possibilities of minimising that risk. Doesn't that set it out from what might have been the normal approach of the Department?

A. Well, I appreciate that -- I mean, I appreciate the point you're making but if that were the case it would not have been -- have fallen to me, and I don't know

to whom it would have fallen, to actually make sure that this particular Council of Europe recommendation was promulgated. This was way above the sort of level that I was operating at.

If this is a governmental issue, then that matter fell to be considered at the top of the Office and with the Chief Medical Officer.

Q. So the question of meeting that recommendation ultimately would have fallen, you think, on the shoulders of the Chief Medical Officer? If anyone was going to do it, it would be the Chief Medical Officer?

A. But I'm not clear whether or not this went anywhere near ministers, because it seems to me that this --

Q. It did.

A. It did?

Q. Yes.

A. Okay, but I didn't know that.

Q. No, no. We'll see that tomorrow with Lord --

A. So what I'm trying to say is that I didn't know what had happened to it. It was something I was asked to comment on. I commented. We've seen what the outcome of that was. Therein ended my role. And if it did go to ministers, then there was presumably a conversation between ministers and deputy or permanent secretaries, and the CMO even, and that's where the decisions would

have been taken or not.

Q. Let me make it clear, I asked the question of you not because I was seeking to suggest it was your personal responsibility to implement the Council of Europe recommendation, it was asking for your reflection on a very -- as a very experienced clinician and civil servant on what the Department should or shouldn't have done.

A. Understood.

Q. Penultimate topic on AIDS and then one further matter I want to ask you about.

The line to take of "no conclusive proof".

A. Yes.

Q. We looked at the origins of it or what may have been the origins of in the early May 1983 yesterday with the suggested draft for the Prime Minister which wasn't in the end utilised. So can I then pick up your own involvement at DHSC0002309_123.

So we can see here reference to a paper prepared by you giving some information on AIDS that's going to be provided to Lord Glenarthur, and then the paper itself is at DHSC0002229_054.

We can see there you are providing it to all Med SEB professional staff, 28 June. We think it's the same paper as was sent to Lord Glenarthur and

I think, indeed, to Mr Patten as well.

If we go a further two pages on -- I'm not going to go through the detail of it but I'm showing you this really because the "no conclusive proof" formulation doesn't appear in this background paper that's being, it would seem, supplied to Lord Glenarthur in June of 1983. So that's, as it were, the starting point.

Now, if we then go to DHSC0002229_085, we can see this is an answer given by Lord Glenarthur in the House of Lords on 14 July 1985, and if we go --

SIR BRIAN LANGSTAFF: '83.

MS RICHARDS: '83, I'm so sorry.

If we go a tiny bit further down the page and we look at the left-hand side, we can see it says:

"The Parliamentary Under-Secretary of State ... (Lord Glenarthur) ..."

Then it's -- the second paragraph starts with "The Medical Research Council", and then the last sentence of that paragraph:

"Although there is no conclusive evidence that AIDS is transmitted by blood or blood products, the department is considering the publication of a leaflet ...", et cetera.

Now, I will be asking Lord Glenarthur more about

this tomorrow but do you know, at this distance of time, if you were involved in the drafting of the suggested answer for Lord Glenarthur?

A. No, I wasn't involved in this, as far as I know, but it's -- subsequently Lord Glenarthur is asked by -- is it --

Q. Baroness Masham.

A. -- Baroness Masham about cryoprecipitate.

Q. That's when you become involved as far as you're aware?

A. Yes.

Q. So then let's go to that. You wrote some wording for Lord Glenarthur for a suggested response to Baroness Masham.

DHSC0001109.

It's dated 20 July 1983:

"Herewith some wording for the reply by Lord Glenarthur to Baroness Masham ..."

One of the issues was cryoprecipitate. So your first paragraph is about cryoprecipitate. Don't need to ask you about that.

Then the second paragraph says:

"There is no conclusive proof that AIDS can be transmitted by blood, cryoprecipitate or Factor VIII concentrates but the assumption is that such

transmission may be possible."

So I will get to a question eventually but I just want to go through the documents. You here say -- you are using the "no conclusive proof" formula -- I want to come back to you about that -- but you have added here a qualifying clause:

"... but the assumption is that such transmission maybe possible."

That's your draft.

A. Yes.

Q. Can we then go to DHSC0002309_032?

SIR BRIAN LANGSTAFF: I think it's also -- the use there is not that AIDS is transmitted by blood but AIDS can be. That's the formulation there.

A. Yes.

SIR BRIAN LANGSTAFF: If there's a difference it might be material, but shall we --

A. Well --

SIR BRIAN LANGSTAFF: Just an observation but let me move on.

A. Okay.

MS RICHARDS: So if we then go to DHSC0002309_032, this is a minute dated 26 July, it's copied to you, and if we just go further down the page we can see the date and the fact that it's copied to you.

Then its directed to Mr Joyce, who I think was in Lord Glenarthur's private office probably, but we can establish that with him tomorrow, and it says:

"I understand Miss Edwards is replying separately ...", et cetera, et cetera.

So if we go over the page, we can see this is, I think as we understand it, trying to as best we can to put the bits and pieces of paper together, the draft contribution to the reply emanating from Mr Parker, emanating from HS1:

"I should emphasise that there is no conclusive proof that AIDS can be transmitted by blood, cryoprecipitate or Factor VIII concentrates."

So your qualifying clause has been omitted from this draft.

A. Yes.

Q. Do you know why?

A. No, I don't think I was aware that it was.

Q. I mean, we think you might have been copied into this but -- assuming it accompanied the minute on the preceding page? Do you have any memory of whether you spotted that the draft had been amended or attached any significance?

A. I don't know whether I would have actually reread something that I was supposed to have written, no.

Q. Then if we go to the final letter that's sent to Baroness Masham, WITN4461147. This is Lord Glenarthur's letter of 30 August 1983. If we go to the third paragraph we can see the final draft is:

"There is, in fact, no conclusive proof that AIDS can be transmitted by blood, cryoprecipitate or Factor VIII concentrates."

So, again, a statement there without the qualification of your original draft.

Do you have any concerns about the removal of that qualification so that one has here the fairly strong statement of no conclusive proof?

A. Well, I guess I would always have concerns if I thought a piece that I had written had actually been amended and I hadn't been aware that it was going to be amended. So if something is attributed to me and I didn't know or hadn't spotted, shall I say, because if you say I saw it I might have done, but I suspect I might not have reread something I was told I'd already written, but one is always concerned. It must be like a journalist writing for the newspaper when the subeditor takes out a very crucial phrase. So it looks like a crucial phrase, in my view, was taken out. I don't know why or how. But clearly it would concern me if something's been attributed to me which

is not strictly what I wrote.

Q. If we then move from August to DHSC0002235_048. So if we look at the article on the top of the page first of all, "US blood caused Aids", the date we can see has been handwritten on there, 1 November 1983, and this refers to the Bristol case, as we have called this individual.

A. Yes.

Q. "The British haemophiliac who died from Aids almost certainly caught the disease from contaminated supplies of blood clotting agent Factor VIII, imported from the US, doctors report today."

Then we see the third paragraph on the left-hand side there, it records Dr Helena Daly, Dr Geoffrey Scott, who were the treating clinicians at the Bristol Haemophilia Centre saying:

"'It seems highly probable that the development of Aids was related to this treatment. This case provides further evidence for a link between blood products and Aids' ..."

Then if we zoom back out, we'll see there's a cross marked behind that paragraph, and then if we go down to the bottom of the page, someone has written:

"Dr Walford.

"Have you seen? On X -- is it OK for me to continue to say 'there is no conclusive proof that the disease has been transmitted by American blood products'."

Can we just zoom out again. We've got a date there at the bottom that looks like it might be 23 November:

"PS Congratulations on your promotion."

Then above that is what I understand to be your handwriting.

A. That's right.

Q. "Mr Green

"Thanks. Yes it is OK."

A. Yes.

Q. So November 1983 you are endorsing the continuation of this line "no conclusive proof". Why?

A. Because I was answering Mr Green's -- incidentally I didn't really know who Mr Green was at that time and I don't think I ever met him but he was in HS, I find. I was answering the question: does this particular report make any difference in terms of what we are saying? That report, as I've now found out and have found out since Lord Penrose asked me about it, that report in The Observer -- or was it The Guardian?

Q. Guardian, I think.

A. That report in The Guardian, the same report had occurred -- or the death of this unfortunate patient had been reported a month earlier in October in The Guardian. It was the same case that had been reported in September to the various bodies that it was reported to and, basically, there had been no suggestion by anybody over that period of time that -- I mean, nothing new had occurred because of this report in The Guardian, to which he was drawing my attention in November, from September, when we knew about this case. So it was not a revelation. Unfortunately, Mr Green didn't know that and, basically, shorthand, perhaps I should have explained in more detail, it would clearly -- I dearly wish I had explained in more detail, but actually this report X doesn't change what it is that we had been saying.

But my -- the caveat or rather the rider I would put on that is that, pretty well, as far as I know, every time I talked about no conclusive proof, I always added a rider but it's either looking increasingly likely or it appears that this may be taking place. My -- my line, if I can put it that way, since I didn't device the first line was always to put a qualification that it's looking likely or it

may well be the case.

This was a very shorthand bit of question and answer. Somebody scribbling on a journal, on a hot photocopy of a newspaper, pointing out to me, as it were, what he thought to be a new development, but it wasn't a new development and, therefore, I simply said yes, you know, nothing has changed.

Q. So it's not a broader question that you are answering then. The broader question: is this an okay line to be --

A. I was answering does this change anything, because there's a big cross, in other words have you seen on X, cross, because the patient was reported as having died, is it okay? As I mentioned before, the fact of this case, the fact that there was a patient who had been suffering from AIDS was the most important fact, a UK patient. The fact that, as we know, so many patients who actually did get AIDS actually died was not -- was, of course, of monumental consequence to the family of the individual but was not -- made no difference to policy, if you like, because the policy area, if we had been changing anything, should have been when we realised that there was another -- a second case of AIDS.

So this is a truncated bit of exchange with

somebody whom I didn't know who seemed not to be up to speed with what was going on.

Q. Just look further up at the article again. The X is not by -- I may be reading far too much into this but the X is not by the date, the X is by the fact that two haemophilia clinicians are saying it seems highly probable that the development of AIDS was related to this treatment. Now, as a matter of semantics, highly probable and conclusive are not the same thing; I accept that.

A. Yes.

Q. But isn't that what you are being asked to reflect on?

A. Well, I don't know about that but I do know that actually these clinicians or at least Dr Scott had not reported this case which is why CDSC hadn't known about it, because the clinician himself was not convinced that it was a case of AIDS. So he's now saying this to reporters and he may have said it the week before, or the month before, but I didn't read into that, into this exchange that we did, which is obviously quite a hasty one, basically that there was anything more than we now have another case, which looks as if it's related to American Factor VIII, the fact of the patient's death was not of the essence in relation to the policy, it was the fact that there was

another case.

That other case had been, as it were, factored in to the knowledge in the wider world of haemophilia that that case had occurred and that had been factored in in September and not when The Guardian chose to report it.

Q. Picking up on that, should then, in your view, the "no conclusive proof" line have been abandoned at the point at which the second case became apparent as a case of AIDS?

A. I remain of the view, although I didn't compose that line, I remain of the view that we did not have conclusive proof, and you might say, well, what is conclusive proof and I think I referred yesterday to the fact that, if you had been able to determine a virus in a particular donation and you had been able to find that virus in the recipient, you've got to the point which you have got conclusive proof.

As you saw from the American -- the discussion in America, as you will see if you do look at the MRC discussions, nobody was saying that this was absolutely conclusive. People were constantly wondering what was going on and, clearly, I felt, and you can see from various other correspondence, that I felt increasingly it was likely that this was

happening. But I had no conclusive proof and nobody had any conclusive proof.

Whilst it may sound -- it may sound dismissive, that's what it sounds, it wasn't intended to. It was we don't know beyond a peradventure, we have no iron-clad proof that this is what is happening.

Q. That could be said that that's effectively a trite fact: until you can test, you have no conclusive proof.

A. Yes.

Q. Indeed, I think the evidence that we will hear tomorrow or Friday may suggest that this line was abandoned after you've left but before there is what you would have regarded as conclusive proof in the form of an ability to test but, in any event, that's after your time.

What was the point of this line? Why did the Department want to emphasise the absence of conclusive proof, which may be true in a narrow technical sense, rather than the presence of a likely risk?

A. Well, as I've made very clear, this wasn't my line, it was the Department's line, and the line was qualified in most instances and should have been qualified in all instances.

Q. Can I ask the question in a slightly different way

then, recognising that you're not -- and I wasn't seeking to suggest that you were the originator of the line -- we don't currently know who was -- can you help us in understanding why the Department took a line which emphasised the absence of conclusive proof rather than explaining what you have told us was your own view, and was the mainstream view within the Department, that there was a likely connect cause?

A. No, I can't particularly but, basically, if the line had been appropriately qualified, I would have no qualms about it at all. The fact that it wasn't appropriately qualified on each occasion obviously is very unfortunate because it might sound as if it's much too definite, if you will, even though the words don't say that, the words say "no conclusive proof", they don't say "no proof at all", "no conclusive proof", but if it were qualified with but it looks likely and we are taking this, that and the other step, whatever that might be, I would have said that that's a perfectly correct and proper -- scientifically correct and proper way to put out something publicly.

Now, I'm sure you'll be bringing me to look at the leaflet ultimately, where you will see my almost preferred way of expressing matters, in order to leave

no ambiguity.

Q. I'm actually going to take the leaflet very quickly because I think your involvement was at that beginning and you were then, as it were, copied in but not central to the process and we're going to be looking at it in some detail with both Lord Glenarthur and Lord Clarke.

You, I think, have anticipated what I wanted to ask you next. The leaflet poses a question about transmission, and answers it with the words "almost certainly, yes", and you've, I think, said in your statement, well, donors needed something that was clear and unambiguous.

A. Yes.

Q. Didn't the patients who were going to be exposed to that risk or the public --

A. Yes.

Q. -- also deserve something clear and unambiguous, which this was not?

A. The point I was trying to make about the blood transfusion leaflet, and actually I went further with Dr Gunson, went further than the science would lead us, because you've talked about the leaflet that ultimately was sent, but that was not the leaflet that Dr Gunson and I prepared, because we were so concerned

that donors would still continue to turn up, even though they were active homosexuals, who had recently had sex with other men -- I didn't expect too many drug abusers to turn up, but I thought that there had to be some way of really dissuading donors. It had to be completely stark, black and white, no ambiguity.

So when Dr Gunson and I -- and he was of the same mind with me -- prepared the first draft of the leaflet, it didn't say "almost certainly, yes" it said "yes, it can".

Now, that was going further than the science really allowed and you might say, correctly -- it was correctly reined back because it really was not scientifically correct. We didn't know. But the thought that you were preparing a leaflet for donors which was in any way wishy-washy or ambiguous, so that they could pick it up and think, well, you know, I don't know, and we really wanted to make it abundantly clear, potentially, if you give blood now, you may infect -- your blood may transmit AIDS.

So there was a, sort of, almost horses for courses and, in that case, I think we did go further than the evidence really would let us go and, in a sense, rightly, were hauled back by whoever drafted the second version of the leaflet.

But you see where my thoughts lay; in other words, I would have been -- wanted to have a greater degree of qualifying all these messages than actually turned out to be the messages that were actually conveyed by ministers or by the Department in general. But it wasn't my call.

Q. Can I just then explore before we leave this topic two propositions in relation to the "no conclusive proof" line for your comment or reflection. It had the potential at least, did it not, to create a false sense of security or to mislead? Those receiving it might get the wrong message, in other words, because they're not being told what was actually the Department's view, which was that AIDS is probably caused -- transmitted through blood and blood products. Do you have any observations on that?

A. I think appropriately qualified, so that it's perfectly obvious that we're -- nobody is disregarding the possibility, "no conclusive proof", that is correct. It's correct scientifically. You'd only get conclusive proof at a time when you could actually test and determine what had happened. But, "The Department is doing X and Y, including producing leaflets, including doing whatever it was we were doing, if you like" -- and I saw various

configurations of this in various ministerial statements -- I don't think that would necessarily be misleading. The question is who was actually receiving these messages? These messages were by and large promulgated as part of PQs or in Parliament.

Q. They were in Parliament, they were press releases, they were communications with other members of either the House of Commons or the House of Lords who presumably were raising things because they thought they were matters of wider public interest or of interest to individual constituents.

A. And you've just reminded me -- thank you -- of a very pertinent fact, and that is that when the leaflet was actually promulgated, which was the donor leaflet, not for the wider public, it was accompanied by a press release which the Department put out. Now, the leaflet was agreed to be a UK leaflet, but both the DHSS and SHHD agreed to put out their own press releases. Our press release you have undoubtedly got. SHHD chose to use the formulation "no conclusive proof". They didn't have to. Nobody was insisting that they did. They had their own CMO, their own scientific advisers, but they chose to use that formulation. They absolutely were free to do their own press release and it differed in other respects,

but they chose to use that formulation also.

Q. The second aspect I wanted to explore with you is this: it might be said that the Department chose as this line to take this formulation of "no conclusive proof" rather than saying, in positive terms, "we think it's likely", because that excused a failure on the part of the Department to take more radical action. Do you have any observations on that suggestion?

A. It's a suggestion, Ms Richards, but I can't necessarily say -- I've never heard it expressed in that way and I would have no reason to believe that that's what they were doing it for.

Q. Can I then take the question of the AIDS leaflet, and I'm going to take it, for present purposes, I think fairly quickly --

A. Yes.

Q. -- because we've dealt with it in detail in your statement and because we're going to hear a lot about it over the coming days with other witnesses. So I just want to establish really without, I think, having to go to too many of the documents, or necessarily any of the documents, what it was -- what your involvement was.

You attended a meeting of Regional Transfusion

Directors at which this issue was raised --
A. Yes.
Q. -- and I understand it's a meeting of which you've got, in contrast to some others, a distinct recollection --
A. Yes, unfortunately I have.
Q. -- because there was a degree of adverse or hostile reception. Can you just elaborate upon that?
A. Yes. Although we saw the other day that my presence in the Haemophilia Reference Centre Directors' meeting was not particularly welcomed, I wasn't aware of that, I wasn't made to feel terribly unwelcome. When I invited myself or asked to go to the Regional Transfusion Directors' meeting, because I wanted to persuade -- together with Dr Gunson, to persuade them that there had to be a leaflet for donors, because already knew that there was reluctance to do that, I do remember, because it was not comfortable, that the chair of the meeting at that time said words to this effect, and they might have even been a bit stronger, "Since Dr Walford has wished herself on us, I suppose we had better hear what she has to say."

Now this is not a particularly helpful introduction to whatever it is you're going to say, and what I had to say was deeply unwelcome to the

transfusion directors because I was there to say we in the Department believed that there should be a leaflet for donors and it should say in no uncertain terms that people who might be at additional risk for AIDS, or in what was called higher risk groups, particularly male homosexuals, should not donate blood and should be excluded from donation.

As I anticipated, that went down very badly. It is fortunate that Dr Gunson had actually written in to the meeting beforehand to make some suggestions about the potential of what material should go in the leaflet, and it may be that you are going to show us anything from that meeting, but basically he offered four options, I think, and two of them were turned down out of hand, and then another two I don't recall what they were precisely.

But with great reluctance they agreed to a leaflet and they said they would prepare one and that it would then come to the Department, and I think I probably stressed that it needed to come quite fast and the Department would pay for the printing if that was helpful. When I did eventually get the leaflet, the draft that they produced, it was some time -- I remember feeling very impatient and why hadn't it turned up -- it was really not adequate for the

purpose. It was what I, as it were, was talking about earlier, it was ambiguous. You really weren't sure what they were trying to say to donors.

And so I spoke to Harold Gunson and said, "This is just not strong enough", and he absolutely agreed, and he agreed that he, and I think probably with his colleague from Edgware Blood Transfusion -- I get that impression from papers I've subsequently seen, I don't know if I knew then -- redrafted, and then what you had then was the redraft that had been redone by Harold Gunson.
Q. It was sent, I think -- circulated round the Department. You sent it to Mr Winstanley?
A. Yes.
Q. And then it would appear that the Department's own information division got involved --
A. Yes.
Q. -- and there's toing and froing about the wording --
A. Yes.
Q. -- which I'm not going to ask you about, but if we just go to a memo from Mr Winstanley, there's just one point I wanted to ask you about.

It's DHSC0002321_018.

So it's Mr Winstanley, its dated 8 June 1983. It's to a Mr Windsor in the ID, information

department. He says in paragraph 2:

"... there are some things that are either incorrect or misleading."

Because the information department had made various revisions.

I'm not going to ask you to go through those now, we've got the document.

If we go over the page, if we look at the last paragraph, paragraph 5, he then says:

"To sum up then, I think we can accept your text subject to the comments above, but it is essential to act without delay. As it is, the time for printing and distribution seems painfully slow."

Then there's an issue about printing and payment. So it would appear Mr Winstanley's already concerned it's taking too long?
A. Yes, it was.
Q. Because, of course, as every day or week went by a donor, a high-risk donor, might be giving blood, infecting the donor pool, if the blood's used for blood products, or a transfusion might be given to a recipient of transfusion and be infected with AIDS?
A. Yes.
Q. Now I'm not going to go through the detail of what then happened because I can do that with

Lord Glenarthur tomorrow --
A. Yes.
Q. -- but we will see when we look at the evidence tomorrow there's then a paper and a revised leaflet that went to Lord Glenarthur and finally, after some toing and froing, which I won't trouble you with, it's September by the time the leaflet is -- I think it's the beginning of September but it's nonetheless September by the time the leaflet is ready.
A. Yes.
Q. It's a press release by Mr Clarke and so on. That was too long, wasn't it?
A. Much too long.
Q. Then can you just assist with this, I want to ask the same question of Lord Glenarthur and Mr Clarke, but it's an issue on which ministers got quite involved in the nitty-gritty?
A. Yes.
Q. Yet, by contrast, we've seen other issues such as the Galbraith paper, the decision of the Biological Subcommittee on the Committee of Safety of Medicines, it's seemingly not going to ministers, or at least not going to Lord Glenarthur, subject to the anything he tells us tomorrow.
A. Yes.

Q. What's the rhyme or reason as to what goes to a minister and what they get interested in and what doesn't?
A. I wish I knew, actually. Occasionally, it did seem -- I didn't spot the particular logic. We discussed the other day why on earth did the question of a steering group of the CBLA, or whatever it was, why on earth did that have to go to ministers?

I don't think I ever really fully understood which goes to the fact that I probably never had the sort of administrative training that my administrative colleagues had, and I just accepted that some things, if they thought had to go, as you know, submissions to ministers, then they had to go. So I'm not sure that I ever really understood the inwardness of it.

This was a very interesting one, though, because of the degree of intimate involvement that a whole variety of ministers seemed to take and I'm not entirely sure why. I mean, clearly there was worry about the Blood Transfusion Service and that it might be impacted adversely and that, therefore, there would be a reduction in the number of donors wanting to give blood and that was not an unreasonable thing to be worried about.

Then there seems to have been a big sensitivity,

and I'm only maybe interpreting stuff but this is -- you frequently ask me to interpret and so I'm doing it this time -- huge sensitivity over the sexual side of things, that basically whatever you do you must not ask donors about their sexual behaviour. Now, that was probably linked to because that will be a big turnoff to donors and you may lose donors accordingly.

But I mean, I could be wrong. My interpretation was that there was a bit more to this and the reason -- and maybe I'm doing it with a degree of retrospection because, subsequently, Mrs Thatcher became terribly concerned that there was going to be, and actually prohibited, a survey of the sexual habits of the population, that I think the Wellcome Trust or some such body was going to conduct, and she wasn't having it. I suspect there was a degree of sensitivity because this was an area of great sensitivity involving the homosexual population, involving sexual practices, which were having to be spelt out increasingly, and I do actually amongst some of the few bits of briefing that I recall giving ministers, was having to be very explicit on some of the things that I was just learning. I was a page ahead of them in learning these things.

So that I think there was this overtone to do

with sexuality and homosexuality and, of course, potentially drug abuse as well. So it was a terribly sensitive subject.
MS RICHARDS: Sir, I've got about, I think, 15 minutes more questions for Dr Walford of my own. It's a matter for you, for Dr Walford's convenience, and the convenience of others, whether I continue now then I can essentially get all my questions done and then we can have a decent break because I will need to consider questions from Core Participant. It does mean a slightly longer day.
SIR BRIAN LANGSTAFF: Let me ask Dr Walford because you are the person who has got to answer the questions.
A. Yes -- alas.
SIR BRIAN LANGSTAFF: The alternatives are these: we can have a break now, which I am sure you could probably do with or -- because counsel then will come back for 15 minutes but then we would have another break. The reason for the break then is to give an opportunity, having considered everything that you have said thus far, for those Core Participants, representatives who have been listening, to suggest to Ms Richards further questions that she may want to ask you. It's what we do for every witness, you may have seen.

That takes probably about half-an-hour, I would

think, in terms of break here, because you have three days of evidence to think about. So the choice is stop now, come back for 15 minutes or thereabouts, break for another half hour or so and come back and finish whenever we finish, or we go on now for 15 minutes, then have the break and finish whenever we finish. So it's quicker, if you like, to go on but it's entirely a matter for you and what you feel like.

A. That's very kind. I'm very conscious of the fact that people have been sitting here. I, at least, have a semi-active role. I'm very conscious of the fact that people are sitting here and they must be dying for a break but, as far as I'm concerned, I'm happy to go with whatever I anybody else wants to do. My personal preference, but it's not to influence anybody else, is that I would prefer to press on frankly than have a break and then another break, and so on, but I'm absolutely in anybody's else's hands and if there's some way of ascertaining what the audience would like, I mean, frankly, I'm happy to go with it.

SIR BRIAN LANGSTAFF: I tell you what I shall do. I will take the flak, rather than have it rest on you --

A. Okay.

SIR BRIAN LANGSTAFF: -- and I will decide to give anyone who wants to, to have a break now, five minutes, to

have a short break and, otherwise, we will press on.

MS RICHARDS: We will take 5 minutes, shall we?

A five-minute comfort break.

SIR BRIAN LANGSTAFF: Comfort break, and then we press on.

(3.35 pm)

(A short break)

(3.43 pm)

MS RICHARDS: Dr Walford, I'm going to ask you to look now at a document at DHSC0002231_059. It's dated 19 September 1983 and we can see it's a minute from you to Mr Winstanley, "Meeting of Haemophilia Reference Centre Directors, 19 [September] 83", and you refer to having invited yourself to that meeting to hear the latest on AIDS. Just two bits I wanted to ask you about.

Paragraph 2 says this:

"The relatives of the haemophiliac who died of AIDS in Bristol have taken legal advice and are keen to sue the manufacturers (Alpha and Immuno) of the commercial [Factor] VIII concentrate which he received in 1981."

Pausing there, this is something you'd been told in the meeting I think is the obvious reading of this minute.

A. Mm-hm.

Q. Then you say this:

"If they go ahead, this could put the cat amongst the pigeons. Is it worth mentioning at this stage to ID and SOL C?"

I assume that's a reference to your information division and to the legal department?

A. Yes.

Q. Why did you use the phrase, and what did you mean by it, "If they go ahead, this could put the cat amongst the pigeons"?

A. I meant that it was quite likely to go to -- to impact back, if you like -- this was a case in Bristol, were likely to be significant consequences, probably involving our lawyers as well. I suspect it was a loose phrase after having enjoyed a meeting of the Haemophilia Reference Centre Directors and I just thought, well, this is going to cause mayhem really if, in fact, there is a lawsuit and the Committee on Safety of Medicines has just said we're not doing anything about product.

I think -- I don't think you can put a more -- or at least I wouldn't put a more serious construction on it than a loose way of talking.

Q. The first paragraph refers to Professor Bloom reading out:

"... a letter which he has prepared for The Haemophilia Society to send its members (ie an up-date on his earlier letters). I haven't got a copy of the letter but it sounded reasonable and, hopefully, will not create any new problems."

Can you assist us with understanding what you mean by saying it won't create any new problems?

A. No, of course, because I can't remember what the letter said. I don't know. Again, I'm merely saying I heard a letter being read out. It didn't seem to lead to any particular consequentials for us in the Department. But, again, it's putting quite a lot of weight on an informal note just telling Winstanley on -- what had happened in the meeting.

Q. We can take that down now. I want to ask you now about a separate topic which is about the collection of blood from prisons.

A. Yes.

Q. We look at three documents and then I can ask you some general questions about it.

So the first is PRSE0004345. It's dated 27 July 1983 and it's from JB Brown MB2. Do you know what MB2 was?

A. Part of Medicines Division.

Q. Then if we look at the top of the page, addressed to

Mr Parker at HS1:

"Use of blood from prisons.

"1. At a recent meeting of Medicines Division's Inspection Action Group concern was expressed about the collection and use of blood from borstal institutions and prisons. Blood Transfusion Centres in Scotland were making use of these sources (particularly prisons) and some, at least, of the English Blood Transfusions Centres were also understood to do.

"2. The Group considered this practice to be highly questionable because of the incidence of homosexuals and homosexual activity in prisons and the present unease about the incidence of AIDS among this group of people.

"3. The Group asked to be advised of Departmental policy on the practice of collecting and using blood from borstals and prisons and I shall be grateful if you will let me have a note about this which I can pass on."

If we just go back to the whole document, can we just look at the full document -- yes, so that handwriting at the bottom of the page:

"Mr Winstanley

"Please ..."

A. "Consult".

Q. "... consult with Dr Walford and reply direct on by myself."

So that's the first document.

Then if we go to PRSE0003281, we've got a note there which is 26 August 1983, I think. I'm not sure if it's obvious who this is from, but anyway:

"Mr Winstanley, DHSS, rang. He has received an enquiry Medicines Inspection re Departmental Policy on donor sessions in prisons and borstals given there is now AIDS. (He explained that England and Wales have tended to shy off in fact ..."

A. "... in fact because of Hepatitis ..."

Q. "... because of Hepatitis but he ..."

"... wouldn't know"?

SIR BRIAN LANGSTAFF: "... he wondered ..."

MS RICHARDS: "... wondered what Scottish position was."

Then there's a reference to an RTD meeting.

"I summarised ..."

Surmised?

"... summarised to Mr Winstanley what was said then and referred to the general position. He was interested in the reference to the ..."

I can't read the next word.

"... approaching the [working party] on

selection and [something] of Blood donors and will try to explain that avenue. He will copy his response to MI to us ..."

So there has been some liaison, in any event, between, it would seem, the Department in the form of Mr Winstanley and the Scottish Home and Health Department I think?

A. Yes.

Q. Then there's a memo from Mr Winstanley copied to you and this is really where I want to then ask you of your involvement. It's at PRSE0004729, and this is dated 23 August 1983, Mr Winstanley to Mr Brown. It says:

"I am replying on behalf of Mr Parker to your minute ...

"It is difficult to advise any particular Departmental policy on the collection of blood from borstals and prisons at the moment. It is for individual Regional Transfusion Directors to determine how and from where donations are sought in the light of the targets they need to achieve and the numbers of donors on their panels.

"However, Transfusion Directors have been aware of the dangers of relying too heavily on prisons as a source of donations for some time ie prior to the

advent of AIDS as a cause of concern, because of the risk of hepatitis in prisons, (also connected with the higher incidence of homosexuality) which can be spread through blood transfusion. Nevertheless, although most Regions, especially those with no shortage of donors, may not need to use prisons, there is at least one which has to view them as a major source of donations in order to meet targets.

"AIDS has now of course called the wisdom of continuing to view prisons as a source of blood even further into question, and the Directors are due to discuss it at their next meeting in September. If the risks are now considered too great to justify continued collection from prisons, some measures will be needed to compensate for the loss of that source of donors, perhaps, for example, a system whereby Regions with no need to rely on prisons can take extra blood to be transferred to those Regions for whom the loss of prison as a source of blood will cause difficulties.

"I shall of course advise you of any developments which occur. I gather that this problem has been debated by Transfusion Directors in Scotland, but no particular policy line emerged. We shall obviously need to liaise closely with Home Office also

since they have in the past been very much in favour of blood donation by prisoners."

We can see, if we look at the bottom of the page, Mr Winstanley's minute is copied to you.

Now, this would appear to indicate that the practice of collecting blood from prisons was still ongoing in England and Wales, not in all areas, but in at least one, and was still ongoing in Scotland. There appears to be a suggestion of the Department, the DHSS, having no particular policy in relation to that.

Can you cast any further light on this issue?

A. I had absolutely no idea that we collected blood from prisoners. Of course, it's a bad idea and, basically, it shouldn't have been going on. Scotland, I think, did much more but I wasn't aware, until this issue came up, that we were actually doing that, nor did I think, at the time -- the time I found out about the Home Office being quite keen for -- was it -- no, it was the homosexuals that they were quite keen to encourage, as well, I think. I can't remember, there was some sort of reference to the Home Office on 3 June meeting, the Home Office needing to be informed about something, but basically, as far as I can recall, I have -- I had no knowledge that, at the

time, Regional Transfusion Centres were going out to prisons and collecting bloods from prisoners, because it seems like thoroughly bad idea.

Q. The problem, in a sense, thrown up by Mr Winstanley's response is it doesn't appear to be envisaged that the Department is going to do anything about it.

A. That's true.

Q. Do you think the Department should have been doing something about it?

A. My personal preference would have been for the Department to say this must stop.

Q. Would you agree that, irrespective of what was known by this time in relation to AIDS, this was a terrible idea, in any event --

A. It was a terrible idea.

Q. There's a reference there to it being essentially down to individual Regional Transfusion Directors. Is that another manifestation of the clinical freedom --

A. Not the clinical freedom the transfusion directors' freedom because RTDs, as I've explained before, really were not actually managed but they were overseen by their Regional Health Authority but, essentially, RTDs were fairly autonomous. So it was just another manifestation of a degree of autonomy but not clinical autonomy as UKHCDO such because that's relates to the

patient-doctor relationship.

Q. So it's potentially a reflection and an adverse consequence of what you described, I think, earlier and in your statement as collection of loose fiefdoms --

A. Yes.

Q. -- with there being no unifying National Blood Transfusion Service as a legal entity?

A. Yes.

Q. There's reference there to it's going to be discussed at the Regional Transfusion Directors meeting in September. You address this in your statement and I raise it just so that we can correct something.

A. Yes.

Q. The references you gave in your statement to a directors' meeting and to an internal minute from you are actually references to the Haemophilia Centre Directors' meeting in September of --

A. So I got the wrong meeting, have I?

Q. Yes. Don't worry about that at all. It's a matter I have raised with Ms Grey, there's no criticism with you in raising it. It's the wrong references.

We haven't then troubled you with additional documents but when one looks at the Regional Transfusion Directors' next meeting, because there was

one, whether it was September or October, it's not discussed.

A. Right.

Q. Do you have any idea about what happened in relation to these policy?

A. No. If it isn't written downs in the minutes of the meeting then either it was discussed and only cursorily and somebody didn't minute it or it wasn't discussed but I wouldn't -- I don't remember anything about it at all.

Q. Then do you know what the position was in relation to the collection of blood from the military, either in England and Wales or in Scotland?

A. No.

Q. Can I then come to the role -- just go back to the role of the Chief Medical Officer briefly, and the issue of Chief Medical Officer letters. We can look at the examples of letters if it would be helpful to you, Dr Walford, but, broadly speaking, you've identified two letters of some relevance in the sense that they are "Dear Doctor" letters from the Chief Medical Officer. There's one in 1982 in relation to the hepatitis B vaccine?

A. Yes.

Q. Then there's one, which you referred to in your

evidence already today, in 1985 in relation to AIDS.
A. Mm-hm.
Q. In what circumstances -- and I'm really asking you to recall here not just upon your own involvement in the Department at this time -- but your own later involvement as a Deputy Chief Medical Officer?
A. Yes.
Q. In what circumstances was it the practice of the Chief Medical Officer to issue "Dear Doctor" letters?
A. I think it was pretty rare. I mean, that is to say it occurred several times in any given year and there should be a whole archive of "Dear Doctor" letters in the Department so, in effect, you can, as it were, check on all this.

Mostly, they would be to do with what I would call a wider public health issue, not a specific issue related to a specific group of patients needing a specific sort of care. So it would be to do with vaccines. Vaccines was one that the CMOs did write letters about.

The interesting thing about the letter that Sir Donald Acheson wrote about AIDS, actually, the first "Dear Doctor" letter, if you like, about AIDS, which was in 1995 *(sic)*, it may throw some light on what I'm saying now that I think just towards the end

of the letter there's a whole lot of very useful information and there's a section from CDSC describing the latest state of epidemiology, but then there's a form of words just towards the very, very end of the letter, and you may or may not have it here I may have brought it in with me, which says -- and he's saying to doctors in the field, as it were, in the NHS, "I have taken the liberty of writing to you about this because AIDS is a new disease". It's an extraordinary form of words because what he's saying is "I wouldn't normally do this but because AIDS is this new disease" and obviously he felt, rightly in my view, that there was a need for this dissemination, that he felt he had to almost beg their pardon for having intervened in this way and having written to them. And I just thought that was extremely revealing and I thought it actually -- it actually said all I could reasonably say about how a letter from the CMO to doctors was, as it were, viewed and it was not usually in relation to a particular disease.
Q. Just so that we have -- you're almost absolutely verbatim on this:

"I take the liberty of sending this information because AIDS is a new disease."
A. Yes.

Q. I won't put it on screen but for anyone's reference, in terms of legal representatives, it's DHSC0002327_016.

Can I ask you to consider two matters in relation to the sending of the "Dear Doctor" letter or equivalent by the CMO at an earlier stage and why perhaps it should have been considered.

This was a new disease, as the later letter from Sir Donald Acheson says. It was a disease with a very high mortality rate, a disease about which, as you have said, there was much uncertainty, that had the potential to affect very profoundly an identifiable cohort of patients and I'm dealing for the purposes of this first scenario with patients receiving factor concentrates but, obviously, in the context of a much bigger public health issue.
A. Yes.
Q. Wouldn't the emergence of that be really -- would have been a very good thing for the Chief Medical Officer to share such information as there was because not all doctors would have had access to the same sources of information that the Department had?
A. Well, I agree with you. I mean, essentially, we have focused here necessarily on patients with haemophilia. By the time the CMO was writing that letter in 1985

there was still only three patients with haemophilia, two of whom I knew about in my time and there had obviously been one other. But there were really quite large numbers of homosexual men and also drug addicts and also spouses and some children, by then, who had developed AIDS, and this was a completely new disease.

So I agree with you that, in this particular instance, where it's not a question of saying, well, here's a new development about a disease that you all know about, or whatever, this is a brand new disease, frankly, it's the start of a new pandemic, not -- you know, you don't actually normally realise you're at the beginning of a pandemic until you are right in it, but that's what was happening and I think it would have been a good thing to do to have written out sooner than was the case, particularly as one saw the numbers of cases in non-haemophiliacs going up, so that it became of a much broader general interest than of a select group who might be presumed to be being told about it by their clinicians.
Q. If we leave aside for a moment that group that I've already canvassed with you at some length, and whether information should have been given by the Department or the CMO to haemophilia clinicians, leave those aside, you yourself have flagged up, as a particular

concern, those patients who might be receiving -- being treated with concentrate, treated with blood products in hospitals that were not haemophilia centres?

A. Yes.

Q. Indeed, the Inquiry has heard some evidence of that and of people being infected in consequence.

A. Yes.

Q. Neither the CMO nor the Department could have made any assumption about the state of knowledge of those hospitals, could they?

A. That's so.

Q. Then there's also -- if one then goes on to a wider population level, any member of the public at any time might find themselves potentially in need of a transfusion?

A. That is right.

Q. Again, the circumstances in which a transfusion might come to be given are so many and varied and they can involve all sorts of different disciplines, not just specialist haematologists, so those two scenarios might have been particular reasons why some form of CMO "Dear Doctor" intervention might have been very helpful.

A. I agree.

Q. By the time you were Deputy Chief Medical Officer, which I think was 1989 to 1992, was it that the approach to clinical freedom in relation to clinicians or the hands-off approach to the NHS, both of which we talked about on Monday, had those changed at all by 1989 or the early 1990s?

A. Well, I'm possibly better placed to talk about the NHS because, as well as being DCMO, I had this role as being the Director of Healthcare on the NHS Management Executive, which was also slash Medical Director of the NHS in England and, therefore, I found myself writing out, on some occasions certainly, to doctors or to health authorities, if you will, about specific issues, operational issues.

Those -- what I would be writing would not have replaced "Dear Doctor" letters on the professional line coming from the CMO. But there was more management of the NHS by the time I'd got to be DCMO and that is after the Griffiths report, the NHS Management Executive was set up, Duncan Nichol was that chief executive, equivalent to Sir Simon Stevens now, and basically we tried, we purported to do a bit more hands-on management of the NHS than had been done previously.

Q. Now, I've just lastly got a handful of more general

questions for you.

You've said in your statement, you've said in your oral evidence, understandably on a number of occasions, I was a medical officer, I was giving advice, I was not part of the administrative hierarchy, which actually ultimately either took the decisions or put the matter up for the Minister to take the decisions?

A. Mm-hm.

Q. I understand that. It may be that a theme that emerges from the evidence of the ministers who are going to be giving evidence tomorrow, next week might be "We weren't the experts, we were just the politicians, we relied on the medical or scientific advice that was given to us". So there might be an element of, on the one hand the medical officer saying, well, it's down to you, and the Minister saying, well, no sorry it's down to the medical advice. Do you have any observations to make on that?

A. Well, I think perfectly reasonable for a minister -- if he or she is to be appropriately briefed they must expect on a scientific matter, such as we have here, just as our current Government ministers rely on Chris Whitty and other medical advisers, the DCMOs, to give their best possible advice, I think it's

absolutely right that -- ministers are right that they have to rely on the scientific advice that they're given and, of course, they should challenge it if they are unhappy because they are hearing things from elsewhere that doesn't seem to chime with what's being given. But I don't see how it's possible for a minister to take a view on a particularly thorny scientific issue -- and this was a very thorny scientific matter -- without seeking to get the best possible advice that he can get.

Now, to the extent that that is the role of the CMO, to ensure that the advice that is coming up through the medical and scientific echelons of the Department of Health, is properly supported by advice that they are getting from experts -- because as I've said before -- you know, one really can't repeat it too much -- most doctors in the Department of Health were not specifically expert in their particular field. They became very knowledgeable, we all became fairly knowledgeable, but they weren't necessarily expert. Their job was to go out and collect as much information and try to interpret it as well as they could to help the administrators put up their submission or to brief ministers face-to-face.

Certainly throughout my career I did brief

ministers face-to-face but almost certainly as a member of a team, with administrative colleagues, and I expected to give my best possible advice but my best possible advice I expected to be based on whatever I had been able to glean from the experts in the field.

Q. Second general question is this, who -- and this is again really asking for your comment, your observation, not just from the period that we've been focusing on, '77 through to '83, but given that you have been involved in the public sector and the NHS in a range of roles over the years -- who, in terms of person -- I don't mean named person, I mean their role, Secretary of State, Chief Medical Officer, clinician -- what person or organisational body, in your view, had the overarching responsibility for ensuring safe delivery of NHS treatment in the late 70s and early 80s?

A. That is an extraordinarily difficult question, and just at the end of the session. A very difficult question.

For safe delivery of care. Well, in technical terms there is no doubt but that the Secretary of State for Health or, at my time, for Health and Social Security, had that ultimate responsibility. So

I don't think there is -- I don't think that should be debatable. That was where the ultimate responsibility lay. How that became then translated into action, obviously that's where the levers, I suspect, became -- as we once said in a different context, for the NHS -- like rubber levers. The levers were not fit for purpose.

Q. Then, finally, you have talked in your witness statement, and you mentioned it again in the course of your evidence, about financial constraints.

A. Yes.

Q. The elephant in the room. Is it the case, and again I'm really asking for your overall perspective as someone who had reasonably close involvement in the issues for an important period of time, is it the case, do you think, that funding for the safety of blood and blood products was not a sufficiently high priority?

A. I can't express it in terms of priority. I think I did explain in my statement that funding of the NHS wasn't high enough up Government priorities. I think the percentage of GDP was somewhere around about 3.75 per cent, being -- compared with now, which we know is, forgetting Covid, very much higher than that.

So there was an enormous range of priorities for

Government in the health sphere, and it's hard to know precisely where you should locate the priorities. But with regard to the MBTS in particular, it was for regions in the organisation, as we then had, to determine how much money they were going to accord their Regional Transfusion Service. And the interesting thing was that some regions were so much more generous to their Regional Transfusion Centres than others. So that was almost -- it was their tranche of money; how they divided it up in terms of the priorities in the NHS between the Blood Transfusion Service and all their other priorities was a matter for Regional Health Authorities and their regional chairmen and, as I say, it was very variable. It depended what region you were in, how well funded your Regional Transfusion Centre was.

MS RICHARDS: Sir, those are the questions I had for Dr Walford but obviously we do now need a further break, a longer break, so that I can consider suggestions from recognised legal representatives and Core Participants.

SIR BRIAN LANGSTAFF: Well, are you likely do you think to need about 40 minutes?

MS RICHARDS: The nod from behind leads me to think there's probably a lot for me to look at, so yes,

please. I'm sorry that means a longer day.

SIR BRIAN LANGSTAFF: I'm sorry about that, doctor, but we'll take a break in that case until 5 to 5.

MS RICHARDS: Thank you, sir.

(4.13 pm)

(A short break)

(5.01 pm)

Questions by CORE PARTICIPANTS

MS RICHARDS: Dr Walford, last lot of questions, and because these have come from a number of different sources, they are going to dot around from topic to topic so there won't be a chronological automatic link.

First question, and this focuses on your time, 1977 through to 1983: were you aware, did you have any knowledge about the practices of US pharmaceutical companies in terms of obtaining plasma from third world countries in central or South America or elsewhere?

A. I wasn't particularly aware, my sort of key preoccupation was with American plasma, but I don't know that I knew specifically that material was coming from third world countries, though if I reflect on that now I'm assuming that the WHO resolution, or the World Health Authority resolution which said become

self-sufficient so that -- in terms -- you don't deplete the plasma supplies of other countries, they would mostly be referring to countries in the developing world rather than necessarily America.

Q. But you didn't have any specific knowledge?

A. I didn't have any specific knowledge.

Q. What about other sources in terms of donors within the USA or, indeed, elsewhere? Did you have any knowledge of prison collection of blood in the States, for example, that that was a possible source of the plasma that was being used by the American pharmaceutical companies?

A. I think I only became aware of the sort of places that were undertaking plasmapheresis and the sort of donors they might be getting blood from when the AIDS issue became apparent. I'm not aware that I knew very much about it beforehand.

Q. What about the size of the US plasma pools? Can you recall what your broad understanding was of their size?

A. I knew they were pretty large.

Q. Did you have --

A. Thousands and thousands of donations.

Q. Was it your understanding that they were significantly larger than the pools used in the UK?

A. Yes.

Q. I've asked you a number of questions and so I'm not repeating those about your perception of the advantages of concentrates in terms of treatment of people with haemophilia.

A. Yes.

Q. I think it's probably clear from some of the documents and from your statement, but I wanted to check, are you there talking about really the position of people with severe haemophilia?

A. Yes.

Q. So do you accept that the advantages you articulated would be much less significant for those who had moderate or mild haemophilia?

A. Yes, I would say that the disadvantages of pooled -- large-pool products outweighed the advantages for mild haemophiliacs and probably moderate haemophiliacs, depending on the circumstance, and the circumstance would have to be major surgery or a terrible trauma. But I would have thought that, really and truly, we're talking here for large-pool products for severe haemophiliacs.

Q. You have talked about your perception of the different approaches of Dr Tovey and Dr Gunson. You I think possibly alluded in passing to, but then I didn't ask

you about, a difference in terms of the characters of the Chief Medical Officers, so Sir Henry Yellowlees and Dr Donald Acheson. Are there any reflections or observations you have about any difference of approach as between the two of them?

A. Well, I had very little contact, that I can recall, with Sir Henry. The times I sort of recall seeing him were in the big town hall meetings, so to speak, where he was meeting with all doctors. I really didn't have very much contact with him, that I can easily recall. I must have had more than the complete blank which I draw.

He was less -- well, let me contrast. Donald Acheson was a really distinguished epidemiologist, and this was his absolute love and it was to the forefront of his thinking and how he actually interacted with the medical staff in his division. I don't know actually what Sir Henry's background was in terms of discipline but one didn't have a particular sense of what that might be.

The area where I know he, as it were, made his biggest impact on public health, because this I do remember quite clearly, was on lead in petrol, and he was very influential within the Department on getting the Government to move to remove lead from petrol,

because he felt that this was actually potentially poisoning children, because the lead was in the environment.

Q. Then the issue of central purchasing, so central purchasing for commercial concentrates, which we've alluded to or referred to in your evidence.

A. Yes.

Q. You have referred to it being a concern of the National Blood Transfusion Service, such as it was, I think for over a number of years --

A. Yes.

Q. -- for safety reasons?

A. Yes.

Q. And I think you've helped us understand what those safety reasons were in relation to an element of it, which was non-haemophilia centres using factor concentrates --

A. Yes.

Q. -- and no-one having a record or being able to trace that through?

A. Yes.

Q. Were there other safety considerations that fed into the question of central purchasing?

A. I think the whole point was having a proper database. If you are going to give a potentially hazardous

substance, and all blood and blood products are potentially hazardous -- thank goodness not normally realised in an actual eventuality -- you really have to have very good record-keeping, because you need to be able to trace a batch from its inception, if you like, through to -- well, not exactly inception because that's the pharmaceutical industry's role, but from its initial use through to the end user through to anything else that might have happened to it.

So in blood product terms and in whole blood and any other blood component you need to have very, very good records so that you can trace back or do a look-back or withdraw further batches of the same material if you think that the material has caused a patient ill health.

Q. We saw perhaps most vividly evoked in that correspondence between Professor Bloom and Dr Jones the reaction at least of some of the Reference Centre Directors to that. Did you explain to them that the potential move to central purchasing was because of safety concerns?

A. Well, I must have explained something because I promised them that I would take their views back and explain their views to the centre, if you like. We obviously did have a conversation about it. They were

pretty fixated, I believe, on the fact that this must be yet another plot on the part of the Department to control the purchase so that in fact there would be some cost-saving and that Department or the RTCs would then say, "Well, no, you cannot have this concentrate" or "You must have that concentrate", and there they were really concerned about their clinical autonomy, that they must be free to purchase the right product for their particular patient.

Now, as I said, I tried to make clear to them that that wasn't the purpose of all this but I did come back to the Department and say that there was some sort of almost wilful misunderstanding on their part. So I had obviously tried to explain. It didn't work, though.

Q. Then, again, I've asked you number of questions about reverting to cryoprecipitate, not going back over those, but you identified as a potential problem the effect that there would be on the production of other blood products, albumin, immunoglobulin, if plasma was being retained in RTCs for the purpose of generating cryoprecipitate rather than being sent to BPL.

Was any consideration ever given to the possibility of obtaining those other blood products from elsewhere, commercial sources, importing them?

A. Well, I mean, that would potentially open another Pandora's Box but the most important of those products from -- if we think about it now in terms of patient safety, would have been the Factor IX for the haemophilia B patients because, although -- it's important to recognise although there were very many fewer haemophilia B patients than haemophilia A. A severe haemophilia B was just as severe as haemophilia A. So there had to be an arrangement whereby the starting material for Factor IX, which is, in fractionation terms, the cryoprecipitate supernatant, found its way to BPL so that they could then work on it to make Factor IX because the Regional Transfusion Service couldn't make Factor IX.

Q. In terms of albumin, for example, which could be heat treated?

A. Yes, albumin could be heat-treated, so one would be -- I suppose it would be open to this country to have purchased albumin because it was considered, at that time, pretty safe because it was heat-treated. Immunoglobulins, which was the other one that you mentioned, they were not heat-treated but they, for some reason -- and nobody exactly understood why -- had not been associated with the transmission of hepatitis -- I'm talking here hepatitis -- and had not

been associated and there were various theories about that, basically, the fraction that they came out of in the fractionation process, I think it was fraction 2, from memory, that they may have been complexed -- we're talking here immunoglobulins so they made antibody and any antigen or virus that might have been around -- might have been complexed together and one neutralised the other. But nobody actually understood why they hadn't been associated and they hadn't. I think it was pretty clear from everything I've read that intramuscular immunoglobulin had not been associated to any significant extent with the transmission of non-A, non-B or hepatitis B for that matter.

Q. Then on the issue, again, of clinicians' jealously guarding their autonomy, and then you talked about the perception from the haemophilia clinicians of the Department as an outsider --

A. Yes.

Q. -- was that suspicion of the Department specific to haematology or was it a more general suspicion of clinicians'?

A. It's a sort of -- it's almost a headquarters phenomenon. I mean, anybody out in the field distrusts headquarters. The motives are always

malign -- or thought to be. Essentially I think it would have been the same in any condition. Professionals as a group guarded their autonomy, and I'm not just talking about individual patient and doctor, I'm talking about the body of professionals such as doctors who did not believe that Government departments should interfere in their proper province of whatever specialty they were involved in.

Q. The next question is in relation to Professor Bloom. There were many renowned haematologists in the United Kingdom, there were a number of leading haemophilia clinicians. Do you have any sense as to why, when one looks across at these various committees, groups, organisations, the Central Blood Laboratories Authority, he became a member of that, for example, there's a common thread to so many of the committees and working parties which was Professor Bloom --

A. Yes.

Q. -- do you know why and -- why there wasn't a view to try to seek a wider range of expertise?

A. Well, you would have thought that would be useful, but I would suggest he was on these various committees *ex officio*, if you like. He was the elected chair to represent UK Haemophilia Centre Directors. If the

Department had then turned round and said, "Well, you may think that your elected chair is the person who should be representing your views but we have other ideas about it", I don't suppose that would have been particularly welcome.

But essentially he was occupying a role. Had somebody else been occupying the role, they would have been invited in. And he was a very eminent haemophilia -- not only clinician but researcher. He was well-respected.

Q. Was any consideration ever given, that you can recall, to what might have been the benefits of having a wider range of representation, so that you weren't only hearing from the same voice?

A. Well, on first principles I absolutely agree with you. When you look across the range of meetings that Professor Bloom was involved in, I mean, I don't know how he found time to do anything else, quite frankly, because he was on every committee that I can remember looking at. So clearly it would have been good. Obviously, a series of other clinicians, including, for example, Peter Jones -- and you drew to my attention something that I didn't know, that The Lancet article -- The Lancet editorial -- and unfortunately the editorials were anonymous, it would

be very helpful if they hadn't been -- had been written by Peter Jones, the implication being that he had a particular agenda.

Now, firstly, I didn't know that he'd written the article and, secondly, I wouldn't have known he had a particular agenda. We would not have been in a position, I don't think, to select or take a view as to who would be best to represent directors.

Q. Now going back in time to the Medicines Division and your time there, the product information leaflets.

A. Yes.

Q. Who were they for, patient or clinician?

A. Both. So you would have a particular product leaflet for doctors, who were prescribing the product. This applied to pharmaceuticals as well as biologicals in exactly the same way and it applies today. You have your leaflets for professionals and you have your patient inserts, that's what they are called. So you have your medicament -- you will have seen this yourself -- and there is always a patient leaflet in there, and that should describe the range of adverse reactions and other things that the patient might be wanting to know about the medicine they're about to take.

Q. Then you may have covered this in your oral evidence,

so my apologies if this is a repetition, but it relates to the Medicines Inspectorate within the Medicines Division.

A. Yes.

Q. Did it do inspections of PFC or of Regional Transfusion Centres in Scotland or was there a separate inspection regime for Scotland?

A. Well, I don't actually know but if -- from first principles, if the Licensing Authority -- well, Secretaries of State for England and Wales and Secretary of State for Agriculture and for Scotland, then I'm assuming that their writ would probably have run in Scotland as well.

Q. And then, just still on the theme of Scotland, do you recall ever providing advice directly, I don't mean necessarily in person but in the knowledge that your advice was being given directly, to ministers responsible for the Scottish Home and Health Department?

A. Absolutely not.

Q. Another topic now, DHSS Small Grants Fund. Do you have any recollection as to what in very broad terms was the size of the fund?

A. No, unfortunately. Small is really my recollection.

Q. In hindsight, and this touches on the questions I was

asking you about Professor Bloom and his dominance, as it were, over the various committees, in hindsight do you think you got a full understanding of what might have been the range of views of haemophilia clinicians?

A. I think I might have got that range of views I suppose by attending the various meetings that I did attend. I mean, I listened attentively, contributed from time to time. So obviously he was having to represent what he viewed as a consensus. I had no reason to think that somehow or other I was prevented from hearing a range of views.

Q. Do you know what, if any, consideration was given by the Department to hepatitis B core screening as a surrogate marker for HIV?

A. Well, it was considered. It was not considered by the Department, I don't think, so much as considered by the professionals in the field, because obviously this was one issue. If you were looking to see if you could, as it were, spot a potentially infected donor but you didn't have a test for HIV itself or you didn't even know that HIV existed, potentially the sort of person who might be able to transmit or more liable to transmit AIDS would be somebody who had had hepatitis B because we've learnt together that the

epidemiology of the two infections followed very similar lines.

So whilst by this time all donations were being actually screened for hepatitis, surface antigen and the antibody probably together but certainly screening out those who had, as far as one could see, hepatitis B infection, the core hepatitis -- the anti-hepatitis core antigen still could persist even if the hepatitis surface antigen had disappeared and there was no evidence of antibody.

So if you used that as a potential marker, then potentially you might eliminate some donors who you really didn't want to donate.

I think the arguments were then that, if you did that, you were quite likely to reduce the amount of blood available from donations by a very considerable extent, something like 10 per cent. I could be wrong about that figure but it was quite a considerable, sizeable amount of blood that would be lost if you did that.

Q. Given that, as you told us, that there was no overarching National Blood Transfusion Service and you had Regional Transfusion Centres and Directors as individual fiefdoms, and that in the early 1980s the Medicines Inspectorate was not yet inspecting Regional

Transfusion Centres, although there was an intention, as you explained to us, to do so, how was the Department able to know or check if the plasma that was being collected in the United Kingdom was safe and safe practices were being adopted?

A. Well, we had to rely on the guidance that the Regional Transfusion Service was working to. I mean, they did have quite a number of protocols and, you know, absolute tests that must be done. So, insofar as the testing across the board was pretty unified, I don't think it's fair to characterise the Regional Transfusion Centres as being so entirely footloose and fancy free that they did not all follow a very stringent protocol for testing, because they did, and so every one of them would be testing for the things that we knew they were testing for.

Q. But in terms of collection practices, such as prisons --

A. That I think we knew less about. We would have to make individual enquiries if somebody approached us to say, well, what's going on in region X.

Q. Then was any assessment done in or by the spring of 1983 of the likelihood of AIDS being or getting into the UK donor population, given the ease of transmissibility of AIDS and the realities of

international travel?

A. I don't know how one would have done that assessment. You couldn't diagnose it. The only thing you could possibly do is to try to make sure that you could keep out as many donors who might be in the risk category for AIDS as possible. But there's no way of working out, as far as I can see, whether or not that was being done successfully.

Could you repeat your question --

Q. Yes, you will appreciate I'm asking a question posed by others, so I can't necessarily articulate it in any different way.

Was any assessment done in or by the spring of 1983 of the likelihood or the risks of AIDS either already being in or getting into the UK donor pool, given the reality of international travel and the ease of transmissibility of AIDS because my question to you very much focused on the American problem of imported concentrates, so it's the domestic risk?

A. Yes, I don't know how they would have done such an assessment and if you think that it took until September '83 to get a leaflet out, which was trying to make sure that donors -- inappropriate donors didn't donate, I can't think of a single way in which that assessment could have been done.

Q. If, contrary to what you have explained was your understanding and the Biological Subcommittee's understanding in 1983 if it had been logically feasible and practical to revert to a wide use of cryoprecipitate, either locally in RTCs or through BPL --

SIR BRIAN LANGSTAFF: Do you mean logically or logistically?

MS RICHARDS: Logistically, sorry. Yes, logistically. I misread it, I'm sorry. That's the problem with reading late in the day other people's writing.

Would it have been the right thing to do to go down that route in 1983?

A. If we had enough cryo?

Q. Yes.

A. And it didn't impact on the Factor IX production and albumin and the immunoglobulin?

Q. Yes.

A. If -- we did very seriously consider could we somehow or other arrange for small-pool product, because small pools carry, obviously, less risk than the large pools. We were advised very clearly by Dr Lane and also Dr Gunson that small-pool products couldn't be used.

I think it's still important to realise that you

would still have to use or need to use concentrate on a number of cases.

But certainly if supply had been no consideration, if there had been plenty of cryo, then it would be a perfectly reasonable and logical thing to say that's bound to be safer in terms of the UK population. The UK population, even if it has some donors in it who are actually incubating AIDS, if you like, carrying AIDS, it's bound to be less than the American concentrate, and you will be giving smaller pools, so hopefully you will be protecting patients better.

Q. Now, in your witness statement, I'm not going to put it up on screen because it is just one sentence but if you want to look at it, it is paragraph 86.53 I think, but it's on the issue of leafleting donors.

A. Yes.

Q. And some of the other measures that Dr Gunson had proposed and Regional Transfusion Directors rejected. You say that:

"... the resistance from Directors arose from concerns about deterring donors from donating or causing them offence ..."

And you refer to the stigmatising nature of homosexuality, the fact that it had only been

decriminalised only just over a decade before, and that injecting drug misuse remained a criminal offence.

Do you think it's likely, or possible, that the association of AIDS with homosexuals might have contributed to the resistance of some Haemophilia Centre Directors in accepting a link between AIDS in the haemophilia community?

A. I really couldn't comment on that.

Q. I don't know whether you will be able to answer this Dr Walford but I'll ask it. It's what was the source, as far as you can recall, of your knowledge or belief about the incidence of brain bleeds in haemophiliacs?

A. Well, obviously I will have read. I would have read reports or publications. That would have been my source. I was never -- I never personally encountered, as a patient, a haemophiliac who had had a bleed into the brain, but my understanding was that that was one of the most likely causes of death from a bleed.

Q. I think the next question probably follows logically from your -- the fact that you had no comments on the relevant part of the Council of Europe recommendation and from other things you have said but I'll ask it anyway.

Do you accept that patients, in particular haemophiliacs, always had the right to know about the risks of the products they were being treated with and the right to be informed of possible ways of mitigating that risk?

A. Absolutely.

Q. You were involved in medical education at a slightly later stage of your career.

A. Yes.

Q. Do you know what, if any, steps were being taken in the late 1980s/early 1990s to ensure that risks from blood and blood products were part and parcel of the medical curriculum?

A. No. Actually I had nothing to do with the undergraduate curriculum at all. It was postgraduate medical education that my work was involved with.

Q. Then in that period of time when you were Deputy Chief Medical Officer, so '89 to '92, before you went off to the Public Health Laboratory Service, do you know what, if any, steps were being taken to provide knowledge to the public or to clinicians about diagnosing non-A, non-B hepatitis or, indeed, hepatitis C, as it had by that point come to be known?

A. Well, I think -- with regard to hepatitis C, I think of course there was, round about that time, and I've

been shown the papers, there was a non-A, non-B -- or hepatitis C look-back exercise, was then being carried out, which was -- its intention was to try to trace anyone who might have hepatitis C, not necessarily associated with blood products or blood but who might have developed hepatitis C, to find out who they were, to give them the opportunity for testing, and for -- if necessary, referral on to liver departments.

Q. Are you aware of any steps being taken by the Department from the late 70s through, really, to the beginning of the 1990s, so in the multiple different capacities in which you were working, to influence or shape blood transfusion practice? So leave aside treatment with factor concentrates, but to perhaps try to ensure that people were not given transfusions unless absolutely necessary or were given all necessary advice and information about risks?

A. Yes. I can't remember the exact date, but at some stage the National Blood Authority was established. That then subsequently became the NHS Blood and Transplant, so there were stages in the evolution of that National Health Service and its overarching management.

Essentially, I would have supposed, although I wasn't associated with the work of the National

Blood Authority, that they would have been developing more and more sophisticated haemovigilance surveillance, which -- as I talked about, the serious hazards of transfusion. There was a virological safety, a blood committee. Things certainly improved as the time went on, but I can't -- because I can't fix the timeline, but absolutely I think the safety of blood was ramped up progressively as time went on.

Q. Back to self-sufficiency. Do you recall whether in the late 70s, beginning of the 1980s, when you were most closely involved with this issue, whether there was a clear understanding within the Department and those with whom they were interacting about what self-sufficiency actually meant, and did it include ensuring home treatment for all or include prophylactic treatment for all?

A. Well, I don't know that I ever personally queried it. I sort of had my own view. I thought we needed to use home-grown plasma to provide for whatever it was our patients, the haemophiliac patients, or anyone else who needed blood products, needed. Clearly, there is a distinction to be drawn between in need and absolute need, if you can define it, and a demand which might be or might not be appropriate. So it might have been that there was a luxurious waste of product, for

example, in which case you'd want to rein that back, but my own personal sort of understanding was that it meant we should have enough plasma from our own voluntary donors to supply the needs of the haemophiliac population.

Q. At some point in the course of your evidence yesterday or on Monday, I think we looked at a document which talked about the reporting of cases of jaundice or hepatitis --

A. Yes.

Q. -- that was associated with non-A, non-B --

A. Yes.

Q. -- to the appropriate person within the Department, and we talked about that and you said you thought it would be the consultant adviser?

A. Yes.

Q. I omitted to ask you then, so I am asking you now, about the yellow card system.

A. Yes.

Q. How did that operate in this period 1977 to 1983, as far as you can recall?

A. I don't know how well it operated during that period. It was certainly up and running when I was in Medicines Division. It was early days for it but we did have a yellow card system and every British

pharmacopoeia, which was the sort of document which described the composition of all drugs contained a yellow card, which could be taken out and completed by the medical practitioner and sent back into the Department.

Now, obviously, it was only as good as people were prepared to use the yellow cards but it was a form of, obviously, surveillance after the drugs had been licensed. How much the cards were used by the Blood Transfusion Service, I just don't know.

Q. Would there have been, as far as you're concerned, an expectation that clinicians encountering post-transfusion hepatitis should report it using the yellow card scheme?

A. Well, I don't know whether they did or would, probably because they, as we saw at the time, it was so well understood, unfortunately, that post-transfusion hepatitis occurred, so it wasn't something that was a novel adverse reaction that needed -- you needed to alert Medicines Division that, look, here is a product, it's been licensed and suddenly we're finding that patients have all got thrombocytopenia, or something, their platelets have dropped through the floor. Those are cases that need to be reported.

If you have got an ongoing thing, and

post-transfusion hepatitis, and the Chairman was good enough to give me a paper dating from 1953 last night to read, where, of course, post-transfusion hepatitis B was well known, I doubt that that reporting system would have been used because it would be considered to be a fact that was known to everybody that, unfortunately and hopefully unavoidably post-transfusion hepatitis did happen.

Q. Hopefully the last question from me. It involves looking back at a document we looked at on Monday or Tuesday, NHBT0000068_049. These are the minutes of a "Working Party on Post-Transfusion Hepatitis", 25 June 1981. Can we go to page 5, please, Soumik. Paragraph 4 -- yes, thank you, that's perfect. I think we looked at this but there's a question I didn't expressly ask you. So it's the paragraph that says:

"Dr Craske concluded by saying that there was little information about the incidence of symptomless hepatitis and the relative risks of hepatitis due to different brands of Factor VIII and IX."

Then there's the reference then to the prospective study of patients, which I think I did ask you about.

A. Mm-hm.

Q. Then this:

"... and to provide a collection of well documented sera and other specimens for the use in development of serological tests for non-A, non-B hepatitis."

A. Mm-hm.

Q. The question is this, and you were one of the DHSS representatives, I think, at this meeting: did you see at the time, and if you didn't do you see now, any ethical issues associated with the collection of stored sera or other specimens?

A. The specimens would have been taken for -- not specifically for this test, for this surveillance, if you will, the specimens would have been taken for the clinical benefit of the patient. What I think is being referred to here is the storing of the remainder of a sample.

I mean, this was absolutely common practice. It was considered to be good practice and it was considered to be bad practice if you didn't do it.

Now, of course, ethics change and, over the years -- and we've seen discussion of this in the Inquiry, that what was at one stage considered not only normal practice but good practice came to be seen as unethical practice if you hadn't actually asked the

patient, at the time that you were taking the sample for their own clinical needs, do you mind if we retain some of this sample to test for other things, and you might specify what you were going to test for.

There was always a problem that you didn't necessarily know what you were going to need to test for until a circumstance arose, and I think that did occur with AIDS, or HIV, as then it was the question. Of course you didn't know that you were going to want to test for HIV because you'd never heard of HIV but you could perhaps get round that with a catch-all consent that would you be happy if we store some of the sample if it's left over from taking it for your clinical needs, so that we can use it in any future investigation or research, which would get round that particular problem.

But in the days that we're talking about and when this work was being done, it didn't appear to be even a consideration. It was simply common practice and considered to be good practice because you were then in a position to say, well, you know, a year ago did this patient who is now exhibiting this particular problem have evidence of it in the serum and we hadn't looked for it? So it was good practice. But I certainly recognise that times changed and the

ethics of the situation changed too.

Q. So would this be right: applying the ethical standards of the time, it would, even by those standards, only have been acceptable to collect sera or other specimens if that was for the clinical benefit of the patient?

A. It had to be for the clinical -- otherwise you were doing a clinical trial.

Q. At the time the consent issues, that the Inquiry has talked about and doing this without patients' knowledge or consent, had not expressly occurred to you -- and I'm really asking about your knowledge, I'm not expecting you to speak for the entire medical profession, but your knowledge --

A. No, and I think another way I could look at it is that in haematology departments, nothing to do with haemophilia, you collected an enormous amount of blood samples and there was always something left over. Those samples were really valuable, because how else did you calibrate the machinery? If you had those left over samples you had an option: either you said -- and I don't think this is what we said to ourselves at the time -- we have to get consent to have them used to calibrate the machinery or we have to throw them away. And it would be literally the

choice: do you use them for good and sufficient purpose in them having been taken for the clinical care of the patient, a bit of sample is left over, can you use those to calibrate the machine so that you get accurate readings for the next time you want to use the machine, or do you just throw them away?

Throwing it away seemed actually possibly more unethical than using it to calibrate the machine so that you got the right result. But we didn't, at the time, think about getting consent.

Subsequently, even more that purpose, it became a requirement, if you like, to make sure that you got consent.

MS RICHARDS: Sir, those are the questions I am proposing to ask of the multiple questions that I have been invited to consider. Let me just turn to see if Ms Grey has anything. No.

Sir, do you have any questions?

Questions from SIR BRIAN LANGSTAFF

SIR BRIAN LANGSTAFF: Just one or two very general questions from me, if I may, Dr Walford.

The first one is really rather general. You were a civil servant, albeit a doctor, in a chain which went up to the Minister who took ultimate responsibility for everything that happened in The

Health Service.

A. Yes.

SIR BRIAN LANGSTAFF: It's often said that the role of the Civil Service is to speak truth unto politicians.

A. Yes.

SIR BRIAN LANGSTAFF: Are there any particular truths that you would have wished, reflecting back on your time in the Civil Service, to have been expressed to politicians in respect of the matters we are considering in this Inquiry?

A. Well, I think, insofar as I was briefing politicians face-to-face, I expressed my views. I believe I would -- I never felt inhibited about expressing my views. One needed to actually be there to do it and I wasn't always there. Let me take an example, an easy one if you like, that had I had the opportunity to be face-to-face with ministers over the rebuilding of BPL, I would have made my view that really we had no alternative but to rebuild BPL and that all this penumbra, this extraordinary amount of debate about the subject, was really surplus to requirements, because we needed to do it. I think for those ministers that I have had dealings with, should they be giving evidence, I hope they would be able to say that I did.

I certainly recall with some pleasure, actually, the exchanges of views that I could have with Mr Clarke, who was only too happy to hear a differing view and to have an exchange of -- a proper exchange, as opposed to: you are a civil servant and you should know your place.

SIR BRIAN LANGSTAFF: The second question, again, is a very general one. One of the difficulties, it might be thought, for those who need treatment for their haemophilia and it may be for other blood disorders --

A. Yes.

SIR BRIAN LANGSTAFF: -- is that they are not large in number. The division of the country into Regional Health Authorities, and quite a number, would tend to ensure that those Regional Health Authorities had concern, in particular, for the mainstream interests in their region.

A. Yes.

SIR BRIAN LANGSTAFF: What system might be better designed to serve the interests of what is a minority, whose interests need to be served, but if one applies the broad democracy of it, the local subsidiarity of it, it would simply get ignored, or wouldn't get very well looked after.

A. Yes. Well, there was an organisational arrangement

called the Supra-Regional Services, and that was designed precisely to do what you say. So for rare diseases and possibly diseases not distributed uniformly round the country in any particular way, there were arrangements made whereby one particular region, for example, might host the central entity which was dealing with patients with particular rare disease.

It's one of the things, for example, when I mentioned in my statement that I was involved with setting up the regional bone marrow transfusion service, and these were being -- it was initially being treated as a supra-regional service because there were so few bone marrow transplant units, but they needed to be funded to a considerable extent.

So there was a number, a small number, of Supra-Regional Services which were set up specifically to deal with your particular point, that otherwise you would have patients in some part of the country who were really losing out because nobody was focusing on them.

SIR BRIAN LANGSTAFF: We've heard in this Inquiry how some people with haemophilia moved closer to Oxford, for instance --

A. Yes.

SIR BRIAN LANGSTAFF: -- because they felt they were guaranteed rather better treatment.
A. Yes.
SIR BRIAN LANGSTAFF: That wouldn't have been necessary unless the region had been in some way not treating them quite so well as others.
A. I mean, you really need a critical mass of patients with a particular illness to know how to treat them well. I mean, it was always one of the problems that, for example -- again, let me take one from my time in the Department.

Surgeons, general surgeons, were treating breast cancer wherever the patients turned up in the hospital, and the results were poor. The only time that you got improvements were where you had a critical mass of patients, you had the appropriate research being done, the funding from the research councils and -- Medical Research Council Trials Unit. If you didn't have -- with rare-ish conditions, if you didn't have centres of excellence and expertise, the patients would come off very badly. It might be that they were more conveniently served by their local district hospital, but you wouldn't really want to end up there because there wasn't the expertise.
SIR BRIAN LANGSTAFF: Yes. Thank you.

Let me turn to something else, and it does reflect on the document which I sent through to you. I didn't want you to spend a lot of time just browsing through the whole of it but this was a report from WHO in 1952, published in 1953 as it happens.
A. Yes.
SIR BRIAN LANGSTAFF: But it was dealing with the measures that might be taken to, amongst other things --
A. Yes.
SIR BRIAN LANGSTAFF: -- might be taken to reduce hepatitis.
A. Hepatitis B, yes.
SIR BRIAN LANGSTAFF: Well, serum hepatitis. They didn't know it was hepatitis B, did they, at the time?
A. No, but that was the term that, over many years, was used for hepatitis B. But you are quite right, they couldn't test for it.
SIR BRIAN LANGSTAFF: So, so far as serum hepatitis was concerned, the first of those of the recommendations -- there were five I think -- and I want to go through each of them in turn. There was: donor selection; there was pool size, control of pool size; treatment of plasma; records and record-keeping; and the sterilisation of equipment.
A. Yes.

SIR BRIAN LANGSTAFF: Leave aside the last.
A. Yes.
SIR BRIAN LANGSTAFF: Let me just deal with each of the other four.
A. Mm-hm.
SIR BRIAN LANGSTAFF: The selection of donors in this country, from what you have said -- and I just want to know if this is right or not -- the selection of donors was largely left to regions who might vary considerably in the practice of who they took blood from?
A. Yes.
SIR BRIAN LANGSTAFF: You've described them as fiefdoms. They might ask different would-be donors different questions as to whether they should or shouldn't give blood, hence the reluctance of many to ask about certain practices; is that right?
A. Well, there was guidance, and I haven't got the chapter and verse on that, but undoubtedly there was guidance put out about the sort of questions that should be asked of donors. The sort of approach you should take, by -- the Blood Transfusion Service should take towards donors. I don't think it was really the Wild West, as it may have appeared, and I certainly hope I didn't contribute to that -- the

sort of feeling that it was an uncontrollable state of affairs.

I think the Inquiry will be able to find guidance, quite a bit of guidance, which was being used across the board in the Blood Transfusion Service.
SIR BRIAN LANGSTAFF: I mean, I suspect that there was a degree of commonality of behaviour but also a degree of exceptionality. So it might be not quite a postcode lottery, I wouldn't want to use that phrase, but it did differ from region to region?
A. To an extent it must have done because they were fairly autonomous, but I think there was a general understanding on the part of Regional Transfusion Directors -- and they did meet together and they had met together for many years -- of what was and was not the right sort of the practice.

But it will be possible to find out from the Blood Transfusion Service what guidance was available from what date. Now, obviously they probably don't have stuff going back to 1952 --
SIR BRIAN LANGSTAFF: Of course, the principles or the suggestions by WHO are generalisable to any serious virus that might be transmitted by blood or blood products?

A. Yes, absolutely.
SIR BRIAN LANGSTAFF: So, so far as donor selection is concerned, it took the efforts you have described as being too slow, to issue the leaflet, to advise people to defer and not give donations if they fell into certain high risk groups.
A. Yes.
SIR BRIAN LANGSTAFF: So it might be said that it was less than entirely satisfactory from the point of view of controlling infection through blood.
A. That's true but of course we need to remember that for many, many years, the Blood Transfusion Service was testing, for example, for syphilis, which might be -- at the time be considered as stigmatising, if you will. So, actually, I believe it would be quite useful, certainly not to rely on what I can say about which is not as much as you obviously would need, to see what the National Blood Transfusion can tell you how a -- Service can tell you about how matters were harmonised, to a degree, and the times in which they were not harmonised, but I'm not sure I can help.
SIR BRIAN LANGSTAFF: We are yet to come, I think, to that evidence.
So far as pool sizes were concerned, I think the WHO had in mind a maximum of 300 donors to a pool,

maybe even less?
A. It was less. I think talking about ten donors in a pool.
SIR BRIAN LANGSTAFF: Am I pretty right in my understanding that it was, by and large, by 1970, it was still having that sort of pool size and then it began rapidly to increase with the demands of producing factor concentrate domestically?
A. Yes, I think it was from the, sort of, late '70s the pool size for UK -- UK fractionation -- sort of grew from 400 and then incrementally grew to 1,000 and then maybe I think at maximum, but again that would need checking, to about 5,000, which of course compared favourably, you might say, with the size of the pools in America.
SIR BRIAN LANGSTAFF: That was going to be my next question. Obviously, you may not have known precisely how large the American pools were but they were, for commercial efficiency --
A. Yes, yes.
SIR BRIAN LANGSTAFF: -- they were rather larger?
A. Very much.
SIR BRIAN LANGSTAFF: So throughout the 1970s, the picture would be one of increasing pool size but also increasing awareness of the fact that there might be

something transmitted by blood, which was viral --
A. Yes.
SIR BRIAN LANGSTAFF: -- which was causing non-A, non-B, the subject close to your heart.
A. Yes. Yes, on non-A, non-B, I think it might be worth saying that there is some evidence from the material that I've seen that, after you got past, some say, 250/300 donors, 300 donations having been received by the patient, then even in the UK non-A, non-B was probably inevitable. That's because of the prevalence, the wide prevalence of non-A, non-B, as it turned out in the population, which once one could measure it, was about 0.5 per cent.
SIR BRIAN LANGSTAFF: Otherwise, it might seem that as awareness of the virus was increasing in one branch of those who had knowledge and the other branch, manufacturing the product, was actually steadily increasing the pool size.
A. That's right.
SIR BRIAN LANGSTAFF: Who would have been in the position to have said, "Look, you are telling me the risk increases with the pool size, Dr Owen told us when he came that that's what he thought, but lo and behold you are actually increasing pool size"?
A. Yes, yes. I think your question would be, as it were,

best addressed to the Licensing Authority because essentially this was a product issue. If the -- and of course NIBSC, and I gather you will be hearing from NIBSC, that -- for reasons which I can't determine and I don't know, the fact that there were large-pool size, that the large-pool size did appear to increase the risk both of non-A, non-B and of, obviously when we came to it, of AIDS, that this wasn't something that the Licensing Authority had decided to say "We cannot accept products made from pools this big", now, that would have been for them to make that call.
SIR BRIAN LANGSTAFF: The third one was the treatment of plasma. Now, we know that, so far as albumin production was concerned, that was treated.
A. Heat-treated.
SIR BRIAN LANGSTAFF: And it may have been some immunoglobulins had some form of treatment. But as a matter of fact, until the rise of pasteurisation, early attempts, and heat treatment in the early 80s, nothing was actually done to treat -- successfully to treat plasma --
A. Yes.
SIR BRIAN LANGSTAFF: -- in respect of the viral risks of hepatitis or whatever?
A. If you're referring to coagulation factor concentrates

like Factor VIII and --

SIR BRIAN LANGSTAFF: Yes.

A. The problem was that that was a very, very complex thing to do.

SIR BRIAN LANGSTAFF: I think we'll probably ask the fractionators about it.

A. Yes.

SIR BRIAN LANGSTAFF: All I am really saying is, as a matter of fact --

A. As a matter of fact, yes, albumin was treated and could be sterilised at 60 degrees for a number of hours, and it worked. As a matter of what happened during the course of the time that I know about, if you will, essentially non-A, non-B appeared not to be very heat-susceptible, and basically an enormous amount of work had to go into trying to find a way to protect the protein and at the same time to destroy the non-A, non-B.

I'll just finish by saying, because it seems to me such a great pity, that because of the experience that fractionators had with trying to get rid of non-A, non-B and finding that they had to heat for a very long time at a high temperature and protecting the protein and major loss of yield, and because you could not actually test for HIV and therefore you

couldn't do a spiking test to put HIV into plasma, heat it up and see if you could get rid of it, the assumption -- it took an awful lot longer to introduce heat-treated coagulation factor, certainly Factor VIII, than it might have done, because HIV turned out to be much more susceptible to heat. Unfortunately, though, before you could test for HIV, you couldn't do the experiments which showed that it was. So you might have introduced heat-treated concentrate sooner in order to deal with AIDS even if you couldn't deal with non-A, non-B. But it was two epidemics proceeding in parallel.

SIR BRIAN LANGSTAFF: The fourth, the question of records, you've dealt with your concerns about record-keeping in your statement.

A. Yes.

SIR BRIAN LANGSTAFF: And for those who want to refer to it, it's your section 41, page 120. I don't think we need to go there and look at I because you know very well what you have written.

A. I can remember.

SIR BRIAN LANGSTAFF: But you had quite a number of concerns about the absence of records or the poor record-keeping.

A. Yes, well, it was largely the poor record-keeping at

the hospital blood banks rather than at the Regional Transfusion Centres, and we were sort of alerted to this by a scandal, if that's the right word, at the National Heart and Chest Hospital, I think it was called in those days, where there appeared to be potentially some sale of blood to the private sector going on and I was asked to get in touch with Dr Wagstaff to get it investigated very quickly. It turned out that the record-keeping at the Regional Transfusion Centres was not bad at all and they knew where they had sent the blood.

What was a problem was that the record-keeping at the hospital blood banks was not good and they were supposed to return outdated plasma to the Regional Transfusion Centres and they were certainly supposed to say what was the end user of whatever was the unit of blood, and that information wasn't getting back consistently to Regional Transfusion Centres and that was obviously a major issue which needed attention.

SIR BRIAN LANGSTAFF: That would apply to -- really, you emphasise it, I think in an answer you gave to counsel just before the end, that the successful means of controlling what might be a real threat in blood has to depend critically upon good records, and we didn't really have as good a system as we might have done.

A. Absolutely.

SIR BRIAN LANGSTAFF: That, I think, is what you are saying.

A. Yes.

SIR BRIAN LANGSTAFF: Right. The last question -- the last area of questions that I want to ask you about -- I'm sorry to take so long -- but is about the sources of information which came in to the various departments of the Civil Service that were looking at the questions of blood. Obviously there were aspects of your work which overlapped with the aspects of HS1, HS2 of Med IMDB, and so on.

Did information ever reach you, for instance, or if so, when, about the activities of Luc Montagnier in Paris, the report of 20 May 1983, that he had discovered a viral particle associated with -- in the usual classical way that scientists draw attention to something that might be causal -- associated with the symptoms of AIDS?

A. Mm-hm.

SIR BRIAN LANGSTAFF: When did you first hear of that, do you remember?

A. Well, I would have read about it because obviously I was then all eyes and ears trying to find out as much as I could.

I would have read about it. It was written up. It didn't receive the kind of, you know, thunder clap, this is it, and of course, as you know, then it wasn't until Gallo isolated what appeared to be the same entity and then there was a huge spat between the men as to who got there first but, certainly, I knew about it and, of course, I think, probably through the MRC hepatitis, or the MRC working party that I was on, I think they spoke about it.

But I had read about it at the time and I actually think I probably mentioned it in one of the briefing papers. I think we saw it just not so long ago, which said, the question is: is this HTLV-III entity actually the cause of AIDS or is it a passenger which is opportunistic, if you like, which is there like so many of the other viruses that were associated with patients who developed AIDS, and it just happened to be a fellow traveller, if you like, and not the causal agent. For some time there was debate about whether it was the causal agent.

SIR BRIAN LANGSTAFF: That presumably will be after Gallo had done his work --

A. Yes.

SIR BRIAN LANGSTAFF: -- because that's where the name HTLV-III came from, as I understand it.

A. Yes, but I see that I was briefing about it at the time, actually.

SIR BRIAN LANGSTAFF: So do you think you knew about LAV or Montagnier's description of the same particle?

A. Yes, I think I probably did, yes. It didn't somehow come as a surprise to me, yes.

SIR BRIAN LANGSTAFF: Do you happen to know whether you learnt about it before the committee on the -- the Biological Subcommittee of the CSM?

A. I probably -- well, whenever it was published. I don't know when it was published actually.

SIR BRIAN LANGSTAFF: It was -- 20 May '83 it was published in Science, I think.

A. Right. Well, I probably knew about it round about the same time.

SIR BRIAN LANGSTAFF: The other question is, I notice one of the papers we looked at that there was an international division --

A. Yes.

SIR BRIAN LANGSTAFF: -- in the Department.

A. Yes.

SIR BRIAN LANGSTAFF: Now, that would pick up intelligence from other health systems around the world?

A. Yes.

SIR BRIAN LANGSTAFF: So if matters had been happening in

Finland, in Denmark, in Sweden, in Italy, in Germany, that might be of interest to you in SEB --

A. Yes.

SIR BRIAN LANGSTAFF: -- would you expect to be told?

A. Yes.

SIR BRIAN LANGSTAFF: By that branch?

A. Hopefully. Hopefully, yes.

SIR BRIAN LANGSTAFF: Would they know what to look out for and how would they do that?

A. Well, they would obviously be picking up intelligence, and I don't know how that intelligence would be related to them, but presumably they would have been hearing the Council of Europe reports, and there were some reports then on how many cases that there were.

But there was something that you've just prompted me to think about, if I could now just call it to mind, and that was, of course, we did get some intelligence back from Dr Gunson, who was also reporting back from the international conferences -- oh, yes, I know what it was. It was -- what came to me as a real surprise was that Med IMCD had some kind of relationship, intelligence-exchanging relationship, with the scientific adviser at the American embassy. And I had no idea that they had that, and that is where I think they were getting quite a lot of their

information about what was going on in America, this Dr Norton, whom I'd never heard of before, and I didn't know that Dr Field had, as it were, his finger on the pulse in that way. That was an -- interesting.

Whether or not the international division also had their agents scattered around in other countries, I have no idea.

SIR BRIAN LANGSTAFF: So you picked up about Spain from reading The Lancet, those haemophiliacs in Spain who had AIDS --

A. Well, I didn't, alas, pick it up, because I think I didn't know about the -- when The Lancet published that, it was late April or something of that sort.

SIR BRIAN LANGSTAFF: Yes.

A. I did not pick it up at that time because I never necessarily got The Lancet as The Lancet was published. That's one of the reasons why I just don't know how -- I don't know how it was that that briefing was prepared that we were talking about before. I think -- obviously somebody had picked it up from The Lancet, but it wasn't me. So I did find out about it, of course, subsequently, and Spence Galbraith referred to it, but at the time I hadn't read it. I didn't actually read The Lancet on the dot because

didn't have it on the dot.
SIR BRIAN LANGSTAFF: The practices of other European countries, which might have been inclined to take a concentrate from commercial suppliers, they would have been known, would they, through the international division, through to you, or how would that information have come?
A. Well, I don't know what the international division knew, to be honest, but I know what Gunson reported back and of course we also then got (and it turned out, unfortunately, misleadingly) some information through from Professor Bloom, who was doing his own survey and, as you know, he reported back and he said that there had been no cases in Germany, although the German use of concentrate was something -- ten times the use -- American concentrate was ten times the use in the UK and he reported there were no cases.
That was of considerable comfort, I have to say, because it seemed -- you know, wasn't sure what the phenomenon was we were looking at but Germany wasn't experiencing it, apparently, from the survey that he'd done.
SIR BRIAN LANGSTAFF: Yes. Well, that's all that I have to ask.
MS RICHARDS: Dr Walford, no more questions from me. Is

there anything you would like to add?
A. Well, if anyone can stand hearing any more from me, I could say one or two words, if you permit me.
I just want to say that for those of you who have read my statement, at the beginning of my statement I said that I hoped that this Inquiry would produce some long-sought answers for the people who have suffered so much and for whom the lack of clear answers to their questions has contributed so much to their distress, which is why, in my evidence over the past days and in my very detailed statement, I have tried to use, to the greatest extent possible, evidence from the contemporary notes, not simply from my memory, which was obviously deficient in many respects.
I've also tried, in my evidence, to explain the context in which those records were created. It was a very different world, not just technologically but from a societal point of view also.
So I hope that in some small way my testimony has been helpful in providing some of those answers. But what I really want to say is that if there is anything that I said, or did, or did not say, or did not do that has contributed in any way to the suffering of those affected or their families then, of

course, I am profoundly sorry.
MS RICHARDS: Thank you, Dr Walford.
Sir Brian.
SIR BRIAN LANGSTAFF: We've asked a lot of you in so many ways, and I need to put on record my thanks to you for all that. I have to say that one of the demands that we have placed upon you, and which you have gladly accepted, as your last words indicate, is going through with meticulous attention a huge bundle of documents, many of which you will have seen before but some of which you haven't, and your mastery of those and attention to detail, I have to say, is hugely impressive.
A. Thank you.
SIR BRIAN LANGSTAFF: I wish that all witnesses that I have heard had been as diligent.
Your retention and memory, again something which began so many years ago for you, and you've done so many other things since, is something which I stand in some awe of. You've been ready to accept matters where they needed to be accepted. You haven't been frightened to express your pretty firm views on a number of topics and you've done all this while being challenged by your voice, which hasn't given out. I think you have warmed to your topic but I see

your husband is laughing at the thought your voice might ever give out! Perhaps I'm doing you an injustice.
In any event, thank you very much for all that and for giving us your time, which brings me to the last matter, which I'm sorry that we have to finish so late, but thank you for your perseverance, again without any sense of complaint. So thank you.
A. Thank you, sir. Thank you.
MS RICHARDS: We have Lord Glenarthur giving evidence tomorrow with a 10.00 start.
SIR BRIAN LANGSTAFF: So 10.00. 10.00 tomorrow.
(6.15 pm)
(Adjourned until 10.00 am the following day)

MS RICHARDS: [36] 1/5 8/1 9/1 10/8 10/21 10/25 17/4 20/4 53/6 53/17 57/24 58/3 101/8 103/17 116/16 116/24 118/19 120/20 120/24 121/2 129/24 147/13 149/22 172/4 174/2 174/8 178/17 195/17 195/24 196/4 196/9 213/9 225/14 245/25 247/2 248/10
SIR BRIAN LANGSTAFF: [127] 7/24 8/17 10/5 10/9 10/23 14/17 15/5 15/7 16/16 16/25 17/5 18/7 19/5 19/24 20/3 49/11 50/25 51/9 51/12 51/16 51/24 52/1 52/11 53/1 53/12 57/22 57/25 99/2 99/5 99/8 99/16 99/24 100/4 100/10 100/14 100/16 100/19 100/23 101/5 101/7 103/16 115/21 116/4 116/6 116/10 116/15 116/19 118/14 120/17 120/21 121/1 128/15 147/12 149/12 149/16 149/19 172/12 172/15 173/21 173/24 174/4 178/16 195/22 196/2 213/7 225/20 226/3 226/6 227/7 227/12 227/19 228/22 229/1 229/4 229/25 230/7 230/10 230/13 230/18 231/1 231/3 231/6 231/13 232/7 232/22 233/2 233/8 233/22 234/4 234/16 234/21 234/23 235/3 235/14 235/20 236/12 236/16 236/23 237/2 237/5 237/8 238/13 238/17 238/22 239/20 240/2 240/5 240/21 241/21 241/24 242/3 242/7 242/12 242/16 242/20 242/22 242/25 243/4 243/6 243/8 244/9 244/15 245/2 245/23 247/4 247/15 248/12

'

'70s [1] 234/9
'77 [1] 193/10
'78 [1] 87/17
'78/'79 [1] 87/17
'79 [1] 87/17
'83 [8] 8/18 71/9 71/10 147/12 147/13 193/10 212/22 242/12
'89 [1] 216/18
'92 [1] 216/18
'agenda' [2] 79/9 80/5
'dangerous' [1] 34/2
'dump' [1] 37/16
'Epidemic' [1] 70/24
'future' [1] 103/10
'haemophiliac' [1] 75/21
'incubating' [1] 75/23
'It [1] 152/17
'let [3] 121/21 126/17 127/14
'let-out' [3] 121/21 126/17 127/14
'not [1] 82/17
'possibilities' [1] 81/24
'post [1] 46/23
'rare [2] 5/24 7/22
'there [1] 153/2
'tip' [2] 9/15 10/17

.

... [2] 12/6 31/21

0

0.5 per cent [1] 235/13
006 [1] 35/23
016 [1] 187/3
017 [1] 108/9
018 [1] 167/23
019 [1] 44/6
020 [2] 47/13 104/1
030 [1] 57/1
032 [2] 149/11 149/22
034 [1] 73/5
038 [1] 42/16
041 [1] 70/1
048 [1] 152/2
049 [1] 221/11
051 [1] 66/18
052 [1] 35/4
054 [1] 146/22
055 [1] 70/9
059 [2] 74/20 174/9
067 [1] 116/25
085 [1] 147/9
097 [1] 102/23

1

1 June [2] 42/17 120/18
1 June 1985 [1] 119/24
1 November 1983 [1] 152/5
1,000 [1] 234/11
1-3 [1] 6/21
1.10 pm [1] 116/21
10 [2] 5/23 48/7
10 per cent [1] 210/17
10.00 [5] 1/2 248/11 248/12 248/12 248/14
100 per cent [2] 4/22 4/24
1000 [1] 6/12
11 [4] 6/2 49/1 61/3 87/19
11.15 [1] 53/14
11.45 [1] 53/13
11.46 [1] 53/16
12 [1] 6/7
12 months [1] 6/20
120 [1] 238/18
122 [1] 31/1
123 [1] 146/18
13 [1] 121/3
13 July [5] 63/11 79/4 83/2 107/12 111/12
13 July 1983 [1] 85/12
13 June [1] 139/7
13 June 1983 [1] 73/3
13 May [4] 1/7 31/3 48/4 113/4
13 September [1] 97/24
14 July 1985 [1] 147/11
14 June 1983 [1] 70/1
15 [2] 8/13 173/3
15 July 1983 [1] 3/20
15 minutes [3] 172/4 172/18 173/6
16 [2] 5/6 5/13
16 May [1] 32/2
16 May 1983 [2] 33/21 118/25
17 [1] 105/13
18 May [1] 68/12
18 months [1] 24/12
182 [2] 20/7 21/18
19 [2] 11/25 174/12
19 July [1] 104/11
19 September 1983 [1] 174/10
1952 [2] 230/5 232/21
1953 [2] 221/2 230/5
1960s [1] 20/23
1964 [1] 23/12
1970 [1] 234/5
1970s [3] 21/21 130/19 234/23
1977 [2] 196/15 219/20
198 [1] 21/6
1980s [2] 210/24 218/10
1981 [3] 140/22 174/21 221/13
1982 [3] 6/17 135/11 184/22
1983 [67] 3/20 3/22 6/17 8/13 8/22 10/22 11/25 17/17 29/24 30/5 30/12 31/2 33/21 37/16 37/25 38/2 38/7 42/7 53/24 55/8 70/1 70/10 72/20 73/3 73/6 79/11 85/12 93/20 95/11 101/12 101/19 102/6 102/24 104/2 108/9 108/18 109/11 111/2 117/4 118/5 118/25 121/3 122/16 135/3 135/18 135/20 136/17 137/7 140/15 146/15 147/7 148/16 151/3 152/5 153/15 167/24 174/10 176/22 178/6 179/12 196/15 211/23 212/14 213/3 213/13 219/20 240/15
1984 [2] 15/22 16/15
1985 [6] 26/5 119/24 138/19 147/11 185/1 187/25
1989 [2] 190/2 190/6
1990s [3] 190/6 216/11 217/11
1992 [1] 190/2
1995 [1] 185/24
1st [1] 122/15

2

2 April [1] 10/23
2 April 1983 [1] 10/22
2,000 [2] 129/1 129/4
2.15 [1] 116/20
2.15 pm [1] 116/23
20 [1] 50/6
20 July 1983 [2] 102/24 148/16
20 May '83 [1] 242/12
20 May 1983 [1] 240/15
20 September [1] 113/21
20 September 1983 [1] 111/2
2021 [1] 1/1
21 [1] 62/6
21 July 2021 [1] 1/1
23 [4] 41/23 101/18 101/24 103/11
23 August 1983 [1] 179/12
23 March [11] 38/22 38/23 39/2 39/14 39/19 40/1 40/5 40/9 40/20 72/8 104/19
23 May [1] 35/24
23 November [1] 153/7
24 June [2] 97/8 101/1
24 June 1983 [2] 93/20 136/17
24 March [6] 14/25 15/17 34/14 35/15 36/5 72/20
24 March 1983 [2] 30/5 37/25
24 March' [1] 46/23
24 May [3] 15/2 15/5 36/2
24th [1] 31/9
25 [1] 104/14
25 July [1] 106/15
25 July 1983 [1] 104/2
25 June 1981 [1] 221/13
25 months [1] 4/24
250/300 [1] 235/8
26 [1] 63/8
26 August 1983 [1] 178/6
26 July [1] 149/23
27 July 1983 [1] 176/22
28 June [1] 146/24
28 June 1983 [2] 70/10 79/11
28 March 1983 [1] 73/6
29 June [1] 115/24

3

3 August 1983 [1] 108/9
3 June [7] 42/14 53/18 56/25 68/10 69/23 107/8 181/23
3 June 1983 [2] 38/7 122/16
3-4 years [1] 4/23
3.35 pm [1] 174/5
3.43 pm [1] 174/7
3.75 per cent [1] 194/23
30 [1] 50/6
30 August 1983 [1] 151/3
30 June [1] 8/18
300 [3] 233/25 235/8 235/8
37 years [1] 23/11

4

4.13 pm [1] 196/5
40 [2] 18/3 195/23
40 million [2] 25/16 112/6
400 [1] 234/11
41 [1] 238/18

5

5,000 [1] 234/13
5.01 pm [1] 196/7
50 per cent [1] 92/23

6

6 June [1] 66/19
6.15 pm [1] 248/13
60 [1] 18/3
60 degrees [1] 237/11

7

7 cases [1] 10/16
70s [4] 87/17 193/18 217/10 218/10
7th [4] 120/19 120/20 120/23 122/15

8

8 June 1983 [1] 167/24
80 per cent [1] 125/22
80.4 [3] 20/6 23/4 24/9
80.5 [1] 21/17
80s [2] 193/18 236/19
83 [2] 131/5 174/12
86.34 [1] 21/6
86.53 [1] 214/15

9

9 June 1983 [1] 53/24

A

abandoned [2] 157/8 158/13
ability [3] 28/4 56/7 158/15
able [31] 8/14 33/2 36/1 36/4 36/20 40/24 42/10 42/13 62/12 66/1 66/4 69/3 81/20 89/16 90/1 90/2 90/12 107/15 130/3 140/9 141/9 157/15 157/16 193/5 200/19 201/5 209/23 211/3 215/10 226/24 232/3
abnormal [1] 81/8
abnormalities [3] 9/12 10/14 77/10
about [297]
above [3] 145/3 153/9 168/11
absence [4] 112/15 158/18 159/5 238/23
absolute [3] 199/15

A

absolute... [2] 211/9 218/22
absolutely [35] 16/2 16/6 18/6 19/12 26/15 27/3 41/6 42/12 48/17 50/12 51/15 83/25 84/13 86/5 97/23 106/7 116/14 117/16 124/15 137/21 157/22 163/24 167/5 173/18 181/13 186/21 192/1 206/15 208/20 216/6 217/16 218/7 222/18 233/1 240/1
abundantly [1] 161/19
abuse [1] 172/2
abusers [3] 84/9 89/8 161/4
accept [17] 34/13 46/23 51/25 63/15 86/14 88/12 105/3 125/24 128/1 135/16 137/21 156/10 168/10 198/12 216/1 236/10 247/20
acceptability [1] 120/8
acceptable [2] 105/4 224/4
accepted [4] 120/11 170/12 247/8 247/21
accepting [1] 215/7
access [1] 187/21
accompanied [2] 150/20 163/15
accompanying [1] 10/13
accomplishing [1] 78/24
accord [1] 195/5
accordance [3] 103/11 108/16 143/22
according [2] 45/9 111/20
accordingly [2] 29/11 171/7
account [2] 31/23 94/17
accurate [2] 129/22 225/5
accurately [2] 28/5 96/18
Acheson [4] 185/22 187/9 199/3 199/14
achieve [1] 179/21
achieved [3] 92/6 122/7 131/19
achieving [1] 91/21
acknowledged [1] 62/10
Acquired [1] 74/25
across [6] 118/8 129/11 205/13 206/16 211/10 232/5
act [2] 79/17 168/12
action [30] 14/3 21/9 35/19 36/24 38/11 43/2 43/4 43/6 43/9 43/21 43/24 46/5 57/19 58/14 58/18 59/14 61/2 61/7 63/13 69/20 73/14 74/8 79/15 79/15 82/23 102/5 109/10 164/8 177/4 194/3
actions [3] 66/11 66/20 69/23
active [2] 161/2 173/11
actively [2] 27/12 27/16
activities [2] 35/10 240/14
activity [1] 177/13
acts [1] 117/7
actual [7] 10/6 40/12 56/7 96/21 114/14 133/13 201/3
actually [98] 1/18 2/20 9/4 11/20 15/8 22/2 22/7 23/2 26/10 29/2 32/20 33/12 33/18 39/8 39/12 39/22 41/16 45/19 45/25 52/4 52/15 60/11 72/7 77/13 81/15 87/23 88/8 88/22 90/13 90/21 92/21 99/10 103/23 106/19 107/21 110/9 111/12 112/1 112/9 112/17 114/4 114/17 116/12 128/6 128/7 137/6 140/25 141/14 145/1 150/24 151/14 154/15 155/18 155/18 156/14 160/2 160/21 162/3 162/4 162/13 162/21 163/3 163/14 166/9 170/4 171/13 171/20 181/17 182/21 183/17 185/22 186/17 186/17 188/12 191/6 199/17 199/18 200/1 204/8 208/8 210/4 214/8 216/14 218/14 222/25 225/7 226/14 227/1 233/15 235/17 235/24 236/20 237/25 241/11 241/14 242/2 242/11 244/25
ad [1] 3/15
ad hoc [1] 3/15
add [2] 67/9 246/1
added [2] 149/6 154/21
addicts [1] 188/4
Adding [1] 13/16
addition [3] 79/23 85/2 120/1
additional [3] 69/17 166/4 183/23
address [2] 71/24 183/12
addressed [2] 176/25 236/1
addressing [1] 32/23
adequacy [2] 37/24 115/8
adequate [4] 46/24 55/16 102/14 166/25
adequately [1] 102/17
Adjourned [1] 248/14
Adjournment [1] 116/22
Administration [1] 30/5
administrative [4] 170/11 170/11 191/5 193/2
administrators [2] 61/8 192/23
admissions [1] 21/2
adopted [11] 63/21 72/18 93/7 94/4 94/19 96/11 96/17 125/2 128/6 131/21 211/5
advanced [1] 75/15
advantageous [1] 31/7
advantages [4] 47/19 198/4 198/12 198/16
advent [2] 21/3 180/1
adverse [5] 24/7 165/7 183/2 207/21 220/19
adversely [1] 170/21
advice [18] 2/23 36/20 64/23 79/14 174/18 191/5 191/15 191/19 191/25 192/2 192/10 192/12 192/14 193/3 193/4 208/15 208/17 217/17
advisable [2] 73/8 101/14
advise [4] 13/13 179/16 180/21 233/4
advised [4] 17/24 30/7 177/16 213/22
adviser [5] 28/16 133/25 143/1 219/15 243/23
advisers [5] 28/18 28/21 90/16 163/23 191/24
advising [1] 107/1
advisory [3] 12/2 17/22 96/23
advocating [4] 26/14 32/20 48/1 55/24
aetiology [4] 75/15 77/3 85/15 85/18
affairs [3] 17/19 108/1 232/2
affect [3] 35/19 127/22 187/12
affected [6] 77/18 77/19 95/14 97/7 101/21 246/25
afraid [3] 3/17 78/1 84/12
after [25] 2/8 6/6 15/16 23/15 28/8 29/18 34/14 35/15 36/2 40/4 53/11 65/19 68/11 101/17 102/22 144/4 158/13 158/16 169/5 175/15 190/19 220/8 227/24 235/7 241/21
afternoon [1] 114/2
again [43] 7/15 21/8 38/18 40/7 46/7 46/12 46/16 60/8 62/7 64/8 65/23 68/5 68/8 69/5 73/1 74/6 84/18 104/2 118/21 126/21 127/8 135/17 136/19 136/25 141/23 142/4 142/8 151/8 153/5 156/3 176/9 176/12 189/18 193/8 194/9 194/12 202/16 204/15 227/7 229/10 234/12 247/17 248/7
against [5] 13/3 17/12 21/12 89/10 119/16
agency [1] 13/13
agenda [6] 42/15 42/23 42/25 44/1 207/3 207/6
agent [13] 4/11 4/14 54/5 75/22 75/25 76/12 77/2 85/19 99/21 117/16 152/11 241/19 241/20
agents [1] 244/7
ago [6] 6/21 115/22 119/14 223/21 241/13 247/18
agree [8] 92/17 93/11 121/6 182/12 187/23 188/7 189/25 206/15
agreed [12] 33/4 45/25 59/24 61/2 85/8 105/4 110/24 163/17 163/18 166/17 167/5 167/6
agreement [2] 36/15 61/20
Agriculture [1] 208/11
ah [2] 93/17 97/13
ahead [4] 93/17 171/24 175/2 175/9
AHF [1] 13/21
AIDS [148] 4/3 4/11 5/17 5/21 7/14 9/14 10/16 13/8 13/9 13/20 13/23 13/25 14/2 14/5 14/20 15/25 15/25 16/4 16/5 16/11 18/20 20/20 21/10 21/12 25/4 26/2 26/7 34/7 34/12 43/13 44/12 44/23 45/1 45/23 47/14 49/18 49/23 49/24 50/21 50/23 51/11 51/12 51/20 52/11 52/15 52/19 54/1 54/10 57/18 57/20 62/11 63/11 65/6 69/16 73/11 74/8 75/15 75/21 75/23 75/25 78/14 79/10 79/16 85/11 85/17 86/20 86/21 87/3 87/6 87/15 88/9 88/23 88/24 89/10 112/24 113/15 114/4 114/12 114/18 116/2 117/8 118/16 119/2 123/6 131/14 133/5 133/17 135/12 136/6 136/11 138/19 139/23 140/5 140/13 146/10 146/20 147/22 148/23 149/13 149/13 150/12 151/6 152/4 152/9 152/18 155/16 155/18 155/24 156/7 156/17 157/10 161/20 162/14 164/14 166/4 168/22 174/14 174/18 177/14 178/11 180/1 180/9 182/13 185/1 185/22 185/23 186/9 186/11 186/24 188/6 197/15 209/24 211/23 211/25 212/6 212/14 212/17 214/8 214/9 215/5 215/7 223/8 236/8 238/10 240/19 241/14 241/17 244/11
Aids' [1] 152/20
aim [3] 79/13 91/20 102/2
al [1] 75/16
alas [3] 114/17 172/14 244/12
albeit [6] 74/10 76/1 88/11 108/17 130/19 225/23
albumin [8] 79/21 202/20 203/15 203/17 203/19 213/17 236/13 237/10
albumin and [1] 213/17
alert [2] 3/4 220/20
alerted [1] 239/2
alerting [1] 119/20
alienation [1] 76/19
all [103] 3/24 7/2 11/8 12/17 13/22 16/23 25/19 28/8 28/17 28/20 30/1 30/7 35/3 40/3 41/1 41/17 48/22 49/4 50/22 59/16 59/18 61/19 62/19 64/8 65/20 67/4 68/14 70/24 71/4 74/14 76/9 80/17 81/6 84/12 85/15 86/17 87/1 95/15 96/22 97/8 98/12 99/3 101/14 107/3 108/13 110/21 113/11 114/4 123/1 123/5 131/13 132/6 132/19 133/3 133/4 133/14 136/9 137/12 137/13 138/6 143/12 143/15 144/4 144/18 146/23 152/4 158/24 159/11 159/16 162/3 172/8 181/7 183/20 184/10 185/14 186/17 187/20 188/9 189/20 190/5 192/19 195/12 199/9 201/1 202/11 210/3 211/13 216/15 217/16 218/15 218/16 220/2 220/22 223/11 226/20 237/8 239/10 240/24 245/23 247/6 247/15 247/23 248/4
allergic [1] 47/23
alleviate [1] 89/20
allow [2] 105/16 111/5
allowed [3] 19/10 106/4 161/12
allowing [1] 87/25
allows [1] 83/18
alluded [2] 198/25 200/6
alluding [1] 29/21
almost [15] 11/25 89/18 123/22 124/9 152/9 159/24 160/10 161/9 161/21 186/14

A

almost... [5] 186/21 193/1 195/9 202/13 204/23
alone [2] 68/25 78/7
along [2] 97/16 113/8
Alpha [8] 39/11 111/22 112/25 117/3 117/7 117/10 118/15 174/19
already [21] 38/3 46/5 60/25 71/25 74/6 89/19 91/7 95/16 95/23 97/4 110/24 112/23 120/11 134/13 139/17 151/20 165/17 168/15 185/1 188/22 212/15
also [34] 21/5 29/2 32/11 38/18 40/12 65/25 67/21 68/10 77/10 93/6 96/9 113/1 113/1 114/25 136/3 136/11 149/12 160/18 164/1 177/9 180/2 180/25 188/4 188/5 189/13 190/10 213/23 232/8 234/24 243/18 244/6 245/10 246/16 246/19
alteration [1] 111/4
alternative [6] 55/3 55/25 121/10 122/2 129/4 226/19
alternatives [1] 172/15
although [23] 5/8 44/24 45/8 48/20 54/10 81/10 91/18 92/11 111/25 117/15 119/15 124/7 135/22 139/13 147/21 157/11 165/9 180/4 203/5 203/6 211/1 217/24 245/14
altogether [1] 10/17
always [15] 81/4 90/7 124/15 130/22 151/13 151/20 154/21 154/24 204/25 207/20 216/2 223/5 224/18 226/15 229/9
am [18] 1/2 26/16 26/20 53/14 53/16 79/7 98/15 98/17 119/1 134/6 172/16 179/14 219/17 225/14 234/4 237/8 247/1 248/14
ambiguity [2] 160/1 161/6
ambiguous [2] 161/16 167/2
amended [4] 130/24 150/22 151/15 151/16
amendment [2] 124/2 124/13
amendments [1] 120/9
America [14] 12/4 12/13 14/14 16/9 86/22 87/16 87/20 103/1 105/12 157/20 196/18 197/4 234/15 244/1
American [25] 9/20 11/11 21/14 31/6 31/15 35/14 41/1 41/2 50/16 50/17 52/13 69/4 88/7 103/4 115/1 153/3 156/23 157/19 196/21 197/11 212/18 214/10 234/18 243/23 245/16
Americans [6] 18/11 106/3 106/8 106/10 108/2 110/14
among [2] 34/1 177/14
amongst [7] 11/21 67/19 140/11 171/20 175/3 175/9 230/8
amount [10] 12/16 27/4 27/5 48/11 105/13 210/15 210/19 224/17 226/20 237/16
amounting [1] 72/9
amounts [1] 97/5
An accompanying [1] 10/13
an adverse [1] 183/2
an area [1] 171/17
an arrangement [1] 203/9
an assessment [1] 212/21
an asymptomatic [1] 19/16
an awful [1] 91/1
an earlier [1] 187/6
an easy [1] 226/16
an element [1] 191/16
an exceptional [1] 128/20
an exchange [1] 30/24
an expectation [1] 220/12
an extraordinary [1] 186/9
an identifiable [1] 187/12
an injustice [1] 248/3
an intention [1] 211/1
an internal [1] 183/16
an issue [3] 38/1 136/6 136/7
an okay [1] 155/9
an organism [1] 19/20
an overstatement [1] 24/15
an unfair [1] 103/15
an unreasonable [1] 170/23
analysis [1] 18/15
ankle [1] 24/5
Annals [1] 10/11
announcements [1] 118/7
annual [1] 70/20
anonymous [1] 206/25
another [21] 26/19 36/8 38/13 38/19 51/23 100/15 100/16 113/8 155/23 156/22 157/1 166/15 172/18 173/4 173/17 182/18 182/23 202/2 203/1 208/21 224/15
answer [16] 27/3 27/24 50/12 59/13 60/10 77/7 134/6 136/24 142/8 144/12 147/10 148/3 155/3 172/13 215/10 239/21
answer's [1] 134/10
answered [1] 115/11
answering [4] 153/17 153/20 155/8 155/11
answers [7] 37/20 59/20 60/8 160/10 246/7 246/9 246/21
ante [1] 24/24
anti [1] 210/8
anti-hepatitis [1] 210/8
antibody [3] 204/6 210/5 210/10
anticipated [2] 160/8 166/8
antigen [4] 204/6 210/4 210/8 210/9
any [132] 2/2 2/10 2/24 5/9 7/10 10/25 14/19 14/24 15/2 15/4 19/17 21/15 27/2 33/9 35/13 35/18 38/10 39/2 40/17 40/18 42/5 43/1 43/4 47/11 56/3 56/5 56/21 56/22 57/4 62/21 63/5 63/19 64/4 64/14 65/3 67/21 67/22 68/16 77/1 77/3 77/7 79/15 82/25 83/20 85/4 86/2 87/2 88/23 91/12 92/9 93/10 95/2 95/8 98/16 98/23 104/16 106/25 107/13 107/18 107/18 109/10 109/15 111/4 113/14 114/10 115/17 115/18 120/9 122/20 124/9 129/3 132/18 133/13 133/15 136/19 137/16 138/8 150/21 150/23 151/10 153/21 158/2 158/15 161/16 162/16 164/8 164/23 176/5 176/7 176/11 179/4 179/16 180/21 181/12 182/14 184/4 185/11 189/9 189/14 189/14 191/19 196/15 197/5 197/6 197/8 199/3 199/4 201/11 202/23 204/6 204/12 205/2 205/12 206/11 208/22 209/13 211/22 212/11 212/13 216/10 216/20 217/9 222/9 223/14 225/18 226/6 228/4 232/23 246/2 246/24 248/4 248/8
any further [1] 62/21
anybody [11] 65/16 92/21 93/2 106/19 124/9 133/5 143/4 154/7 173/14 173/15 204/24
anybody in [1] 93/2
anybody's [1] 173/18
anyone [8] 2/5 42/10 92/24 145/10 173/24 217/4 218/20 246/2
anyone's [1] 187/1
anything [30] 25/7 41/9 41/15 56/10 61/15 63/2 65/9 68/1 68/16 69/14 83/18 92/21 94/13 131/8 134/7 137/17 141/1 155/11 155/22 156/22 166/13 169/23 175/20 182/6 184/9 201/9 206/18 225/17 246/1 246/23
anyway [3] 78/4 178/7 215/25
anywhere [1] 145/12
apart [1] 106/24
apologies [4] 12/7 23/4 75/3 208/1
apparent [2] 157/9 197/16
apparently [2] 92/19 245/21
appeal [1] 76/17
appear [19] 1/12 23/5 73/24 74/7 74/17 84/14 85/23 100/15 103/14 111/7 113/14 124/19 147/5 167/15 168/15 181/5 182/5 223/18 236/6
appear from [1] 1/12
appeared [6] 86/21 87/16 231/24 237/14 239/5 241/4
appeared in [1] 86/21
appearing [2] 86/7 98/2
appears [6] 32/22 80/12 89/6 96/1 154/22 181/9
application [1] 59/1
applied [1] 207/15
applies [2] 207/16 227/21
apply [2] 49/21 239/20
applying [1] 224/2
appreciate [4] 52/1 144/23 144/23 212/10
approach [10] 55/24 58/14 66/13 113/10 130/2 144/22 190/3 190/4 199/4 231/21
approached [1] 211/20
approaches [2] 63/19 198/24
approaching [1] 178/25
appropriate [8] 43/5 43/9 118/11 121/9 126/9 218/24 219/13 229/16
appropriately [4] 159/10 159/12 162/17 191/21
approximately [2] 39/18 54/23
April [7] 8/22 10/21 10/22 10/23 30/19 73/21 244/14
April 1983 [1] 8/22
April, [1] 55/8
April, 1983 [1] 55/8
ARCH0002544 [1] 3/18
archive [1] 185/12
ARCS0002544 [1] 11/6
are [137] 5/1 5/7 5/20 14/10 15/15 18/19 23/23 24/2 29/15 31/18 34/1 35/6 35/10 36/1 41/5 42/9 44/5 44/5 47/25 49/9 50/4 53/3 54/13 56/6 56/17 57/8 60/1 62/12 63/12 65/8 66/1 66/4 66/20 68/5 70/25 71/3 71/21 72/9 72/11 74/15 77/24 77/25 80/8 82/22 82/25 84/2 84/5 84/12 84/20 89/11 89/13 89/16 91/15 93/17 97/5 97/6 97/7 97/9 98/4 98/7 103/8 105/2 109/1 114/1 120/15 121/19 122/17 125/14 130/3 132/23 132/24 134/1 134/12 134/19 135/7 135/18 137/12 137/12 137/13 138/14 139/15 139/22 140/4 140/10 143/9 146/23 149/4 153/15 153/21 155/8 156/6 156/9 156/12 159/18 166/12 168/2 168/2 172/13 172/15 173/12 174/18 179/20 180/11 180/13 183/17 184/21 188/13 189/19 191/11 192/1 192/4 192/4 192/15 195/17 195/22 196/11 198/8 199/3 200/25 201/1 204/25 207/18 214/8 217/9 220/24 221/11 225/14 226/6 226/9 227/5 227/12 230/16 232/23 233/22 235/21 235/24 240/2
area [6] 75/4 110/19 155/22 171/17 199/21 240/6
areas [8] 5/18 5/21 37/23 70/24 72/5 84/9 89/8 181/7
arguably [1] 45/22
argued [2] 121/17 127/11
arguing [1] 17/11
argument [2] 9/23 19/7
arguments [2] 120/10 210/14
arisen [1] 28/22
arising [1] 130/1
arithmetic [1] 6/12
Armour [3] 6/1 17/19 17/20
arose [3] 61/21 214/21 223/7
around [11] 63/6 77/15 88/22 105/14

F:

A

around... [7] 110/22 138/21 194/22 196/11 204/7 242/23 244/7
arrange [1] 213/20
arrangement [2] 203/9 227/25
arrangements [1] 228/5
arrived [1] 56/21
article [6] 8/21 9/4 152/3 156/3 206/24 207/5
articles [1] 10/12
articulate [1] 212/11
articulated [1] 198/12
articulating [1] 102/7
as [351]
ascertain [4] 12/5 58/15 104/8 138/10
ascertaining [2] 67/1 173/19
aside [7] 124/21 124/24 134/18 188/21 188/25 217/13 231/1
ask [73] 1/11 3/18 4/1 12/9 16/17 16/17 20/4 20/11 20/15 44/8 47/7 57/11 61/15 62/7 66/14 67/16 67/20 67/22 68/10 75/10 77/25 83/14 84/19 84/20 85/15 85/20 101/11 103/6 103/13 109/22 115/21 116/24 117/24 118/13 118/19 123/1 130/1 130/2 131/8 131/22 132/3 132/16 143/9 146/11 148/21 158/25 160/9 167/20 167/22 168/6 169/14 171/2 171/5 172/12 172/23 174/8 174/15 176/15 176/19 179/10 187/4 198/25 215/11 215/24 219/17 221/16 221/23 225/15 231/14 231/16 237/5 240/6 245/24
asked [33] 32/11 32/16 38/17 41/21 58/10 68/23 74/4 75/2 83/10 85/8 108/2 120/7 120/13 121/4 125/20 127/21 127/24 131/1 140/16 143/5 145/20 146/2 148/5 153/23 156/12 165/13 177/16 198/2 202/16 222/25 231/21 239/7 247/4
asking [23] 8/19 27/21 38/14 38/18 51/1 51/22 59/16 77/21 83/9 96/14 98/9 103/25 127/23 144/10 146/5 147/25 185/3 193/8 194/13 209/1 212/10 219/17 224/12
asks [1] 69/2
aspect [2] 55/3 164/2
aspects [3] 36/22 240/10 240/11
aspirational [1] 130/7
assertion [1] 11/8
asserts [1] 140/2
assess [1] 99/9
assessed [1] 56/9
assessment [8] 80/20 84/1 88/10 211/22 212/2 212/13 212/21 212/25
assessor [1] 81/1
assist [13] 42/13 62/12 63/16 66/2 66/4 80/18 89/16 90/1 90/12 90/22 98/23 169/14 176/6
assist with [1] 169/14
assistance [2] 43/4 81/19
Assistant [1] 17/25
associated [11] 203/24 204/1 204/9 204/12 217/5 217/25 219/11 222/10 240/16 240/18 241/16
association [2] 17/7 215/5
assume [1] 175/5
assumed [1] 98/4
assumes [1] 15/8
assuming [5] 48/6 88/3 150/20 196/24 208/12
assumption [6] 79/25 142/9 148/25 149/7 189/10 238/3
assurance [1] 71/6
assurances [2] 103/9 103/18
assured [1] 101/25
astonished [1] 93/2
asymptomatic [1] 19/16
attached [1] 150/22
attempt [3] 6/9 11/10 12/15
attempt by [1] 11/10
attempts [1] 236/19
attend [2] 79/22 209/7
attended [5] 68/12 129/13 129/14 135/2 164/25
attending [4] 132/8 132/19 133/8 209/7
attention [13] 3/25 11/20 30/11 32/7 53/25 61/24 114/5 154/10 206/23 239/19 240/17 247/9 247/12
attentively [1] 209/8
attributed [2] 151/16 151/25
audience [1] 173/19
August [7] 71/10 108/9 113/18 151/3 152/2 178/6 179/12
authored [2] 57/9 79/11
authorities [7] 46/5 61/9 142/20 190/13 195/13 227/14 227/15
Authority [19] 35/8 36/19 37/10 43/19 72/5 102/1 107/2 107/2 110/5 112/13 139/8 182/22 196/25 205/15 208/9 217/19 218/1 236/1 236/9
automatic [2] 13/15 196/12
automatically [1] 17/1
autonomous [2] 182/23 232/13
autonomy [5] 182/24 182/25 202/7 204/16 205/3
availability [1] 13/16
available [17] 7/8 15/9 24/23 32/12 34/16 35/12 38/21 39/21 68/24 71/9 74/14 74/18 85/24 107/6 121/10 210/16 232/19
avenue [1] 179/2
average [1] 18/2
avoid [13] 33/6 33/7 121/7 121/25 123/10 124/11 124/14 124/16 125/18 125/19 128/9 128/22 131/15
avoidance [1] 125/24
avoided [1] 123/23
awaiting [1] 38/3
aware [35] 2/6 28/21 30/16 38/10 45/14 46/2 52/12 56/6 56/17 56/19 56/23 64/4 64/10 67/16 73/20 83/3 113/12 135/16 136/6 136/9 136/20 137/19 138/24 143/13 148/10 150/18 151/15 165/11 179/23 181/16 196/15 196/20 197/13 197/16 217/9
awareness [2] 234/25 235/15
away [6] 76/6 93/1 99/13 224/25 225/6 225/7
awe [1] 247/20
awful [5] 26/10 27/1 87/10 91/1 238/3
axiomatic [1] 16/2

B

baby [1] 44/20
back [55] 3/3 11/5 20/11 21/17 28/8 28/22 29/18 33/16 46/13 46/17 49/12 54/16 54/18 55/21 57/5 59/13 62/3 64/17 65/23 68/17 71/21 90/2 101/8 103/2 106/17 130/18 143/16 149/5 152/21 161/13 161/24 172/17 173/3 173/4 175/12 177/21 184/15 201/12 201/13 201/23 202/12 202/17 207/9 217/2 218/9 219/1 220/4 221/10 226/7 232/21 239/17 243/18 243/19 245/10 245/13
background [5] 44/7 75/8 86/8 147/5 199/19
bad [4] 181/14 182/3 222/20 239/10
badly [2] 166/8 229/21
bags [1] 50/6
balance [4] 13/1 82/21 113/9 143/25
balanced [2] 82/23 89/10
ban [4] 16/25 32/20 61/23 103/4
banks [2] 239/1 239/13
Baroness [5] 148/7 148/8 148/14 148/18 151/2
Baroness Masham [3] 148/14 148/18 151/2
based [11] 18/15 20/21 21/25 48/13 62/25 70/3 73/16 76/11 86/14 110/16 193/4
basic [1] 131/9
basically [24] 1/22 2/24 7/11 22/6 23/9 49/22 52/8 66/8 80/25 112/4 123/23 139/1 141/3 154/6 154/13 156/21 159/9 166/13 171/4 181/14 181/24 190/22 204/2 237/15
basing [1] 88/10
basis [8] 14/6 16/18 16/19 23/7 23/21 26/1 69/15 110/17
batch [10] 15/19 15/23 16/6 16/13 18/21 34/18 36/12 39/4 97/21 201/5
batches [4] 36/2 36/20 41/10 201/13
BAYP0004674 [1] 12/9
be [479]
bear [1] 130/17
bearing [2] 97/3 111/11
became [14] 73/20 113/12 157/9 171/12 188/18 192/19 192/19 194/3 194/5 197/13 197/16 205/15 217/20 225/11
because [172] 1/21 7/4 7/14 8/19 11/24 14/7 15/7 15/20 16/20 18/20 19/10 19/15 22/4 24/3 26/12 28/9 28/15 32/22 40/10 50/12 50/21 50/22 57/11 65/8 69/15 74/5 77/21 80/25 81/14 83/4 83/20 84/18 84/19 89/18 94/12 96/15 96/21 97/1 98/7 98/12 98/24 100/23 105/18 106/10 108/25 109/24 109/24 115/3 115/8 123/22 124/8 125/8 125/11 125/12 126/1 126/4 126/19 127/6 127/17 128/1 128/17 129/14 129/25 133/17 134/13 135/2 135/5 141/2 142/12 142/14 143/6 143/7 143/19 144/11 144/12 145/13 146/3 147/4 151/17 153/17 154/8 155/11 155/13 155/21 156/16 159/13 160/3 160/23 160/25 161/13 162/12 163/9 164/6 164/18 164/19 165/7 165/14 165/17 165/18 166/1 168/4 168/18 168/25 170/16 171/6 171/11 171/17 172/9 172/12 172/17 173/1 176/8 177/12 178/13 178/14 180/1 182/2 182/20 182/25 183/25 186/9 186/10 186/11 186/24 187/20 190/8 192/4 192/15 196/10 199/22 200/1 200/2 201/4 201/7 201/20 201/22 203/5 203/13 203/19 203/20 206/19 209/18 209/25 211/14 212/17 213/20 214/14 218/6 220/16 221/5 223/10 223/20 224/19 226/22 228/13 228/20 229/1 229/24 232/12 235/10 236/1 237/19 237/20 237/24 238/5 238/19 240/23 241/24 244/12 244/16 244/25 245/19
because already [1] 165/17
because there'd [1] 143/6
become [11] 19/9 36/18 46/2 87/4 87/5 88/23 99/11 100/25 142/3 148/9 196/25
becomes [1] 102/3
been [231] 1/9 1/15 1/20 1/24 2/4 2/7 2/9 2/15 2/22 2/25 3/4 3/5 3/6 3/7 7/2 7/3 7/8 8/23 13/21 14/24 15/8 15/17 17/2 20/21 20/23 21/18 21/25 24/22 25/1 25/2 25/3 25/5 25/8 25/22 25/24 26/6 30/17 30/21 34/8 34/23 39/23 40/4 40/24 40/24 41/3 41/11 50/9 50/10 50/18 50/19 52/16 54/6 54/11 55/2 56/17 56/19 57/16 59/21 60/5 60/9 64/1 64/3 64/10 64/13 65/17 65/20 65/21 66/8 66/15 68/6 71/25 74/18 77/9 82/12 83/22 87/16 87/19 88/7 88/16 90/18 90/19 93/12 94/18 96/17 97/25 99/16 100/20 100/21 102/15 103/1 103/21 106/5 107/6 107/20 108/11 108/15 109/12 110/3

B

been... [133] 110/16 110/24 112/2 112/7 113/18 114/5 114/13 115/16 119/9 119/25 122/6 125/17 126/7 128/6 128/24 130/17 130/25 131/19 134/4 135/21 136/5 136/9 139/9 141/9 141/13 142/22 142/24 144/1 144/1 144/21 144/25 146/1 146/14 150/14 150/19 150/22 151/14 151/15 151/25 152/5 153/3 154/3 154/4 154/6 154/16 155/16 155/22 155/23 157/2 157/4 157/8 157/15 157/16 158/23 159/10 162/2 165/20 167/10 170/25 172/22 173/10 174/22 179/4 179/23 180/23 181/1 181/15 182/8 182/10 187/7 187/19 188/3 188/15 188/23 189/22 189/23 190/23 193/5 193/9 193/11 203/4 203/24 204/1 204/4 204/6 204/7 204/9 204/11 205/2 206/4 206/7 206/8 206/12 206/20 207/1 207/1 207/6 209/4 212/25 213/3 213/12 214/3 214/4 214/25 215/15 217/1 218/1 218/24 220/9 220/11 220/21 221/5 222/12 222/14 224/4 225/2 225/15 226/8 229/4 229/5 235/8 235/20 236/11 236/16 242/25 243/12 245/3 245/5 245/14 246/21 247/16 247/20 247/21

before [46] 3/1 14/25 15/2 15/4 15/17 23/9 23/11 24/24 31/8 31/13 32/9 39/7 39/13 39/23 39/25 41/23 48/22 49/11 53/17 55/8 74/21 79/3 90/13 102/21 109/14 110/25 111/25 129/24 133/21 137/14 141/13 155/14 156/19 156/19 158/13 162/7 182/20 192/16 215/1 216/18 238/7 239/22 242/8 244/2 244/20 247/10

beforehand [5] 36/24 39/1 40/22 166/10 197/17

beg [1] 186/14

began [2] 234/7 247/18

beginning [7] 28/25 160/3 169/8 188/13 217/11 218/10 246/5

begins [1] 54/2

behalf [1] 179/14

behaviour [2] 171/5 232/8

behind [2] 152/22 195/24

behold [1] 235/23

behoves [1] 78/19

being [97] 4/8 4/17 5/14 5/18 7/5 11/14 16/15 22/17 24/8 26/24 33/2 38/2 50/8 51/4 55/8 55/14 57/13 60/16 62/23 63/13 64/4 65/4 65/12 68/7 69/18 77/19 86/6 89/5 91/15 91/23 94/22 95/8 98/20 98/21 100/23 103/2 117/23 120/13 122/15 125/8 125/20 126/16 127/21 128/10 128/15 129/15 129/20 129/21 134/1 135/16 137/18 139/22 140/4 141/14 143/2 143/9 147/6 156/12 162/13 176/10 181/19 182/16 183/7 188/19 189/2 189/7 190/8 190/9 192/5 194/23 197/11 200/8 200/19 202/21 202/22 207/2 208/17 210/3 211/4 211/5 211/12 211/23 212/8 212/15 216/3 216/10 216/20 217/2 217/9 222/16 223/18 228/12 228/13 229/17 232/4 233/4 247/24

belief [1] 215/12

believe [12] 48/24 59/16 104/17 105/15 135/22 137/5 141/2 164/12 202/1 205/6 226/12 233/15

believed [2] 108/5 166/2

belonged [1] 15/14

below [1] 119/11

beneficial [1] 20/23

benefit [4] 82/21 102/11 222/15 224/5

benefits [4] 61/9 89/12 90/19 206/12

best [14] 17/13 78/24 95/22 101/4 101/6 124/14 130/15 150/7 191/25 192/9 193/3 193/4 207/8 236/1

better [9] 25/2 40/18 53/11 126/19 165/22 190/7 214/12 227/19 229/2

between [16] 4/15 12/12 12/17 13/2 14/8 36/15 102/1 145/24 152/19 179/5 195/11 199/5 201/17 215/7 218/22 241/5

beyond [1] 158/5

big [7] 19/1 105/24 155/12 170/25 171/6 199/8 236/10

bigger [2] 19/4 187/16

biggest [1] 199/22

bin [1] 18/21

binning [1] 18/22

Biological [7] 1/21 26/23 73/9 111/11 169/20 213/2 242/9

biologicals [1] 207/15

Biologics [2] 17/23 106/16

Birmingham [1] 115/25

bit [14] 16/9 17/8 57/4 124/2 128/3 131/22 147/14 155/2 155/25 165/20 171/9 190/22 225/3 232/4

bits [5] 81/7 102/19 150/8 171/21 174/14

black [1] 161/6

blank [1] 199/11

bleak [1] 5/3

bled [1] 32/13

bleed [6] 22/16 22/21 22/22 24/5 215/18 215/20

bleeding [4] 22/20 23/19 26/11 126/12

bleeds [3] 22/10 26/9 215/13

blood [127] 12/2 14/1 17/15 17/22 19/18 19/21 28/18 30/8 34/7 43/2 43/18 44/11 44/11 44/13 49/24 50/23 54/6 54/7 54/13 54/13 70/19 73/11 75/7 75/7 76/14 76/18 79/10 79/16 82/9 84/8 85/11 85/22 89/7 89/11 101/20 131/23 131/24 133/25 139/8 147/22 147/22 148/24 149/13 150/12 151/6 152/4 152/11 152/19 153/3 160/20 161/19 161/20 162/15 162/15 166/6 167/7 168/19 168/21 170/20 170/23 176/17 177/2 177/5 177/6 177/9 177/18 179/1 179/17 180/4 180/10 180/17 180/19 181/2 181/6 181/13 183/7 184/12 189/2 194/17 194/17 195/11 197/9 197/15 200/9 201/1 201/1 201/10 201/10 201/11 202/20 202/24 205/14 210/16 210/19 210/22 216/12 216/12 217/5 217/5 217/13 217/19 217/20 218/1 218/5 218/8 218/21 220/10 224/17 227/10 231/10 231/16 231/22 232/5 232/19 232/24 232/24 233/10 233/12 233/18 235/1 239/1 239/6 239/11 239/13 239/17 239/23 240/10

blood's [1] 168/20

bloods [1] 182/2

Bloom [32] 30/25 31/25 32/3 32/19 33/5 34/24 45/4 45/5 45/14 62/25 73/13 79/24 82/3 82/19 90/20 93/12 96/10 117/3 118/14 135/20 137/11 143/5 143/9 143/12 143/15 175/24 201/17 205/9 205/18 206/17 209/1 245/12

board [3] 129/11 211/10 232/5

bodies [2] 137/16 154/5

body [3] 171/15 193/15 205/5

bomb [1] 76/7

bone [2] 228/11 228/14

borstal [1] 177/5

borstals [3] 177/18 178/10 179/18

both [12] 1/16 21/3 32/5 34/24 48/16 114/24 144/19 160/6 163/17 190/4 207/13 236/7

bottom [17] 12/22 17/4 17/5 44/9 58/21 61/13 75/12 78/4 82/7 83/7 117/13 120/18 122/23 152/23 153/6 177/23 181/3

bound [3] 22/8 214/6 214/9

Box [1] 203/2

BPL [23] 25/11 27/22 43/20 47/15 47/18 48/12 48/17 49/17 49/20 49/23 50/8 51/20 55/14 62/6 113/1 114/25 115/5 119/17 202/22 203/12 213/6 226/18 226/19

BPL's [1] 28/3

brain [2] 215/13 215/18

branch [4] 70/2 235/15 235/16 243/6

brand [1] 188/10

brands [1] 221/21

break [25] 29/19 53/11 53/12 53/15 116/18 116/19 172/9 172/16 172/18 172/19 173/1 173/4 173/6 173/13 173/17 173/17 173/25 174/1 174/3 174/4 174/6 195/19 195/19 196/3 196/6

breakdown [1] 121/11

breaks [1] 28/8

breast [1] 229/12

BRIAN [2] 225/19 247/3

brief [4] 73/16 80/7 192/24 192/25

briefed [1] 191/21

briefing [6] 120/8 171/21 226/11 241/12 242/1 244/19

briefings [1] 30/22

briefly [2] 132/3 184/16

bringing [1] 159/23

brings [1] 248/5

Bristol [8] 11/1 46/2 86/24 112/24 152/6 152/15 174/18 175/12

British [5] 102/25 103/2 104/3 152/9 219/25

broad [3] 197/19 208/22 227/22

broadcast [1] 142/23

broader [4] 133/18 155/8 155/9 188/18

broadly [3] 38/10 124/6 184/19

brought [2] 61/23 186/6

Brown [2] 176/22 179/12

browsing [1] 230/3

Bruce [1] 14/11

bundle [1] 247/9

business [2] 101/2 101/3

but [354]

by [173] 1/4 4/6 5/22 7/6 8/1 8/11 8/23 9/20 10/2 10/13 11/9 11/10 14/6 15/8 16/15 16/21 20/25 23/1 25/17 26/1 27/12 28/7 30/7 31/12 32/24 34/24 37/9 38/3 39/8 40/13 41/9 41/10 43/4 43/6 43/16 43/21 44/3 44/13 44/13 46/5 46/8 49/13 54/5 60/15 61/22 62/10 62/12 62/20 62/23 64/4 65/6 65/16 75/1 75/15 75/23 75/25 76/9 78/1 78/25 79/11 80/15 83/11 85/11 87/17 89/11 93/16 94/4 94/12 94/19 95/11 96/9 96/10 96/18 96/24 97/7 99/12 101/18 103/9 104/25 107/10 108/17 109/16 109/17 109/19 110/4 111/1 111/20 113/12 113/22 115/9 118/17 129/16 134/15 135/4 135/19 136/2 136/6 137/18 141/8 142/9 146/20 147/10 147/22 148/5 148/17 148/24 149/13 150/12 151/6 153/3 154/7 156/4 156/5 156/5 161/24 162/5 162/5 163/4 163/15 167/10 168/18 169/7 169/9 169/11 169/19 175/8 176/7 178/2 180/23 181/2 182/4 182/13 182/21 187/6 187/25 188/5 188/20 188/23 190/1 190/5 190/18 192/14 196/8 197/11 207/2 209/7 209/13 209/16 209/17 210/3 210/16 211/22 212/11 212/13 213/22 216/23 217/9 220/4 220/9 221/18 224/3 229/22 231/22 232/23 232/24 234/5 234/5 235/1 235/8 237/19 239/3 243/6 247/24

C

calibrate [4] 224/20 224/24 225/4 225/8
call [6] 21/9 28/14 162/6 185/16 236/11 243/16
called [8] 79/9 141/17 152/6 166/5 180/9 207/18 228/1 239/5
calling [1] 13/14
calls [1] 143/13
came [24] 24/25 26/22 30/11 32/10 33/16 39/7 39/14 39/23 40/5 48/22 59/13 69/14 73/4 92/18 114/5 140/22 181/17 204/2 222/24 235/23 236/8 240/8 241/25 243/20
can [171] 1/11 3/4 3/18 4/2 4/7 4/20 6/15 9/1 10/9 15/21 17/9 19/18 20/2 20/4 24/6 26/15 28/14 29/20 31/1 34/17 37/7 37/15 38/13 42/24 43/3 43/6 44/9 44/22 46/1 46/8 46/19 47/5 47/18 49/9 49/11 49/19 57/11 58/13 59/23 61/13 61/17 63/8 63/16 66/18 68/17 69/1 71/15 73/3 74/25 75/24 77/25 78/6 79/8 79/22 80/10 81/17 81/21 81/21 82/7 84/18 84/20 86/17 92/12 93/15 93/23 95/3 101/24 103/5 105/20 106/9 108/10 109/22 114/9 114/16 117/13 118/12 118/21 119/9 119/12 119/23 120/15 120/18 120/25 121/14 122/10 122/17 126/3 127/3 128/2 128/8 128/9 130/1 131/3 133/13 137/20 138/16 139/14 141/12 142/8 142/20 146/17 146/19 146/23 147/9 147/15 148/23 149/11 149/13 149/24 150/3 150/6 150/7 150/12 151/4 151/6 152/4 153/5 154/23 157/24 158/8 158/25 159/3 161/10 162/7 164/14 165/8 168/10 168/25 169/14 172/8 172/9 172/15 174/10 175/21 176/6 176/15 176/19 177/20 177/21 180/3 180/17 181/3 181/12 181/24 183/13 184/15 184/17 185/13 187/4 189/19 192/10 195/19 197/18 199/6 199/10 201/12 206/11 206/19 212/7 215/12 218/23 219/21 221/13 223/14 225/3 233/16 233/18 233/19 233/21 238/21 246/2
can't [40] 3/16 7/11 8/12 11/19 11/19 26/12 28/7 30/18 38/18 48/21 50/11 62/21 67/17 75/2 76/12 77/7 80/18 81/13 86/13 89/23 92/21 98/23 104/13 106/13 118/10 126/19 138/13 159/9 164/10 176/8 178/24 181/21 192/16 194/19 212/11 212/24 217/18 218/6 218/6 236/4
Canada [2] 5/8 18/17
Canadian [1] 17/15
cancel [1] 97/21
cancelling [1] 63/25
cancer [1] 229/13
cannot [10] 19/20 55/18 76/5 82/5 83/17 84/6 101/23 137/5 202/5 236/10
canvass [1] 68/25
canvassed [3] 91/7 139/17 188/22
capable [1] 50/1
capacities [1] 217/12
capacity [1] 56/12
card [6] 67/10 67/13 219/18 219/25 220/3 220/14
Cardiff [2] 44/24 45/7
cards [2] 220/7 220/9
care [5] 12/23 21/19 185/18 193/22 225/3
career [2] 192/25 216/8
careful [2] 9/21 106/2
carefully [1] 55/8
carried [1] 217/2
carry [3] 95/22 104/16 213/21
carrying [1] 214/9
case [74] 5/14 5/25 6/20 7/12 11/1 14/6 14/6 26/3 29/18 44/15 44/20 44/24 44/25 45/2 45/7 45/9 45/10 45/12 45/15 45/23 45/24 45/25 46/2 49/2 50/24 64/16 66/4 69/21 71/1 71/2 86/23 87/21 88/17 89/6 89/12 89/15 95/8 108/13 110/13 112/10 113/8 114/3 114/16 114/21 115/4 115/14 115/17 125/16 126/8 128/20 144/5 144/24 152/6 152/18 154/4 154/11 155/1 155/15 155/24 156/15 156/17 156/22 157/1 157/2 157/4 157/9 157/10 161/22 175/12 188/16 194/12 194/16 196/3 219/1
cases [47] 4/8 5/5 5/6 5/9 5/11 5/13 5/15 5/20 6/3 9/22 10/12 10/16 11/16 21/2 23/6 24/13 26/6 26/7 34/12 44/16 44/17 48/25 52/9 54/8 54/9 54/10 81/16 86/15 86/16 86/19 86/20 86/21 87/19 87/19 88/9 88/11 105/12 105/14 116/12 117/18 188/17 214/2 219/8 220/24 243/14 245/14 245/17
cast [4] 9/6 56/3 107/15 181/12
casts [1] 68/16
cat [2] 175/2 175/9
catch [1] 223/11
categories [3] 63/22 82/22 95/13
category [2] 136/13 212/5
caught [1] 152/10
causal [3] 240/18 241/19 241/20
cause [14] 22/19 23/16 23/18 45/20 76/1 85/17 99/21 99/22 113/15 159/8 175/17 180/1 180/19 241/14
caused [8] 8/8 21/13 54/5 75/25 118/17 152/4 162/15 201/14
causes [2] 6/13 215/19
causing [2] 214/23 235/3
caveat [4] 39/8 88/16 88/20 154/18
CBLA [4] 27/21 43/17 49/7 170/7
CBLA0000043 [1] 73/5
CBLA0000060 [1] 116/25
CBLA0001710 [1] 139/7
CDC [3] 4/7 7/6 14/11
CDSC [14] 35/1 44/25 45/8 45/16 45/19 83/11 83/16 113/18 113/22 115/9 116/8 116/8 156/15 186/2
CDSC's [1] 114/5
ceased [1] 70/23
cell [2] 9/12 10/14
cent [7] 4/22 4/24 92/23 125/22 194/23 210/17 235/13
Center [1] 17/23
central [11] 43/18 78/2 139/8 160/5 196/18 200/4 200/4 200/23 201/20 205/14 228/6
centre [40] 1/7 27/18 31/3 31/17 34/1 34/25 41/13 46/12 47/25 48/5 49/15 56/11 64/12 65/18 65/22 69/3 93/7 94/4 94/19 96/11 96/18 113/4 133/2 134/22 134/25 135/2 135/23 139/2 140/18 140/20 152/16 165/10 174/12 175/16 183/17 195/16 201/18 201/24 205/25 215/7
centres [29] 27/17 32/14 34/11 40/14 43/3 55/18 56/8 70/25 72/14 94/23 129/12 129/13 129/16 136/1 177/6 177/9 182/1 189/4 195/8 200/16 208/6 210/23 211/1 211/12 229/20 239/2 239/10 239/15 239/18
cerebral [1] 22/21
certain [7] 9/6 49/6 81/3 118/10 139/15 231/17 233/6
certainly [36] 2/6 2/12 12/13 14/12 14/17 18/13 22/14 22/18 36/1 77/2 77/8 87/13 106/4 106/9 108/3 113/25 130/20 140/19 142/18 152/10 160/11 161/9 190/12 192/25 193/1 210/5 214/3 218/5 219/23 223/25 227/1 231/25 233/16 238/4 239/15 241/6
cetera [8] 4/16 47/23 89/20 131/6 131/6 147/24 150/5 150/5
chain [1] 225/23
chair [11] 8/14 12/8 27/17 29/21 34/24 58/14 64/22 66/14 165/19 205/24 206/2
Chairman [1] 221/1
chairmen [1] 195/14
challenge [1] 192/3
challenged [1] 247/24
chances [1] 105/25
change [22] 9/23 48/1 49/16 51/17 52/7 55/24 64/14 97/25 98/13 99/17 100/20 100/21 111/7 113/9 113/11 114/15 115/6 119/17 124/19 154/16 155/11 222/21
changed [8] 80/8 81/12 115/3 122/11 155/7 190/5 223/25 224/1
changing [1] 155/22
chapter [1] 231/19
character [1] 14/12
characterise [1] 211/11
characterised [1] 109/22
characters [1] 199/1
charge [3] 2/25 45/1 45/11
check [4] 120/25 185/14 198/8 211/3
checked [1] 36/23
checking [2] 68/14 234/13
Chest [1] 239/4
chief [17] 28/15 53/19 142/24 145/7 145/10 145/11 184/16 184/17 184/21 185/6 185/8 187/19 190/1 190/21 193/14 199/2 216/17
children [5] 64/8 82/17 95/14 188/5 200/2
Children's [1] 115/25
chime [1] 192/5
Chisholm [1] 137/10
choice [2] 127/18 173/2
choice: [1] 225/1
choice: do [1] 225/1
choose [1] 110/10
chose [6] 90/22 157/6 163/20 163/23 164/1 164/3
chosen [1] 60/6
Chris [1] 191/24
Chris Whitty [1] 191/24
chronological [1] 196/12
chronology [1] 102/21
circulated [3] 1/9 70/14 167/12
circulates [2] 35/4 42/23
circulation [1] 1/11
circumspect [1] 95/20
circumstance [4] 125/20 198/18 198/18 223/7
circumstances [5] 97/19 125/11 185/3 185/8 189/18
cited [1] 13/22
citizens [2] 76/16 110/1
civil [7] 143/20 146/6 225/23 226/4 226/8 227/5 240/9
clad [1] 158/6
clap [1] 241/2
Clarke [4] 160/7 169/11 169/15 227/3
classical [1] 240/17
clause [3] 128/13 149/6 150/14
clear [20] 1/18 12/25 23/15 25/3 25/5 55/23 74/4 98/15 134/17 145/12 146/2 158/21 160/13 160/18 161/19 198/7 202/10 204/10 218/12 246/8
clearance [2] 38/3 72/11
clearly [22] 6/22 22/7 35/7 45/8 50/11 56/20 78/7 88/16 108/1 109/13 114/25 126/4 126/8 130/21 151/24 154/14 157/23 170/19 199/23 206/20 213/22 218/21
clinical [22] 22/1 64/20 75/4 75/5 75/8 82/24 94/9 142/4 142/15 144/8 182/18 182/19 182/24 190/3 202/7 222/15 223/2 223/14 224/5 224/7 224/8 225/2
clinically [2] 9/14 10/17
clinician [11] 21/19

F:

C

clinician... [10] 45/1 45/11 140/8 141/17 142/4 146/6 156/16 193/15 206/9 207/12
clinicians [31] 64/24 112/17 132/13 132/13 132/19 133/14 133/15 133/19 134/7 134/16 135/5 135/7 136/21 136/22 138/10 140/11 141/9 142/10 144/7 152/15 156/6 156/14 188/20 188/24 190/3 204/17 205/12 206/21 209/5 216/21 220/12
clinicians' [2] 204/15 204/22
close [5] 61/3 101/25 143/11 194/14 235/4
closed [1] 31/5
closely [2] 180/25 218/11
closer [1] 228/23
clotting [9] 20/18 81/24 84/5 85/23 91/3 91/16 91/24 101/14 152/11
clotting-factor [2] 85/23 101/14
CMO [18] 26/4 29/11 65/11 134/1 138/15 138/17 138/18 138/23 145/25 163/22 186/18 187/6 187/25 188/24 189/9 189/23 190/17 192/12
CMOs [1] 185/19
co [1] 35/10
co-ordinated [1] 35/10
coagulation [8] 70/16 121/8 122/3 123/10 131/16 132/25 236/25 238/4
cohort [2] 136/22 187/13
cohorts [1] 132/13
colleague [2] 113/7 167/7
colleagues [4] 106/25 142/10 170/12 193/2
collect [3] 70/23 192/21 224/4
collected [12] 14/25 18/3 31/8 31/13 36/2 71/9 101/17 108/15 109/12 181/13 211/4 224/17
collecting [5] 30/8 101/20 177/17 181/6 182/2
collection [13] 34/18 36/17 70/24 176/16 177/5 179/17 180/14 183/4 184/12 197/9 211/17 222/2 222/10
Colleges [1] 137/17
colossal [1] 88/5
column [2] 9/8 9/17
come [46] 8/4 11/1 26/3 27/6 28/8 28/22 29/18 29/20 32/18 34/11 37/23 41/25 42/14 46/13 46/17 53/25 54/16 54/18 55/21 58/5 58/21 65/23 68/17 73/3 87/11 93/11 102/21 114/1 118/8 124/24 143/6 149/5 166/19 166/20 172/17 173/3 173/4 184/15 189/19 196/10 202/12 216/23 229/21 233/22 242/6 245/7
comes [2] 18/13 113/8
comfort [3] 174/3 174/4 245/18
comfortable [1] 165/18
comication [1] 51/21
coming [6] 110/17 129/12 164/20 190/17 192/12 196/22
comment [17] 3/1 18/5 19/6 35/3 61/21 62/13 62/21 120/13 127/21 127/24 130/23 131/1 139/12 145/21 162/9 193/8 215/9
commented [1] 145/21
commenting [1] 123/7
comments [7] 61/25 120/15 121/4 122/20 130/25 168/11 215/22
commercial [13] 18/14 19/9 49/21 51/4 51/10 51/13 51/19 52/6 174/20 200/5 202/25 234/19 245/4
Commissioner [1] 18/1
committee [46] 1/20 12/3 13/1 13/13 13/18 14/3 16/19 17/22 17/24 26/21 27/6 40/7 63/9 63/10 73/10 79/4 79/14 79/23 81/2 81/16 85/7 86/14 89/17 89/23 90/11 90/15 90/19 90/22 91/1 91/19 92/16 93/6 96/9 101/13 106/15 107/11 110/4 112/12 120/5 120/11 131/5 169/21 175/18 206/19 218/5 242/8
committees [4] 205/14 205/17 205/23 209/2
common [5] 5/23 7/21 205/16 222/18 223/19
commonality [1] 232/8
commonly [2] 9/13 10/15
Commons [1] 163/8
Commonwealth [1] 120/7
communicating [1] 62/15
communications [4] 30/2 33/20 103/19 163/7
community [1] 215/8
companies [12] 14/23 59/9 59/13 60/5 60/22 69/25 70/7 71/21 72/18 72/24 196/17 197/12
companies' [1] 19/8
company [3] 17/20 36/16 71/12
compared [2] 194/23 234/13
compensate [1] 180/15
complaint [1] 248/8
complaints [1] 25/24
complementary [1] 43/4
complete [2] 73/2 199/11
completed [1] 220/3
completely [4] 124/22 134/19 161/6 188/6
completeness [2] 21/6 53/21
complex [2] 13/1 237/3
complexed [2] 204/4 204/7
complexion [1] 115/6
compliance [1] 103/24
compliant [2] 71/22 112/9
comply [7] 36/21 36/25 71/7 125/12 130/6 130/20 130/21
component [1] 201/11
compose [1] 157/11
composition [1] 220/2
comprehensive [1] 12/12
compromise [1] 67/9
concentrate [55] 5/23 7/21 13/21 18/10 24/17 24/20 26/13 27/24 34/19 49/17 49/20 49/21 49/23 50/1 51/4 51/7 51/8 51/10 51/14 51/18 51/19 51/20 52/5 52/5 52/6 52/18 54/24 64/6 64/7 75/22 76/24 78/11 78/12 78/19 95/1 97/6 97/22 98/7 98/8 98/13 99/12 99/12 114/22 117/18 174/20 189/2 202/5 202/6 214/1 214/10 234/8 238/10 245/4 245/15 245/16
concentrated [1] 6/9
concentrates [61] 6/16 7/16 18/16 20/15 20/19 21/3 21/14 21/23 21/24 23/21 24/11 24/25 31/16 31/18 32/8 34/10 34/13 37/22 38/2 38/12 43/11 47/7 50/9 51/5 52/13 52/15 58/23 70/16 76/2 79/20 82/1 84/5 84/10 85/23 89/9 89/15 91/4 91/17 91/25 92/24 95/18 96/20 97/11 101/15 102/6 103/4 112/18 113/16 125/13 126/11 127/19 148/25 150/13 151/7 187/15 198/4 200/5 200/17 212/19 217/14 236/25
concept [1] 76/7
concern [19] 13/11 25/24 29/22 32/23 33/14 45/20 60/25 60/25 76/19 98/17 98/18 114/22 136/10 151/25 177/4 180/1 189/1 200/8 227/16
concerned [20] 31/25 40/3 47/10 59/9 88/5 95/4 104/20 129/1 132/22 151/20 160/25 168/16 171/12 173/13 202/7 220/11 230/19 233/3 233/24 236/14
concerning [2] 4/3 31/11
concerns [7] 125/8 151/10 151/13 201/21 214/22 238/14 238/23
concerted [2] 11/10 12/14
conclude [1] 40/23
concluded [4] 91/5 92/25 97/24 221/18
conclusion [11] 16/20 18/15 67/8 80/12 80/15 81/10 81/11 82/4 82/19 84/3 92/18
conclusions [6] 80/7 84/21 84/24 85/14 101/10 107/12
conclusive [32] 8/6 44/12 146/12 147/4 147/21 148/23 149/4 150/11 151/5 151/12 153/2 153/16 154/20 156/9 157/8 157/13 157/14 157/18 157/22 158/1 158/2 158/8 158/14 158/18 159/5 159/15 159/16 162/8 162/19 162/21 163/20 164/4
condition [3] 33/19 54/12 205/2
conditions [3] 144/4 144/14 229/19
conduct [1] 171/15
conference [2] 8/10 8/16
conferences [1] 243/19
confident [1] 98/15
configurations [1] 163/1
confined [1] 18/16
confirm [1] 45/25
confirmed [6] 4/8 5/6 45/2 45/12 106/23 115/14
confirms [1] 74/17
conflated [1] 89/3
conflating [1] 88/13
conformity [5] 38/23 39/18 39/18 41/3 41/11
confronted [1] 12/25
confusion [1] 50/22
Congratulations [1] 153/8
congress [8] 16/21 16/22 109/17 109/24 110/8 110/8 110/17 110/23
Congressional [2] 109/14 111/3
connect [1] 159/8
connected [1] 180/2
conscious [6] 57/2 57/8 74/5 143/7 173/9 173/11
consensus [3] 14/2 119/16 209/10
consent [6] 223/12 224/9 224/11 224/23 225/10 225/13
consequence [3] 155/19 183/3 189/7
consequences [5] 20/12 24/7 61/1 90/3 175/13
consequentials [1] 176/11
consider [24] 31/7 34/3 39/3 43/1 43/6 43/9 43/12 43/15 43/17 43/21 45/1 45/12 57/17 73/8 81/3 95/6 95/13 96/3 98/10 172/10 187/4 195/19 213/19 225/16
considerable [6] 35/7 119/19 210/16 210/18 228/15 245/18
considerably [2] 40/10 231/10
consideration [11] 65/4 81/23 85/11 91/14 107/13 115/18 202/23 206/11 209/13 214/4 223/19
considerations [3] 41/6 82/22 200/22
considered [20] 84/16 88/24 105/3 109/17 112/5 145/6 172/20 177/11 180/13 187/7 203/19 209/16 209/16 209/17 221/6 222/19 222/20 222/23 223/20 233/14
considering [3] 15/23 147/23 226/10
consistent [4] 4/10 79/1 92/14 111/9
consistently [5] 45/6 45/6 80/13 98/1 239/18
constant [1] 113/6
constantly [2] 129/15 157/22
constituents [1] 163/11
constitute [1] 9/23
constrained [1] 20/25
constraints [1] 194/10
construction [1] 175/22

C

consult [2] 178/1 178/2
consultant [6] 28/16 28/18 28/20 133/25 142/25 219/15
consultants [1] 134/21
contact [8] 44/14 101/25 137/16 140/20 140/24 143/11 199/6 199/10
contain [1] 33/24
contained [1] 220/2
contaminate [4] 18/9 19/17 19/19 19/22
contaminated [2] 19/11 152/10
contamination [1] 17/21
contemporaneous [2] 12/1 118/22
contemporaneously [2] 56/4 63/3
contemporary [1] 246/13
content [4] 36/14 84/24 86/3 117/25
context [7] 21/8 54/6 94/9 99/20 187/15 194/5 246/17
contingency [1] 49/7
continuation [3] 55/4 56/1 153/15
continue [9] 9/22 89/4 95/20 105/15 106/20 106/20 153/2 161/1 172/7
continued [4] 1/3 51/13 72/14 180/14
continuing [2] 22/17 180/10
contrary [2] 55/25 213/1
contrast [3] 165/4 169/19 199/13
contribute [1] 231/25
contributed [5] 14/20 209/8 215/6 246/9 246/24
contribution [3] 17/2 17/6 150/9
control [5] 58/21 59/10 105/11 202/3 230/22
controlling [2] 233/10 239/23
controls [2] 39/13 61/1
conundrum [1] 27/1
convenience [3] 47/22 172/6 172/7
conveniently [1] 229/22
conversation [3] 32/3 145/23 201/25
conversations [3] 60/12 60/13 83/19
convey [1] 12/13
conveyed [1] 162/5
convinced [1] 156/17
convincing [1] 75/14
copied [9] 2/4 53/24 70/11 149/23 149/25 150/19 160/4 179/9 181/4
Copies [1] 122/18
copious [1] 24/22
copy [4] 7/19 93/24 176/3 179/2
core [7] 172/10 172/21 195/21 196/8 209/14 210/7 210/8
correct [8] 7/1 77/3 159/20 159/21 161/14 162/20 162/20 183/13
corrected [3] 23/1 26/20 68/9
correctly [3] 135/8 161/12 161/13
correspondence [9] 2/3 3/13 30/24 35/22 115/4 135/14 143/13 157/24 201/17
corroborated [1] 141/8
cost [1] 202/4
cost-saving [1] 202/4
could [97] 3/10 6/18 11/20 16/7 18/9 19/11 22/22 25/6 25/8 25/15 27/3 27/11 27/19 27/22 27/22 29/9 33/3 33/18 34/21 37/9 38/21 40/3 40/23 41/14 41/22 49/6 49/16 50/4 50/18 51/17 52/15 56/13 59/12 68/10 70/7 76/17 82/15 83/3 83/16 89/15 92/24 93/16 96/18 102/13 103/20 103/22 104/1 104/15 104/15 106/22 106/25 107/18 111/14 112/2 119/17 121/17 125/19 127/11 127/25 129/6 138/25 144/6 158/7 161/17 162/21 171/8 172/16 175/2 175/9 186/17 189/9 189/11 192/23 203/12 203/15 203/17 209/20 210/6 210/8 210/17 212/3 212/4 212/9 212/25 213/19 220/3 223/11 224/15 227/2 235/12 237/11 237/25 238/2 238/7 240/25 243/16 246/3
couldn't [18] 19/1 19/10 22/15 27/25 41/18 106/4 110/22 111/18 125/19 128/25 203/14 212/3 213/23 215/9 230/17 238/1 238/8 238/11
council [24] 28/22 28/24 43/16 46/15 55/20 61/17 62/3 118/20 119/2 119/8 120/3 120/5 130/4 130/12 139/10 143/7 143/23 144/15 145/2 146/4 147/19 215/23 229/18 243/13
Council's [1] 61/24
councils [1] 229/18
counsel [2] 172/17 239/21
countries [14] 18/17 29/3 119/15 122/5 127/23 130/22 130/25 131/18 196/18 196/23 197/2 197/3 244/7 245/3
country [12] 39/5 54/11 72/11 103/23 112/7 126/4 130/22 203/18 227/13 228/4 228/19 231/7
coupled [1] 11/14
course [58] 8/4 16/20 19/18 22/11 22/25 23/23 24/7 27/7 30/17 32/25 35/9 36/23 38/17 55/10 64/3 68/15 68/18 77/19 89/14 97/23 103/6 105/8 106/13 109/25 110/2 110/8 111/19 114/1 124/16 126/21 127/23 140/16 141/2 155/19 168/18 172/1 176/8 180/9 180/21 181/14 192/3 194/9 216/25 219/6 221/3 222/21 223/9 232/22 233/11 234/13 236/3 237/13 241/3 241/7 243/17 244/23 245/10 247/1
courses [3] 57/19 63/13 161/22
covered [3] 60/24 97/7 207/25
covered by [1] 97/7
Covid [1] 194/24
Craske [8] 79/24 113/7 135/12 135/14 135/20 135/23 136/2 221/18
create [3] 162/10 176/5 176/7
created [2] 61/22 246/17
criminal [1] 215/2
criteria [2] 44/25 45/9
critical [2] 229/7 229/16
critically [1] 239/24
criticism [1] 183/21
cross [3] 152/22 155/12 155/13
crossed [1] 3/22
crucial [3] 109/13 151/22 151/23
cryo [11] 22/5 22/15 25/17 27/4 27/14 47/17 51/8 64/8 119/18 213/14 214/4
cryoprecipitate [48] 20/14 20/22 21/24 23/6 23/9 23/11 23/13 23/14 24/10 24/11 24/22 24/23 25/8 25/11 27/20 28/25 29/7 47/19 47/22 48/9 49/5 50/3 50/6 51/2 56/9 56/13 76/22 77/1 77/4 77/10 77/17 78/7 82/2 91/5 95/18 113/1 119/13 137/10 148/8 148/19 148/20 148/24 150/13 151/6 202/17 202/22 203/11 213/5
cryoprecipitates [1] 48/3
CSM [4] 79/14 85/12 112/5 242/9
CSM's [1] 106/24
CSMB [2] 2/9 73/9
culture [2] 142/2 142/14
curious [1] 79/6
current [3] 34/19 83/25 191/23
currently [2] 32/12 159/3
curriculum [2] 216/13 216/15
cursorily [1] 184/8
curtailed [1] 21/15
Cutter [1] 71/12
cynicism [1] 103/15

D

Daly [1] 152/14
damage [2] 22/17 22/18
dangers [2] 12/15 179/24
data [4] 6/17 6/17 86/18 88/6
data-poor [1] 86/18
database [1] 200/24
date [23] 8/10 8/12 8/15 8/19 31/13 33/10 33/11 34/18 36/16 104/13 106/14 113/19 120/18 122/14 140/14 140/16 149/24 152/4 153/5 156/5 176/2 217/18 232/20
dated [14] 3/20 35/24 66/19 70/10 79/11 102/23 104/2 104/18 148/16 149/23 167/24 174/9 176/21 179/12
dates [3] 10/25 11/2 72/23
dating [1] 221/2
day [15] 11/22 23/21 23/21 64/18 68/18 74/21 128/7 130/23 165/9 168/18 170/6 172/11 196/1 213/11 248/14
days [6] 164/20 173/2 219/24 223/17 239/5 246/11
DCMO [2] 190/8 190/18
DCMOs [1] 191/24
DDAVP [3] 95/6 95/11 95/13
dead [1] 5/7
deal [10] 94/17 99/8 110/20 133/13 134/20 142/20 228/18 231/3 238/10 238/11
dealing [5] 37/4 101/11 187/13 228/7 230/7
dealings [1] 226/23
deals [1] 139/16
dealt [3] 40/7 164/18 238/14
Dear [7] 184/21 185/9 185/12 185/23 187/5 189/23 190/16
dearly [1] 154/14
death [13] 6/13 21/2 22/19 23/7 23/16 23/18 23/18 24/14 52/4 114/8 154/2 156/24 215/19
deaths [1] 52/9
debatable [1] 194/2
debate [2] 226/21 241/19
debated [3] 16/15 110/8 180/23
decade [1] 215/1
decent [1] 172/9
decide [2] 142/5 173/24
decided [8] 3/11 14/5 82/16 110/11 110/12 110/23 143/1 236/9
deciding [1] 49/15
decision [17] 1/15 13/17 14/22 16/21 25/5 49/16 58/10 77/25 78/3 96/16 106/25 109/20 110/4 110/18 111/5 143/25 169/20
decision-makers [1] 78/3
decisions [4] 109/15 145/25 191/7 191/8
decriminalised [1] 215/1
dedication [1] 97/22
deeply [1] 165/25
default [1] 78/1
defer [1] 233/5
Deficiency [1] 74/25
deficient [1] 246/14
define [1] 218/23
defining [1] 100/8
definite [2] 13/7 159/14
definitely [4] 13/21 64/10 110/18 137/13
definition [2] 94/12 99/13
degree [16] 14/15 40/10 84/6 98/19 103/15 112/8 143/11 162/3 165/7 170/17 171/10 171/16 182/24 232/8 232/8 233/20
degrees [1] 237/11
delay [1] 168/12
delegates [6] 5/11 6/9 6/22 11/11 11/13 62/4
delegation [1] 122/21
deliberately [1] 143/18
delivery [2] 193/17 193/22
demand [4] 27/5 48/9 49/5 218/23
demands [2] 234/7 247/6
democracy [1] 227/22
Denmark [1] 243/1

D

dense [2] 14/8 17/8
department [89] 2/17 3/7 7/4 7/9 8/5 11/17 27/13 30/3 36/13 43/5 46/6 57/17 63/6 64/23 65/21 69/10 70/2 93/2 103/3 113/11 119/25 130/3 130/11 130/15 130/20 133/12 133/22 134/7 136/20 136/20 137/15 138/8 138/25 141/25 142/21 143/17 143/22 144/3 144/6 144/16 144/22 146/7 147/23 158/18 159/4 159/8 162/5 162/23 163/16 164/3 164/7 166/2 166/19 166/21 167/13 168/1 168/4 175/6 176/12 179/5 179/7 181/9 182/6 182/8 182/11 185/5 185/13 187/22 188/23 189/9 192/14 192/17 199/24 202/2 202/4 202/12 204/18 204/20 206/1 208/19 209/14 209/17 211/3 217/10 218/12 219/13 220/5 229/11 242/20
Department's [10] 3/24 107/8 113/10 141/23 142/2 142/14 144/17 158/22 162/14 167/15
Departmental [3] 177/17 178/9 179/17
departments [4] 205/7 217/8 224/16 240/9
depend [1] 239/24
depended [1] 195/15
dependent [1] 37/20
depending [1] 198/18
depending on [1] 198/18
deplete [1] 197/2
deputy [4] 145/24 185/6 190/1 216/17
derivatives [1] 13/20
derived [12] 14/2 32/9 34/22 35/14 52/15 54/25 72/8 84/8 89/7 101/15 103/10 117/19
describe [4] 10/12 127/13 133/7 207/21
described [7] 17/21 45/15 96/19 183/3 220/2 231/13 233/3
describes [2] 38/24 49/2
describing [3] 22/13 22/24 186/2
description [1] 242/4
deserve [1] 160/18
Desforges [1] 9/17
designed [2] 227/19 228/2
desirability [1] 67/2
desirable [2] 36/19 121/7
desired [1] 27/4
desk [3] 3/22 3/24 118/8
destroy [1] 237/17
detail [16] 30/6 30/20 30/22 44/9 46/7 47/8 73/1 85/21 131/8 147/3 154/14 154/15 160/6 164/18 168/24 247/12
detailed [1] 246/11
details [1] 30/23
detect [1] 19/20
determine [5] 157/15 162/22 179/19 195/5 236/4
deterring [1] 214/22
develop [1] 87/6
developed [13] 13/25 15/24 15/25 16/4 26/2 49/18 50/21 51/19 52/19 114/17 188/6 217/6 241/17
developed AIDS [1] 50/21
developing [3] 49/8 197/4 218/1
development [6] 152/17 155/5 155/6 156/7 188/9 222/4
developments [4] 31/24 61/4 144/5 180/22
develops [1] 5/2
device [1] 154/24
DHSC0000207 [1] 111/1
DHSC0000716 [1] 118/23
DHSC0001109 [1] 148/15
DHSC0001204 [1] 30/2
DHSC0001206 [1] 32/2
DHSC0001208 [1] 84/22
DHSC0001209 [1] 79/5
DHSC0001394 [1] 33/21
DHSC0001659 [3] 120/16 121/2 126/21
DHSC0002227 [1] 35/4
DHSC0002229 [10] 35/23 44/6 47/13 57/1 70/1 70/9 74/20 102/23 146/22 147/9
DHSC0002231 [2] 66/18 174/9
DHSC0002235 [1] 152/2
DHSC0002309 [3] 146/18 149/11 149/22
DHSC0002321 [1] 167/23
DHSC0002327 [1] 187/3
DHSC0002351 [1] 108/9
DHSC0002353 [2] 42/16 104/1
DHSC0105313 [1] 122/13
DHSS [6] 43/21 163/18 178/8 181/10 208/21 222/7
diagnose [1] 212/3
diagnosed [2] 87/16 97/9
diagnosing [1] 216/22
diagnosis [1] 13/8
diagnostic [1] 33/15
DIANA [1] 1/3
dichotomous [1] 25/5
dictate [1] 13/11
did [105] 8/9 14/24 15/21 22/3 32/19 36/21 39/19 40/10 49/20 60/14 81/14 81/14 83/14 92/7 92/7 94/23 96/22 100/7 105/17 105/21 106/18 107/2 111/4 111/12 111/17 113/10 115/19 116/4 118/14 124/23 132/18 133/5 133/11 133/12 134/7 134/24 137/15 137/19 138/8 138/19 143/8 144/6 144/9 144/12 144/13 145/14 145/15 145/22 155/18 156/20 157/12 158/17 161/22 162/10 163/22 166/22 170/4 170/6 170/8 175/8 175/8 181/16 181/17 185/19 192/25 194/20 196/15 197/8 197/22 201/19 201/25 202/11 205/6 208/5 209/7 210/14 210/19 211/7 211/13 211/14 213/19 218/14 219/20 219/25 220/15 221/8 221/23 222/8 223/7 223/22 224/20 226/25 230/14 232/11 232/15 236/6 240/13 240/21 242/5 243/17 244/16 244/22 246/23 246/23 246/23
didn't [92] 2/2 8/20 10/3 12/13 16/12 16/22 22/6 24/21 25/4 25/13 29/8 29/9 30/13 30/19 33/8 33/9 45/12 45/19 47/9 67/16 73/17 74/23 81/6 86/24 88/21 90/7 96/21 102/14 102/17 114/15 115/17 125/3 125/5 128/5 129/2 138/17 141/1 141/4 141/5 142/13 143/11 144/14 145/17 145/19 151/17 153/18 154/12 154/24 156/1 156/19 157/11 160/15 161/3 161/9 161/14 163/21 170/5 176/10 184/8 197/5 197/6 198/25 199/9 199/19 202/14 206/23 207/4 209/21 209/22 210/13 212/24 213/16 221/16 222/9 222/20 223/5 223/9 223/18 225/9 229/19 229/20 230/3 230/13 231/25 239/24 241/2 242/5 244/3 244/12 244/13 244/25 245/1
died [8] 112/24 113/13 113/18 141/3 152/9 155/14 155/18 174/17
differ [1] 232/11
differed [2] 13/23 163/25
difference [8] 37/7 40/16 141/19 149/16 153/21 155/21 199/1 199/4
different [27] 6/18 7/10 11/18 56/2 63/19 63/21 63/22 76/1 81/23 97/15 110/23 115/19 132/12 136/22 138/22 138/22 158/25 189/20 194/5 196/10 198/23 212/12 217/11 221/21 231/14 231/14 246/18
differing [2] 143/20 227/3
difficult [9] 2/22 22/15 41/24 80/25 125/12 135/22 179/16 193/19 193/20
difficulties [5] 59/2 59/5 107/7 180/20 227/8
difficulty [1] 121/5
dilemma [2] 109/21 109/24
diligent [1] 247/16
direct [1] 178/2
directed [1] 150/1
direction [1] 138/13
directive [1] 136/10
directly [4] 56/19 140/20 208/15 208/17
director [5] 30/14 34/25 113/25 190/9 190/10
directors [60] 1/7 1/10 27/18 29/14 31/3 31/17 34/1 34/25 41/14 46/9 47/25 48/21 48/25 49/15 58/9 58/15 64/12 65/18 65/22 66/14 67/4 67/5 67/19 68/12 68/14 93/7 94/5 94/20 95/9 95/16 96/11 96/18 133/3 134/22 135/1 135/2 135/5 135/23 139/2 140/10 140/18 140/21 165/1 166/1 174/12 175/16 179/19 179/23 180/11 180/23 182/17 183/11 201/19 205/25 207/8 210/23 214/19 214/21 215/7 232/15
directors' [13] 46/12 48/5 67/1 68/25 113/4 135/9 135/17 165/10 165/14 182/19 183/16 183/18 183/25
disability [2] 21/1 24/14
disadvantages [2] 47/22 198/15
disappeared [1] 210/9
discipline [1] 199/19
disciplines [1] 189/20
discovered [1] 240/16
discuss [3] 65/19 104/17 180/12
discussed [11] 1/20 20/10 63/12 63/15 89/20 113/25 170/5 183/10 184/2 184/7 184/9
discussing [2] 63/11 94/9
discussion [29] 2/8 14/8 16/8 59/25 61/7 61/17 62/5 63/18 63/20 63/23 64/1 64/17 65/25 69/6 73/16 79/9 79/13 80/6 80/7 80/14 86/3 98/18 115/18 137/5 138/7 142/25 143/14 157/19 222/22
discussions [15] 3/14 3/15 56/22 59/8 59/15 59/18 60/4 60/16 60/18 60/21 69/24 71/19 80/23 139/9 157/21
disease [18] 4/19 54/3 64/7 117/12 117/16 152/10 153/3 186/9 186/11 186/20 186/24 187/8 187/9 187/10 188/6 188/9 188/10 228/8
diseases [2] 228/3 228/3
dismissive [1] 158/3
disorders [3] 126/12 132/25 227/10
disparaging [1] 18/5
disregarding [1] 162/18
dissemination [1] 186/13
dissent [1] 133/11
dissociate [1] 126/3
dissuading [1] 161/5
distance [1] 148/1
distinct [1] 165/4
distinction [1] 218/22
distinguished [1] 199/14
distress [1] 246/10
distribute [2] 13/6 14/24
distributed [2] 68/20 228/3
distribution [1] 168/13
district [1] 229/23
distrusts [1] 204/25
divided [1] 195/10
division [41] 1/17 1/25 2/5 2/6 3/6 30/15 31/21 32/6 35/9 39/20 41/21 43/7 43/7 55/11 57/14 59/24 59/25 60/1 73/7 75/6 80/19 102/2 103/3 107/20 107/21 118/4 118/5 118/9 167/16 175/6 176/24 199/18 207/9 208/3 219/24 220/20

D

division... [5] 227/13 242/18 244/6 245/6 245/8
Division ... I hope [1] 31/21
Division's [1] 177/3
divisions [1] 60/3
do [147] 2/14 2/21 7/8 9/22 15/12 24/19 25/4 26/4 26/12 26/13 27/22 27/25 28/12 29/2 30/10 31/4 31/14 33/7 33/24 35/18 36/16 49/11 50/4 53/11 55/9 56/13 57/5 57/25 60/3 65/13 67/12 67/13 67/14 67/24 69/14 70/23 75/4 78/8 78/13 81/6 86/2 88/12 88/16 90/9 90/10 93/16 96/16 98/6 98/10 100/2 102/13 102/13 103/5 104/10 107/17 107/23 109/4 110/5 110/22 119/17 121/9 122/20 125/9 125/25 130/15 130/21 134/7 142/13 143/5 143/8 143/16 144/9 144/9 145/11 148/1 150/17 150/21 151/10 156/13 157/20 162/16 163/24 164/8 165/17 165/18 168/25 171/4 171/20 171/25 172/17 172/24 173/14 173/21 176/22 177/10 182/6 182/8 184/4 184/11 185/15 185/18 186/11 188/15 190/22 191/19 194/16 195/18 195/22 198/12 199/22 201/12 205/12 205/20 206/18 208/5 208/14 208/21 209/2 209/13 211/2 212/4 213/7 213/12 215/4 216/1 216/10 216/14 216/19 218/9 222/9 222/20 223/2 224/16 225/1 225/6 225/18 226/14 226/22 228/2 237/4 238/1 238/8 240/21 242/3 242/7 243/9 246/24
doctor [12] 2/16 183/1 184/21 185/9 185/12 185/23 187/5 189/23 190/16 196/2 205/5 225/23
doctors [13] 3/15 52/2 142/23 143/20 152/12 186/7 186/18 187/21 190/12 192/17 199/9 205/6 207/14
document [26] 1/20 3/19 3/21 12/8 16/18 29/15 30/10 68/2 72/23 79/5 79/7 80/17 81/2 85/6 101/8 116/25 118/1 168/7 174/9 177/21 177/22 178/4 219/7 220/1 221/10 230/2
documentation [2] 1/12 42/2
documented [1] 222/3
documents [13] 63/5 74/15 74/18 79/3 83/2 118/22 149/3 164/22 164/23 176/19 183/24 198/7 247/10
does [19] 34/11 38/1 45/1 45/18 45/20 50/13 64/16 64/16 81/10 83/7 91/13 100/15 117/15 120/24 125/21 153/20 155/11 172/10 230/1
doesn't [20] 14/13 37/21 37/23 37/24 38/4 52/23 71/24 73/24 84/14 98/5 98/10 106/11 106/13 113/14 144/21 147/5 154/16 170/3 182/5 192/5
DoH [1] 73/7
doing [19] 14/15 95/22 95/23 109/5 135/24 140/10 162/23 162/24 162/25 164/13 171/2 171/10 175/19 181/17 182/8 224/8 224/10 245/12 248/2
domestic [2] 31/9 212/19
domestically [3] 51/4 100/6 234/8
dominance [1] 209/1
don't [114] 2/5 2/24 3/13 7/19 8/24 12/6 15/21 16/7 22/11 22/24 24/17 24/18 26/20 27/2 33/7 33/18 40/22 45/5 55/10 58/19 59/4 59/16 61/14 62/7 63/2 65/7 65/8 68/7 69/19 73/20 75/5 75/8 81/8 85/14 85/20 86/23 86/25 90/8 92/2 92/18 92/20 93/1 98/24 104/4 107/13 110/2 110/17 119/4 124/16 125/16 125/16 126/3 126/12 129/5 133/11 135/17 137/7 138/12 139/1 141/4 142/8 142/14 144/25 148/20 150/18 150/24 151/24 153/19 156/13 158/5 159/3 159/15 159/16 161/18 163/2 166/15 167/8 170/9 175/21 176/9 183/20 184/9 188/12 192/6 193/13 194/1 194/1 196/21 197/1 199/18 206/4 206/17 207/7 208/8 208/15 209/17 211/10 212/2 212/20 215/10 218/17 219/22 220/10 220/15 224/22 231/23 232/20 236/5 238/18 242/11 243/11 244/18 244/19 245/8
Donald [4] 185/22 187/9 199/3 199/14
Donald Acheson [2] 187/9 199/14
donate [3] 166/6 210/13 212/24
donating [1] 214/22
donation [3] 157/16 166/7 181/2
donations [13] 50/5 76/18 76/23 76/25 77/6 179/20 179/25 180/8 197/23 210/3 210/16 233/5 235/8
done [37] 22/17 25/14 27/11 27/11 29/9 41/9 41/16 43/12 56/19 56/20 66/24 69/18 98/20 98/21 116/6 144/11 146/8 151/18 172/8 190/23 211/9 211/22 212/2 212/8 212/13 212/20 212/25 223/18 229/17 232/12 236/20 238/5 239/25 241/22 245/22 247/18 247/23
donor [27] 13/7 14/4 15/24 16/4 19/14 19/14 19/17 32/14 39/13 40/11 49/24 50/2 58/8 67/10 76/23 77/4 117/11 163/14 168/19 168/19 168/20 178/10 209/20 211/24 212/15 230/22 233/2
donors [52] 15/13 15/14 18/23 32/13 33/1 33/13 54/15 55/17 58/11 66/16 67/12 76/14 76/15 76/20 78/8 101/21 131/24 131/24 139/25 160/12 161/1 161/5 161/15 165/16 166/3 167/3 170/22 171/5 171/7 171/7 179/1 179/22 180/6 180/16 197/7 197/14 210/12 212/5 212/23 212/23 214/8 214/16 214/22 219/4 231/6 231/9 231/14 231/21 231/23 233/25 234/2 235/8
dosage [2] 84/11 89/10
dot [3] 196/11 244/25 245/1
double [1] 120/25
doubt [12] 9/6 44/19 45/10 52/19 56/3 77/1 77/4 77/8 113/13 113/14 193/23 221/4
doubtless [2] 69/8 80/8
down [32] 4/20 6/9 11/11 12/15 16/22 18/20 26/1 33/23 43/14 47/21 57/15 61/13 69/7 78/17 82/7 85/13 117/12 118/12 119/5 122/18 131/7 139/11 147/14 149/24 152/23 166/8 166/15 176/15 182/16 191/17 191/18 213/13
downs [1] 184/6
downsides [1] 29/4
DR [175] 1/3 1/13 2/4 2/13 3/10 3/14 3/19 4/2 4/6 8/11 10/2 11/3 11/5 11/8 12/7 14/11 17/18 18/1 20/4 20/9 21/9 21/9 27/17 27/19 28/3 28/10 29/12 30/14 30/16 32/6 32/19 33/21 35/4 35/22 35/24 36/13 36/15 36/20 37/3 38/14 42/13 42/17 47/3 48/14 48/16 48/16 48/17 48/18 48/23 53/8 53/17 53/19 55/23 56/4 57/2 57/24 58/1 59/3 60/10 60/25 61/18 61/19 62/3 64/17 65/11 65/24 65/25 66/1 66/5 66/25 67/8 67/11 68/16 68/23 69/2 73/5 73/6 73/15 74/1 74/7 74/8 74/9 74/11 74/19 74/21 75/2 75/3 75/4 75/7 77/20 77/21 79/8 79/11 80/15 81/19 82/13 83/5 83/10 83/12 83/14 83/14 83/16 83/17 83/22 84/2 84/13 84/15 84/23 90/25 91/8 93/24 95/10 98/16 104/5 105/5 107/10 107/16 107/17 113/3 113/7 115/24 116/24 118/14 118/24 119/20 120/10 121/3 122/19 126/23 133/24 134/18 135/12 135/14 137/10 139/5 139/7 139/17 140/7 140/25 141/13 152/14 152/14 152/25 156/14 160/22 160/25 161/7 165/15 165/21 166/9 172/5 172/6 172/12 174/8 178/2 184/19 195/18 196/9 198/24 198/24 199/3 201/17 213/22 213/23 214/18 215/11 221/18 225/21 235/22 239/8 243/18 244/2 244/3 245/25 247/2
Dr Bloom [1] 118/14
Dr Bruce Evatt [1] 14/11
Dr Chisholm [1] 137/10
Dr Craske [4] 113/7 135/12 135/14 221/18
Dr Donald Acheson [1] 199/3
Dr Duncan Thomas [1] 107/17
Dr Evatt [1] 4/6
Dr Field [7] 3/10 3/14 21/9 66/1 74/9 84/15 244/3
Dr Foster [1] 4/2
Dr Foster's [1] 11/5
Dr Fowler [13] 30/16 32/19 33/21 35/24 38/14 47/3 60/10 73/15 74/19 77/20 83/12 105/5 107/10
Dr Fowler's [3] 35/22 37/3 75/4
Dr Galbraith [6] 2/4 74/11 83/5 83/22 84/2 84/13
Dr Galbraith's [4] 1/13 21/9 65/25 74/8
Dr Geoffrey [1] 152/14
Dr Green [1] 42/17
Dr Gunson [25] 27/17 28/10 48/14 48/16 48/23 55/23 62/3 65/11 65/24 118/24 119/20 133/24 139/5 140/7 140/25 141/13 160/22 160/25 161/7 165/15 166/9 198/24 213/23 214/18 243/18
Dr Gunson's [5] 48/18 53/19 56/4 61/18 139/7
Dr H [1] 120/10
Dr Helena [1] 152/14
Dr Hill [1] 115/24
Dr Holgate [1] 75/7
Dr Joe [1] 30/14
Dr Jones [1] 201/17
Dr Joseph [1] 73/5
Dr Keith [2] 32/6 73/6
Dr Lane [6] 27/19 28/3 48/16 48/17 90/25 213/22
Dr LK Fowler [1] 75/2
Dr Michael [1] 17/18
Dr Norton [1] 244/2
Dr Oliver [1] 35/4
Dr Owen [1] 235/22
Dr Peter [4] 3/19 10/2 11/3 11/8
Dr Pollock [1] 83/16
Dr Rodell [1] 18/1
Dr Scott [1] 156/14
Dr Sibellas [1] 66/5
Dr Smith [5] 74/1 79/11 80/15 83/10 83/14
Dr Smith's [2] 74/7 83/14
Dr Sweeney [1] 20/9
Dr Thomas [2] 36/20 42/13
Dr Tovey [1] 198/24
Dr Wagstaff [6] 66/25 67/8 67/11 68/23 69/2 239/8
Dr Walford [42] 2/13 12/7 20/4 53/17 57/2 58/1 59/3 60/25 61/19 64/17 68/16 74/21 77/21 81/19 82/13 84/23 91/8 93/24 95/10 98/16 104/5 107/16 113/3 116/24 121/3 122/19 126/23 134/18 139/17 152/25 165/21 172/5 172/12 174/8 178/2 184/19

D

Dr Walford... [6] 195/18 196/9 215/11 225/21 245/25 247/2
Dr Walford's [1] 172/6
draft [17] 46/16 62/1 120/2 120/3 120/12 122/10 122/25 123/7 146/16 149/9 150/9 150/15 150/22 151/4 151/9 161/8 166/23
drafted [1] 161/24
drafting [1] 148/2
draw [6] 3/25 11/20 17/14 32/6 199/12 240/17
drawing [1] 154/9
drawn [1] 218/22
drew [1] 206/22
dried [2] 27/20 119/18
drip [1] 22/6
dropped [1] 220/23
drug [7] 30/4 84/8 89/8 161/4 172/2 188/4 215/2
drugs [2] 220/2 220/8
dubious [4] 121/20 126/16 127/13 128/4
due [3] 103/5 180/11 221/20
dumped [1] 34/2
dumping [8] 29/22 33/6 46/21 58/23 101/12 104/21 105/25 106/1
Duncan [3] 36/13 107/17 190/20
Duncan Nichol [1] 190/20
during [3] 141/22 219/22 237/13
dying [1] 173/12

E

e.g [1] 82/16
each [14] 14/3 32/15 34/17 34/18 56/11 70/5 71/1 71/6 81/9 88/17 144/4 159/12 230/21 231/3
earlier [14] 8/8 14/22 21/21 54/22 69/11 104/12 114/23 115/4 139/19 154/3 167/2 176/3 183/3 187/6
early [11] 10/21 54/17 130/19 146/15 190/6 193/18 210/24 216/11 219/24 236/19 236/19
ears [1] 240/24
earth [3] 124/8 170/6 170/7
ease [2] 211/24 212/16
easier [1] 122/9
easily [1] 199/10
easy [1] 226/16
echelons [1] 192/13
Edgware [1] 167/7
Edinburgh [1] 69/3
editorial [5] 8/22 10/2 10/13 10/18 206/24
editorials [1] 206/25
education [2] 216/7 216/16
Edwards [1] 150/4
effect [6] 53/2 94/11 113/6 165/20 185/13 202/19
effective [2] 40/9 58/25
effectively [5] 38/3 49/4 85/8 87/1 158/7
efficiency [1] 234/19
efficient [1] 19/9
effort [1] 76/8
efforts [3] 91/15 91/23 233/3
eg [2] 13/9 104/25
Egerton [4] 60/11 70/2 70/3 103/19
Egerton's [1] 60/19
either [24] 15/24 16/4 27/9 45/2 60/3 67/12 72/3 72/11 92/11 92/15 123/16 127/15 133/16 138/8 139/2 154/21 163/7 168/2 184/7 184/12 191/6 212/14 213/5 224/21
elaborate [1] 165/8
elbow [1] 24/5
elected [2] 205/24 206/2
elective [3] 25/20 63/25 97/21
element [3] 91/11 191/16 200/15
elephant [1] 194/12
eliminate [2] 91/18 210/12
else [16] 62/20 65/9 65/16 68/1 88/15 106/19 106/24 133/5 173/14 173/16 201/9 206/7 206/18 218/20 224/19 230/1
else's [1] 173/18
elsewhere [6] 69/21 92/15 192/5 196/19 197/8 202/25
email [1] 60/8
emails [1] 60/9
emails -- it [1] 60/9
emanate [1] 94/24
emanating [2] 150/9 150/10
embassy [4] 102/25 103/2 104/3 243/23
emerged [1] 180/24
emergence [1] 187/18
emergency [1] 97/19
emerges [1] 191/11
eminent [1] 206/8
emphasis [1] 126/14
emphasise [4] 11/7 150/11 158/18 239/21
emphasised [2] 55/19 159/5
emphasising [1] 101/4
enable [1] 143/24
encompass [1] 5/15
encountered [1] 215/17
encountering [1] 220/12
encourage [2] 43/13 181/21
end [16] 10/8 11/22 41/16 53/22 75/18 117/9 128/7 130/23 146/17 185/25 186/4 193/20 201/8 229/23 239/16 239/22
ended [1] 145/22
endorsing [1] 153/15
England [7] 54/9 54/25 178/11 181/7 184/13 190/11 208/10
English [3] 69/4 69/17 177/9
enjoyed [1] 175/15
enormous [4] 88/19 194/25 224/17 237/15
enough [13] 13/10 13/11 24/21 25/7 25/11 100/11 102/17 134/18 167/5 194/21 213/14 219/3 221/2
enquiries [1] 211/20
enquiry [1] 178/9
ensure [7] 78/14 78/19 143/23 192/12 216/11 217/15 227/15
ensures [1] 99/17
ensuring [2] 193/17 218/15
entered [1] 88/16
entire [5] 18/10 25/25 52/20 141/25 224/13
entirely [8] 50/10 52/8 55/10 77/14 170/19 173/8 211/12 233/9
entitled [1] 85/10
entity [4] 183/8 228/6 241/5 241/14
entry [1] 62/7
environment [1] 200/3
envisaged [1] 182/5
epidemic [1] 117/8
epidemics [2] 100/2 238/12
epidemiological [3] 4/18 7/13 83/13
epidemiologist [1] 199/15
epidemiology [8] 4/13 83/4 83/11 83/15 83/23 83/25 186/3 210/1
equation [1] 99/9
equipment [3] 56/15 56/16 230/24
equivalent [3] 112/16 187/6 190/21
especially [5] 122/4 131/17 139/21 140/3 180/5
essence [2] 72/6 156/24
essential [1] 168/11
essentially [28] 4/19 19/8 34/24 37/3 38/1 38/5 39/5 45/22 47/2 48/13 48/18 52/12 61/10 62/14 65/17 94/14 111/9 133/1 135/19 172/8 182/16 182/22 187/23 205/1 206/6 217/24 236/2 237/14
establish [3] 24/2 150/3 164/21
established [3] 13/21 117/18 217/19
establishments [1] 30/8
estimated [1] 18/7
et [9] 4/16 47/23 75/16 89/20 131/6 131/6 147/24 150/5 150/5
et al [1] 75/16
et cetera [8] 4/16 47/23 89/20 131/6 131/6 147/24 150/5 150/5
etc [3] 13/10 58/12 67/3
ethical [3] 142/12 222/10 224/2
ethics [2] 222/21 224/1
etiology [1] 54/3
Europe [22] 5/7 5/9 28/23 28/24 43/16 46/16 55/21 61/18 62/3 118/20 119/2 119/8 130/4 130/12 139/10 143/8 143/23 144/15 145/2 146/4 215/23 243/13
Europe's [2] 120/3 120/5
European [8] 6/3 6/22 34/20 34/22 38/4 71/2 119/15 245/2
Evaluation [1] 17/23
Evatt [2] 4/6 14/11
even [28] 2/25 23/5 24/12 36/24 38/14 39/12 48/11 51/20 52/21 78/6 86/23 87/25 95/11 112/9 145/25 159/14 161/1 165/20 180/10 209/22 210/8 214/7 223/19 224/3 225/11 234/1 235/9 238/10
evening [1] 117/1
event [12] 5/9 47/11 82/25 85/4 91/12 95/2 98/16 104/16 158/15 179/4 182/14 248/4
eventuality [1] 201/3
eventually [2] 149/2 166/22
ever [19] 27/12 50/20 52/5 63/2 111/17 116/4 118/14 137/15 143/5 143/8 153/19 170/9 170/15 202/23 206/11 208/15 218/17 240/13 248/2
every [9] 36/12 70/5 141/16 154/20 168/18 172/24 206/19 211/15 219/25
everybody [2] 25/3 221/6
everyone's [1] 116/16
everything [6] 23/17 69/5 138/5 172/20 204/10 225/25
evidence [54] 1/13 3/16 3/20 4/17 4/18 5/21 7/13 8/1 11/9 24/1 44/14 57/4 57/10 64/18 68/21 73/2 76/22 76/25 84/14 85/24 92/14 95/10 96/2 105/22 117/15 136/19 138/13 139/20 141/6 141/10 147/21 152/19 158/11 161/23 169/3 173/2 185/1 189/6 191/3 191/11 191/12 194/10 200/6 207/25 210/10 219/6 223/23 226/24 233/23 235/6 246/10 246/13 246/16 248/10
evident [2] 62/14 63/18
evoked [1] 201/16
evolution [1] 217/21
ex [1] 205/24
ex officio [1] 205/24
exact [4] 8/15 26/25 129/5 217/18
exactly [6] 30/18 64/25 112/4 201/6 203/23 207/16
exaggerating [2] 26/17 26/21
exaggeration [1] 90/9
examination [1] 40/13
examine [2] 57/18 63/13
examining [1] 115/22
example [17] 8/8 22/6 64/5 81/22 87/3 135/3 180/16 197/10 203/15 205/16 206/22 219/1 226/15 228/6 228/9 229/10 233/13
examples [1] 184/18
excellence [1] 229/20
except [5] 123/11 123/19 124/11 124/22 126/1
exception [5] 70/22 124/5 127/10 128/1 128/19
exceptional [1] 128/20
exceptionality [1] 232/9
exceptionally [1] 129/7
exchange [9] 12/12 30/24 32/18 35/21 103/19 155/25 156/20 227/4 227/4
exchanges [2] 41/7 227/2
exchanging [1] 243/22
exclude [2] 76/17 117/10
excluded [2] 15/15 166/7
Exclusion [1] 76/14
exclusively [1] 22/21
excused [1] 164/6
executive [3] 190/10 190/20 190/21
exercise [3] 56/17 109/4 217/2

E

exhibiting [2] 116/1 223/22
existed [2] 12/16 209/22
existent' [2] 5/24 7/22
expands [1] 75/18
expect [5] 77/13 93/14 161/3 191/22 243/4
expectancy [3] 20/25 21/4 23/10
expectation [1] 220/12
expected [6] 66/9 134/13 134/15 136/8 193/3 193/4
expecting [1] 224/13
experience [7] 22/1 22/2 67/12 86/22 118/6 141/20 237/20
experienced [2] 26/18 146/6
experiencing [1] 245/21
experiments [1] 238/8
expert [8] 90/16 90/21 90/23 110/11 110/11 120/11 192/18 192/21
expertise [5] 75/4 75/5 205/21 229/20 229/24
experts [10] 1/23 3/2 12/13 12/17 89/25 90/11 110/10 191/13 192/15 193/5
explain [8] 49/1 79/7 179/2 194/20 201/19 201/24 202/14 246/16
explained [10] 57/16 58/25 67/5 154/13 154/15 178/11 182/20 201/22 211/2 213/1
explaining [2] 41/5 159/6
explains [1] 92/13
explanation [1] 88/11
explicit [1] 171/22
explode [1] 88/19
explore [4] 63/14 73/4 162/7 164/2
explored [3] 1/8 27/12 27/16
exponential [1] 4/10
export [1] 31/7
exported [2] 18/17 31/14
exposed [2] 78/9 160/15
express [3] 107/11 194/19 247/22
expressed [11] 13/12 13/19 52/22 53/2 53/4 56/4 114/23 164/11 177/4 226/8 226/12
expresses [1] 76/19
expressing [5] 21/8 83/23 103/14 159/25 226/13
expressly [3] 84/15 221/16 224/11
extensively [1] 22/12
extent [11] 7/10 49/6 62/24 108/11 116/11 192/11 204/12 210/17 228/15 232/12 246/12
extra [1] 180/17
extraordinarily [1] 193/19
extraordinary [4] 87/25 88/7 186/9 226/20
extrapolate [1] 81/14
extremely [1] 186/16
eyes [1] 240/24

F

face [9] 103/20 192/24 192/24 193/1 193/1 226/12 226/12 226/17 226/17
face-to-face [4] 192/24 193/1 226/12 226/17
faced [2] 27/1 33/5
fact [54] 1/8 8/9 10/2 12/8 13/22 20/21 26/1 26/6 39/9 45/13 72/13 74/23 96/17 114/8 114/14 114/15 114/21 115/11 115/13 117/24 126/1 127/1 136/4 137/8 138/18 149/25 151/5 155/14 155/15 155/16 155/17 156/5 156/24 156/25 157/15 158/8 159/11 163/13 170/10 173/9 173/11 175/18 178/12 178/13 202/1 202/3 214/25 215/22 221/6 234/25 236/5 236/18 237/9 237/10
factor [86] 5/22 5/23 7/16 7/21 8/2 11/9 18/10 18/12 20/14 21/3 21/14 23/21 24/11 24/16 25/12 25/16 26/19 26/24 31/6 31/15 31/18 32/8 35/12 35/14 35/20 39/7 40/17 41/1 41/3 43/11 47/7 47/15 50/16 50/17 50/20 52/13 54/23 61/6 70/16 71/8 72/10 78/12 79/20 81/25 84/1 84/5 85/23 88/7 91/17 91/24 92/23 93/8 96/12 96/19 97/2 101/14 102/18 103/10 112/7 114/25 115/1 115/5 117/18 122/3 123/10 131/16 148/24 150/13 151/7 152/11 156/23 174/20 187/14 200/17 203/4 203/10 203/13 203/14 213/16 217/14 221/21 234/8 236/25 237/1 238/4 238/5
factor concentrates [1] 200/17
Factor IX [6] 25/12 203/4 203/10 203/13 203/14 213/16
factor VIII [50] 7/16 11/9 18/10 18/12 20/14 21/3 21/14 23/21 24/11 24/16 25/16 26/19 26/24 31/15 31/18 35/12 35/14 35/20 39/7 40/17 41/1 41/3 47/7 50/16 50/17 50/20 52/13 54/23 61/6 72/10 78/12 84/1 88/7 92/23 93/8 96/12 97/2 102/18 112/7 114/25 115/1 115/5 117/18 148/24 151/7 152/11 156/23 221/21 237/1 238/5
factored [2] 157/2 157/5
factored in [1] 157/5
factors [1] 91/4
factual [1] 23/7
fail [2] 19/2 19/10
failure [6] 143/16 143/21 144/1 144/10 144/12 164/6
fair [2] 61/11 211/11
fairly [7] 81/13 98/15 151/11 164/16 182/23 192/20 232/13
fairness [1] 139/6
fall [1] 99/13
fallen [4] 143/3 144/25 145/1 145/9
false [2] 98/19 162/10
familiar [4] 53/8 57/8 80/1 93/21
families [1] 246/25
family [1] 155/20
fancy [1] 211/13
far [48] 15/12 19/4 20/19 24/1 38/10 42/1 50/5 67/16 75/14 76/10 82/25 83/1 83/3 85/24 86/23 93/9 94/2 94/3 94/23 96/12 96/20 96/22 97/3 97/10 97/14 105/12 106/14 128/21 128/22 128/25 132/22 138/24 148/4 148/9 154/19 156/4 172/21 173/13 181/24 210/6 212/7 215/12 219/21 220/11 230/18 233/2 233/24 236/13
fashion [1] 19/16
fast [1] 166/20
fault [1] 134/18
favour [1] 181/1
favourably [1] 234/14
FDA [31] 14/23 18/1 31/10 32/9 33/22 39/14 41/4 43/8 46/14 70/25 71/7 71/22 72/20 73/14 78/16 78/21 101/12 101/18 103/24 104/9 105/10 105/15 108/18 109/7 109/20 110/6 111/5 111/25 112/1 112/3 112/9
FDA's [2] 108/4 108/5
FDA-type [1] 72/20
fears [1] 34/1
feasible [6] 27/5 27/19 91/6 102/3 121/9 213/4
February [1] 15/22
February 1984 [1] 15/22
fed [1] 200/22
Federation [4] 4/5 8/15 11/2 14/10
feel [5] 26/14 90/9 106/17 165/12 173/8
feeling [4] 7/1 67/19 166/24 232/1
fell [5] 66/20 69/20 69/23 145/6 233/5
fellow [2] 48/25 241/18
felt [17] 6/23 13/1 26/16 50/9 58/7 59/19 67/5 67/8 67/11 107/22 157/23 157/25 186/12 186/13 200/1 226/13 229/1
few [6] 54/10 84/20 88/3 88/8 171/21 228/14
fewer [1] 203/7
fiefdoms [3] 183/5 210/24 231/13
field [13] 3/10 3/14 21/9 66/1 74/9 84/15 142/20 186/7 192/19 193/6 204/24 209/18 244/3
fifth [1] 122/18
figure [1] 210/18
figures [4] 6/15 121/14 126/25 127/3
final [6] 125/2 129/24 131/2 131/21 151/1 151/4
finalised [1] 119/9
finally [5] 31/5 110/25 112/22 169/5 194/8
financial [2] 48/10 194/10
find [17] 9/1 28/7 32/13 34/17 106/4 110/19 125/12 135/21 153/19 157/17 189/15 217/6 232/3 232/18 237/16 240/24 244/22
finding [4] 20/1 110/13 220/22 237/22
findings [1] 144/5
finely [1] 82/23
finger [1] 244/4
finish [6] 173/5 173/5 173/6 173/7 237/19 248/6
finished [2] 34/15 104/18
Finland [1] 243/1
firm [2] 141/14 247/22
firms [2] 70/19 70/22
first [53] 1/15 6/20 7/2 9/10 10/8 11/7 12/10 22/11 30/1 33/4 33/14 35/3 35/23 35/24 37/3 51/1 54/14 57/20 63/18 64/18 66/12 66/23 74/14 74/19 75/17 75/19 80/6 83/7 99/19 108/10 117/9 121/5 123/4 132/19 133/14 138/18 139/16 148/20 152/3 154/24 161/8 175/24 176/21 178/4 185/23 187/14 196/14 206/15 208/8 225/22 230/19 240/21 241/6
firstly [1] 207/4
fit [3] 120/24 125/21 194/7
fit with [1] 120/24
five [6] 5/7 5/9 70/19 173/25 174/3 230/20
fix [1] 218/7
fixated [1] 202/1
flag [1] 68/19
flagged [1] 188/25
flak [1] 173/22
flavour [1] 81/17
flawed [1] 106/17
floated [1] 107/10
floor [1] 220/24
flying [1] 77/15
focus [2] 74/10 79/19
focused [2] 187/24 212/18
focuses [1] 196/14
focusing [2] 193/10 228/20
fold [1] 54/13
follow [11] 18/24 50/25 52/8 52/23 102/20 104/24 105/6 111/10 111/25 122/9 211/13
followed [1] 210/1
following [7] 31/2 66/11 66/24 81/21 85/14 108/1 248/14
follows [2] 122/24 215/21
followup [1] 14/1
Food [1] 30/4
footloose [1] 211/12
force [3] 32/10 39/8 39/14
forefront [1] 199/16
foreign [3] 91/16 91/24 120/7
forget [2] 26/25 124/23
forgetting [1] 194/24
Forgive [1] 134/24
forgotten [1] 113/24
form [11] 26/19 32/20 129/19 129/22 158/15 179/5 186/4 186/10 189/22 220/8 236/17
formal [1] 94/14
formalities [1] 85/3
format [1] 81/13
formed [2] 14/13 18/21
formula [2] 81/15 149/5
formulaic [1] 81/1
formulate [1] 79/14
formulated [2] 80/13 80/15
formulation [6] 147/5 149/14 163/20 163/24 164/1 164/4
fortunate [1] 166/9
fortunately [1] 111/19
forward [5] 2/23 19/7

F

forward... [3] 25/6 105/5 119/15
Foster [3] 3/19 4/2 11/3
Foster's [2] 11/5 11/8
found [13] 2/10 15/20 18/23 49/18 49/23 51/19 60/7 153/22 153/23 181/18 190/11 203/12 206/18
four [7] 9/19 17/20 18/9 33/23 34/9 166/14 231/4
four's [1] 100/5
fourth [2] 103/6 238/13
Fowler [16] 30/16 32/6 32/19 33/21 35/24 38/14 47/3 60/10 73/6 73/15 74/19 75/2 77/20 83/12 105/5 107/10
Fowler's [3] 35/22 37/3 75/4
fraction [2] 204/2 204/3
fractionation [3] 203/11 204/3 234/10
fractionators [5] 14/11 15/12 17/20 237/6 237/21
Fraenkel [1] 20/10
Francisco [1] 44/20
frankly [5] 77/21 173/16 173/20 188/11 206/18
free [4] 94/15 163/24 202/8 211/13
freedom [8] 64/20 94/9 142/4 142/16 182/18 182/19 182/20 190/3
freeze [2] 27/20 119/18
freeze-dried [2] 27/20 119/18
frequent [2] 21/1 143/14
frequently [1] 171/2
Friday [1] 158/12
frightened [1] 247/22
froing [2] 167/18 169/6
from [258]
front [1] 81/5
full [5] 35/21 110/9 110/9 177/22 209/3
fully [4] 3/1 35/10 48/24 170/9
function [1] 75/21
fund [2] 208/21 208/23
fundamental [1] 50/13
fundamentally [2] 52/16 65/15
funded [2] 195/15 228/15
funding [3] 194/16 194/20 229/17
furrow [1] 105/7
further [34] 4/20 7/18 10/12 41/7 43/1 43/4 43/12 43/14 43/24 57/15 62/21 68/17 69/7 69/14 85/21 98/23 107/15 119/5 137/4 146/10 147/2 147/14 149/24 152/19 156/3 160/21 160/22 161/11 161/22 172/22 180/11 181/12 195/18 201/13
future [4] 71/6 71/22 100/10 223/14

G

Galbraith [11] 1/8 2/4 74/11 79/24 83/5 83/17 83/22 84/2 84/13 169/20 244/23
Galbraith's [5] 1/13 21/9 65/25 74/8 87/15
Gallo [2] 241/4 241/21
gap [1] 3/13
gastrointestinal [1] 22/22
gather [2] 180/22 236/3
gathered [1] 108/11
gave [6] 11/21 39/10 73/2 92/14 183/15 239/21
Gay [1] 58/20
GDP [1] 194/22
general [17] 6/8 100/23 130/2 138/11 141/16 162/5 176/20 178/22 188/18 190/25 193/7 204/21 225/20 225/22 227/8 229/12 232/13
generalisable [1] 232/23
generality [3] 126/10 128/21 141/19
generally [2] 5/20 130/7
generating [1] 202/21
generous [1] 195/8
Geoffrey [1] 152/14
German [1] 245/15
Germany [3] 243/1 245/14 245/20
get [36] 10/10 11/22 22/16 25/3 35/22 39/19 41/2 60/23 81/17 102/14 110/22 111/17 115/12 142/15 149/2 155/18 162/12 162/20 166/22 167/7 170/2 172/8 192/9 192/10 212/22 223/11 223/15 224/23 225/4 227/23 227/23 237/21 238/2 239/7 239/8 243/17
getting [13] 45/5 57/4 60/14 98/7 98/8 192/15 197/15 199/24 211/23 212/15 225/10 239/17 243/25
gist [1] 119/9
give [24] 9/1 60/6 62/16 81/20 111/4 119/9 121/23 122/1 124/8 129/4 129/7 142/5 161/19 170/22 172/19 173/24 191/25 193/3 200/25 217/7 221/2 231/15 233/5 248/2
given [39] 18/8 53/10 71/6 80/6 82/6 84/23 87/15 87/22 88/12 92/22 94/16 103/9 103/18 107/14 126/25 129/2 130/22 141/11 143/9 147/10 168/21 178/10 185/11 188/23 189/19 191/15 192/3 192/6 193/10 202/23 206/11 208/17 209/13 210/21 211/24 212/16 217/15 217/16 247/24
gives [2] 68/21 101/5
giving [11] 2/25 114/10 146/20 168/19 171/21 191/4 191/12 214/10 226/24 248/5 248/10
glad [1] 31/20
gladly [1] 247/7
glanced [1] 74/2
glean [1] 193/5
Glenarthur [17] 68/21 146/21 146/25 147/7 147/10 147/17 147/25 148/3 148/5 148/13 148/18 160/6 169/1 169/5 169/15 169/23 248/10
Glenarthur's [2] 150/2 151/3
glibly [1] 103/9
go [113] 4/20 5/17 6/6 7/18 9/16 11/5 11/6 16/22 18/19 20/11 21/17 28/6 30/6 30/24 33/20 37/12 37/15 42/24 43/14 44/8 46/7 47/21 49/11 50/17 56/25 57/5 58/13 59/23 61/13 61/16 64/17 65/9 70/5 71/15 71/21 73/1 75/10 76/6 76/21 81/18 84/3 85/13 85/21 86/17 87/1 87/5 87/8 88/22 90/2 96/21 101/8 102/22 104/1 104/5 105/22 106/18 107/4 108/6 117/5 117/12 119/5 121/2 123/3 128/2 131/3 131/7 131/9 138/17 138/19 139/10 145/22 147/2 147/3 147/9 147/11 147/14 148/12 149/3 149/11 149/22 149/24 150/6 151/1 151/3 152/23 161/22 161/23 164/22 165/13 166/11 167/21 168/6 168/8 168/24 170/8 170/13 170/14 173/5 173/7 173/14 173/20 175/2 175/9 175/11 177/21 178/5 184/15 192/21 213/12 221/13 230/21 237/16 238/19
goes [10] 9/5 55/20 76/4 78/10 91/12 117/22 139/24 170/1 170/10 189/13
going [110] 1/23 2/1 3/3 8/14 12/5 16/16 18/19 20/11 22/4 24/13 24/19 25/3 25/23 25/25 28/17 28/19 29/6 29/10 40/19 41/2 41/14 41/24 42/9 44/8 46/7 46/13 46/17 47/7 53/6 66/9 68/20 69/5 70/5 71/14 73/1 79/7 79/19 79/22 85/20 87/10 87/23 88/19 92/5 102/16 103/4 106/3 108/3 109/17 110/7 110/22 114/1 116/24 117/24 118/19 119/7 120/4 122/8 123/1 129/15 130/18 131/7 134/4 134/20 134/22 135/13 142/22 145/11 146/20 147/2 151/15 156/2 157/23 160/2 160/5 160/15 161/11 164/15 164/19 165/24 166/12 167/20 168/6 168/24 169/22 169/23 171/12 171/15 174/8 175/17 181/15 182/1 182/6 183/10 188/17 191/12 195/5 196/11 200/25 202/17 207/9 211/21 214/13 223/4 223/6 223/9 232/21 234/16 239/7 244/1 247/8
gone [5] 2/8 7/15 56/11 107/1 138/15
good [27] 1/5 3/11 29/1 40/24 48/23 76/16 78/7 95/22 102/13 109/5 125/25 135/1 187/19 188/15 201/4 201/12 206/20 220/6 221/1 222/19 222/24 223/20 223/24 225/1 239/13 239/24 239/25
goodness [1] 201/2
got [47] 16/22 16/25 18/20 18/21 25/10 26/13 29/16 38/20 44/7 44/10 45/3 56/15 72/23 74/2 81/6 93/20 104/4 122/16 128/1 135/1 153/5 157/17 157/18 163/19 165/4 167/16 168/7 169/16 172/4 172/13 176/3 178/5 183/19 190/18 190/25 209/3 209/6 220/22 220/25 225/9 225/12 229/15 231/18 235/7 241/6 244/17 245/10
government [10] 132/18 133/12 136/14 144/16 144/18 191/23 194/21 195/1 199/25 205/6
governmental [1] 145/5
governments [1] 131/12
Grants [1] 208/21
grateful [1] 177/19
gravamen [1] 15/10
great [7] 92/8 94/17 140/24 166/17 171/17 180/13 237/20
greater [3] 119/13 121/19 162/2
greatest [4] 84/7 89/6 97/5 246/12
greatly [1] 21/4
Green [7] 42/17 42/19 42/21 42/23 153/12 153/18 154/12
Green's [1] 153/17
grew [2] 234/10 234/11
Grey [2] 183/21 225/17
Griffiths [1] 190/19
gritty [1] 169/17
ground [2] 7/4 64/25
grounds [3] 16/12 27/25 91/6
group [15] 5/1 65/16 87/18 89/25 110/11 110/12 170/7 177/4 177/11 177/15 177/16 185/17 188/19 188/21 205/3
groups [6] 15/15 43/22 62/8 166/5 205/14 233/6
grown [1] 218/19
growth [1] 4/10
guaranteed [1] 229/2
guarded [1] 205/3
Guardian [6] 153/24 153/25 154/1 154/4 154/9 157/5
guarding [1] 204/16
guess [4] 3/12 52/21 98/4 151/13
guidance [10] 64/23 94/13 111/25 112/1 211/6 231/18 231/20 232/4 232/4 232/19
guidelines [3] 31/10 71/7 71/23
Gunson [31] 27/17 28/10 29/12 48/14 48/16 48/23 55/23 62/3 65/11 65/24 79/24 118/24 119/20 120/10 133/24 139/5 140/7 140/25 141/13 160/22 160/25 161/7 165/15 166/9 167/4 167/11 198/24 213/23 214/18 243/18 245/9
Gunson's [5] 48/18 53/19 56/4 61/18 139/7

H

habits [2] 67/22 171/13
had [281]
had signed [1] 144/16
hadn't [13] 1/9 21/18 114/12 151/15 151/17

H

hadn't... [8] 156/15 166/24 204/9 204/9 207/1 222/25 223/23 244/24
haematologists [2] 189/21 205/10
haematologists in [1] 205/10
haematology [2] 204/21 224/16
Haemofact [1] 63/5
haemophilia [114] 4/5 5/14 5/15 5/20 8/16 9/13 10/15 11/2 11/16 14/10 20/13 21/19 22/12 22/19 23/1 23/24 25/1 25/12 25/14 25/22 26/15 31/16 34/1 34/25 41/13 43/3 43/25 46/11 47/25 49/15 54/24 62/9 62/15 62/19 62/23 63/4 64/11 64/12 65/18 65/22 72/14 82/15 87/20 87/24 89/12 89/16 89/25 90/4 90/6 90/6 90/11 90/21 90/23 91/1 93/7 94/4 94/19 94/22 95/5 96/10 96/18 102/16 112/17 126/10 129/2 129/12 129/13 133/2 133/9 134/21 135/5 135/7 136/5 136/21 137/23 138/9 138/10 139/2 140/7 140/11 140/18 140/20 141/17 152/16 156/6 157/3 165/10 174/11 175/16 176/2 183/17 187/24 188/1 188/24 189/3 198/5 198/10 198/14 200/16 203/5 203/7 203/7 203/8 203/9 204/17 205/12 205/25 206/9 209/4 215/6 215/8 224/17 227/10 228/23
haemophilia A [3] 25/14 203/7 203/9
haemophilia B [5] 5/14 25/12 203/5 203/7 203/8
haemophilia' [1] 82/17
haemophiliac [15] 6/20 49/17 51/18 78/6 112/24 113/2 113/13 114/16 114/17 126/8 152/9 174/17 215/17 218/20 219/5
haemophiliacs [45] 5/1 5/6 6/10 6/14 13/22 13/24 20/24 21/14 23/10 23/19 23/20 23/23 23/23 26/7 44/23 48/2 50/16 63/20 63/22 64/6 65/15 75/1 76/8 78/15 86/22 94/24 97/7 97/14 98/1 98/11 105/14 117/7 121/16 129/14 132/9 136/7 139/22 140/4 188/17 198/17 198/17 198/22 215/13 216/2 244/10
haemophilias [1] 133/1
haemophilias A [1] 133/1
haemotherapy [1] 132/10
haemovigilance [1] 218/2
half [10] 5/7 51/6 51/6 51/7 51/7 54/23 73/21 78/12 172/25 173/4
half-an-hour [1] 172/25
halfway [1] 78/17
hall [1] 199/8
hand [14] 7/19 8/25 9/9 19/13 22/11 29/16 95/3 95/25 96/6 101/9 147/15 152/13 166/15 191/16
handful [3] 90/15 102/19 190/25
handing [1] 68/23
hands [4] 38/14 173/18 190/4 190/23
hands-off [1] 190/4
hands-on [1] 190/23
handwriting [2] 153/10 177/23
handwritten [5] 93/25 120/1 122/17 122/19 152/5
happen [4] 25/23 102/9 221/8 242/7
happened [14] 8/9 67/15 88/14 88/14 119/2 145/20 162/22 168/25 176/14 184/4 201/9 225/25 237/12 241/17
happening [4] 158/1 158/6 188/14 242/25
happens [1] 230/5
happy [5] 103/8 173/13 173/20 223/12 227/3
hard [2] 7/19 195/1
hardly [1] 39/3
harmonised [2] 233/20 233/21
harms [1] 21/13
Harold [2] 167/4 167/11
Harold Gunson [2] 167/4 167/11
has [51] 1/13 13/21 37/17 49/7 52/4 54/6 71/6 72/23 77/20 89/25 108/15 110/11 110/12 111/3 112/24 115/5 119/2 119/8 119/25 120/11 122/6 128/19 131/19 141/6 141/7 141/9 150/14 151/11 152/4 152/23 153/3 155/7 165/21 165/22 172/13 175/19 176/1 178/8 179/4 180/7 180/9 180/23 189/6 201/14 214/7 224/9 225/17 239/23 246/9 246/21 246/24
hasn't [3] 68/6 100/20 247/24
hasty [1] 156/21
hauled [1] 161/24
have [458]
have an [1] 98/24
haven't [14] 2/10 26/13 29/15 42/4 42/9 74/4 83/18 84/23 112/23 176/3 183/23 231/18 247/11 247/21
having [40] 5/25 16/5 21/24 22/10 53/7 56/17 56/19 57/9 57/9 59/19 60/4 60/21 68/24 70/14 76/5 81/7 83/9 88/7 102/6 110/16 114/5 117/10 155/13 164/22 171/16 171/19 171/22 172/20 174/13 175/15 181/10 186/14 186/15 200/19 200/24 206/12 209/9 225/2 234/6 235/8
hazard [3] 52/13 75/1 133/23
hazardous [2] 200/25 201/2
hazards [6] 132/10 132/15 132/20 133/17 133/19 218/4
HCDO [4] 113/24 114/7 136/25 137/5
HCDO0000003 [1] 31/1
he [175] 4/6 4/7 4/15 4/17 5/5 5/8 5/9 5/10 5/17 5/25 6/6 6/7 17/11 17/11 17/17 18/7 18/18 27/19 27/24 28/15 28/15 28/16 28/20 28/23 29/2 29/4 29/5 29/8 29/9 29/10 31/3 31/10 32/16 33/16 35/4 35/16 35/25 36/9 37/3 37/13 37/18 37/20 37/21 37/23 37/25 38/4 38/24 45/6 45/6 45/7 45/21 45/24 45/25 54/8 54/9 54/14 55/5 55/6 55/13 55/20 55/25 67/3 68/24 70/4 73/7 73/7 73/11 75/12 75/18 75/19 75/24 76/4 76/10 76/12 76/21 78/5 78/10 78/16 78/17 78/23 79/11 79/18 80/10 80/13 81/10 81/10 81/11 83/10 83/15 84/15 90/21 92/13 92/14 92/18 113/1 113/18 114/14 114/24 118/15 118/25 119/5 119/10 119/11 135/24 136/3 139/11 139/16 139/17 139/18 139/24 140/8 140/10 140/16 140/19 140/19 140/21 140/24 141/1 141/3 141/3 141/4 141/4 141/5 141/5 141/15 141/19 153/19 154/9 155/5 156/18 161/7 166/13 167/5 167/6 167/6 168/1 168/9 169/23 174/20 176/1 178/8 178/11 178/14 178/16 178/22 179/2 186/12 186/13 186/13 191/21 192/10 199/9 199/13 199/16 199/21 199/23 200/1 205/15 205/23 205/24 206/6 206/8 206/9 206/18 206/19 207/2 207/5 209/9 209/10 235/22 235/23 240/15 245/13 245/13 245/17
he seemed [1] 45/6
he'd [5] 28/22 45/19 48/24 207/4 245/21
he's [7] 55/9 114/24 140/7 140/8 156/17 186/6 186/10
head [2] 8/12 110/22
headed [1] 74/25
heading [8] 44/22 61/5 62/8 81/9 81/23 82/8 83/25 131/4
heading -- so [1] 82/8
headings [2] 80/5 81/3
headquarters [2] 204/23 204/25
health [39] 2/16 2/16 12/3 17/25 17/25 30/3 30/4 40/11 61/8 69/9 72/5 103/3 120/5 132/10 132/15 133/16 133/19 142/21 179/6 182/22 185/16 187/16 190/13 192/14 192/17 193/24 193/24 195/1 195/13 196/25 199/22 201/15 208/18 216/19 217/22 226/1 227/14 227/15 242/23
Healthcare [1] 190/9
hear [6] 158/11 164/19 165/22 174/14 227/3 240/21
heard [18] 24/1 28/16 52/2 52/25 53/1 58/1 95/10 110/6 112/23 113/22 141/21 164/11 176/10 189/6 223/10 228/22 244/2 247/16
hearing [10] 109/14 109/19 111/3 118/18 192/4 206/14 209/11 236/3 243/13 246/2
heart [2] 235/4 239/4
heat [15] 43/11 47/6 61/2 203/15 203/17 203/20 203/22 236/15 236/19 237/15 237/22 238/2 238/4 238/6 238/9
heat-susceptible [1] 237/15
heat-treated [9] 43/11 47/6 61/2 203/17 203/20 203/22 236/15 238/4 238/9
heavily [1] 179/24
held [4] 31/12 56/22 60/12 72/2
Helena [1] 152/14
help [7] 3/5 3/16 79/13 138/25 159/4 192/23 233/21
helped [1] 200/14
helpful [11] 7/2 73/12 103/21 129/10 129/21 165/23 166/22 184/18 189/24 207/1 246/21
helping [1] 22/5
hence [1] 231/16
Henry [2] 199/2 199/7
Henry Yellowlees [1] 199/2
Henry's [1] 199/18
hepatitis [39] 79/21 178/13 178/14 180/2 184/23 203/25 203/25 204/13 209/14 209/25 210/4 210/7 210/7 210/8 210/9 216/22 216/23 216/24 217/2 217/4 217/6 219/9 220/13 220/18 221/1 221/4 221/8 221/12 221/20 221/20 222/5 230/11 230/12 230/13 230/14 230/16 230/18 236/24 241/8
hepatitis B [10] 79/21 184/23 204/13 209/14 209/25 210/7 221/4 230/12 230/14 230/16
hepatitis C [5] 216/23 216/24 217/2 217/4 217/6
her [2] 66/9 142/5
here [39] 8/11 11/24 15/18 21/8 21/10 24/9 24/19 29/16 29/17 51/23 52/22 60/16 65/8 65/10 84/24 88/4 98/6 110/16 114/23 130/7 131/8 137/25 141/2 146/19 149/3 149/6 151/11 173/1 173/10 173/12 185/4 186/5 187/24 191/22 198/21 203/25 204/5 220/20 222/16
here's [1] 188/9
Herewith [1] 148/17
herself [1] 165/21
hierarchy [2] 1/17 191/6
high [15] 11/15 15/14 54/15 84/9 84/10 89/8 89/10 97/5 117/11 168/19 187/10 194/17 194/21 233/6 237/23
high-risk [1] 54/15
higher [5] 4/9 10/7 166/5 180/3 194/24
highest [2] 34/12 37/23
highlighted [1] 12/19
highly [6] 20/23 118/16 152/17 156/6 156/8 177/12
Hill [1] 115/24
him [11] 19/6 19/7 28/19 32/11 118/18

F:

H

him... [6] 134/1 141/1 150/3 153/19 199/7 199/10
himself [3] 74/11 135/24 156/16
hindsight [2] 208/25 209/2
his [42] 8/13 11/10 11/12 17/15 18/15 28/12 32/6 37/12 37/13 45/15 48/24 54/22 55/25 65/11 67/12 74/17 75/6 75/8 79/1 92/4 92/4 92/11 92/13 92/15 113/7 113/7 114/14 116/1 140/22 142/5 142/25 167/6 176/3 179/2 199/15 199/16 199/17 199/21 209/1 241/22 244/3 245/12
history [1] 90/2
hitherto [1] 114/3
HIV [10] 209/15 209/21 209/22 223/8 223/10 223/10 237/25 238/1 238/5 238/7
hm [13] 66/22 70/8 85/1 95/19 123/9 124/25 174/25 185/2 191/9 221/25 222/6 231/5 240/20
hoc [1] 3/15
Holgate [1] 75/7
home [11] 25/19 69/9 97/17 179/6 180/25 181/19 181/22 181/23 208/18 218/15 218/19
home-grown [1] 218/19
homosexual [7] 43/22 44/13 62/8 76/15 171/18 177/13 188/4
homosexuality [3] 172/1 180/3 214/25
homosexuals [9] 75/23 76/17 84/8 89/7 161/2 166/6 177/13 181/20 215/5
honest [2] 128/8 245/9
honestly [1] 7/11
honesty [1] 40/11
hope [7] 26/4 31/21 38/13 76/6 226/24 231/25 246/20
hoped [2] 15/16 246/6
hopefully [6] 176/4 214/11 221/7 221/9 243/7 243/7
horns [2] 109/20 109/23
horses [1] 161/21
hospital [8] 21/1 22/16 115/25 229/14 229/23 239/1 239/4 239/13
hospitals [2] 189/3 189/11
host [1] 228/6
hostile [1] 165/7
hot [1] 155/3
hour [2] 172/25 173/4
hours [1] 237/12
House [4] 21/20 147/11 163/8 163/8
how [59] 9/6 25/15 33/3 33/7 33/15 40/8 40/15 40/16 56/13 68/19 73/4 74/5 78/13 80/22 81/15 81/17 87/4 88/22 92/24 94/23 98/6 101/4 111/23 122/10 125/21 127/21 129/22 134/24 140/7 140/10 141/4 151/24 179/20 186/18 192/6 194/3 195/5 195/10 195/15 199/16 206/18 211/2 212/2 212/20 219/20 219/22 220/9 224/19 228/22 229/8 233/19 233/19 234/18 243/9 243/11 243/14 244/19 244/19 245/6
however [12] 6/17 13/8 26/9 33/24 71/7 86/6 91/15 101/23 104/24 106/16 121/20 179/23
HS [2] 35/9 153/19
HS1 [3] 150/10 177/1 240/11
HS2 [1] 240/12
HSIB [1] 70/12
HTLV [2] 241/13 241/25
HTLV-III [2] 241/13 241/25
huge [5] 25/24 105/13 171/3 241/5 247/9
hugely [1] 247/12
human [2] 30/3 117/19
husband [1] 248/1
Hyland [2] 6/4 6/4
hypothesis [3] 75/14 76/11 96/10

I

I absolutely [2] 137/21 206/15
I accept [4] 51/25 86/14 135/16 156/10
I actually [1] 241/11
I agree [3] 187/23 188/7 189/25
I always [1] 154/21
I am [11] 26/16 26/20 79/7 98/15 98/17 172/16 179/14 219/17 225/14 237/8 247/1
I anticipated [1] 166/8
I anybody [1] 173/14
I appreciate [3] 52/1 144/23 144/23
I ask [1] 68/10
I asked [2] 140/16 146/2
I assume [1] 175/5
I attended [1] 68/12
I because [1] 238/19
I been [1] 2/25
I believe [1] 104/17
I believed [1] 108/5
I can [26] 9/1 15/21 28/14 49/19 75/24 84/20 114/9 119/9 128/8 138/16 141/12 142/20 154/23 168/25 172/8 176/19 177/20 181/24 195/19 199/6 199/10 206/19 212/7 233/16 233/21 238/21
I can't [25] 8/12 11/19 30/18 38/18 50/11 67/17 77/7 81/13 89/23 92/21 104/13 126/19 138/13 159/9 164/10 176/8 178/24 181/21 194/19 212/11 212/24 217/18 218/6 218/6 236/4
I cannot [2] 83/17 137/5
I certainly [3] 223/25 227/1 231/25
I commented [1] 145/21
I continue [1] 172/7
I could [9] 11/20 171/8 186/17 210/17 224/15 227/2 240/25 243/16 246/3
I couldn't [3] 41/18 110/22 128/25
I dearly [1] 154/14
I did [14] 15/21 22/3 81/14 81/14 92/7 92/7 166/22 192/25 194/20 202/11 209/7 221/23 226/25 244/22
I didn't [27] 2/2 10/3 22/6 30/19 125/3 128/5 129/2 143/11 145/19 151/17 153/18 154/24 156/1 156/19 157/11 161/3 170/5 198/25 206/23 207/4 221/16 230/3 231/25 244/3 244/12 244/13 244/25
I do [10] 31/4 31/14 36/16 90/9 90/10 119/17 156/13 165/18 171/20 199/22
I don't [92] 2/5 2/24 3/13 7/19 8/24 12/6 15/21 16/7 22/11 22/24 24/17 24/18 27/2 40/22 45/5 55/10 58/19 59/16 62/7 63/2 65/7 65/8 68/7 69/19 73/20 75/5 81/8 85/14 85/20 86/23 86/25 90/8 92/2 92/18 92/20 93/1 104/4 110/17 119/4 124/16 125/16 125/16 126/3 126/12 129/5 133/11 137/7 138/12 139/1 141/4 142/8 144/25 150/18 150/24 151/24 153/19 156/13 161/18 163/2 166/15 167/8 170/9 175/21 176/9 184/9 192/6 193/13 194/1 194/1 196/21 199/18 206/4 206/17 207/7 208/8 208/15 209/17 211/10 212/2 212/20 215/10 218/17 219/22 220/15 224/22 231/23 236/5 238/18 242/11 243/11 244/19 245/8
I doubt [1] 221/4
I draw [1] 199/12
I entirely [1] 52/8
I ever [5] 63/2 153/19 170/9 170/15 218/17
I expected [2] 193/3 193/4
I explained [1] 67/5
I expressed [1] 226/12
I feel [1] 26/14
I felt [2] 157/23 157/25
I find [2] 135/21 153/19
I follow [1] 50/25
I forget [1] 26/25
I found [2] 181/18 190/11
I gather [2] 180/22 236/3
I get [1] 167/7
I go [1] 49/11
I got [2] 74/2 183/19
I guess [4] 3/12 52/21 98/4 151/13
I had [24] 22/12 52/24 63/7 68/1 98/4 106/18 107/25 114/20 151/14 154/15 158/1 165/25 181/13 181/25 190/8 193/5 195/17 199/6 202/14 209/10 216/14 226/16 241/10 243/24
I hadn't [2] 151/15 244/24
I have [28] 8/18 11/24 15/20 25/21 31/11 32/11 32/16 59/22 63/5 74/2 75/3 78/1 99/1 138/14 142/17 165/6 181/25 183/21 186/8 225/15 226/23 244/8 245/18 245/23 246/11 247/6 247/12 247/16
I haven't [4] 2/10 42/4 83/18 231/18
I heard [1] 176/10
I honestly [1] 7/11
I hope [3] 38/13 226/24 246/20
I hoped [1] 246/6
I invited [1] 165/13
I just [22] 3/15 3/25 11/7 26/20 58/18 59/19 63/14 66/12 68/22 84/20 93/4 93/15 103/6 115/21 149/3 164/21 170/12 175/16 186/15 220/10 244/18 246/4
I knew [9] 30/17 105/18 167/9 170/4 188/2 196/22 197/16 197/21 241/6
I know [15] 12/6 29/15 73/24 80/16 86/1 89/24 93/21 118/4 126/22 148/4 154/19 199/21 237/13 243/20 245/9
I learnt [1] 30/18
I like [1] 52/21
I listened [1] 209/8
I may [4] 87/11 99/2 156/4 186/5
I mean [34] 3/9 8/20 16/2 25/4 33/4 50/21 52/9 59/16 72/6 81/12 88/16 92/19 102/10 103/21 124/5 129/6 134/4 144/23 150/19 154/8 170/19 171/8 173/20 185/10 187/23 193/13 203/1 206/17 209/8 211/7 222/18 229/7 229/9 232/7
I meant [1] 175/11
I mentioned [3] 27/9 155/14 228/10
I merely [1] 14/7
I might [6] 63/6 89/24 136/24 151/18 151/19 209/6
I misread [1] 213/10
I move [1] 90/13
I must [2] 199/11 201/22
I necessarily [1] 126/15
I need [4] 58/19 62/7 101/11 247/5
I never [4] 141/1 215/16 226/13 244/16
I notice [2] 83/9 242/16
I obviously [1] 26/19
I omitted [1] 219/17
I only [1] 197/13
I or [1] 106/25
I ought [1] 83/5
I paraphrase [1] 134/13
I perhaps [1] 128/15
I personally [1] 16/13
I picked [1] 115/24
I prepared [1] 160/25
I presented [1] 81/15
I pretty [1] 234/4
I probably [6] 166/20 170/10 241/11 242/5 242/10 242/14
I promised [1] 201/23
I put [2] 79/7 119/15
I raise [1] 183/13
I read [3] 12/10 14/7 14/17
I really [6] 3/16 11/19 62/20 199/9 215/9 246/22
I recall [1] 171/21
I referred [1] 157/14
I reflect [1] 196/23
I remain [2] 157/11 157/12
I remember [1] 166/24
I right [1] 134/6
I said [6] 36/5 126/15 141/12 202/10 246/6 246/23
I saw [3] 41/19 151/18 162/25

F:

I

I say [4] 12/10 96/15 151/17 195/14
I see [5] 26/4 36/17 97/13 242/1 247/25
I seem [1] 12/18
I sent [2] 38/13 230/2
I shall [2] 173/21 177/18
I should [5] 39/8 95/9 118/10 150/11 154/13
I shouldn't [1] 26/14
I simply [2] 45/11 155/6
I sometimes [1] 11/22
I sort [2] 199/7 218/18
I spoke [1] 167/4
I stand [1] 247/19
I stick [1] 96/24
I subsequently [1] 30/21
I suggest [3] 104/23 120/22 124/13
I suggested [1] 104/8
I summarised [1] 178/19
I suppose [9] 15/1 35/13 40/6 49/22 50/15 87/9 165/22 203/18 209/6
I suspect [9] 98/23 105/9 110/3 128/11 151/18 171/16 175/14 194/4 232/7
I take [2] 81/18 186/23
I talk [1] 88/2
I talked [2] 154/20 218/3
I then [2] 102/19 113/23
I think [163] 1/8 2/12 3/9 3/24 7/18 8/13 8/24 9/9 9/18 10/21 11/24 14/12 15/9 16/7 18/3 18/11 20/6 21/5 23/9 23/10 23/12 25/18 25/21 28/23 30/15 30/19 31/16 36/5 40/16 41/8 44/2 47/10 48/16 50/11 51/6 54/17 54/21 60/24 64/10 66/15 68/1 70/10 73/17 73/24 74/4 74/15 75/6 77/8 80/19 82/25 83/5 83/16 84/16 86/17 87/18 87/18 88/3 88/15 88/17 89/19 94/3 94/8 94/10 94/12 95/17 96/24 102/10 106/5 107/13 114/6 114/19 116/25 121/21 122/2 122/8 122/14 124/7 124/12 126/13 132/22 134/12 136/24 137/2 138/5 139/4 139/5 139/19 140/8 140/22 141/8 147/1 150/1 150/7 153/25 157/14 158/11 160/3 160/8 160/11 161/22 164/15 164/21 166/14 166/19 167/6 167/12 169/7 171/14 171/25 172/4 175/21 178/6 179/7 181/15 181/18 181/21 183/3 185/10 185/25 188/14 190/2 191/25 194/19 194/21 198/24 200/10 200/14 204/3 204/10 205/1 211/19 213/25 214/15 216/24 216/24 218/7 219/7 221/15 221/23 222/8 222/15 223/7 224/15 226/11 226/22 230/20 232/13 233/24 234/2 234/12 235/5 235/25 239/4 239/21 240/2 241/7 241/9 241/12 242/13 243/25 244/12 244/21 247/25
I thought [14] 12/10 12/11 38/16 83/24 103/21 105/9 128/3 128/12 129/20 129/21 151/14 161/4 186/16 218/18
I took [1] 105/14
I totally [1] 33/4
I tried [1] 202/10
I understand [11] 100/24 106/7 115/7 123/14 124/1 124/18 125/7 153/9 165/3 191/10 241/25
I used [1] 96/24
I want [12] 84/18 118/13 130/1 131/22 132/16 146/11 149/5 169/14 176/15 179/10 230/21 240/6
I wanted [5] 20/15 160/8 164/2 165/14 198/8
I was [51] 2/1 8/19 16/16 22/4 30/16 31/19 38/18 41/17 45/10 52/24 53/6 60/14 103/24 110/2 110/21 115/3 124/19 125/14 125/17 125/18 128/11 128/11 128/25 129/21 143/14 145/4 145/20 146/3 150/18 150/25 151/19 153/17 153/20 155/11 160/20 166/1 171/23 171/23 191/4 191/4 191/5 208/25 209/11 215/16 219/23 226/11 228/10 239/7 240/24 241/8 242/1
I wasn't [10] 62/18 63/3 148/4 159/1 165/11 165/12 181/16 196/20 217/25 226/15
I went [2] 57/2 160/21
I will [6] 41/15 65/23 134/3 173/21 173/24 215/14
I wish [2] 170/4 247/15
I won't [5] 30/6 47/9 136/18 169/6 187/1
I wonder [2] 11/19 83/3
I would [44] 2/6 22/13 22/25 23/2 51/16 53/4 56/20 60/20 64/3 66/9 81/1 81/13 89/24 93/1 94/18 94/18 107/24 118/10 130/10 133/7 136/8 141/20 142/19 150/24 151/13 154/18 159/10 159/19 162/2 164/12 172/25 173/16 185/15 190/15 198/15 198/20 201/23 205/23 215/14 217/24 226/13 226/18 240/23 241/1
I wouldn't [6] 60/5 63/7 175/22 184/9 186/10 207/5
I wrote [2] 27/20 152/1
I'd [6] 114/22 127/16 127/16 151/19 190/18 244/2
I'll [10] 38/7 54/16 55/21 58/5 68/8 68/25 102/21 215/11 215/24 237/19
I'm [114] 1/18 3/17 7/14 8/17 8/17 11/23 12/5 20/10 22/13 22/24 23/22 28/5 28/9 33/16 41/14 44/8 46/7 46/13 46/16 47/7 48/6 49/13 51/21 52/8 52/11 56/19 56/22 57/2 57/8 57/24 65/7 67/16 68/8 68/9 69/5 70/5 71/14 73/1 77/21 77/25 83/3 83/9 83/11 84/12 85/20 90/10 96/14 113/19 115/2 116/17 116/24 117/24 118/19 122/25 124/18 130/7 131/7 132/22 134/17 134/17 134/19 137/19 138/24 141/23 143/13 143/18 145/12 145/19 147/2 147/3 147/13 159/23 160/2 164/15 167/20 168/6 168/24 170/14 170/18 171/1 171/2 171/10 173/9 173/11 173/13 173/13 173/18 173/20 174/8 176/9 178/6 185/3 185/25 187/13 190/7 194/13 196/1 196/2 196/24 197/16 198/2 203/25 205/4 205/5 208/12 212/10 213/10 214/13 224/12 224/12 233/21 240/7 248/2 248/6
I've [28] 8/23 9/4 12/18 23/17 75/2 82/12 83/21 87/9 91/7 113/23 116/16 133/21 139/16 153/22 158/21 164/11 167/8 172/4 182/20 188/21 190/25 192/15 198/2 202/16 204/10 216/25 235/7 246/16
i.e [1] 82/1
iceberg [9] 6/24 9/3 9/5 9/14 10/7 10/16 10/19 11/13 88/18
ID [2] 167/25 175/4
idea [13] 17/12 59/22 95/22 125/25 142/17 181/13 181/14 182/3 182/14 182/15 184/4 243/24 244/8
ideal [1] 25/1
Ideally [1] 35/13
ideas [1] 206/4
identical [1] 84/25
identifiable [2] 71/4 187/12
identified [3] 115/16 184/20 202/18
identifies [1] 70/18
identify [6] 33/2 33/3 36/2 36/4 37/7 46/8
identifying [1] 33/9
ie [3] 6/16 176/2 179/25
if [345]
ignore [1] 76/5
ignored [1] 227/23
iii [3] 82/8 241/13 241/25
ill [3] 114/4 114/13 201/15
illness [2] 114/15 229/8
IMCD [6] 1/24 3/10 3/10 116/9 143/4 243/21
IMDB [1] 240/12
immediately [6] 8/24 28/14 34/16 67/4 102/3 114/6
imminent [1] 100/12
immune [4] 74/25 77/11 77/13 77/18
Immuno [8] 6/1 6/5 34/20 70/22 71/2 71/10 112/25 174/19
immunoglobulin [4] 79/20 202/20 204/11 213/17
immunoglobulins [3] 203/21 204/5 236/17
impact [4] 21/23 175/11 199/22 213/16
impacted [1] 170/21
impatient [1] 166/24
implement [1] 146/4
implementation [2] 78/21 139/15
implicate [1] 115/1
implicated [1] 54/6
implication [2] 15/1 207/2
implications [8] 18/18 35/8 43/10 43/15 43/17 47/14 51/13 57/17
implicitly [1] 44/19
importance [1] 35/7
important [14] 35/10 114/18 118/7 122/5 130/6 131/17 139/12 144/5 144/5 155/16 194/15 203/2 203/6 213/25
importation [1] 55/7
imported [11] 31/15 31/18 31/23 34/5 35/14 55/1 78/11 78/13 78/20 152/11 212/18
importing [1] 202/25
imports [5] 58/22 61/23 69/4 70/21 92/24
imposed [1] 41/12
imposing [1] 42/7
imposition [1] 105/1
impossible [1] 28/2
impractical [1] 28/2
impression [4] 6/8 11/10 12/14 167/8
impressive [1] 247/13
improved [3] 20/24 21/4 218/5
improvement [3] 40/18 40/19 101/3
improvements [2] 23/16 229/15
inactivate [1] 20/2
inadequate [2] 89/2 90/5
inappropriate [2] 67/6 212/23
inception [2] 201/5 201/6
incidence [8] 84/9 88/13 89/8 177/12 177/14 180/3 215/13 221/19
incident [1] 14/4
incidentally [4] 103/8 112/23 125/3 153/17
inclined [1] 245/3
include [2] 218/14 218/15
included [2] 92/25 144/18
includes [1] 44/19
including [6] 18/17 86/7 119/25 162/23 162/24 206/21
inclusion [1] 14/4
inconceivable [1] 136/4
inconsistent [1] 95/10
incorporated [1] 13/7
incorrect [3] 22/25 92/9 168/3
increase [4] 49/6 51/2 234/7 236/6
increased [3] 48/2 48/8 56/8
increases [1] 235/22
increasing [5] 234/24 234/25 235/15 235/18 235/24
increasingly [3] 154/22 157/25 171/20
incrementally [1] 234/11
incubating [3] 16/11 19/16 214/8
incubation [3] 6/21 87/25 99/25
indeed [17] 3/24 5/3 8/7 42/12 55/24 62/17 66/7 74/10 87/4 93/23 124/9 130/8 147/1 158/11 189/6 197/8 216/22
independence [2]

F:

I

independence... [2] 91/16 91/24
independent [4] 86/2 98/24 99/1 106/14
indicate [3] 141/10 181/5 247/8
indicated [12] 80/8 121/18 123/12 123/20 124/10 124/12 124/23 126/2 126/5 127/12 128/2 128/17
indicating [1] 120/8
indication [2] 52/14 125/9
indicators [1] 16/11
individual [11] 36/14 81/7 141/24 152/7 155/20 163/11 179/19 182/17 205/4 210/24 211/20
individually [1] 143/19
individuals [3] 65/14 88/5 141/7
industry's [1] 201/7
inevitable [1] 235/10
inevitably [2] 18/22 94/14
infect [1] 161/20
infected [9] 18/9 19/14 19/16 50/2 87/4 87/5 168/22 189/7 209/20
infecting [1] 168/20
infection [5] 76/1 87/2 88/21 210/7 233/10
infections [6] 4/25 5/2 86/20 88/22 89/11 210/1
infectious [2] 54/5 85/17
influence [3] 125/5 173/15 217/12
influenced [1] 7/9
influential [2] 14/12 199/24
info [1] 93/24
inform [6] 132/8 133/15 133/19 133/22 134/7 144/19
informal [5] 7/5 59/8 59/15 71/19 176/13
information [66] 4/6 7/3 8/20 8/21 21/11 21/12 36/8 40/2 41/10 41/13 42/7 42/11 48/19 48/23 60/7 62/16 71/16 77/15 87/2 87/8 87/14 88/25 89/1 90/18 93/10 103/13 115/13 115/23 116/4 131/24 132/20 136/13 136/22 137/15 137/18 137/21 138/2 138/9 139/2 140/12 141/11 142/5 142/23 143/10 143/24 144/7 146/20 167/16 167/25 168/4 175/5 186/2 186/23 187/20 187/22 188/23 192/22 207/10 217/17 221/19 239/17 240/8 240/13 244/1 245/7 245/11
information's [1] 108/11
informed [13] 65/12 93/6 96/9 96/14 113/18 134/2 139/22 140/4 141/15 143/2 143/25 181/23 216/4
informing [1] 65/14
inhibited [1] 226/13
initial [1] 201/8
initially [1] 228/12
injecting [1] 215/2
injustice [1] 248/3
Inquiry [15] 1/13 8/23 11/21 89/25 115/22 141/6 141/9 141/22 189/6 222/23 224/9 226/10 228/22 232/3 246/6
Inquiry how [1] 228/22
Inquiry's [2] 24/1 95/10
insert [1] 123/4
insertion [5] 123/15 124/3 125/1 125/4 127/14
inserts [1] 207/18
insisting [1] 163/21
insofar [2] 211/9 226/11
inspecting [1] 210/25
inspection [3] 177/4 178/9 208/7
inspections [1] 208/5
Inspectorate [2] 208/2 210/25
instance [4] 52/10 188/8 228/24 240/13
instances [2] 158/23 158/24
instigate [1] 59/25
institute [1] 32/7
instituted [1] 108/16
Institutes [1] 12/3
institutions [1] 177/6
instructed [1] 15/12
intact [1] 77/14
intelligence [5] 242/22 243/10 243/11 243/18 243/22
intelligence-exchanging [1] 243/22
intend [1] 31/20
intended [3] 101/16 126/15 158/4
intention [2] 211/1 217/3
interacted [1] 199/17
interacting [1] 218/13
interactions [1] 28/12
interdepartmental [1] 38/8
interest [4] 163/10 163/11 188/18 243/2
interested [3] 55/2 170/2 178/23
interesting [12] 11/25 15/20 16/14 26/21 40/14 83/24 87/13 87/14 170/16 185/21 195/7 244/5
interests [4] 57/3 227/16 227/20 227/21
interfere [1] 205/7
intermediate [2] 27/24 50/8
internal [3] 10/11 112/20 183/16
internally [1] 41/12
international [14] 15/1 25/16 39/6 71/12 72/10 103/3 112/6 212/1 212/16 242/18 243/19 244/6 245/5 245/8
interpret [3] 89/23 171/2 192/22
interpretation [1] 171/8
interpreting [1] 171/1
intervene [1] 144/3
intervened [1] 186/14
intervention [2] 57/12 189/23
intimate [1] 170/17
into [32] 14/5 22/22 24/25 26/11 32/10 34/5 39/8 39/14 43/13 50/22 85/21 87/24 99/9 106/1 106/4 116/16 135/13 150/19 156/4 156/20 156/20 180/11 194/3 200/22 211/23 212/15 215/18 220/4 227/13 233/5 237/16 238/1
intramuscular [1] 204/11
introduce [1] 238/3
introduced [8] 30/18 37/9 39/11 39/24 101/18 101/19 105/10 238/9
introducing [1] 102/2
introduction [3] 20/22 43/10 165/24
invariably [2] 89/18 89/21
investigated [3] 35/1 56/9 239/8
investigation [1] 223/15
invited [5] 79/22 165/13 174/13 206/8 225/16
involve [1] 189/20
involved [21] 21/18 62/19 62/22 63/1 63/3 77/24 80/16 142/3 142/15 148/2 148/4 148/9 167/16 169/16 193/11 205/8 206/17 216/7 216/16 218/11 228/10
involvement [9] 54/17 146/18 160/3 164/24 170/17 179/11 185/4 185/6 194/14
involves [1] 221/9
involving [3] 171/18 171/19 175/14
inwardness [1] 170/15
iron [1] 158/6
iron-clad [1] 158/6
irrespective [1] 182/12
irreversible [2] 22/18 26/12
is: [2] 41/8 98/6
is: how [1] 98/6
is: ultimately [1] 41/8
ish [1] 229/19
isn't [10] 7/25 10/7 19/25 27/8 52/23 63/25 99/3 141/2 156/12 184/6
isolated [1] 241/4
issue [53] 10/11 14/18 29/20 34/6 38/1 41/22 46/21 58/22 64/23 65/23 66/8 67/15 68/3 68/17 68/19 68/21 69/11 71/25 101/12 103/25 104/21 111/1 114/11 114/11 114/15 114/18 127/8 129/25 132/1 136/6 136/7 143/7 145/5 165/1 168/14 169/16 181/12 181/16 184/17 185/9 185/16 185/16 187/16 192/8 197/15 200/4 204/15 209/19 214/16 218/11 233/4 236/2 239/19
issues [10] 68/5 104/6 107/10 148/19 169/19 190/14 190/14 194/15 222/10 224/9
it's [169] 7/24 8/18 9/3 9/8 9/8 10/9 10/10 11/25 12/1 12/8 16/14 17/8 19/5 20/5 20/7 25/18 26/16 26/21 27/8 29/17 30/25 31/2 41/1 47/6 49/13 50/7 50/12 51/21 51/23 52/21 53/22 53/24 55/23 63/25 65/9 68/20 70/1 70/10 70/10 72/6 72/22 74/25 78/1 79/5 79/6 79/11 79/23 80/25 81/7 81/17 85/10 89/14 89/21 92/11 92/13 92/13 92/14 95/5 95/22 96/5 96/7 98/15 100/16 100/16 101/9 104/5 106/8 106/10 108/12 110/7 110/9 117/3 117/5 117/25 118/11 122/8 124/6 124/7 124/11 125/10 126/13 126/23 127/8 128/2 128/10 131/2 131/22 132/12 134/18 136/4 136/14 138/5 139/8 140/2 140/23 140/24 142/15 144/12 146/24 147/18 148/5 148/16 149/12 149/23 149/25 154/21 154/25 155/8 156/23 159/13 162/17 162/20 164/6 164/10 165/3 167/23 167/24 167/25 168/16 169/6 169/7 169/8 169/11 169/16 169/22 172/5 172/23 173/7 173/8 173/15 174/9 174/10 176/12 176/21 176/22 178/7 179/11 181/14 183/2 183/10 183/20 183/22 184/1 186/9 187/2 188/8 188/11 191/17 191/18 191/25 192/6 195/1 198/7 203/5 204/23 204/23 211/11 212/19 213/25 214/9 214/16 215/4 215/11 220/21 221/16 223/13 226/3 228/9 238/18
Italy [1] 243/1
its [22] 1/11 16/19 46/16 64/5 79/23 101/22 105/7 106/4 106/13 110/1 111/24 117/10 120/8 130/15 150/1 167/24 176/2 201/5 201/8 203/12 217/3 217/22
itself [9] 75/22 96/3 100/1 133/13 133/15 138/8 138/10 146/22 209/21
IV [2] 84/8 89/7
IV drug [1] 84/8
IX [7] 25/12 203/4 203/10 203/13 203/14 213/16 221/21

J

jaundice [1] 219/8
JB [1] 176/22
jealously [1] 204/15
jeopardise [1] 13/15
job [2] 142/3 192/21
Joe [2] 30/14 90/21
joints [3] 24/3 26/11 89/20
Jones [4] 10/2 201/17 206/22 207/2
Joseph [4] 73/5 74/1 74/17 92/3
Joseph's [2] 74/7 92/12
journal [1] 155/3
journalist [1] 151/21
Joyce [1] 150/1
judgement [3] 82/24 106/12 106/14
Judith [1] 23/12
Judith Pool [1] 23/12
July [20] 1/1 3/20 8/13 11/25 17/17 63/11 79/4 83/2 85/12 102/24 104/2 104/11 104/14 106/15 107/12 111/12 147/11 148/16 149/23 176/22
July 19 [1] 11/25
July 1983 [1] 17/17
June [36] 8/18 8/18 38/7 41/19 42/14 42/17 53/18 53/24 56/25 66/19 68/10 69/23 70/1 70/10 73/3 79/11 93/20 97/8 101/1 107/8 115/24 119/24 120/18 121/3 122/16 135/20 136/17 137/2 139/7 140/15 140/22 146/24 147/7

F:

J

June... [3] 167/24 181/23 221/13
June '83 [1] 8/18
June 1981 [1] 140/22
June 1983 [1] 121/3
June 3 [1] 41/19
just [153] 1/11 3/3 3/4 3/15 3/25 7/15 7/18 8/17 9/1 10/5 10/9 11/5 11/7 12/5 21/5 21/17 23/22 24/16 26/20 28/1 28/22 29/20 30/1 35/21 39/23 41/1 41/25 43/14 44/5 45/3 46/19 49/9 49/11 49/13 53/17 53/21 53/22 57/11 57/22 57/25 58/4 58/18 59/19 60/18 60/20 63/14 66/12 67/14 68/22 70/17 71/15 71/21 73/1 73/4 74/4 75/10 81/13 81/17 83/3 84/20 88/12 89/4 90/13 92/25 93/4 93/10 93/15 95/2 95/25 101/8 102/19 103/6 104/10 106/9 106/10 107/5 108/8 110/4 110/6 110/25 111/11 112/22 115/11 115/12 115/21 118/21 120/17 123/14 127/23 128/8 130/1 130/9 130/22 131/7 134/17 137/14 142/13 149/3 149/19 149/24 153/5 156/3 162/7 163/12 164/21 165/8 167/5 167/21 167/21 169/14 170/12 171/23 174/14 175/16 175/19 176/13 177/21 177/22 182/23 183/13 184/15 185/4 185/25 186/4 186/15 186/21 189/20 190/25 191/13 191/23 193/9 193/20 203/8 205/4 208/14 214/14 215/1 220/10 225/6 225/16 225/20 230/3 231/3 231/7 237/19 239/22 241/12 241/17 243/15 243/16 244/18 246/4 246/18
Justice [1] 17/15
justify [3] 82/23 91/14 180/13
justifying [1] 99/6

K

Kaposi's [1] 4/23
keen [3] 174/18 181/19 181/20
keenly [1] 55/2
keep [5] 6/16 61/3 61/11 62/17 212/4
keeping [10] 62/11 65/6 113/5 201/4 230/24 238/14 238/24 238/25 239/9 239/12
Keith [2] 32/6 73/6
kept [2] 78/15 99/18
key [4] 4/3 5/18 132/22 196/20
kill [1] 19/11
kind [12] 7/3 40/12 40/14 56/16 60/18 107/10 118/6 126/13 144/8 173/9 241/2 243/21
Kingdom [4] 87/21 127/2 205/11 211/4
knew [35] 14/14 16/21 30/17 33/11 86/19 86/23 91/1 92/21 102/14 105/18 109/16 133/3 133/4 134/21 134/22 134/23 134/24 135/2 141/1 141/4 154/10 165/17 167/9 170/4 188/2 196/22 197/16 197/21 211/16 211/19 239/10 241/6 242/3 242/14 245/9
know [163] 2/5 3/13 10/3 12/6 15/21 22/11 24/17 28/9 29/15 33/3 33/7 33/8 33/14 33/15 33/18 37/21 37/24 38/20 39/3 40/15 42/1 45/5 45/19 48/22 49/7 53/7 55/9 55/10 57/6 59/4 59/16 59/20 59/21 60/3 63/7 65/13 65/14 65/15 67/14 67/24 69/14 69/19 73/24 75/4 75/5 75/8 80/16 81/6 86/1 86/24 88/21 89/24 92/2 92/20 93/1 93/21 107/13 109/14 110/2 110/17 111/18 118/4 119/1 120/25 125/3 125/5 125/17 126/8 126/22 128/5 129/5 133/10 134/14 134/24 140/7 140/9 140/10 141/4 141/4 141/5 142/8 144/25 145/17 145/19 148/1 148/4 150/17 150/24 151/17 151/24 153/18 154/12 154/19 155/7 155/17 156/1 156/13 156/13 158/5 159/3 161/14 161/17 161/18 167/9 170/13 176/9 176/22 178/15 184/11 188/10 188/12 192/16 194/24 195/1 196/22 199/18 199/21 205/20 206/17 206/23 207/4 207/23 208/8 209/13 209/22 211/3 211/8 212/2 212/20 215/10 216/2 216/10 216/19 218/17 219/22 220/10 220/15 223/6 223/9 223/21 227/6 229/8 230/14 231/8 236/5 236/13 237/13 238/19 241/2 241/3 242/7 242/11 243/8 243/11 243/20 244/3 244/13 244/19 244/19 245/8 245/9 245/13 245/19
knowing [3] 108/4 112/19 135/23
knowledge [20] 10/25 42/2 111/17 133/12 138/14 144/17 157/3 181/25 189/10 196/16 197/5 197/6 197/8 208/16 215/12 216/21 224/11 224/12 224/14 235/16
knowledgeable [2] 192/19 192/20
known [20] 21/13 32/25 41/11 54/3 86/15 94/25 114/12 115/9 133/2 134/25 135/4 142/19 156/15 182/12 207/5 216/23 221/4 221/6 234/17 245/5
Krever [1] 17/15
Kryobulin [1] 114/24

L

labelling [10] 32/8 32/24 33/1 33/25 34/4 41/9 47/1 107/9 107/19 112/16
Laboratories [3] 43/18 139/8 205/15
laboratory [3] 2/17 55/17 216/19
Labs [1] 71/8
lack [3] 21/11 21/11 246/8
lacuna [1] 3/16
Lancet [11] 8/21 8/22 9/4 206/24 206/24 244/10 244/13 244/17 244/17 244/22 244/25
Lane [6] 27/19 28/3 48/16 48/17 90/25 213/22
LANGSTAFF [1] 225/19
large [30] 17/21 49/25 121/7 121/16 122/4 123/11 124/9 124/14 125/13 125/23 125/24 126/5 127/5 127/18 129/5 129/17 131/16 132/24 133/4 163/5 188/4 197/21 198/16 198/21 213/21 227/12 234/5 234/18 236/5 236/6
large-pool [15] 121/7 121/16 124/14 125/13 125/23 125/24 126/5 127/5 129/5 132/24 133/4 198/16 198/21 236/5 236/6
largely [5] 24/2 82/14 141/8 231/9 238/25
larger [4] 27/23 135/4 197/25 234/21
last [29] 6/19 7/24 9/10 9/16 9/19 11/21 12/11 21/7 39/10 49/14 51/16 74/2 75/13 93/4 96/6 100/19 101/10 111/21 124/2 147/19 168/8 196/9 221/2 221/9 231/1 240/5 240/6 247/8 248/6
lastly [1] 190/25
late [10] 74/2 87/17 193/17 213/11 216/11 217/10 218/10 234/9 244/14 248/7
late 1980s/early 1990s [1] 216/11
latency [1] 4/19
later [11] 8/4 11/1 26/4 27/7 46/10 68/22 87/12 108/8 185/5 187/8 216/8
latest [2] 174/14 186/3
latter [2] 73/21 130/10
laughing [1] 248/1
LAV [1] 242/3
lawsuit [1] 175/18
lawyers [1] 175/14
lay [3] 38/14 162/1 194/3
lead [7] 59/9 115/17 160/22 176/11 199/23 199/25 200/2
leading [3] 2/15 119/12 205/11
leads [1] 195/24
leaflet [33] 46/8 54/16 57/20 58/5 132/1 139/24 147/24 159/24 160/2 160/9 160/21 160/23 160/24 161/9 161/15 161/25 163/13 163/14 163/17 163/17 164/14 165/16 166/2 166/12 166/18 166/22 169/4 169/7 169/9 207/13 207/20 212/22 233/4
leafleting [1] 214/16
leaflets [6] 54/18 68/20 68/24 162/24 207/10 207/17
learn [1] 31/20
learning [2] 171/23 171/24
learnt [3] 30/18 209/25 242/8
least [15] 8/22 31/18 40/8 65/3 80/2 86/10 156/14 162/10 169/22 173/10 175/22 177/8 180/6 181/8 201/18
leave [11] 53/21 94/15 124/21 124/24 134/18 159/25 162/7 188/21 188/24 217/13 231/1
led [2] 11/17 67/7
left [13] 82/24 95/25 96/6 101/9 133/23 147/15 152/13 158/13 223/13 224/18 224/21 225/3 231/9
left-hand [5] 95/25 96/6 101/9 147/15 152/13
legal [8] 36/22 59/1 59/22 174/18 175/6 183/8 187/2 195/20
legally [1] 41/24
length [3] 39/4 40/8 188/22
Lesesne [1] 10/13
less [11] 32/24 47/17 77/17 198/13 199/13 211/19 213/21 214/9 233/8 234/1 234/2
let [18] 16/17 19/1 28/8 57/6 119/1 128/4 128/9 146/2 149/19 161/23 172/12 177/19 199/13 225/16 226/15 229/10 230/1 231/3
let's [7] 42/14 124/24 127/25 137/10 137/11 137/14 148/12
let-out [2] 128/4 128/9
letter [32] 1/8 26/4 53/19 55/23 58/17 65/11 73/6 93/20 94/16 96/3 97/8 101/1 113/7 117/3 118/24 136/17 138/15 138/19 151/1 151/3 176/1 176/4 176/9 176/10 185/21 185/23 186/1 186/5 186/18 187/5 187/8 187/25
letters [11] 135/19 138/17 176/3 184/17 184/18 184/20 184/21 185/9 185/12 185/20 190/16
level [7] 87/2 88/21 91/13 93/3 99/5 145/3 189/14
levers [3] 194/4 194/6 194/6
liable [1] 209/24
liaise [1] 180/25
liaison [2] 58/20 179/4
Liberton [2] 69/2 69/12
liberty [2] 186/8 186/23
Licence [1] 31/22
licences [2] 33/24 82/16
licensed [7] 70/25 73/11 79/10 79/16 85/11 220/9 220/21
licensing [12] 35/8 36/19 37/9 82/23 102/1 107/1 107/2 110/5 112/13 208/9 236/1 236/9
life [13] 13/4 20/24 20/25 21/3 21/4 23/10 24/6 26/24 89/13 89/15 89/21 90/6 117/20
life-preserving [1] 26/24
life-saving [3] 89/13 89/15 89/21
life-sustaining [1] 13/4
life-threatening [2] 24/6 90/6
lifestyle [1] 117/21
light [7] 43/8 68/17 107/15 130/24 179/20 181/12 185/24
like [49] 16/12 24/5 25/7 30/19 33/15 34/3

L

like... [43] 35/13 39/16 52/17 52/21 53/4 68/13 81/4 81/8 94/16 98/9 100/19 101/4 105/11 112/6 118/1 119/17 122/20 130/4 137/17 151/21 151/23 153/6 155/21 162/25 173/7 173/8 173/20 175/12 182/3 185/23 194/6 201/6 201/24 205/24 210/17 214/9 225/12 226/16 237/1 241/15 241/16 241/18 246/1
likelihood [3] 101/20 211/23 212/14
likely [28] 13/15 40/9 40/17 40/21 44/15 59/9 77/17 77/17 84/7 85/18 93/11 97/6 99/21 99/22 118/16 154/22 154/25 157/25 158/20 159/8 159/18 164/6 175/11 175/13 195/22 210/15 215/4 215/19
limb [1] 136/13
limited [4] 22/2 71/13 81/20 92/2
limiting [1] 42/6
line [26] 8/5 8/5 43/16 98/17 104/24 105/7 111/10 146/12 153/16 154/23 154/24 155/9 157/8 157/12 158/12 158/17 158/21 158/22 158/22 159/3 159/5 159/9 162/9 164/4 180/24 190/17
lines [6] 9/19 33/23 75/13 97/16 139/11 210/2
link [3] 152/19 196/13 215/7
linked [2] 76/2 171/6
links [1] 9/20
lip [1] 130/9
list [5] 38/16 39/19 39/20 67/9 122/17
listed [1] 70/14
listened [1] 209/8
listening [1] 172/22
literally [1] 224/25
little [5] 40/8 46/13 49/13 199/6 221/19
liver [1] 217/8
lives [1] 25/25
LK [1] 75/2
lo [1] 235/23
local [2] 227/22 229/22
locally [1] 213/5
locate [1] 195/2
located [2] 5/18 5/20
logic [3] 49/21 124/1 170/5
logical [1] 214/5
logically [3] 213/3 213/7 215/21
logistic [2] 27/25 119/18
logistically [3] 213/8 213/9 213/9
long [13] 4/19 38/16 87/25 98/3 99/25 115/22 168/16 169/12 169/13 237/23 240/7 241/12 246/7
long-sought [1] 246/7
longer [5] 118/5 172/11 195/19 196/1 238/3
look [80] 3/2 3/18 6/19 17/9 21/6 21/7 26/22 32/1 35/3 38/7 41/7 44/5 46/9 49/10 53/6 53/8 53/17 53/22 57/15 58/17 59/11 61/19 65/24 69/25 70/9 70/17 73/5 73/21 74/13 74/23 81/22 82/7 83/6 85/21 92/3 93/4 95/2 95/25 101/9 101/11 116/11 116/24 119/23 120/18 122/9 122/13 122/14 123/3 124/14 125/2 126/19 129/24 131/2 134/3 135/3 135/13 139/6 147/15 152/3 156/3 157/20 159/23 168/8 169/3 174/8 176/19 176/25 177/22 181/3 184/17 195/25 201/13 206/16 214/15 217/2 220/20 224/15 235/21 238/19 243/8
look-back [1] 217/2
looked [18] 29/6 29/21 41/17 69/11 77/18 103/18 104/11 113/3 123/15 137/9 138/6 146/14 219/7 221/10 221/15 223/24 227/24 242/17
looking [28] 1/6 2/14 8/13 8/17 18/25 30/13 46/20 47/6 52/9 55/10 58/4 58/19 62/22 63/1 65/19 74/12 88/6 92/17 106/17 143/16 154/21 154/25 160/5 206/20 209/19 221/10 240/9 245/20
looks [8] 58/22 100/19 151/23 153/6 156/23 159/17 183/24 205/13
loose [5] 53/22 141/24 175/15 175/23 183/4
Lord [22] 68/21 145/18 146/21 146/25 147/7 147/10 147/17 147/25 148/3 148/5 148/13 148/18 150/2 151/3 153/23 160/6 160/7 169/1 169/5 169/15 169/23 248/10
Lord Glenarthur [17] 68/21 146/21 146/25 147/7 147/10 147/17 147/25 148/3 148/5 148/13 148/18 160/6 169/1 169/5 169/15 169/23 248/10
Lord Glenarthur's [2] 150/2 151/3
Lord Penrose [1] 153/23
Lords [2] 147/11 163/8
lose [1] 171/7
losing [1] 228/20
loss [5] 58/12 67/3 180/15 180/18 237/24
lost [1] 210/19
lot [16] 13/6 13/18 22/4 52/5 77/15 87/10 91/1 164/19 176/12 186/1 195/25 196/9 230/3 238/3 243/25 247/4
lots [4] 5/23 7/21 13/23 13/25
lottery [1] 232/10
love [1] 199/15
low [4] 78/15 88/1 88/2 99/18
Luc [1] 240/14
lunch [5] 102/21 102/22 110/25 116/16 116/18
Luncheon [1] 116/22
luxurious [1] 218/25
lymphadenopathy [1] 13/9
lymphocyte [1] 77/11

M

machine [3] 225/4 225/6 225/8
machinery [2] 224/20 224/24
MACK0000307 [1] 131/2
made [39] 7/8 14/19 14/25 15/2 15/4 17/2 18/4 18/16 25/8 26/8 31/8 34/10 34/14 37/22 38/21 38/22 39/1 39/7 39/17 41/22 61/25 76/23 76/24 91/15 91/23 111/20 124/5 136/3 142/9 155/20 158/21 165/12 168/4 189/9 199/21 204/5 226/18 228/5 236/10
main [7] 23/16 23/18 29/3 85/10 108/10 120/11 121/5
mainly [2] 5/18 6/22
mainstream [2] 159/7 227/16
maintain [1] 45/11
maintained [4] 77/9 77/16 98/12 102/1
major [7] 18/14 22/19 48/9 180/7 198/19 237/24 239/19
majority [5] 23/20 89/19 121/15 127/4 129/13
make [28] 1/24 25/11 33/19 34/4 39/4 40/17 49/19 50/8 58/1 74/4 143/1 143/4 143/25 145/1 146/2 153/21 160/20 161/18 166/10 191/19 202/10 203/13 203/14 211/20 212/4 212/23 225/12 236/11
maker [1] 96/16
makers [1] 78/3
makes [3] 54/14 78/7 122/15
making [11] 15/13 17/11 25/10 99/11 102/10 109/15 129/21 134/17 141/17 144/24 177/7
male [1] 166/6
malign [1] 205/1
man [3] 86/24 113/17 140/25
managed [2] 78/6 182/21
management [5] 190/9 190/18 190/20 190/23 217/23
mandated [1] 112/3
mandatory [1] 96/24
manifest [3] 87/3 88/23 100/1
manifestation [2] 182/18 182/24
manifestations [1] 22/9
manifesting [1] 88/9
manufacture [1] 24/25
manufactured [6] 33/12 35/15 71/8 101/17 108/15 112/8
manufacturer [2] 32/15 34/17
manufacturer's [2] 36/14 111/22
manufacturers [22] 17/7 19/15 31/7 31/12 34/21 36/1 36/4 36/11 36/25 37/7 37/14 37/20 38/15 39/9 39/24 103/9 108/13 108/17 108/25 111/20 112/11 174/19
manufacturers' [4] 41/12 108/12 109/12 112/20
manufacturing [1] 235/17
many [34] 13/24 18/17 21/2 23/6 72/10 76/15 80/2 87/4 88/22 95/9 95/16 119/14 138/21 142/22 155/17 161/3 164/22 189/19 203/6 205/10 205/16 212/5 230/15 231/16 232/16 233/12 233/12 241/16 243/14 246/14 247/4 247/10 247/18 247/19
March [50] 10/11 14/22 14/25 15/5 15/6 15/17 29/24 30/5 30/12 31/9 32/21 34/14 35/15 36/5 37/16 37/25 38/2 38/11 38/22 38/23 39/2 39/14 39/19 40/1 40/5 40/9 40/20 41/23 42/7 55/5 58/23 71/9 72/8 72/15 72/20 73/6 101/12 101/18 101/24 102/6 102/8 103/11 104/19 108/18 108/20 109/11 111/13 112/19 117/4 135/20
March 1983 [4] 30/12 101/12 108/18 117/4
March 23 [2] 41/23 101/18
March 24th [1] 31/9
March' [1] 46/23
marginal [1] 102/12
marginally [1] 4/9
MARION [1] 1/3
marked [1] 152/22
markedly [1] 91/17
marker [2] 209/15 210/11
market [1] 37/17
marrow [2] 228/11 228/14
marvellous [1] 140/25
Mary [1] 2/3
Mary Sibellas [1] 2/3
Masham [5] 148/7 148/8 148/14 148/18 151/2
mass [2] 229/7 229/16
massive [3] 19/3 26/8 26/18
mastery [1] 247/11
material [62] 13/23 28/6 33/3 34/2 34/5 34/21 35/15 37/17 38/21 39/1 39/15 39/17 39/21 40/3 40/21 40/21 40/22 40/24 41/22 46/19 56/6 64/4 64/13 68/6 70/18 74/6 80/20 86/7 101/17 101/24 102/8 102/20 103/23 104/23 104/25 105/3 105/21 105/23 106/1 106/20 109/11 110/15 111/6 111/8 111/20 112/2 112/3 112/14 112/25 118/7 121/11 127/1 129/8 129/18 138/6 149/17 166/11 196/22 201/14 201/14 203/10 235/6
materially [1] 115/3
materials [4] 62/23 74/13 74/15 104/4
matter [43] 16/15 32/16 35/1 36/8 36/15 45/13 65/2 65/20 72/13 82/14 82/24 92/6 92/13 93/1 96/17 107/16 109/17 113/5 115/11 115/13 127/1 137/8 138/18 142/3 142/15 142/19 142/24 145/6 146/10 156/8 172/6 173/8 183/20 191/7 191/22 192/9 195/13 204/14 236/18 237/9 237/10 237/12 248/6
matters [17] 9/6 34/9 34/23 54/1 63/12 63/14 84/25 133/16

M

matters... [9] 134/8 144/8 159/25 163/10 187/4 226/9 233/19 242/25 247/20
maximum [2] 233/25 234/12
may [105] 1/7 5/11 6/23 9/13 9/18 10/15 10/18 15/2 15/5 17/2 18/13 19/6 26/1 29/18 31/2 31/3 31/7 32/2 33/21 34/2 34/3 35/24 36/2 36/5 37/16 42/10 42/12 45/7 48/4 50/6 54/21 60/7 60/9 64/21 68/5 68/11 68/12 75/21 76/4 79/2 80/17 85/19 87/11 87/18 88/18 88/18 98/19 99/2 100/25 101/23 103/15 105/8 110/10 113/4 115/21 116/10 117/11 118/25 119/21 120/19 120/20 124/15 128/15 134/25 135/3 138/1 138/24 140/8 141/18 142/17 142/18 142/21 146/14 146/15 149/1 154/22 155/1 156/4 156/18 158/3 158/3 158/12 158/19 161/20 161/20 166/12 171/7 172/23 172/24 180/6 185/24 186/5 186/5 186/5 191/10 204/4 206/2 207/25 225/21 227/10 231/24 234/17 236/16 240/15 242/12
May 1983 [2] 31/2 146/15
maybe [13] 22/5 24/19 52/22 83/16 105/13 105/13 129/5 138/15 149/8 171/1 171/10 234/1 234/12
mayhem [1] 175/17
MB [2] 57/13 57/13
MB2 [2] 176/22 176/23
MBTS [1] 195/3
me [76] 2/1 2/3 9/1 9/3 11/21 12/13 16/2 16/17 25/17 28/8 33/16 33/17 34/8 35/9 38/20 38/25 39/10 39/20 57/6 60/6 77/20 80/25 83/18 92/8 93/17 107/24 111/21 114/19 116/7 122/20 124/5 125/20 134/24 136/4 137/1 140/25 143/3 144/10 144/25 145/13 146/2 149/19 151/16 151/25 151/25 153/1 153/23 155/4 159/23 161/8 163/12 171/2 172/12 177/19 186/6 195/24 195/25 199/13 221/2 221/9 225/16 225/21 226/15 229/10 230/1 231/3 235/21 237/20 242/6 243/16 243/21 244/22 245/25 246/2 246/3 248/5
mean [49] 3/9 8/20 16/2 25/4 33/4 41/5 49/25 50/13 50/21 52/9 59/16 65/7 72/6 81/12 88/16 90/7 92/19 97/13 102/10 103/21 106/11 106/13 124/5 129/6 134/4 144/23 150/19 154/8 170/19 171/8 172/11 173/20 175/8 176/7 185/10 187/23 193/13 193/13 203/1 204/24 206/17 208/15 209/8 211/7 213/7 222/18 229/7 229/9 232/7
means [6] 28/8 76/9 78/24 112/19 196/1 239/22
meant [5] 62/12 127/17 175/11 218/14 219/3
measure [1] 235/13
measures [8] 27/9 109/2 123/5 131/13 132/6 180/14 214/18 230/7
mechanism [5] 32/21 37/8 37/9 136/1 136/2
Med [8] 1/24 3/10 3/10 107/24 143/4 146/24 240/12 243/21
Med IMCD [5] 1/24 3/10 3/10 143/4 243/21
Med SEB [2] 107/24 146/24
media [2] 57/18 76/6
median [1] 23/11
medical [48] 28/15 53/19 58/20 121/18 123/12 123/21 123/25 124/10 124/17 125/9 126/2 126/6 127/12 128/2 128/10 128/18 129/8 133/24 137/17 142/24 145/7 145/10 145/11 147/19 184/16 184/17 184/22 185/6 185/9 187/19 190/1 190/10 191/4 191/14 191/16 191/18 191/24 192/13 193/14 199/2 199/17 216/7 216/13 216/16 216/18 220/4 224/13 229/18
medically [1] 121/8
medicament [1] 207/19
medicine [3] 10/12 63/10 207/23
Medicines [43] 1/21 1/25 2/5 2/6 3/6 26/22 27/7 30/15 31/21 32/6 39/20 40/7 41/21 43/7 55/11 57/14 59/24 73/7 73/10 75/6 79/17 80/18 81/16 85/7 106/15 107/12 107/20 110/5 112/13 118/4 118/5 118/8 169/21 175/19 176/24 177/3 178/9 207/9 208/2 208/3 210/25 219/24 220/20
medium [1] 55/14
meet [3] 135/17 180/8 232/15
meeting [92] 1/7 11/2 12/2 17/22 27/7 28/17 28/20 28/23 31/2 35/16 38/8 41/20 42/14 42/24 42/25 44/2 46/20 48/5 53/9 53/18 56/25 57/11 57/16 62/10 64/14 65/3 66/1 66/5 66/11 66/21 68/10 68/11 68/11 68/15 69/23 73/3 73/4 73/8 74/9 74/10 74/11 74/14 77/22 77/24 78/3 83/17 83/22 86/1 87/18 90/14 90/24 97/24 99/1 104/9 104/11 106/18 107/8 113/4 113/24 113/25 114/7 114/23 115/18 119/3 135/3 137/5 137/7 145/8 164/25 165/3 165/10 165/14 165/19 166/10 166/13 174/11 174/13 174/23 175/15 176/14 177/3 178/18 180/12 181/23 183/11 183/16 183/18 183/19 183/25 184/7 199/9 222/8
meetings [6] 4/3 48/20 80/23 199/8 206/16 209/7
meets [1] 44/25
member [7] 90/25 131/5 131/12 140/8 189/14 193/2 205/15
members [10] 13/5 13/18 62/15 64/5 79/23 86/14 90/15 135/8 163/7 176/2
memo [4] 8/13 11/6 167/21 179/9
memory [4] 150/21 204/4 246/14 247/17
men [3] 161/3 188/4 241/5
mention [2] 10/16 118/14
mentioned [11] 18/4 24/16 27/9 113/23 133/21 135/12 155/14 194/9 203/22 228/10 241/11
mentioning [1] 175/3
mentions [1] 10/18
merely [2] 14/7 176/9
message [2] 100/23 162/12
messages [4] 162/3 162/4 163/4 163/4
met [4] 135/11 136/25 153/19 232/16
method [2] 19/8 23/13
meticulous [1] 247/9
MI [1] 179/3
Michael [1] 17/18
middle [2] 9/17 119/20
might [122] 3/4 3/5 7/9 8/8 9/9 11/17 14/4 14/21 15/19 16/3 16/5 16/11 18/25 19/11 24/8 26/17 32/21 33/5 35/19 36/24 45/22 49/19 50/9 51/9 51/12 53/10 63/6 69/3 69/16 71/23 72/2 73/16 75/25 79/6 81/11 81/19 82/11 88/15 88/24 89/24 100/1 100/5 102/11 107/5 107/15 109/24 115/7 126/19 128/16 128/18 128/24 130/24 136/24 141/15 144/21 149/16 150/19 151/18 151/19 153/6 157/13 159/13 159/19 161/12 162/12 164/3 165/20 166/4 168/19 168/21 170/20 188/19 189/1 189/15 189/18 189/22 189/23 191/12 191/15 197/15 199/20 201/9 204/6 204/7 206/12 207/22 209/3 209/6 209/23 210/12 212/5 215/5 217/4 217/5 218/23 218/24 218/24 223/4 227/8 227/19 228/6 229/21 230/8 230/10 231/9 231/14 232/9 232/24 233/8 233/13 234/14 234/25 235/5 235/14 238/5 238/9 239/23 239/25 240/18 243/2 245/3 248/2
mightn't [3] 14/21 18/25 19/7
mild [12] 5/14 5/15 23/24 64/6 82/17 95/4 113/2 114/17 126/8 126/10 198/14 198/16
mildly [1] 95/14
Miles [1] 71/7
military [1] 184/12
million [3] 6/11 25/16 112/6
millions [3] 39/6 72/10 87/22
mind [15] 28/13 28/14 54/22 86/13 93/18 97/3 111/11 113/15 128/24 130/17 139/19 161/8 223/2 233/25 243/17
minimise [12] 26/10 43/7 64/5 78/8 93/8 96/12 96/20 97/2 97/10 97/11 97/11 101/20
minimised [1] 63/24
minimising [10] 19/24 20/1 132/11 132/16 132/21 133/20 136/15 136/23 142/11 144/20
minister [7] 146/16 170/2 191/7 191/17 191/20 192/7 225/24
ministerial [1] 163/1
ministers [28] 1/14 1/16 1/19 1/22 2/9 2/14 2/25 3/4 119/8 131/5 145/13 145/23 145/24 162/5 169/16 169/22 170/8 170/14 170/18 171/22 191/11 191/23 192/1 192/24 193/1 208/17 226/17 226/23
minority [1] 227/20
minute [33] 9/2 35/5 37/3 37/13 38/13 38/19 38/19 50/14 59/11 59/16 60/9 60/10 66/19 69/25 70/1 70/15 102/23 104/2 108/9 111/1 113/14 123/14 125/7 126/16 149/23 150/20 174/3 174/10 174/24 179/15 181/4 183/16 184/8
minuted [2] 32/5 58/14
minutes [28] 32/18 35/23 38/25 41/7 49/10 53/9 53/18 63/19 64/2 65/3 65/7 68/15 79/2 84/23 84/25 85/2 85/5 92/19 113/5 172/4 172/18 173/3 173/6 173/25 174/2 184/6 195/23 221/11
mischance [2] 109/19 109/23
misgivings [1] 31/11
misinformation [1] 100/19
misinformed [1] 92/16
mislead [1] 162/11
misleading [2] 163/3 168/3
misleadingly [1] 245/11
misread [1] 213/10
misrepresentation [1] 130/11
Miss [6] 41/20 58/25 59/21 63/9 102/24 150/4
Miss Edwards [1] 150/4
Miss Spencer [4] 58/25 59/21 63/9 102/24
mistake [1] 16/14
mistaken [1] 98/20
misunderstanding [1] 202/13
misuse [1] 215/2
mitigating [1] 216/5
Mm [13] 66/22 70/8 85/1 95/19 123/9 124/25 174/25 185/2 191/9 221/25 222/6 231/5 240/20
Mm-hm [13] 66/22 70/8 85/1 95/19 123/9 124/25 174/25 185/2 191/9 221/25 222/6 231/5 240/20
moderate [4] 5/15

M

moderate... [3] 23/24 198/14 198/17
modify [1] 82/16
moment [13] 23/22 29/9 38/7 41/25 57/22 58/17 79/8 100/25 116/17 134/3 134/19 179/18 188/21
momentarily [1] 8/14
Monday [5] 120/22 120/22 190/5 219/7 221/10
money [2] 195/5 195/10
monitored [1] 55/8
Montagnier [1] 240/14
Montagnier's [1] 242/4
month [2] 154/3 156/19
months [8] 4/24 6/20 24/12 24/12 24/17 24/18 92/6 93/1
monumental [1] 155/19
more [59] 1/12 2/20 3/17 5/11 7/5 12/16 15/12 22/14 34/2 35/5 38/14 39/12 42/11 47/17 51/20 56/14 58/7 59/9 60/15 74/2 78/12 94/13 103/13 105/12 105/21 106/18 112/10 124/2 126/14 128/4 128/7 129/5 129/22 139/4 147/25 154/14 154/15 156/22 164/7 171/9 172/5 175/21 175/22 181/16 190/17 190/23 190/25 195/8 199/11 204/21 209/23 218/2 218/2 225/7 225/11 229/22 238/6 245/25 246/2
more than [1] 199/11
morning [5] 1/5 8/4 27/8 68/15 120/22
mortality [5] 4/22 5/4 11/15 11/15 187/10
Mortimer [1] 79/24
most [19] 44/2 48/25 50/22 70/18 75/14 77/23 93/11 94/21 97/6 99/21 99/22 155/16 158/23 180/5 192/17 201/16 203/2 215/19 218/11
mostly [2] 185/15 197/3
motives [1] 204/25
move [7] 53/6 90/13 118/13 149/19 152/2 199/25 201/20
moved [1] 228/23
moving [1] 28/25
Mr [43] 3/20 17/15 42/19 42/22 42/23 57/16 60/11 60/19 66/20 69/7 69/20 70/2 70/3 70/11 102/24 103/19 147/1 150/1 150/10 153/12 153/17 153/18 154/12 167/13 167/21 167/24 167/25 168/15 169/11 169/15 174/11 177/1 177/24 178/8 178/21 179/6 179/9 179/12 179/12 179/14 181/4 182/4 227/3
Mr Brown [1] 179/12
Mr Clarke [3] 169/11 169/15 227/3
Mr Egerton [4] 60/11 70/2 70/3 103/19
Mr Egerton's [1] 60/19
Mr Green [4] 42/19 153/12 153/18 154/12
Mr Green's [1] 153/17
Mr Joyce [1] 150/1
Mr Justice [1] 17/15
Mr Parker [3] 57/16 150/10 177/1
Mr Patten [1] 147/1
Mr Watt [1] 3/20
Mr Winstanley [13] 66/20 69/7 69/20 167/13 167/21 167/24 174/11 177/24 178/8 178/21 179/6 179/9 179/12
Mr Winstanley's [3] 168/15 181/4 182/4
Mr Wrigglesworth [2] 70/11 102/24
MRC [3] 157/20 241/7 241/8
Mrs [1] 171/11
Mrs Thatcher [1] 171/11
MS [10] 1/4 20/10 39/10 42/21 57/12 107/7 164/10 172/22 183/21 225/17
Ms Fraenkel [1] 20/10
Ms Green [1] 42/21
Ms Grey [2] 183/21 225/17
Ms Richards [3] 39/10 164/10 172/22
Ms Spencer [1] 107/7
Ms Spencer's [1] 57/12
much [41] 3/17 15/8 22/14 36/15 40/16 42/11 50/7 51/4 56/13 74/5 88/7 93/18 106/17 133/5 135/4 156/4 159/14 169/13 181/1 181/16 187/11 187/15 188/18 192/17 192/21 194/24 195/5 195/7 197/16 198/13 199/10 209/17 212/18 220/9 233/17 234/22 238/6 240/25 246/8 246/9 248/4
multiple [3] 24/13 217/11 225/15
must [18] 9/21 9/22 13/1 35/18 45/3 84/16 151/20 171/4 173/12 182/11 191/21 199/11 201/22 202/1 202/6 202/8 211/9 232/12
my [94] 6/8 7/19 8/12 12/7 20/17 20/21 22/2 23/4 25/15 30/22 33/14 38/24 41/8 55/3 56/2 56/5 59/3 59/16 60/8 60/8 60/10 74/12 79/18 82/13 93/18 96/25 98/11 100/25 106/5 106/25 108/2 108/2 110/3 110/14 110/22 113/17 124/13 126/15 126/23 126/24 127/20 129/18 133/9 134/6 134/18 145/22 151/23 154/9 154/18 154/23 154/23 158/21 159/24 162/1 162/6 165/9 170/11 171/8 172/5 172/8 173/14 182/10 186/12 188/2 192/25 193/3 193/3 193/24 194/20 196/20 206/22 208/1 208/24 212/17 215/15 215/18 216/16 218/18 219/2 226/12 226/13 226/18 228/10 229/10 234/4 234/16 246/5 246/5 246/10 246/11 246/14 246/16 246/20 247/5
myself [7] 12/19 23/3 53/5 134/17 165/13 178/3 190/11
mystery [1] 84/16

N

name [3] 119/25 122/18 241/24
named [1] 193/13
narrow [1] 158/19
nasty [2] 109/21 109/23
National [11] 12/3 14/10 43/2 183/7 200/9 210/22 217/19 217/22 217/25 233/18 239/4
naturally [1] 128/10
nature [1] 214/24
NBTS [2] 43/15 56/21
near [1] 145/13
nearly [1] 13/22
necessarily [23] 3/9 15/19 25/19 40/19 77/12 81/9 116/7 126/7 126/15 128/25 130/8 143/3 163/2 164/11 164/23 187/24 192/20 197/4 208/16 212/11 217/4 223/6 244/17
necessary [10] 35/19 52/7 104/5 123/5 131/13 132/6 217/8 217/16 217/17 229/4
necessity [1] 55/16
need [46] 13/3 13/25 21/1 27/11 32/7 34/4 49/6 56/15 57/5 58/19 62/7 65/15 67/6 73/21 85/14 95/17 101/11 103/5 119/4 130/17 137/1 148/20 172/9 179/21 180/6 180/17 180/25 186/13 189/15 195/18 195/23 201/4 201/11 214/1 218/22 218/23 220/24 223/6 227/9 227/21 229/7 233/11 233/17 234/12 238/19 247/5
needed [31] 1/19 21/12 25/12 27/4 28/21 33/3 40/4 41/3 43/21 50/16 59/20 65/14 79/15 102/7 106/2 107/23 129/18 133/9 160/12 166/20 180/15 218/18 218/21 218/21 220/19 220/19 226/14 226/22 228/15 239/19 247/21
needing [2] 181/23 185/17
needs [3] 219/4 223/2 223/14
neither [4] 27/10 106/18 110/15 189/9
neutralised [1] 204/8
never [10] 1/14 141/1 164/11 170/10 215/16 215/16 223/10 226/13 244/2 244/16
nevertheless [6] 29/5 31/16 49/5 50/7 67/18 180/4
new [27] 15/11 32/7 32/9 33/22 43/8 55/5 55/17 56/15 75/1 85/19 101/17 107/19 110/19 115/18 154/8 155/5 155/6 176/5 176/7 186/9 186/11 186/24 187/8 188/6 188/9 188/10 188/11
newly [1] 97/9
newspaper [2] 151/21 155/4
newsworthy [1] 114/9
next [31] 17/9 17/10 42/24 46/4 46/18 47/5 58/13 59/23 61/16 68/19 69/1 75/17 76/21 87/7 91/9 99/8 109/9 116/25 118/19 120/22 122/25 131/22 160/9 178/24 180/12 183/25 191/12 205/9 215/21 225/5 234/16
NHBT0000068 [1] 221/11
NHBT0001067 [1] 53/23
NHS [17] 6/1 95/17 114/22 186/7 190/4 190/7 190/9 190/11 190/18 190/19 190/23 193/11 193/17 194/6 194/20 195/11 217/20
NIBSC [13] 15/22 16/15 30/15 36/13 38/4 41/9 42/10 72/5 72/11 107/17 107/18 236/3 236/4
Nichol [1] 190/20
night [9] 11/21 12/11 13/10 39/10 58/12 67/2 74/2 111/22 221/2
nitty [1] 169/17
nitty-gritty [1] 169/17
no [143] 3/20 8/6 16/7 30/13 36/17 38/6 39/1 40/18 42/18 42/20 44/12 44/19 45/10 45/17 51/6 52/14 52/19 55/3 55/25 56/19 59/6 59/22 60/2 60/20 63/18 63/20 63/23 63/24 65/2 65/25 66/3 66/5 68/1 72/1 72/7 72/7 73/19 74/2 75/9 76/8 77/21 87/2 87/7 92/16 96/2 96/4 96/7 96/23 96/23 97/16 97/25 98/13 99/1 100/8 100/15 104/22 107/10 111/7 112/18 113/13 115/20 116/5 118/3 118/5 118/18 121/15 123/25 127/4 127/18 130/10 134/9 134/10 137/11 138/14 142/17 145/18 145/18 146/12 147/4 147/21 148/4 148/23 149/4 150/11 150/18 150/25 151/5 151/12 153/2 153/16 154/6 154/20 155/20 157/7 158/1 158/5 158/8 159/9 159/10 159/15 159/16 159/16 160/1 161/6 162/8 162/19 163/20 164/4 164/12 166/3 176/8 180/5 180/17 180/24 181/10 181/13 181/19 181/25 183/7 183/21 184/6 184/14 191/18 193/23 200/19 202/5 208/24 209/10 210/10 210/21 212/6 214/3 215/22 216/14 224/15 225/17 226/19 230/15 243/24 244/8 245/14 245/17 245/25
no-one [1] 200/19
nobody [8] 88/3 157/21 158/1 162/18 163/21 203/23 204/8 228/20
nod [1] 195/24
non [41] 5/21 5/24 7/22 37/19 51/23 53/2 53/5 63/25 100/15 100/17 121/19 188/17 200/16 204/13 204/13 216/22 216/22 217/1 217/1 219/11 219/11 222/4 222/4 235/3 235/3 235/5 235/5 235/9 235/9 235/11 235/11 236/7 236/7 237/14 237/14 237/18 237/18 237/22 237/22 238/11 238/11
non sequitur [1] 100/17
non-A [13] 204/13 216/22 219/11 222/4 235/3 235/5 235/9 235/11 236/7 237/14

F:

N

non-A... [3] 237/18 237/22 238/11
non-AIDS [1] 5/21
non-B [14] 204/13 216/22 217/1 219/11 222/4 235/3 235/5 235/9 235/11 236/7 237/14 237/18 237/22 238/11
non-elective [1] 63/25
non-existent' [2] 5/24 7/22
non-haemophilia [1] 200/16
non-haemophiliacs [1] 188/17
non-treatment [1] 121/19
none [2] 27/8 83/20
nonetheless [1] 169/8
nor [4] 27/10 87/4 181/17 189/9
normal [6] 80/22 117/20 144/2 144/2 144/22 222/24
normally [8] 80/23 80/23 118/8 144/11 144/13 186/11 188/12 201/2
Norton [1] 244/2
not [326]
note [12] 20/9 20/11 47/5 67/7 67/24 68/8 68/22 75/10 92/12 176/13 177/19 178/5
NOTE: [1] 82/14
NOTE: This [1] 82/14
noted [1] 8/18
notes [1] 246/13
nothing [12] 42/5 49/4 86/5 100/6 100/14 106/18 106/24 154/8 155/7 216/14 224/16 236/20
notice [2] 83/9 242/16
notification [1] 45/15
notified [2] 45/19 114/5
notwithstanding [2] 101/22 102/12
novel [1] 220/19
November [4] 152/5 153/7 153/15 154/10
November 1983 [1] 153/15
now [98] 1/25 2/14 3/19 5/7 16/17 20/4 20/8 22/11 25/17 28/7 28/14 31/1 38/7 44/1 45/20 46/1 47/14 51/3 55/23 59/4 59/11 63/5 74/1 80/16 84/18 86/1 88/2 89/14 91/21 93/10 95/25 97/18 102/19 105/8 106/17 110/2 110/7 111/3 115/13 116/17 117/24 118/13 119/23 123/14 126/22 136/17 141/23 143/16 143/18 147/9 147/25 153/22 156/8 156/17 156/22 159/23 161/11 161/19 163/16 165/23 168/7 168/24 171/5 172/7 172/16 173/3 173/5 173/25 174/8 176/15 176/15 178/11 180/9 180/13 181/5 185/25 190/22 190/25 192/11 194/23 195/18 196/24 202/10 203/3 207/4 207/9 208/21 214/13 219/17 220/6 222/9 222/21 223/22 232/20 236/10 236/13 242/22 243/16
nudge [1] 101/5
number [40] 4/8 6/11 6/22 27/10 29/3 39/9 41/6 44/1 45/21 46/21 50/5 72/17 78/8 86/16 86/19 86/21 87/16 87/19 119/24 131/4 135/4 137/9 140/17 141/21 170/22 191/3 196/10 198/2 200/10 202/16 205/11 211/8 214/2 227/13 227/14 228/16 228/16 237/11 238/22 247/23
numbered [1] 95/4
numbers [15] 34/12 86/15 86/15 86/20 88/1 88/2 88/10 89/1 89/3 119/11 129/5 129/17 179/21 188/4 188/17

O

objection [1] 67/11
oblique [1] 65/5
observation [2] 149/19 193/9
observations [5] 29/22 162/16 164/8 191/19 199/4
observer [5] 77/22 86/2 96/15 98/25 153/24
observing [1] 85/3
obtain [5] 34/10 35/12 37/22 67/4 141/10
obtained [2] 78/21 103/14
obtaining [2] 196/17 202/24
obvious [9] 9/15 10/17 22/9 28/24 71/24 125/10 162/18 174/23 178/7
obviously [69] 1/22 2/8 3/12 6/25 7/7 10/25 22/9 22/17 23/15 24/18 25/2 26/19 32/2 33/6 33/11 39/23 40/18 40/23 42/9 49/25 60/12 65/9 69/11 69/19 83/13 87/9 98/1 107/11 109/16 113/12 114/13 115/14 116/17 118/4 124/11 125/19 126/7 126/11 128/17 135/13 138/1 138/16 156/21 159/12 180/25 186/12 187/15 188/3 194/4 195/18 201/25 202/14 206/21 209/9 209/18 213/21 215/14 220/6 220/8 232/20 233/17 234/17 236/7 239/19 240/10 240/23 243/10 244/21 246/14
occasion [4] 86/4 107/14 139/4 159/12
occasionally [2] 94/25 170/4
occasions [4] 45/21 137/9 190/12 191/4
occupying [2] 206/6 206/7
occur [2] 180/22 223/8
occurred [8] 2/1 141/21 154/2 154/8 157/4 185/11 220/18 224/11
occurred with [1] 141/21
October [4] 135/18 137/7 154/3 184/1
October 1983 [1] 137/7
odd [1] 105/17
off [6] 8/12 110/25 178/12 190/4 216/18 229/21
offence [3] 114/10 214/23 215/3
offered [1] 166/13
office [7] 120/7 145/6 150/2 180/25 181/19 181/22 181/23
officer [18] 21/21 28/15 53/19 142/24 145/7 145/10 145/11 184/16 184/17 184/22 185/6 185/9 187/19 190/1 191/4 191/16 193/14 216/18
Officers [1] 199/2
official [1] 93/2
officials [2] 41/20 64/14
officio [1] 205/24
often [3] 88/17 134/23 226/3
oh [6] 7/20 12/6 92/7 126/22 134/21 243/20
OK [2] 153/1 153/13
okay [5] 145/17 149/21 155/9 155/14 173/23
Oliver [1] 35/4
omitted [2] 150/14 219/17
once [4] 102/13 113/11 194/5 235/12
one [112] 3/12 5/10 5/14 6/11 15/3 15/8 17/20 18/23 18/24 19/14 19/16 19/18 25/21 26/2 26/10 26/19 28/8 28/14 28/18 30/2 30/22 31/4 38/24 38/24 41/19 44/24 52/9 54/23 56/2 65/12 70/18 76/5 76/7 77/3 79/3 81/6 85/15 86/17 86/23 87/12 87/21 88/20 93/17 106/16 107/3 115/23 115/25 120/17 127/25 128/1 129/7 130/8 135/21 137/8 138/13 139/4 139/16 139/18 146/10 148/19 151/11 151/20 156/21 166/18 167/21 170/16 180/7 181/8 183/24 184/1 184/22 184/25 185/19 188/3 188/16 189/13 191/16 192/16 199/19 200/19 203/17 203/21 204/7 205/13 209/19 210/6 211/15 212/2 214/14 215/19 222/7 222/23 225/20 225/22 226/14 226/16 227/8 227/8 227/21 228/5 228/9 229/9 229/10 234/24 235/12 235/15 236/12 241/11 242/16 244/18 246/3 247/6
one-half [1] 54/23
ongoing [3] 181/7 181/8 220/25
only [50] 6/20 6/23 28/18 34/13 38/21 39/17 46/23 49/17 50/5 50/19 51/20 52/1 52/5 52/18 57/8 67/20 82/1 83/1 83/12 86/17 86/19 88/25 90/23 94/2 94/25 101/16 102/13 115/5 121/9 124/17 125/10 129/7 132/24 141/12 144/1 162/20 171/1 184/7 188/1 197/13 206/9 206/13 212/3 214/25 215/1 220/6 222/24 224/3 227/3 229/14
open [2] 203/1 203/18
operate [1] 219/20
operated [1] 219/22
operating [1] 145/4
operational [3] 48/10 81/23 190/14
opinion [1] 13/19
opportunistic [3] 4/24 5/2 241/15
opportunity [5] 61/21 73/25 172/19 217/7 226/17
opposed [7] 21/24 52/9 65/16 79/20 128/21 141/16 227/5
optimally [1] 90/3
option [5] 38/5 121/15 127/4 130/23 224/21
options [1] 166/14
or [281]
or another [1] 26/19
oral [2] 191/3 207/25
order [12] 32/20 36/9 37/8 37/18 93/8 96/12 97/2 104/6 140/23 159/25 180/8 238/10
orders [3] 47/1 78/25 107/9
ordinated [1] 35/10
organisation [4] 12/4 135/9 135/18 195/4
organisational [2] 193/15 227/25
organisations [1] 205/14
organism [1] 19/20
organs [1] 22/23
orientation [1] 67/23
origin [1] 71/4
original [1] 151/9
originator [1] 159/2
origins [2] 146/14 146/15
other [76] 5/10 6/3 13/18 13/24 19/12 21/19 22/23 34/20 37/21 54/8 56/10 65/4 68/5 76/5 80/20 86/7 89/11 92/16 95/1 102/22 117/16 120/1 123/25 127/23 130/21 130/22 135/5 136/17 136/19 138/14 155/12 157/2 157/24 159/18 161/3 162/1 162/12 163/7 163/25 164/20 165/9 169/19 170/6 188/3 191/24 195/12 197/2 197/7 200/22 201/11 202/19 202/24 203/21 204/8 206/3 206/21 207/22 209/11 213/11 213/20 214/18 215/24 222/3 222/11 223/3 224/4 227/10 230/8 231/4 235/16 241/16 242/16 242/23 244/7 245/2 247/19
others [14] 52/25 53/2 53/4 81/21 92/12 117/12 120/13 138/25 140/18 165/4 172/7 195/9 212/11 229/6
otherwise [7] 67/2 125/12 129/15 174/1 224/7 228/18 235/14
ought [2] 26/10 83/5
our [22] 2/12 10/1 35/10 35/11 55/17 65/17 86/22 92/23 99/11 99/13 110/11 111/7 120/10 121/5 121/15 125/19 130/21 163/19 175/14 191/23 218/19 219/3
ourselves [5] 14/16 108/7 110/13 110/19 224/23
out [92] 6/15 6/25 12/23 17/13 18/13 28/24 29/2 29/5 30/5 30/6 30/23 32/13 33/9 34/17 54/1 55/25 59/12 64/4 64/12 68/24 69/6 70/6 70/20 71/20 72/17 80/10 81/3 84/13 84/25 87/23 100/24 119/10 121/11 121/13 123/19 124/24 128/4 128/9 131/4 131/9 135/9 135/16 135/24 137/25 138/16 138/17 138/19 138/19 139/1 140/22 144/21 151/22 151/24 152/21 153/5 153/22 153/23 155/4 159/21

F:

O

out... [33] 162/4 163/16 163/18 166/15 171/20 175/25 176/10 181/18 182/1 188/15 190/12 192/21 204/2 204/24 210/6 212/5 212/7 212/22 217/3 217/6 220/3 228/20 231/20 232/18 235/12 238/6 239/9 240/24 243/8 244/22 245/11 247/25 248/2
out' [3] 121/21 126/17 127/14
outcome [4] 2/9 71/18 104/8 145/21
outdated [1] 239/14
outside [3] 5/12 46/6 94/22
outsider [1] 204/18
outstanding [1] 31/4
outweighed [1] 198/16
outweighing [1] 20/19
over [35] 5/17 25/9 44/22 46/15 47/24 54/21 55/19 56/14 71/14 75/10 78/10 81/6 84/3 88/8 111/7 117/5 131/9 150/6 154/7 164/20 168/8 171/3 193/12 200/10 202/17 209/2 215/1 222/21 223/13 224/18 224/21 225/3 226/17 230/15 246/10
over-emphasised [1] 55/19
overall [1] 194/13
overarching [3] 193/16 210/22 217/22
overblown [1] 23/2
overlapped [1] 240/11
overseen [1] 182/21
overstate [1] 31/15
overstatement [1] 24/15
overtone [1] 171/25
overturn [3] 109/20 109/24 110/10
overwhelming [1] 72/13
overwhelmingly [1] 141/7
Owen [1] 235/22
own [34] 21/25 35/11 39/11 39/25 41/12 42/1 83/14 86/7 86/22 99/11 99/13 100/25 105/7 107/8 109/1 109/13 110/11 111/21 112/20 146/18 159/7 163/18 163/22 163/22 163/25 167/15 172/5 185/4 185/5 218/18 219/2 219/3 223/2 245/12
Oxford [1] 228/23

P

page [72] 4/20 5/17 7/18 11/6 12/20 12/22 17/4 17/5 17/10 17/10 20/7 21/6 21/18 37/12 37/15 42/24 44/9 44/22 46/4 46/15 46/18 46/22 47/5 47/24 49/12 54/21 58/21 59/23 61/13 61/16 71/14 71/17 71/20 72/22 75/10 75/12 75/17 78/5 78/10 81/18 82/8 83/8 84/3 91/9 93/16 93/23 93/25 96/8 103/7 117/5 117/13 122/23 122/25 123/2 123/3 131/3 131/7 131/10 139/11 147/14 149/24 150/6 150/21 152/3 152/23 168/8 171/23 176/25 177/23 181/4 221/13 238/18
page 120 [1] 238/18
page 182 [2] 20/7 21/18
page 198 [1] 21/6
page 2 [2] 17/4 17/5
page 3 [2] 12/20 81/18
page 5 [1] 221/13
pages [1] 147/2
paid [1] 18/2
pain [2] 21/1 89/20
painful [1] 26/11
painfully [1] 168/13
painted [1] 24/9
pandemic [2] 188/11 188/13
Pandora's [1] 203/2
panel [1] 13/5
panels [1] 179/22
paper [41] 1/25 2/4 3/1 11/20 11/25 12/1 14/17 27/21 30/17 39/10 44/7 44/8 46/3 46/4 46/18 46/18 47/5 47/9 47/10 47/13 66/1 73/16 74/19 81/5 83/10 83/10 83/12 83/12 83/13 83/14 83/14 84/15 87/15 146/19 146/21 146/25 147/5 150/8 169/4 169/20 221/2
papers [18] 2/2 2/10 11/21 30/14 41/17 42/23 44/2 49/9 53/7 53/9 57/3 57/5 83/21 86/8 167/8 217/1 241/12 242/17
paragraph [93] 4/7 4/21 5/5 6/2 6/7 6/19 7/25 9/10 9/16 9/18 10/8 12/21 17/3 20/6 21/6 21/7 21/17 23/4 24/9 35/24 37/13 37/25 46/10 46/11 46/22 47/20 47/21 47/24 48/7 49/1 49/2 49/13 54/2 57/15 57/21 58/4 58/6 58/13 58/22 60/23 61/3 62/6 63/8 66/23 68/19 69/1 69/7 70/18 70/20 71/20 73/14 73/15 75/18 75/19 76/21 78/17 79/25 80/14 81/22 89/4 91/2 93/5 93/5 95/4 96/5 96/7 99/2 101/9 101/10 103/7 108/10 109/9 111/2 117/9 117/14 119/4 120/6 121/5 147/18 147/20 148/20 148/22 151/4 152/13 152/22 168/1 168/9 168/9 174/16 175/24 214/15 221/14 221/16
paragraph 1 [1] 46/10
paragraph 10 [1] 48/7
paragraph 11 [3] 6/2 49/1 61/3
paragraph 12 [1] 6/7
paragraph 2 [6] 37/25 46/11 46/22 57/15 168/1 174/16
paragraph 21 [1] 62/6
paragraph 26 [1] 63/8
paragraph 3 [4] 57/21 58/4 79/25 91/2
paragraph 4 [6] 80/14 81/22 93/5 96/5 96/7 221/14
paragraph 5 [4] 4/21 47/20 101/9 168/9
paragraph 6 [1] 17/3
paragraph 7 [3] 5/5 47/21 58/22
paragraph 80.4 [3] 20/6 23/4 24/9
paragraph 80.5 [1] 21/17
paragraph 86.34 [1] 21/6
paragraph 86.53 [1] 214/15
paragraph 9 [5] 7/25 12/21 47/24 49/13 60/23
parallel [1] 238/12
paraphrase [1] 134/13
parcel [1] 216/12
pardon [1] 186/14
Paris [1] 240/15
Parker [4] 57/16 150/10 177/1 179/14
Parliament [2] 163/5 163/6
Parliamentary [1] 147/16
part [26] 3/7 5/8 9/13 10/15 16/19 17/2 57/14 57/21 58/6 62/10 65/5 99/16 106/5 106/7 143/17 143/21 163/5 164/7 176/24 191/5 202/2 202/14 215/23 216/12 228/19 232/14
participant [3] 14/9 77/23 172/10
participants [6] 13/19 14/9 80/1 172/21 195/21 196/8
participated [1] 90/23
participating [1] 90/14
particle [2] 240/16 242/4
particular [43] 15/19 27/2 28/12 38/11 52/23 99/2 107/25 107/25 115/17 123/6 128/20 129/23 131/14 132/7 145/2 153/20 157/16 170/5 176/11 179/16 180/24 181/10 186/20 188/7 188/25 189/22 192/18 195/3 199/20 202/9 207/3 207/6 207/13 216/1 223/16 223/22 226/6 227/16 228/4 228/5 228/7 228/18 229/8
particularly [13] 52/22 65/10 67/22 120/21 159/9 165/11 165/23 166/5 177/8 188/16 192/7 196/20 206/5
parties [1] 205/17
party [4] 140/19 178/25 221/12 241/8
pass [4] 62/3 122/21 136/14 177/20
passed [1] 103/2
passenger [1] 241/14
passing [2] 135/12 198/25
past [3] 181/1 235/7 246/11
pasteurisation [1] 236/18
patient [31] 22/15 26/2 50/19 65/16 78/9 82/22 90/7 114/3 114/12 114/21 142/6 154/2 155/13 155/15 155/17 183/1 201/15 202/9 203/3 205/4 207/12 207/18 207/20 207/22 215/17 222/15 223/1 223/22 224/6 225/3 235/9
patient's [1] 156/24
patient-doctor [1] 183/1
patients [91] 11/17 14/2 15/9 16/10 21/25 22/3 22/4 22/7 22/8 22/8 22/19 24/8 25/1 25/12 25/14 25/24 26/15 65/4 65/12 65/19 72/15 77/9 77/16 85/22 87/20 87/24 88/8 95/14 95/15 97/9 102/16 112/18 116/1 126/10 126/11 129/1 129/4 129/8 129/11 129/17 132/14 132/25 133/3 133/9 133/14 134/1 134/19 136/5 136/12 137/15 137/21 137/22 138/2 138/9 138/11 139/3 139/21 140/3 140/12 141/10 141/14 141/18 141/21 142/11 143/2 143/9 143/24 144/19 155/18 160/15 185/17 187/13 187/14 187/24 188/1 189/1 203/5 203/7 214/11 216/1 218/20 218/20 220/22 221/23 228/7 228/19 229/7 229/13 229/16 229/21 241/17
patients' [1] 224/10
Patten [1] 147/1
pattern [1] 48/1
pause [1] 12/5
pausing [5] 45/3 67/14 93/10 104/10 174/22
pay [2] 130/9 166/21
payment [1] 168/15
Penrose [1] 153/23
penultimate [2] 117/14 146/10
penumbra [1] 226/20
people [29] 23/1 77/23 77/24 77/25 84/20 87/4 87/17 94/15 94/22 97/25 98/6 98/9 119/24 122/9 130/19 136/4 157/22 166/4 173/10 173/12 177/15 189/7 198/5 198/9 217/15 220/6 228/23 233/4 246/7
people's [1] 213/11
per [8] 4/22 4/24 18/3 92/23 125/22 194/23 210/17 235/13
peradventure [1] 158/5
perceived [2] 91/13 100/9
percentage [1] 194/22
perception [3] 198/3 198/23 204/17
perfect [1] 221/14
perfectly [6] 2/18 2/20 159/20 162/18 191/20 214/5
perhaps [20] 2/15 7/5 17/2 17/14 29/18 53/10 65/5 80/13 113/9 124/2 128/15 129/9 138/14 154/13 180/16 187/7 201/16 217/14 223/11 248/2
period [17] 4/19 6/21 21/19 24/13 24/17 32/13 56/14 72/15 88/1 99/25 105/1 154/7 193/9 194/15 216/17 219/20 219/22
permanent [1] 145/24
permit [1] 246/3
perseverance [1] 248/7
persist [1] 210/8
persistent [1] 13/9
person [10] 22/3 90/17 172/13 193/13 193/13 193/13 193/15 206/2 208/16 209/23 219/13
personal [4] 146/3 173/15 182/10 219/2
personally [6] 16/13 56/23 67/17 94/21 215/16 218/17
personnel [2] 14/14 40/13
persons [3] 18/2 18/9 117/11

P

perspective [5] 62/11 62/18 65/6 86/11 194/13
persuade [3] 36/25 165/15 165/15
persuasive [1] 13/10
pertinent [1] 163/13
Peter [6] 3/19 10/2 11/3 11/8 206/22 207/2
Peter Jones [2] 206/22 207/2
petrol [2] 199/23 199/25
PFC [1] 208/5
pharmaceutical [12] 14/23 17/7 17/19 19/8 60/5 60/22 69/24 70/7 111/22 196/16 197/11 201/7
pharmaceuticals [1] 207/15
pharmacopoeia [1] 220/1
phenomenon [2] 204/24 245/20
PHLS [1] 113/8
photocopy [1] 155/4
phrase [9] 10/6 123/16 124/22 125/4 151/22 151/23 175/8 175/15 232/11
phrases [1] 126/4
physical [1] 40/12
physicians [7] 82/15 132/8 132/20 133/8 133/22 139/21 140/3
pick [12] 30/1 66/12 78/4 83/7 102/19 103/5 108/8 146/17 161/17 242/22 244/12 244/16
picked [6] 68/6 92/3 115/24 116/12 244/9 244/21
picking [4] 78/17 116/12 157/7 243/10
picture [3] 5/3 24/9 234/23
piece [1] 151/14
pieces [3] 102/20 115/23 150/8
pigeons [2] 175/3 175/10
pity [1] 237/20
place [7] 2/7 4/4 111/3 139/9 144/6 154/23 227/6
placed [4] 90/10 107/19 190/7 247/7
places [2] 94/24 197/13
plan [1] 63/13
plans [2] 43/20 49/7
plasma [72] 13/7 13/20 14/4 14/19 14/25 18/2 18/16 19/21 29/24 30/9 31/8 31/13 32/9 33/1 33/8 33/10 33/12 33/16 34/11 34/14 34/18 34/22 36/2 36/7 36/16 37/22 38/22 39/22 42/8 47/18 48/12 54/25 55/16 61/5 61/11 69/4 69/18 71/1 71/3 71/3 71/4 71/8 72/7 72/8 72/15 78/20 101/15 101/17 103/11 104/18 108/15 108/20 111/14 117/19 122/4 123/11 131/16 140/18 196/17 196/21 197/2 197/10 197/18 202/20 211/3 218/19 219/3 230/23 236/13 236/21 238/1 239/14
plasma/finished [1] 104/18
plasmapheresis [2] 40/13 197/14
platelets [1] 220/23
play [3] 6/9 11/11 12/15
played [2] 62/10 65/6
please [11] 17/4 17/9 57/6 93/24 109/22 119/23 122/22 126/24 177/25 196/1 221/13
pleasure [1] 227/1
plenty [1] 214/4
plethora [2] 144/4 144/14
plot [1] 202/2
ploughing [1] 105/7
plus [1] 51/8
pm [7] 116/21 116/23 174/5 174/7 196/5 196/7 248/13
point [36] 4/12 5/13 17/11 20/8 25/18 31/4 37/21 47/16 50/3 50/20 52/14 54/14 54/22 62/24 81/19 84/13 102/10 125/23 127/24 128/5 130/10 135/11 143/6 144/24 147/8 157/9 157/18 158/17 160/20 167/22 200/24 216/23 219/6 228/18 233/9 246/19
point 2 [2] 4/12 54/22
point 4 [1] 47/16
Point 8 [1] 5/13
pointed [6] 28/24 29/2 29/5 72/17 87/23 135/8
pointing [1] 155/4
points [4] 4/3 11/7 85/10 99/19
poisoning [1] 200/2
policies [4] 63/21 94/19 97/22 98/21
policy [30] 9/24 55/4 56/1 64/14 82/12 93/7 94/2 95/21 96/11 96/17 96/19 96/21 97/1 97/8 97/10 98/2 98/13 99/17 99/17 111/7 115/19 155/21 155/21 156/25 177/17 178/9 179/17 180/24 181/10 184/5
political [1] 110/18
politicians [5] 110/9 191/14 226/4 226/9 226/11
Pollock [1] 83/16
pool [49] 14/5 18/8 19/1 19/3 19/4 19/13 19/17 19/17 19/19 19/22 23/12 27/20 27/23 27/23 49/25 61/22 117/11 121/7 121/16 124/9 124/14 125/13 125/23 125/24 126/5 127/5 127/18 129/5 132/24 133/4 168/20 198/16 198/21 212/15 213/20 213/23 230/22 230/23 233/24 233/25 234/3 234/6 234/10 234/24 235/18 235/22 235/24 236/5 236/6
pooled [4] 71/1 71/3 117/19 198/15
pools [17] 30/9 50/8 76/23 76/24 77/4 77/5 122/4 123/11 131/17 197/18 197/25 213/21 213/22 214/11 234/14 234/18 236/10
poor [4] 86/18 229/14 238/23 238/25
population [11] 9/12 10/14 49/24 171/14 171/18 189/14 211/24 214/7 214/7 219/5 235/12
pose [4] 46/21 47/2 48/9 78/1
posed [5] 35/5 47/3 59/13 70/7 212/10
poses [2] 75/19 160/9
posing [1] 114/19
position [24] 2/24 3/1 13/14 28/11 35/11 37/24 55/12 59/21 84/1 86/18 89/18 90/18 92/22 111/5 111/14 111/18 112/4 178/17 178/22 184/11 198/9 207/7 223/21 235/20
positive [3] 58/7 76/14 164/5
possibilities [6] 132/10 132/15 132/21 133/20 136/15 144/20
possibility [17] 17/21 31/6 31/12 32/23 46/25 47/6 54/4 69/2 69/9 69/17 82/14 88/13 91/3 91/9 101/22 162/19 202/24
possible [53] 6/21 20/19 31/22 32/7 32/12 34/10 34/13 35/12 37/22 46/1 47/23 57/19 63/13 64/9 67/8 67/21 70/15 75/20 78/15 80/7 82/10 93/9 96/13 96/21 97/3 97/10 97/14 99/18 114/10 115/17 121/25 123/16 123/23 124/3 124/15 125/6 127/15 128/22 131/15 142/11 149/1 149/8 191/25 192/6 192/10 193/3 193/4 197/10 212/6 215/4 216/4 232/18 246/12
possibly [13] 15/25 26/3 39/12 70/7 99/20 106/25 112/9 126/14 190/7 198/25 212/4 225/7 228/3
post [17] 36/5 37/24 38/22 39/2 40/20 55/5 72/8 101/24 102/8 112/19 112/20 220/13 220/17 221/1 221/3 221/8 221/12
post-March [1] 102/8
post-March 23 [1] 101/24
post-transfusion [6] 220/13 220/17 221/1 221/3 221/8 221/12
postcode [1] 232/10
postgraduate [1] 216/15
potential [16] 12/15 52/12 54/9 58/11 61/22 90/8 132/9 132/15 133/16 136/11 162/10 166/11 187/12 201/20 202/18 210/11
potentially [21] 19/21 19/22 24/16 37/4 39/16 81/12 102/11 110/18 114/4 161/19 172/2 183/2 189/15 200/1 200/25 201/2 203/1 209/20 209/22 210/12 239/6
PQs [1] 163/5
practicable [4] 122/1 125/25 127/15 128/21
practical [13] 29/10 36/22 59/2 59/5 76/9 101/22 107/7 123/17 123/24 124/4 128/14 144/19 213/4
practically [1] 107/5
practice [22] 18/5 52/7 95/9 101/4 101/6 140/11 177/11 177/17 181/6 185/8 217/13 222/18 222/19 222/20 222/24 222/24 222/25 223/19 223/20 223/24 231/10 232/17
practices [6] 171/19 196/16 211/5 211/17 231/17 245/2
practitioner [1] 220/4
pre [18] 10/25 11/2 29/24 32/21 36/4 37/16 38/2 38/11 42/7 58/23 72/15 102/6 104/18 108/20 109/11 111/13 112/19 112/19
pre-24 March [1] 38/11
pre-24 March 1983 [1] 37/16
pre-dated [1] 104/18
pre-dates [2] 10/25 11/2
pre-March [7] 32/21 38/2 58/23 72/15 102/6 108/20 111/13
pre-March 1983 [3] 29/24 42/7 109/11
precautions [2] 76/10 108/16
preceding [2] 49/2 150/21
precipitate [1] 35/18
precise [1] 128/4
precisely [5] 110/2 166/16 195/2 228/2 234/17
predicted [2] 4/9 4/22
preface [1] 132/5
prefer [2] 121/21 173/16
preference [3] 40/25 173/15 182/10
preferentially [1] 31/14
preferred [1] 159/25
prefers [1] 68/23
prejudiced [1] 105/2
preliminaries [1] 123/1
premature [3] 21/2 23/7 23/18
premise [1] 137/22
preoccupation [1] 196/21
preparation [1] 54/18
preparations [3] 81/25 91/10 95/1
prepare [2] 73/15 166/18
prepared [19] 36/7 44/2 44/3 53/10 55/7 78/20 80/19 81/5 101/16 108/4 122/4 123/11 131/16 146/19 160/25 161/8 176/1 220/7 244/20
preparing [2] 81/2 161/15
prescribing [1] 207/14
presence [3] 58/11 158/20 165/9
present [14] 36/17 54/25 59/1 74/11 77/22 77/23 82/5 85/3 91/14 99/6 100/9 137/8 164/15 177/14
presented [2] 4/6 81/15
preserving [1] 26/24
President [1] 17/18
press [16] 55/2 55/21 111/22 114/2 117/5 118/7 118/15 163/6 163/15 163/18 163/19 163/25 169/11 173/16 174/1 174/4
pressing [2] 61/9 61/10
prestigious [1] 12/4
presumably [11] 45/3 45/14 48/4 51/23 62/16 63/4 105/2 145/23 163/9 241/21 243/12
presumed [2] 76/12 188/19
pretty [10] 143/12 154/19 185/10 197/21 202/1 203/20 204/10

P

pretty... [3] 211/10 234/4 247/22
prevailing [1] 142/1
prevalence [2] 235/11 235/11
prevent [2] 54/15 111/13
prevented [1] 209/11
previous [4] 52/24 71/16 71/20 126/16
previously [10] 72/17 80/18 80/19 85/18 95/14 111/10 114/20 115/16 118/6 190/24
Prime [1] 146/16
principle [1] 139/14
principles [5] 120/12 131/9 206/15 208/9 232/22
printing [3] 166/21 168/12 168/14
prior [5] 71/1 72/20 78/21 108/17 179/25
priori [1] 33/2
priorities [5] 194/21 194/25 195/2 195/11 195/12
priority [4] 32/17 35/2 194/18 194/19
prison [2] 180/19 197/9
prisoners [3] 181/2 181/14 182/2
prisons [17] 176/17 177/2 177/6 177/8 177/13 177/18 178/10 179/18 179/24 180/2 180/6 180/10 180/14 180/17 181/6 182/2 211/18
private [2] 150/2 239/6
privy [1] 60/6
probability [1] 72/13
probable [4] 45/15 152/17 156/7 156/9
probably [39] 22/14 33/17 38/1 77/8 78/24 87/10 110/21 114/1 115/6 120/23 120/24 122/8 137/4 138/12 144/14 150/2 162/14 166/20 167/6 170/10 171/6 172/16 172/25 175/13 195/25 198/7 198/17 208/12 210/5 215/21 220/15 232/20 235/10 237/5 241/7 241/11 242/5 242/10 242/14
probed [1] 103/25
probing [2] 59/17 103/25
problem [25] 13/1 24/21 25/10 28/21 48/15 62/17 73/10 76/6 78/11 80/2 88/20 104/18 105/24 116/10 128/16 180/22 182/4 202/18 212/18 213/10 223/5 223/16 223/23 237/3 239/12
problematic [1] 94/21
problems [13] 3/12 24/5 26/17 48/10 59/22 61/22 102/15 110/20 119/18 139/15 176/5 176/7 229/9
procedure [2] 36/9 144/2
proceed [1] 80/22
proceeded [1] 98/19
proceeding [1] 238/12
process [9] 3/5 37/18 49/8 69/3 112/16 117/25 144/2 160/5 204/3
processed [1] 74/6
processing [2] 69/17 71/2
produce [9] 27/19 27/23 34/21 56/8 56/12 56/13 56/14 83/16 246/7
produced [10] 23/12 41/11 51/5 51/10 59/12 62/23 83/11 83/15 103/23 166/23
produces [1] 47/17
producing [4] 23/13 62/25 162/23 234/8
product [54] 13/2 13/6 13/11 13/15 13/18 14/5 14/19 14/24 15/2 15/4 15/16 15/24 16/3 16/23 17/13 17/16 29/3 31/22 33/10 33/11 33/24 34/15 39/5 55/7 72/7 82/16 99/6 104/18 105/11 105/16 106/3 107/3 119/14 119/16 121/10 123/12 123/20 124/9 124/10 124/22 125/22 126/2 128/23 175/20 201/10 202/8 207/10 207/13 207/14 213/20 218/25 220/21 235/17 236/2
production [13] 18/23 19/9 47/15 48/2 61/6 61/23 100/6 100/10 122/6 131/18 202/19 213/16 236/14
production and [1] 61/23
products [69] 6/1 6/4 12/2 14/1 17/22 27/23 29/5 31/8 31/23 32/11 32/22 34/7 44/11 46/23 49/25 54/7 54/13 61/2 70/19 71/2 73/11 75/7 79/10 79/16 79/18 80/20 82/9 84/7 85/11 89/7 89/11 91/19 107/20 121/8 121/16 121/17 122/3 122/6 123/10 124/15 125/8 126/5 127/5 127/12 128/17 129/6 131/16 131/19 132/24 133/4 147/22 152/20 162/16 168/21 189/3 194/17 198/16 198/21 201/1 202/20 202/24 203/2 213/23 216/3 216/12 217/5 218/21 232/25 236/10
products' [1] 153/4
profession [1] 224/14
professional [3] 137/16 146/24 190/16
professionals [5] 133/24 205/3 205/5 207/17 209/18
Professor [29] 30/25 31/25 32/3 32/19 33/5 34/24 45/4 45/5 45/14 62/25 73/12 82/3 82/19 90/20 93/12 96/10 117/3 137/11 143/5 143/9 143/12 143/15 175/24 201/17 205/9 205/18 206/17 209/1 245/12
Professor Bloom [26] 30/25 31/25 32/3 32/19 33/5 45/4 45/5 45/14 62/25 82/3 82/19 90/20 93/12 96/10 117/3 143/5 143/9 143/12 143/15 175/24 201/17 205/9 205/18 206/17 209/1 245/12
Profilate [1] 114/24
profoundly [2] 187/12 247/1
progressively [1] 218/8
prohibited [1] 171/13
promised [3] 67/3 119/1 201/23
promoted [1] 52/19
promotion [1] 153/8
prompted [1] 243/16
promulgated [4] 112/1 145/3 163/5 163/14
proof [33] 8/6 44/12 50/19 52/4 146/12 147/4 148/23 149/4 150/12 151/5 151/12 153/2 153/16 154/20 157/8 157/13 157/14 157/18 158/1 158/2 158/6 158/9 158/14 158/19 159/6 159/15 159/16 159/17 162/8 162/19 162/21 163/21 164/5
proper [5] 159/20 159/21 200/24 205/7 227/4
properly [1] 192/14
prophylactic [2] 63/24 218/16
prophylaxis [2] 25/20 97/16
proportion [3] 80/2 108/14 108/20
proportions [1] 121/12
proposal [3] 46/8 73/23 143/4
propose [4] 36/12 61/14 120/9 134/5
proposed [5] 60/16 82/3 82/18 129/20 214/19
proposing [4] 28/6 110/7 138/15 225/14
proposition [4] 81/25 82/18 126/13 138/16
propositions [1] 162/8
prospective [1] 221/23
protect [4] 76/9 111/24 117/7 237/17
protecting [2] 214/11 237/23
protection [1] 110/1
protein [2] 237/17 237/24
protocol [2] 36/14 211/14
protocols [2] 36/11 211/8
prove [1] 117/16
proven [1] 9/21
provide [10] 1/16 42/10 90/18 132/18 138/9 138/13 144/7 216/20 218/19 222/2
provided [7] 8/23 39/20 41/17 105/1 111/14 137/18 146/21
providers [1] 18/14
provides [1] 152/19
providing [7] 41/10 42/6 131/24 140/12 146/23 208/15 246/21
province [1] 205/7
provision [2] 137/20 138/2
PRSE0002723 [1] 9/8
PRSE0003281 [1] 178/5
PRSE0004345 [1] 176/21
PRSE0004729 [1] 179/11
PS [1] 153/8
public [13] 2/15 2/16 30/4 160/16 163/10 163/15 185/16 187/16 189/14 193/11 199/22 216/19 216/21
publication [1] 147/23
publications [3] 77/9 80/3 215/15
publicity [1] 55/22
publicly [1] 159/22
published [7] 34/15 230/5 242/10 242/11 242/13 244/13 244/18
pulse [1] 244/4
purchase [2] 202/3 202/8
purchased [1] 203/19
purchasing [4] 200/4 200/5 200/23 201/20
purported [2] 3/14 190/22
purpose [6] 167/1 194/7 202/11 202/21 225/2 225/11
purposes [4] 57/10 137/25 164/15 187/13
pursue [2] 69/8 107/21
push [2] 29/6 107/21
put [39] 3/11 19/7 19/23 22/5 28/9 34/8 38/15 64/4 75/24 79/7 93/15 106/9 114/9 119/7 119/15 123/19 128/8 135/24 136/18 139/1 142/20 150/8 154/19 154/23 154/25 159/21 163/16 163/18 175/2 175/9 175/21 175/22 187/1 191/7 192/23 214/13 231/20 238/1 247/5
putative [1] 82/4
putting [5] 64/12 80/16 124/19 126/14 176/12
puzzled [1] 49/13

Q

qualification [5] 71/19 88/11 151/9 151/11 154/25
qualified [6] 158/22 158/23 159/10 159/12 159/17 162/17
qualifying [3] 149/6 150/14 162/3
quality [1] 21/4
qualms [1] 159/11
quantified [1] 84/6
quantities [1] 100/11
quarantine [2] 13/17 105/1
quarter [1] 18/22
queried [1] 218/17
question [75] 1/15 3/3 13/12 16/16 25/15 38/17 40/6 40/16 40/25 41/8 41/21 44/10 50/12 51/1 51/9 56/2 56/5 58/1 58/10 64/22 65/13 68/23 70/5 75/19 107/5 107/9 107/16 109/10 114/19 114/19 115/12 117/25 120/17 133/11 134/6 136/24 137/14 137/20 138/1 145/8 146/2 149/2 153/20 155/2 155/8 155/9 158/25 160/9 163/3 164/14 169/15 170/6 180/11 188/8 193/7 193/19 193/21 196/14 200/23 205/9 212/9 212/10 212/17 215/21 221/9 221/15 222/7 223/8 227/7 234/17 235/25 238/13 240/5 241/13 242/16
questionable [1] 177/12
questioning [2] 66/16 67/6
questions [47] 1/4 34/8 35/5 37/21 38/15 38/16 46/21 47/2 47/3 56/16 59/12 59/17 59/20 67/9 67/10 67/16 70/6 70/14 78/2 82/13 103/1 115/8 118/20 172/5 172/8 172/10 172/13 172/23 176/20 191/1 195/17 196/8 196/9 198/2

Q

questions... [13] 202/16 208/25 225/14 225/15 225/18 225/19 225/21 231/15 231/20 240/6 240/10 245/25 246/9
quicker [1] 173/7
quickly [7] 7/15 25/9 53/7 57/2 160/2 164/16 239/8
quite [42] 9/6 12/11 14/8 15/20 16/10 22/4 22/12 25/5 29/3 39/25 40/10 81/1 83/24 88/6 88/17 98/2 98/4 105/10 114/13 135/22 140/17 156/21 166/20 169/16 175/11 176/12 181/19 181/20 188/3 199/23 206/18 210/15 210/18 211/8 227/14 229/6 230/16 232/4 232/9 233/15 238/22 243/25
quo [1] 24/24

R

radical [2] 32/24 164/7
radically [1] 80/9
raise [3] 34/9 66/10 183/13
raised [6] 34/23 66/9 103/1 115/7 165/1 183/21
raising [4] 98/22 104/6 163/9 183/22
ramped [1] 218/8
rang [1] 178/8
range [12] 59/12 70/6 143/19 193/12 194/25 205/21 206/13 206/16 207/21 209/4 209/6 209/12
rapid [1] 25/16
rapidly [4] 22/16 31/22 119/18 234/7
rare [4] 185/10 228/2 228/7 229/19
rare-ish [1] 229/19
rate [3] 11/15 18/8 187/10
rates [1] 11/16
rather [23] 15/9 31/9 32/23 68/24 75/22 78/2 105/7 105/17 121/20 122/15 128/12 130/8 154/18 158/20 159/6 164/5 173/22 197/4 202/22 225/22 229/2 234/21 239/1
ratio [1] 77/12
re [3] 67/1 121/22 178/9
re-ascertaining [1] 67/1
re-worded [1] 121/22
reach [3] 106/11 116/4 240/13
reached [6] 1/14 2/3 16/19 85/14 116/7 116/8
reaction [2] 201/18 220/19
reactions [2] 47/23 207/22
read [27] 12/10 12/23 14/7 14/17 22/12 23/17 67/12 69/5 73/25 74/5 92/12 93/18 95/17 127/16 156/19 176/10 178/24 204/10 215/14 215/14 221/3 240/23 241/1 241/10 244/24 244/25 246/5
readily [1] 24/23
reading [7] 126/23 126/24 156/4 174/23 175/24 213/11 244/10
readings [1] 225/5
reads [1] 67/10
ready [3] 72/12 169/9 247/20
real [5] 76/7 77/1 77/3 239/23 243/21
realise [2] 188/12 213/25
realised [2] 155/23 201/3
realistic [3] 21/15 22/14 40/15
realities [1] 211/25
reality [1] 212/16
really [74] 3/16 11/19 15/20 16/7 16/18 18/18 19/24 26/11 26/11 50/4 52/3 57/3 59/17 60/14 60/24 62/20 63/3 64/13 71/24 78/1 84/19 87/7 96/14 100/6 101/2 102/11 106/2 117/25 126/12 129/19 147/4 153/18 161/5 161/12 161/13 161/18 161/23 164/21 166/25 167/2 170/9 170/15 175/17 179/10 182/20 185/3 187/18 188/3 192/16 193/8 194/13 198/9 198/20 199/9 199/14 201/3 202/7 208/24 210/13 215/9 217/10 224/12 224/19 225/22 226/19 226/21 228/20 229/7 229/23 231/24 237/8 239/20 239/25 246/22
reared [1] 57/17
reason [20] 8/19 17/1 36/18 50/25 83/9 98/22 111/7 123/25 125/6 128/20 134/5 134/12 138/22 140/16 164/12 170/1 171/10 172/19 203/23 209/10
reasonable [7] 2/18 2/20 77/7 108/6 176/4 191/20 214/5
reasonably [2] 186/17 194/14
reasoning [2] 67/7 67/25
reasons [19] 82/6 121/18 123/13 123/21 123/25 124/10 124/17 126/3 126/6 127/13 128/2 128/10 128/18 129/8 189/22 200/12 200/15 236/4 244/18
reassurance [2] 98/19 98/20
reassured [1] 31/17
rebuild [1] 226/19
rebuilding [1] 226/18
rebuilt [1] 55/14
recall [26] 12/18 13/11 13/15 13/17 14/7 17/1 17/13 30/10 81/9 113/3 113/7 143/5 166/15 171/21 181/25 185/4 197/19 199/6 199/7 199/10 206/11 208/15 215/12 218/9 219/21 227/1
recalled [2] 14/21 15/3
receive [5] 84/10 85/22 89/9 97/5 241/2
received [17] 5/25 6/4 49/17 51/18 52/18 63/2 67/24 102/25 114/22 114/24 115/5 118/15 130/25 141/6 174/20 178/8 235/8
received products [1] 6/4
receiving [9] 13/24 22/15 23/20 24/2 138/2 162/11 163/4 187/14 189/1
recent [4] 31/24 57/18 104/9 177/3
recently [3] 14/7 57/9 161/2
reception [1] 165/8
recipient [2] 157/17 168/22
recipients [10] 13/3 14/1 84/5 91/18 120/2 122/18 132/9 132/23 133/8 133/22
recognise [3] 12/6 203/6 223/25
recognised [2] 97/4 195/20
recognising [1] 159/1
recollection [10] 86/2 92/11 92/14 92/15 98/25 99/1 118/18 165/5 208/22 208/24
recommendation [29] 1/9 1/14 46/12 106/19 120/2 120/4 120/12 121/6 121/22 122/25 127/22 129/23 129/25 130/5 130/18 130/24 131/4 131/21 131/23 132/5 132/12 143/8 143/23 144/15 144/18 145/2 145/8 146/5 215/23
recommendations [20] 46/16 62/1 78/22 94/7 94/10 94/13 94/15 94/23 95/3 98/9 101/2 109/7 118/20 119/21 130/13 131/11 136/18 139/13 139/14 230/20
recommended [7] 14/23 31/19 58/8 82/5 96/23 101/21 101/25
recommending [2] 123/15 130/14
Recommends [1] 131/12
reconsider [2] 58/10 66/15
record [12] 84/21 85/2 115/12 200/19 201/4 230/24 238/14 238/24 238/25 239/9 239/12 247/5
record-keeping [7] 201/4 230/24 238/14 238/24 238/25 239/9 239/12
recorded [3] 57/13 62/5 108/12
records [9] 56/21 92/4 152/14 201/12 230/23 238/13 238/23 239/24 246/17
redevelopment [2] 43/20 62/6
redone [1] 167/10
redraft [1] 167/10
redrafted [1] 167/9
reduce [5] 48/11 91/17 97/16 210/15 230/10
reduced [1] 20/14
reducing [1] 81/24
reduction [1] 170/22
refer [15] 5/8 15/21 15/21 33/22 44/16 46/11 46/14 46/15 46/25 47/15 112/25 127/10 174/13 214/24 238/17
reference [38] 1/7 8/24 9/17 29/16 31/2 43/3 44/19 46/1 46/12 48/5 61/14 61/18 65/2 65/5 73/13 86/6 95/8 104/11 107/11 113/4 113/5 134/25 135/1 135/23 135/25 146/19 165/10 174/12 175/5 175/16 178/18 178/23 181/22 182/16 183/10 187/1 201/18 221/22
references [3] 183/15 183/17 183/22
referral [1] 217/8
referred [16] 28/4 53/18 68/7 74/16 74/20 94/7 94/10 107/8 139/4 157/14 178/22 184/25 200/6 200/8 222/16 244/24
referring [11] 9/9 9/18 26/23 29/15 49/14 55/9 59/5 102/15 117/17 197/3 236/25
refers [32] 4/6 4/7 4/15 4/17 5/5 5/9 5/10 5/13 5/17 5/25 9/5 9/10 26/5 31/5 31/10 37/18 54/8 54/15 55/5 55/15 58/4 70/11 75/12 76/10 76/13 78/16 79/18 102/25 104/2 111/2 152/6 175/24
reflect [3] 156/12 196/23 230/2
reflected [4] 16/20 48/24 60/18 75/11
reflecting [3] 52/1 52/24 226/7
reflection [5] 48/4 64/2 146/5 162/9 183/2
reflections [1] 199/3
refuse [1] 105/3
regard [6] 13/16 42/13 43/10 96/16 195/3 216/24
regarded [4] 9/21 45/2 45/12 158/14
regarding [1] 119/2
regime [3] 109/1 112/20 208/7
regimes [1] 72/20
region [8] 47/17 195/15 211/21 227/17 228/6 229/5 232/11 232/11
regional [48] 27/16 27/18 29/14 46/9 48/20 55/18 56/7 56/11 58/9 61/8 66/13 66/14 67/19 68/11 68/14 72/5 140/9 164/25 165/13 179/19 182/1 182/17 182/22 183/11 183/24 195/6 195/8 195/13 195/14 195/16 203/13 208/5 210/23 210/25 211/6 211/11 214/19 227/13 227/15 228/1 228/11 228/13 228/17 232/14 239/1 239/9 239/14 239/18
regions [6] 180/5 180/16 180/18 195/4 195/7 231/9
regular [1] 18/23
regulation [4] 39/2 39/14 39/19 40/20
regulations [21] 15/11 30/17 32/10 34/14 38/23 39/7 39/23 40/1 40/5 40/9 41/4 41/23 46/14 78/16 101/12 101/18 101/19 103/12 103/24 104/19 105/11
regulator [2] 105/19 108/6
regulatory [2] 13/14 17/18
rein [1] 219/1
reined [1] 161/13
reject [1] 36/20
rejected [1] 214/19
relate [1] 98/10
related [5] 152/18 156/7 156/23 185/17 243/12
relates [2] 182/25 208/2
relating [1] 54/1
relation [40] 9/7 15/11 25/14 34/6 34/18 38/2 38/11 42/6 48/17

R

relation... [31] 48/18 54/14 59/14 62/6 67/15 69/12 69/16 73/11 79/10 81/20 87/14 95/11 102/5 109/11 124/1 133/17 139/18 140/12 156/25 162/8 181/10 182/13 184/4 184/11 184/22 185/1 186/19 187/5 190/3 200/15 205/9
relationship [3] 183/1 243/22 243/22
relative [1] 221/20
relatively [4] 54/10 86/16 101/23 117/20
relatives [1] 174/17
release [8] 36/8 111/23 117/5 118/15 163/16 163/19 163/25 169/11
releases [3] 118/7 163/6 163/19
relevance [1] 184/20
relevant [10] 12/12 28/17 31/23 46/5 68/21 133/24 136/12 137/16 144/7 215/23
reliance [1] 29/12
reliant [2] 92/23 125/13
relied [3] 40/12 106/16 191/14
reluctance [5] 66/16 67/18 165/17 166/17 231/16
reluctant [2] 45/24 49/20
rely [10] 27/3 40/10 117/19 128/9 128/12 180/17 191/23 192/2 211/6 233/16
relying [4] 28/7 65/7 135/19 179/24
remain [3] 84/16 157/11 157/12
remainder [1] 222/16
remained [3] 23/16 112/4 215/2
remains [1] 7/11
remember [18] 8/12 30/18 38/18 75/2 83/18 83/19 126/20 165/18 166/24 176/8 181/21 184/9 199/23 206/19 217/18 233/11 238/21 240/22
remind [1] 137/1
reminded [2] 9/3 163/12
reminding [1] 61/9
removal [1] 151/10
remove [6] 10/5 24/10 24/10 76/15 142/17 199/25
removing [2] 24/16 24/20
renowned [1] 205/10
repeat [3] 57/25 192/16 212/9
repeatedly [3] 84/10 85/22 89/9
repeating [1] 198/3
repetition [2] 91/11 208/1
replace [3] 25/19 27/4 27/23
replaced [2] 25/17 190/16
replacements [1] 21/16
replacing [1] 91/4
replied [1] 71/13
replies [2] 35/22 70/17
reply [4] 32/1 148/17 150/9 178/2
replying [2] 150/4 179/14
report [22] 1/14 15/22 17/15 74/8 75/7 135/24 139/7 139/9 140/22 152/12 153/21 153/22 153/24 154/1 154/1 154/9 154/16 157/6 190/19 220/13 230/4 240/15
reported [21] 8/11 9/22 11/14 30/22 54/11 62/20 63/9 65/10 113/23 114/6 116/8 140/21 154/3 154/4 154/6 155/13 156/15 220/24 245/9 245/13 245/17
reporters [1] 156/18
reporting [3] 219/8 221/5 243/19
reports [9] 28/12 57/18 61/18 114/2 136/3 136/3 215/15 243/13 243/14
represent [3] 205/25 207/8 209/9
representation [1] 206/13
representative [2] 120/10 141/25
representatives [4] 172/21 187/2 195/20 222/8
representing [3] 28/11 85/4 206/3
represents [1] 17/6
request [1] 73/14
requested [1] 67/25
requests [1] 56/21
require [1] 48/2
required [1] 109/11
requirement [6] 14/19 33/25 33/25 34/4 36/17 225/12
requirements [9] 32/8 33/23 39/25 42/7 43/8 107/19 108/18 109/13 226/22
requires [1] 36/10
requiring [1] 17/1
requisite [1] 143/24
reread [4] 57/10 123/1 150/24 151/19
research [9] 17/23 43/13 47/11 61/14 147/19 223/15 229/17 229/17 229/18
researcher [1] 206/9
reserve [1] 95/16
resident [2] 84/9 89/8
resistance [2] 214/21 215/6
resolution [4] 119/7 128/6 196/24 196/25
resolved [2] 111/17 111/19
respect [7] 43/22 54/12 79/16 123/6 131/14 226/9 236/23
respected [1] 206/10
respects [4] 138/22 142/22 163/25 246/15
responded [1] 129/23
response [8] 32/22 60/19 70/9 79/1 121/3 148/13 179/2 182/5
responsibilities [1] 143/21
responsibility [6] 75/6 146/4 193/16 193/25 194/2 225/25
responsible [2] 85/19 208/18
rest [2] 112/11 173/22
restart [1] 25/9
restricted [4] 69/5 104/25 105/24 106/22
restriction [1] 104/22
restrictions [3] 55/6 59/1 107/18
result [6] 25/13 59/18 60/11 69/19 113/15 225/9
results [2] 109/14 229/14
retain [2] 31/9 223/2
retained [1] 202/21
retained in [1] 202/21
retention [1] 247/17
rethink [1] 52/20
retrospection [1] 171/11
return [1] 239/14
revealing [1] 186/16
revelation [1] 154/11
reversed [1] 77/12
reversion [2] 20/13 50/3
revert [3] 27/14 137/10 213/4
reverted [1] 24/24
reverting [1] 202/17
review [1] 113/6
reviewed [1] 129/16
revised [1] 169/4
revisions [1] 168/5
rewording [2] 121/23 131/20
rhyme [1] 170/1
RICHARDS [4] 1/4 39/10 164/10 172/22
rid [3] 10/10 237/21 238/2
rider [2] 154/18 154/21
right [72] 2/21 3/23 8/3 9/9 11/4 16/24 21/22 27/2 27/8 37/2 37/11 42/1 47/12 51/6 51/8 56/15 62/18 63/17 63/25 68/4 71/18 72/4 72/16 72/22 73/22 84/2 84/13 86/10 89/2 89/14 90/17 92/12 93/19 95/3 95/24 98/5 102/4 108/19 109/6 109/25 112/15 113/22 116/3 116/17 120/20 134/6 134/11 137/4 138/5 138/12 142/12 153/11 184/3 188/13 189/17 192/1 192/1 202/8 213/12 216/2 216/4 224/2 225/9 230/16 231/8 231/17 232/17 234/4 235/19 239/3 240/5 242/14
right-hand [2] 9/9 95/3
rightly [5] 41/5 64/21 129/18 161/24 186/12
rights [2] 43/22 62/8
rigorous [1] 112/10
rigour [2] 108/4 108/5
rise [2] 111/4 236/18
risk [52] 6/10 13/2 13/19 15/14 19/25 20/1 26/9 31/15 37/23 50/15 54/15 78/14 82/21 84/1 84/6 84/6 84/7 85/23 85/24 86/6 88/10 88/13 89/2 89/5 89/10 91/13 97/5 99/3 99/5 99/9 99/10 99/18 100/7 100/8 100/9 113/9 117/11 133/23 144/20 158/20 160/16 166/4 166/5 168/19 180/2 212/5 212/19 213/21 216/5 233/6 235/21 236/7
risk/benefit [1] 82/21
risks [35] 43/8 81/24 91/18 93/8 96/12 96/20 97/2 97/10 97/12 99/12 99/13 99/14 121/19 121/19 132/11 132/16 132/21 133/5 133/20 136/15 136/23 139/22 140/4 140/13 142/11 142/12 143/25 144/19 180/13 212/14 216/3 216/11 217/17 221/20 236/23
Rizza [1] 135/20
road [2] 16/22 18/20
Rodell [3] 17/18 18/1 29/21
role [16] 3/3 64/22 65/18 107/25 133/21 145/22 173/11 184/15 184/16 190/8 192/11 193/14 201/7 206/6 206/7 226/3
roles [1] 193/12
room [1] 194/12
rough [1] 70/20
roughly [2] 51/3 140/23
round [8] 110/25 167/12 206/1 216/25 223/11 223/15 228/4 242/14
route [1] 213/13
Royal [1] 137/17
RTCs [7] 27/12 28/11 48/10 48/18 202/4 202/21 213/5
RTD [1] 178/18
RTDs [3] 58/9 182/20 182/22
rubber [1] 194/6
run [1] 208/13
runner [2] 37/19 38/5
running [1] 219/23

S

sadly [1] 141/20
sadness [1] 140/24
safe [8] 50/10 106/11 109/25 193/17 193/22 203/20 211/4 211/5
safeguard [1] 35/11
safely [1] 112/3
safer [6] 15/16 40/22 50/9 76/24 77/5 214/6
safest [1] 35/12
safety [22] 1/21 26/22 27/6 40/17 63/10 73/10 81/16 85/7 106/15 107/12 110/4 112/12 169/21 175/19 194/16 200/12 200/15 200/22 201/21 203/4 218/5 218/7
said [84] 5/6 6/10 7/5 17/17 18/1 24/8 25/17 27/18 27/19 36/5 45/22 51/17 56/12 59/7 65/11 65/24 72/18 76/5 76/16 77/20 79/6 80/13 83/20 87/11 92/20 93/3 96/25 101/1 106/8 106/21 107/24 111/10 111/12 112/14 114/20 118/16 125/10 126/15 127/2 127/25 136/14 137/2 138/6 139/5 141/4 141/5 141/8 141/12 142/1 155/6 156/18 158/7 159/19 160/11 161/9 164/3 165/19 166/18 167/4 172/20 175/19 176/9 178/21 186/17 187/11 191/2 191/2 192/16 194/5 196/25 202/10 206/1 215/24 219/14 224/22 224/22 226/3 231/7 233/8 235/21 241/13 245/13 246/6 246/23
sake [2] 21/5 53/21
sale [1] 239/6
sales [2] 71/7 71/22
same [25] 13/24 38/19 47/2 65/8 89/4 104/24 106/11 115/21 124/6 140/23 146/25 154/1 154/4 156/9 161/8 169/15 187/21 201/13 205/2 206/14 207/16 237/17 241/4 242/4 242/15
sample [5] 222/17 223/1 223/3 223/13 225/3
samples [4] 36/12 224/18 224/19 224/21
San [1] 44/20

F:

S

San Francisco [1] 44/20
sarcoma [1] 4/23
satisfactory [2] 121/10 233/9
satisfied [1] 50/14
saving [4] 89/13 89/15 89/21 202/4
saw [11] 41/19 117/1 119/13 151/18 157/19 162/25 165/9 188/16 201/16 220/16 241/12
say [100] 2/7 11/19 11/19 12/10 15/10 20/5 20/16 21/10 23/2 25/21 32/4 33/17 33/23 34/23 38/1 41/14 44/23 45/7 47/24 69/7 72/22 73/17 76/4 80/25 81/10 81/13 85/8 86/17 89/14 95/9 96/15 98/5 98/5 100/6 100/14 101/13 103/8 104/7 107/2 107/18 109/9 112/22 113/1 120/17 121/3 121/13 126/23 126/24 127/11 128/8 128/13 128/25 134/1 136/24 141/1 141/12 145/19 149/4 151/17 151/18 153/2 157/13 159/15 159/15 159/16 161/9 161/12 164/11 165/22 165/24 165/25 166/1 166/3 167/3 175/1 182/11 185/10 186/18 195/14 198/15 202/5 202/12 211/21 214/6 214/20 223/21 226/25 228/2 233/16 234/14 235/7 236/9 239/16 245/18 246/3 246/4 246/22 246/23 247/6 247/12
say: [1] 88/15
say: yes [1] 88/15
saying [48] 1/23 2/17 7/16 16/22 18/19 18/20 23/5 28/3 37/4 39/9 52/2 52/3 52/3 56/3 62/20 71/21 97/18 105/20 109/1 110/21 111/23 113/7 115/3 117/6 124/6 124/7 126/25 134/12 152/16 153/22 154/17 156/6 156/18 157/21 164/5 176/7 176/9 185/25 186/6 186/10 188/8 191/17 191/18 221/18 235/6 237/8 237/19 240/3
says [54] 6/6 6/7 31/3 31/10 35/5 35/17 35/25 37/13 37/19 54/9 55/6 55/13 57/15 58/6 66/23 68/25 70/21 71/11 73/7 76/21 76/25 78/5 78/18 78/23 79/12 80/10 83/5 85/13 93/23 95/15 96/5 110/5 117/14 118/25 119/5 119/11 120/6 122/23 123/4 137/10 137/11 139/11 139/18 139/18 147/15 148/22 150/3 168/1 168/9 174/16 179/13 186/6 187/9 221/17
scale [1] 17/21
scandal [1] 239/3
scanty [1] 76/25
scattered [1] 244/7
scenario [1] 187/14
scenarios [1] 189/21
scene [2] 50/18 118/21
scepticism [2] 103/16 103/17
scheme [1] 220/14
School [1] 115/23
science [4] 110/16 160/22 161/11 242/13
scientific [8] 163/23 191/14 191/22 192/2 192/8 192/9 192/13 243/23
scientifically [3] 159/21 161/14 162/20
scientists [1] 240/17
Scotland [11] 69/18 177/7 180/23 181/8 181/15 184/13 208/6 208/7 208/11 208/13 208/14
Scott [2] 152/15 156/14
Scottish [4] 69/9 178/17 179/6 208/18
screen [4] 93/15 136/19 187/1 214/14
screened [1] 210/4
screening [2] 209/14 210/5
scribbling [1] 155/3
SEB [3] 107/24 146/24 243/2
second [31] 11/6 37/12 37/12 37/13 44/22 54/1 57/21 58/6 65/2 72/22 73/13 75/12 79/5 99/16 106/7 111/2 115/14 120/6 131/3 132/5 136/13 139/10 139/18 147/18 148/22 155/24 157/9 161/25 164/2 193/7 227/7
secondly [2] 11/9 207/5
secretaries [2] 145/24 208/10
Secretary [6] 17/24 17/25 147/16 193/14 193/23 208/11
section [3] 83/4 186/2 238/18
section 41 [1] 238/18
sector [2] 193/11 239/6
secure [2] 91/15 91/23
secured [1] 111/15
security [2] 162/11 193/25
see [111] 1/19 1/22 2/2 4/2 4/7 4/20 6/15 8/17 11/15 16/9 22/4 25/6 26/4 30/20 31/1 35/13 35/21 36/17 37/12 41/18 42/24 44/5 44/9 44/22 46/1 46/8 46/19 55/11 57/12 57/21 58/13 58/18 58/24 59/23 60/18 61/14 61/17 61/25 63/8 63/14 65/2 66/18 69/1 71/15 73/17 74/25 79/9 79/22 80/10 81/21 82/7 83/6 83/24 86/6 92/7 92/7 93/23 94/7 95/3 97/13 103/7 108/10 112/22 114/16 114/23 117/13 119/12 119/24 120/15 121/12 121/21 122/10 122/17 125/1 126/13 129/2 129/7 131/3 131/10 131/21 131/23 137/17 145/18 146/19 146/23 147/10 147/15 149/24 150/6 151/4 152/4 152/13 152/21 157/20 157/24 159/24 162/1 169/3 174/10 181/3 192/6 209/19 210/6 212/7 222/8 222/9 225/16 233/18 238/2 242/1 247/25
seeing [4] 6/23 105/12 109/4 199/7
seek [2] 130/21 205/21
seeking [4] 4/2 146/3 159/2 192/9
seem [9] 5/24 7/21 12/18 147/6 170/4 176/10 179/5 192/5 235/14
seemed [12] 16/2 28/1 41/23 45/6 45/6 77/10 87/24 125/20 156/1 170/18 225/7 245/19
seeming [1] 5/11
seemingly [1] 169/22
seems [19] 5/8 16/14 24/1 35/9 45/21 45/24 62/14 66/3 85/18 112/8 124/5 141/20 145/13 152/17 156/6 168/13 170/25 182/3 237/19
seen [33] 9/4 9/13 10/15 30/13 42/3 42/4 42/9 63/5 63/6 63/7 64/1 83/9 83/18 83/21 118/1 121/14 127/3 130/5 130/6 130/9 142/3 143/12 145/21 153/1 155/12 167/8 169/19 172/24 207/19 222/22 222/24 235/7 247/10
seized [1] 3/7
select [2] 188/19 207/7
selected [3] 132/8 132/23 133/8
selection [6] 39/13 179/1 230/22 231/6 231/8 233/2
self [15] 55/15 61/7 61/10 62/14 91/22 92/5 92/25 99/11 100/11 122/5 130/18 131/18 197/1 218/9 218/14
self-evident [1] 62/14
self-sufficiency [12] 55/15 61/7 61/10 91/22 92/5 92/25 100/11 122/5 130/18 131/18 218/9 218/14
self-sufficient [2] 99/11 197/1
sell [1] 36/12
semantic [2] 126/13 128/16
semantics [1] 156/8
semi [1] 173/11
send [2] 47/18 176/2
sending [2] 186/23 187/5
Senior [1] 21/20
sense [20] 11/12 11/12 19/10 26/14 78/7 99/10 100/4 100/20 122/15 124/11 125/10 135/1 158/19 161/24 162/11 182/4 184/20 199/20 205/12 248/8
sensible [1] 124/8
sensitive [1] 172/3
sensitivity [4] 170/25 171/3 171/17 171/18
sent [19] 2/4 30/15 38/13 48/12 84/15 100/24 111/21 120/2 135/16 135/19 146/25 151/1 160/24 167/12 167/13 202/22 220/4 230/2 239/11
sentence [14] 7/17 7/24 9/10 21/7 49/14 50/13 51/1 51/17 52/24 93/4 96/6 140/2 147/20 214/14
sentences [1] 99/8
separate [3] 129/25 176/16 208/7
separately [3] 71/3 133/15 150/5
September [25] 71/10 86/25 97/24 111/2 113/21 113/22 114/6 135/11 135/18 136/25 137/1 137/4 154/5 154/10 157/5 169/7 169/8 169/9 174/10 174/12 180/12 183/12 183/18 184/1 212/22
September '83 [2] 71/10 212/22
sequitur [5] 51/23 53/2 53/5 100/15 100/17
sera [3] 222/3 222/11 224/4
series [4] 59/19 118/19 130/12 206/21
serious [4] 91/14 175/22 218/3 232/23
seriously [3] 37/17 130/16 213/19
serological [1] 222/4
serum [3] 223/23 230/13 230/18
servant [3] 146/7 225/23 227/5
servants [1] 143/20
serve [1] 227/20
served [2] 227/21 229/22
service [26] 2/17 30/4 43/2 130/9 170/20 183/8 195/6 195/12 200/9 203/14 210/22 211/7 216/19 217/22 220/10 226/1 226/4 226/8 228/12 228/13 231/22 232/6 232/19 233/12 233/19 240/9
Services [3] 30/4 228/1 228/17
session [1] 193/20
sessions [2] 58/8 178/10
set [21] 6/15 17/13 21/12 70/6 71/20 80/10 81/3 81/3 84/25 94/23 98/8 118/21 121/11 121/13 131/3 131/9 137/25 144/9 144/21 190/20 228/17
sets [6] 30/5 30/6 53/25 55/25 70/20 119/10
setting [3] 7/5 59/12 228/11
several [4] 13/4 13/18 34/7 185/11
severe [17] 5/16 20/23 21/13 23/22 26/9 90/6 97/14 98/1 98/8 98/11 126/12 129/2 129/14 198/10 198/21 203/8 203/8
severely [1] 97/6
sex [1] 161/3
sexual [5] 67/22 171/3 171/5 171/13 171/19
sexuality [1] 172/1
shall [8] 109/20 149/17 151/17 173/21 174/2 177/18 180/21 180/24
Shame [1] 84/17
shape [2] 86/3 217/13
shaped [1] 7/9
share [1] 187/20
shared [2] 7/3 11/12
sharing [1] 41/13
she [8] 41/23 59/5 66/5 66/7 165/22 171/15 172/23 191/21
she's [1] 57/12
SHHD [2] 163/18 163/20
shift [1] 8/9
short [7] 53/15 55/4 56/1 62/5 174/1 174/6 196/6
short-term [2] 55/4 56/1

S

shortage [2] 26/18 180/5
shorthand [2] 154/13 155/2
shortly [3] 59/11 61/19 61/25
should [85] 2/7 2/9 2/15 14/5 14/14 14/18 14/21 15/2 15/25 17/12 30/7 36/4 36/18 38/17 39/8 43/12 43/24 45/2 46/23 58/7 58/9 59/25 61/23 63/21 63/23 76/8 82/24 88/3 88/16 90/1 90/1 90/12 91/17 95/9 98/10 103/13 104/8 104/23 105/2 105/6 106/11 106/20 109/4 109/19 110/15 116/6 116/8 116/8 116/12 118/10 121/21 125/10 136/14 138/15 139/6 144/11 146/7 150/11 154/13 155/22 157/7 158/23 166/2 166/3 166/6 166/6 166/11 182/8 185/12 187/7 188/23 192/3 194/1 195/2 205/7 206/3 207/21 219/3 220/13 226/23 227/5 231/15 231/21 231/22 231/23
shoulders [1] 145/10
shouldn't [10] 26/14 98/7 105/22 106/9 108/3 112/14 116/7 146/7 181/15 231/15
show [3] 90/2 136/21 166/12
showed [2] 23/13 238/8
showing [1] 147/3
shown [4] 30/21 51/10 52/17 217/1
shy [1] 178/12
Sibellas [2] 2/3 66/5
sic [2] 36/3 185/24
side [11] 9/9 93/16 93/16 93/17 95/3 95/25 96/6 101/9 147/15 152/14 171/3
signed [2] 144/16 144/17
significance [5] 54/11 88/5 124/18 124/21 150/23
significant [10] 9/6 24/7 50/15 59/2 72/9 88/4 124/2 175/13 198/13 204/12
significantly [5] 20/24 48/8 48/11 77/5 197/24
signs [2] 13/8 67/11
silly [1] 129/19
similar [3] 34/4 47/3 210/2
Simon [1] 190/21
simple [1] 6/12
simply [16] 18/25 22/4 40/20 45/11 47/5 59/17 68/5 85/2 95/5 103/20 103/24 144/8 155/6 223/19 227/23 246/13
since [11] 62/18 71/9 78/8 88/20 121/18 139/13 153/23 154/24 165/21 181/1 247/19
single [8] 50/2 76/11 76/23 97/21 97/21 114/20 140/2 212/24
sir [28] 19/12 39/10 51/23 53/6 58/3 74/1 74/7 74/17 87/23 90/11 92/3 92/12 116/16 122/16 172/4 185/22 187/9 190/21 195/17 196/4 199/2 199/7 199/18 225/14 225/18 225/19 247/3 248/9
Sir Brian [1] 247/3
Sir Donald Acheson [1] 185/22
Sir Henry [1] 199/7
Sir Henry's [1] 199/18
Sir Joseph [3] 74/1 74/17 92/3
Sir Joseph's [2] 74/7 92/12
sitting [2] 173/10 173/12
situated [1] 32/15
situation [18] 6/10 7/12 11/11 17/16 33/6 49/3 49/4 52/17 64/25 69/16 115/2 125/21 125/22 127/17 127/22 127/25 128/14 224/1
situation on [1] 64/25
six [3] 24/12 24/17 24/18
size [18] 19/13 19/13 19/17 19/22 197/18 197/20 208/23 230/22 230/23 234/6 234/10 234/14 234/24 235/18 235/22 235/24 236/6 236/6
sizeable [1] 210/19
sizes [5] 18/8 19/1 19/3 19/4 233/24
skated [1] 53/7
slash [1] 190/10
slight [1] 101/3
slightest [1] 16/3
slightly [8] 18/4 37/15 56/2 108/8 122/8 158/25 172/11 216/7
slow [2] 168/13 233/4
small [17] 27/20 27/23 61/22 76/23 77/4 85/25 86/6 86/16 87/19 101/23 208/21 208/24 213/20 213/20 213/23 228/16 246/20
small-pool [2] 213/20 213/23
smaller [3] 50/5 50/7 214/10
Smith [9] 30/14 74/1 74/1 74/17 79/11 80/15 83/10 83/14 90/21
Smith's [4] 73/5 74/7 83/14 92/3
so [358]
Social [1] 193/24
societal [1] 246/19
Society [12] 25/22 43/25 58/20 62/9 62/11 62/15 62/19 62/24 63/4 64/11 65/6 176/2
SOL [1] 175/4
sole [1] 18/12
solution [1] 91/15
some [114] 2/23 7/16 11/12 12/14 14/10 22/7 22/8 25/15 29/4 31/6 31/11 32/20 39/6 39/15 40/2 40/12 41/7 54/16 60/7 60/11 62/24 64/2 68/5 69/3 69/17 69/22 71/15 72/23 72/23 76/22 86/7 87/12 87/19 92/19 102/21 104/25 105/24 109/19 111/20 112/2 112/7 112/10 114/13 114/25 117/22 118/21 129/1 129/4 131/9 140/20 141/15 142/23 143/22 146/20 148/12 148/17 160/6 161/5 165/4 166/10 166/23 168/2 169/5 170/12 171/15 171/20 171/22 173/19 176/19 177/8 179/4 179/25 180/14 181/22 184/20 185/24 188/5 188/22 189/6 189/22 190/12 195/7 198/7 201/18 202/4 202/13 203/23 210/12 214/7 214/18 215/6 217/18 219/6 223/3 223/12 227/1 228/19 228/22 229/5 235/6 235/7 236/16 236/17 239/6 241/19 243/14 243/17 243/21 245/11 246/7 246/20 246/21 247/11 247/20
some detail [1] 160/6
some extent [1] 62/24
somebody [13] 1/18 38/13 52/18 60/6 62/20 108/1 155/3 156/1 184/8 206/7 209/24 211/20 244/21
somehow [3] 209/11 213/19 242/5
someone [6] 14/20 17/6 52/4 109/4 152/23 194/14
someone's [3] 18/20 56/11 122/19
something [54] 19/11 20/5 27/22 29/8 30/19 40/7 60/15 68/13 81/8 88/19 92/5 97/16 99/24 105/13 110/10 110/23 112/6 112/16 126/15 126/16 130/4 130/5 130/6 130/9 130/13 130/14 142/13 145/20 150/25 151/16 151/19 159/22 160/12 160/18 174/22 179/1 181/24 182/9 183/13 201/22 206/23 210/17 220/18 220/23 224/18 230/1 235/1 236/8 240/18 243/15 244/14 245/15 247/17 247/19
something's [1] 151/25
sometimes [3] 11/22 22/18 26/11
somewhat [1] 79/6
somewhere [2] 29/16 194/22
Sonnabend [1] 75/15
sooner [2] 188/16 238/10
sophisticated [1] 218/2
sorry [25] 7/19 11/23 36/5 37/15 48/17 52/11 57/24 60/8 64/11 90/13 96/7 97/11 116/17 120/3 134/17 137/14 147/13 191/18 196/1 196/2 213/9 213/10 240/7 247/1 248/6
sort [36] 2/23 12/14 15/10 15/13 25/15 28/14 33/2 105/18 138/18 141/16 142/23 144/3 145/3 161/21 170/11 181/22 185/18 196/20 197/13 197/14 199/7 202/13 204/23 209/23 218/18 219/2 220/1 231/20 231/21 232/1 232/17 234/6 234/9 234/10 239/2 244/14
sorts [1] 189/20
sought [2] 179/20 246/7
Soumik [8] 12/22 17/4 17/9 20/7 93/15 96/7 119/4 221/13
sound [3] 158/3 158/3 159/13
sounded [2] 40/14 176/4
sounds [1] 158/4
source [14] 18/12 31/13 48/19 48/23 93/12 135/21 179/25 180/7 180/10 180/15 180/19 197/10 215/11 215/16
sources [8] 35/13 101/15 177/7 187/21 196/11 197/7 202/25 240/7
South [1] 196/18
South America [1] 196/18
Spain [3] 44/17 244/9 244/10
Spain and [1] 44/17
Spanish [1] 5/10
spared [1] 76/8
sparingly [1] 82/9
spat [1] 241/5
speak [9] 26/15 42/10 83/5 86/13 130/3 136/12 199/8 224/13 226/4
speaker [5] 80/6 80/11 82/3 82/18 84/2
speaking [3] 38/10 124/6 184/19
special [3] 1/6 108/16 109/13
specialist [1] 189/21
specialty [1] 205/8
specific [13] 72/23 75/22 129/9 133/23 139/1 144/15 185/16 185/17 185/18 190/13 197/5 197/6 204/20
specifically [22] 7/17 27/21 46/20 101/19 106/21 121/18 123/12 123/20 124/12 124/23 126/2 126/5 127/12 128/16 128/18 132/25 136/1 136/9 192/18 196/22 222/13 228/17
specifications [1] 111/21
specifics [1] 107/14
specify [1] 223/4
specimens [5] 222/3 222/11 222/12 222/14 224/5
speculating [1] 75/24
speed [1] 156/2
spelt [2] 30/22 171/20
Spence [2] 87/15 244/23
Spence Galbraith [1] 244/23
Spence Galbraith's [1] 87/15
Spencer [6] 41/20 58/25 59/21 63/9 102/24 107/7
Spencer's [1] 57/12
spend [1] 230/3
sphere [1] 195/1
spiking [1] 238/1
spoke [3] 33/22 167/4 241/9
spoken [2] 32/5 66/25
spot [3] 28/10 170/5 209/20
spotted [2] 150/22 151/17
spouses [2] 4/15 188/5
spread [1] 180/3
spring [2] 211/22 212/13
staff [2] 146/24 199/17
stage [9] 11/16 30/11 87/12 136/6 175/4 187/6 216/8 217/19 222/23
stages [3] 4/18 54/17 217/21
stand [4] 22/25 26/20 246/2 247/19
standard [2] 41/12 119/14
standards [3] 31/19 224/2 224/3
standing [1] 17/24
stands [1] 111/6
stark [1] 161/6

F:

S

start [5] 17/9 42/15 44/6 188/11 248/11
starting [2] 147/8 203/10
starts [1] 147/18
state [14] 17/25 70/22 70/24 71/8 108/1 129/3 147/16 186/3 189/10 193/14 193/24 208/10 208/11 232/1
stated [1] 45/8
statement [36] 20/5 20/9 28/4 59/4 68/8 71/23 73/17 73/25 74/8 74/16 74/17 75/11 92/3 92/4 92/13 94/8 96/25 138/7 142/1 151/8 151/12 160/12 164/19 183/4 183/12 183/15 191/2 194/9 194/20 198/8 214/13 228/10 238/15 246/5 246/6 246/11
statements [1] 163/2
states [12] 4/8 5/14 18/9 30/3 44/16 44/25 55/6 105/4 109/18 131/5 131/12 197/9
status [1] 24/24
steadily [1] 235/17
steering [1] 170/6
step [4] 82/5 101/21 102/3 159/19
steps [24] 30/7 42/6 58/7 60/3 107/5 111/13 111/24 113/10 117/10 117/22 123/5 131/13 132/6 132/18 133/13 133/15 137/16 138/8 143/1 143/22 144/19 216/10 216/20 217/9
sterilisation [1] 230/24
sterilised [1] 237/11
Stevens [1] 190/21
stick [1] 96/24
stigmata [1] 116/2
stigmatising [2] 214/24 233/14
still [23] 5/18 6/23 7/11 15/22 16/15 20/25 67/5 72/2 76/1 102/10 104/20 105/12 105/20 111/6 161/1 181/6 181/8 188/1 208/14 210/8 213/25 214/1 234/6
stock [3] 38/25 39/2 55/12
Stockholm [4] 4/4 8/10 11/4 11/5
stocks [9] 31/12 38/20 38/24 39/15 39/22 72/9 108/12 108/14 109/11
stop [14] 25/19 25/20 25/20 32/20 36/9 37/8 37/18 41/22 46/25 78/25 98/6 107/9 173/3 182/11
stopping [1] 41/1
store [1] 223/12
stored [1] 222/11
storing [1] 222/16
Strasbourg [1] 122/21
strategies [1] 82/12
stressed [4] 6/13 13/5 13/25 166/20
strictly [1] 152/1
stringent [6] 39/12 39/13 39/25 105/10 105/18 211/14
strong [10] 5/21 7/13 8/1 9/23 11/8 54/4 66/16 67/18 151/12 167/5
stronger [1] 165/21
strongly [2] 4/13 91/19
struck [1] 13/2
structured [2] 80/24 81/18
studies [1] 14/1
study [1] 221/23
stuff [2] 171/1 232/21
stunning [3] 19/5 19/6 19/6
stupid [1] 128/12
sub [7] 63/9 79/14 90/3 91/19 93/6 96/9 128/13
sub-clause [1] 128/13
sub-committee [5] 63/9 79/14 91/19 93/6 96/9
sub-optimally [1] 90/3
subcommittee [13] 1/21 26/23 27/7 73/9 83/2 96/2 96/5 98/18 102/5 106/16 111/12 169/21 242/9
subcommittee's [6] 93/13 96/1 97/1 97/4 101/10 213/2
subeditor [1] 151/22
subheading [1] 80/11
subject [7] 30/25 107/6 168/11 169/23 172/3 226/21 235/4
submerged [2] 9/13 10/15
submission [1] 192/24
submissions [1] 170/13
submit [1] 36/11
submitted [1] 120/4
subsequent [1] 58/17
subsequently [8] 30/21 73/20 148/5 167/8 171/11 217/20 225/11 244/23
subsidiarity [1] 227/22
substance [1] 201/1
substantial [3] 38/25 108/14 108/20
substantially [1] 40/21
successful [2] 59/10 239/22
successfully [2] 212/8 236/20
succumb [1] 90/8
succumbed [1] 114/14
such [40] 33/3 36/24 46/21 50/1 58/11 59/25 64/1 67/2 67/5 68/7 72/7 72/7 88/1 88/2 91/14 111/6 111/8 121/17 122/6 123/11 123/20 124/22 125/5 126/2 127/12 131/19 132/9 133/3 148/25 149/7 169/19 171/15 182/25 187/20 191/22 200/9 205/6 211/17 212/20 237/20
sudden [1] 26/18
suddenly [1] 220/21
sue [1] 174/19
suffer [1] 25/13
suffered [3] 18/24 20/25 246/8
suffering [2] 155/16 246/25
sufficiency [12] 55/15 61/7 61/10 91/22 92/5 92/25 100/11 122/5 130/18 131/18 218/9 218/14
sufficient [9] 16/12 34/15 34/21 36/25 99/11 100/5 102/8 197/1 225/1
sufficiently [2] 31/25 194/17
suggest [22] 2/10 3/21 14/13 22/13 42/5 50/23 64/14 84/14 89/24 104/23 120/22 124/13 127/14 128/15 128/19 130/14 141/20 146/3 158/12 159/2 172/22 205/23
suggested [24] 9/20 16/10 59/8 79/9 80/6 80/11 80/15 81/10 81/11 82/19 83/15 84/2 84/3 104/8 121/23 124/3 124/13 124/21 125/1 125/4 131/20 146/16 148/3 148/13
suggesting [5] 97/25 124/20 125/7 125/14 127/16
suggestion [13] 15/18 35/16 36/23 37/14 39/1 59/15 66/13 69/15 108/25 154/7 164/9 164/10 181/9
suggestions [3] 166/10 195/20 232/23
suggestive [3] 13/9 16/10 44/14
suggests [10] 4/13 6/12 10/14 23/17 49/16 73/12 76/16 80/5 85/24 117/15
sum [1] 168/10
summarise [2] 4/2 17/14
summarised [5] 27/10 28/5 71/16 178/19 178/21
summary [6] 12/18 17/8 30/10 61/11 70/17 85/10
supernatant [2] 25/11 203/12
supplied [2] 72/2 147/6
suppliers [5] 70/15 70/15 91/16 91/24 245/4
supplies [18] 24/22 37/25 46/24 59/25 70/12 95/16 101/24 102/2 102/8 102/14 103/10 103/22 105/2 106/22 129/3 140/19 152/11 197/2
supply [21] 13/4 13/12 18/10 35/8 35/11 35/19 43/7 50/23 55/16 61/1 61/5 70/4 91/6 111/14 111/18 112/4 112/12 127/8 127/17 214/3 219/4
supplying [3] 32/14 61/11 70/19
supported [2] 139/14 192/14
supporting [1] 120/10
supports [1] 91/20
suppose [13] 15/1 27/3 35/13 40/6 49/22 50/15 56/20 64/3 87/9 165/22 203/18 206/4 209/6
supposed [4] 150/25 217/24 239/14 239/15
supra [3] 228/1 228/13 228/17
Supra-Regional [2] 228/1 228/17
sure [28] 1/24 7/14 8/18 15/14 25/10 33/17 52/8 58/1 68/8 104/13 113/19 115/2 124/18 136/10 141/17 143/1 145/1 159/23 167/2 170/14 170/19 172/16 178/6 212/4 212/23 225/12 233/21 245/19
surface [2] 210/4 210/9
surgeons [2] 229/12 229/12
surgery [6] 25/21 26/12 26/13 63/25 97/21 198/19
Surmised [1] 178/20
surplus [1] 226/21
surprise [3] 92/8 242/6 243/21
surprised [2] 83/11 94/18
surprising [2] 16/9 39/3
surrogate [1] 209/15
surveillance [9] 9/22 15/13 115/8 116/11 135/25 136/2 218/3 220/8 222/13
survey [3] 171/13 245/13 245/21
susceptible [2] 237/15 238/6
suspect [10] 44/24 98/23 105/9 110/3 128/11 151/18 171/16 175/14 194/4 232/7
suspected [3] 6/3 14/20 16/5
suspicion [3] 16/3 204/20 204/21
sustaining [2] 13/4 117/20
sweats [3] 13/10 58/12 67/3
Sweden [1] 243/1
Sweeney [1] 20/9
symptomless [1] 221/19
symptoms [7] 13/8 58/11 67/2 67/17 67/21 88/24 240/19
syndrome [2] 54/4 75/1
syphilis [1] 233/13
system [10] 19/2 77/11 77/14 78/25 180/16 219/18 219/25 221/5 227/19 239/25
systems [2] 77/18 242/23

T

T cell [2] 9/12 10/14
T4 [1] 77/11
T4/T8 [1] 77/11
T8 [1] 77/11
table [1] 71/14
take [61] 8/5 11/18 13/13 31/20 31/23 33/17 35/18 40/20 43/3 53/12 57/22 67/13 69/21 81/18 83/4 84/18 84/21 88/3 94/15 100/1 105/4 109/25 110/14 116/18 116/19 118/12 123/5 123/19 130/15 131/13 132/18 133/13 137/15 138/8 143/1 143/22 144/18 146/12 160/2 164/4 164/7 164/14 164/15 170/18 173/22 174/2 176/15 180/17 186/23 191/8 192/7 196/3 201/23 207/7 207/24 226/15 229/10 231/22 231/23 240/7 245/3
taken [49] 1/19 4/4 14/3 14/22 29/13 30/7 32/9 33/1 33/8 33/10 33/16 33/18 34/14 37/17 38/11 39/23 40/22 42/6 43/6 43/16 43/24 46/5 58/8 59/14 64/20 76/10 94/17 101/24 102/5 103/11 103/20 111/3 111/13 117/10 117/23 124/17 146/1 151/23 174/18 186/8 216/10 216/20 217/9 220/3 222/12 222/14 225/2 230/8 230/10
takes [2] 151/22 172/25
taking [13] 6/16 39/4

F:

T

taking... [11] 77/24 111/24 113/11 132/6 139/9 144/6 154/23 159/18 168/16 223/1 223/13
talk [14] 28/25 47/19 47/21 55/20 60/23 78/10 81/7 88/2 91/12 117/22 135/22 138/17 139/24 190/7
talked [12] 29/4 141/18 154/20 160/23 190/5 194/8 198/23 204/16 218/3 219/8 219/14 224/10
talking [31] 10/9 11/3 12/7 16/17 20/9 23/22 28/10 51/1 91/21 98/6 130/7 132/24 133/18 133/18 134/17 137/12 137/13 137/22 141/19 143/18 167/1 175/23 198/9 198/21 203/25 204/5 205/4 205/5 223/17 234/2 244/20
talks [7] 36/9 89/4 91/2 91/9 99/5 117/9 120/21
target [2] 80/7 80/14
targets [2] 179/21 180/8
task [1] 19/24
tautologous [1] 123/22
team [1] 193/2
technical [3] 17/19 158/19 193/22
techniques [1] 82/11
technologically [1] 246/18
telephone [2] 32/3 143/13
telex [2] 102/25 104/3
tell [12] 2/21 2/22 7/11 8/14 38/19 48/21 90/10 132/12 132/14 173/21 233/18 233/19
telling [6] 72/6 134/23 138/11 142/10 176/13 235/21
tells [1] 169/24
temperature [2] 29/13 237/23
temporary [2] 24/13 69/15
ten [3] 234/2 245/15 245/16
tend [3] 76/16 138/17 227/14
tended [1] 178/12
tendentious [1] 128/3
tends [1] 119/14
tens [1] 39/6
tenth [1] 71/12
term [6] 55/4 55/14 56/1 141/24 143/17 230/15
termed [1] 90/16
terms [42] 1/17 5/3 28/3 32/1 40/11 41/9 51/7 64/16 66/11 69/24 79/8 81/15 87/11 88/10 95/2 98/21 99/19 102/20 109/23 132/23 153/21 164/5 166/3 173/1 187/2 193/12 193/23 194/19 195/10 196/17 197/1 197/7 198/4 199/1 199/19 201/10 203/3 203/11 203/15 208/22 211/17 214/6
terms of [1] 99/19
terrible [4] 50/22 182/13 182/15 198/19
terribly [4] 124/8 165/12 171/12 172/2
territory [1] 60/24
test [13] 158/8 158/15 162/22 209/21 222/13 223/3 223/4 223/6 223/10 230/17 237/25 238/1 238/7
tested [1] 76/12
testimony [1] 246/20
testing [7] 15/13 211/10 211/14 211/15 211/16 217/7 233/13
tests [3] 76/15 211/9 222/4
text [9] 17/8 120/8 120/22 122/10 122/24 125/2 129/24 131/2 168/10
than [58] 2/20 4/9 5/12 8/8 15/9 15/17 19/4 21/19 25/2 31/9 40/18 40/22 50/7 65/5 68/24 74/3 75/22 76/24 77/5 78/2 78/12 105/7 105/22 106/19 121/19 122/15 126/14 130/8 130/21 136/17 139/4 156/22 158/20 159/6 160/22 161/11 161/23 162/3 164/5 173/16 173/22 175/23 188/16 188/18 190/23 194/24 195/9 197/4 197/25 199/11 202/22 203/7 213/21 214/9 225/8 233/9 238/5 239/1
thank [31] 10/6 10/10 10/20 17/10 20/3 49/12 53/5 56/24 57/7 57/23 58/2 93/18 101/7 103/17 116/15 118/12 119/5 121/1 131/10 163/12 196/4 201/2 221/14 229/25 247/2 247/14 248/4 248/7 248/8 248/9 248/9
thanks [3] 119/4 153/13 247/5
that [1283]
that's [98] 4/4 10/1 10/4 10/6 16/24 17/5 18/12 19/12 20/18 21/11 21/22 24/6 24/20 33/25 37/11 37/19 37/25 39/2 43/18 46/3 46/18 47/12 48/13 51/21 57/3 60/14 64/16 66/4 70/12 71/15 72/4 72/16 73/9 73/22 74/12 79/3 84/12 86/14 86/17 90/25 91/21 95/13 95/24 98/22 103/17 104/10 109/6 110/21 117/17 119/20 120/17 125/14 125/16 127/6 127/13 127/16 132/1 132/16 133/17 134/11 138/12 138/16 144/11 145/25 146/20 147/6 147/7 148/9 149/9 149/14 151/1 153/11 158/4 158/7 158/15 159/20 164/13 173/9 175/5 178/4 182/7 182/25 188/14 189/12 194/4 201/7 207/18 213/10 214/6 221/14 233/11 235/10 235/19 235/23 239/3 241/24 244/18 245/23
Thatcher [1] 171/11
thawed [1] 22/5
their [72] 15/13 15/16 18/2 20/24 24/3 25/25 38/14 39/11 39/13 39/25 40/11 52/7 58/10 58/15 65/19 67/4 70/24 71/22 77/11 77/18 89/12 106/1 106/19 109/1 111/21 112/18 134/15 136/12 138/11 140/12 141/17 142/10 163/18 163/22 163/22 163/24 171/5 179/22 180/12 182/22 186/14 188/20 191/25 192/18 192/21 192/23 193/13 195/6 195/8 195/9 195/12 195/13 197/19 201/23 201/24 202/7 202/9 202/13 204/16 205/3 205/7 208/12 220/23 223/2 227/9 227/17 229/22 243/25 244/7 246/9 246/10 246/25
their recommendation [1] 106/19
them [58] 2/19 2/21 2/22 27/10 31/9 41/8 49/19 53/8 57/8 57/9 57/10 61/9 61/10 62/16 63/6 63/7 65/20 66/12 66/15 68/24 76/9 81/5 85/15 91/4 94/10 103/22 104/5 105/18 107/11 117/17 132/14 141/18 143/24 165/15 166/14 171/24 180/7 186/15 199/5 201/19 201/23 202/10 202/25 211/15 214/23 217/7 224/24 224/25 225/1 225/2 225/6 228/21 229/6 229/8 230/21 231/13 236/11 243/12
theme [2] 191/10 208/14
themselves [7] 19/15 26/16 76/18 88/23 108/17 135/8 189/15
then [290]
then -- so [1] 69/22
then happened [1] 168/25
theoretical [1] 13/2
theoretically [1] 121/7
theories [1] 204/1
theory [1] 82/16
Therapeutic [2] 117/4 117/7
Therapeutics [1] 39/11
therapy [1] 13/4
there [290]
there and [1] 238/19
there'd [1] 143/6
there's [68] 3/12 3/20 7/13 9/17 11/10 14/9 17/5 24/13 35/16 41/6 42/5 44/1 46/1 57/4 61/6 61/14 61/17 61/18 62/5 63/18 63/20 63/23 65/25 69/6 70/16 71/14 73/13 80/11 80/11 88/12 91/10 92/16 96/2 98/8 99/16 100/20 107/10 108/19 108/19 124/5 129/25 131/4 131/8 135/13 149/16 152/21 155/12 167/18 167/21 168/14 169/4 173/19 178/18 179/9 182/16 183/10 183/21 184/22 184/25 186/1 186/2 186/3 189/13 195/25 205/16 212/6 221/15 221/22
thereabouts [1] 173/3
thereby [1] 15/16
therefore [9] 111/6 112/13 113/19 129/6 136/8 155/6 170/21 190/11 237/25
Therein [1] 145/22
these [39] 12/17 13/24 18/23 26/23 28/20 31/23 32/1 34/23 63/15 67/9 71/19 78/2 80/8 91/19 94/7 101/19 112/17 119/21 121/14 127/3 132/11 132/16 133/16 134/8 139/13 139/13 156/14 162/3 163/4 163/4 171/24 172/15 177/7 184/5 196/10 205/13 205/23 221/11 228/12
thesis [1] 110/14
they [219] 2/11 10/16 13/22 13/25 14/14 14/15 14/24 15/10 15/15 15/22 16/10 16/11 16/12 18/11 18/14 18/16 19/3 19/10 19/10 20/25 23/1 24/2 25/13 26/15 26/17 26/25 29/1 36/7 36/12 38/16 40/10 40/11 41/14 42/10 44/5 45/9 48/22 50/14 50/16 52/3 52/3 52/12 60/4 60/7 60/12 60/21 62/17 67/16 67/20 67/20 67/21 70/23 72/18 77/19 81/4 81/5 87/5 89/13 90/16 94/12 97/8 97/24 98/5 98/7 98/12 99/9 100/8 100/8 102/10 105/12 105/16 105/17 105/20 105/22 105/24 105/25 107/1 107/21 107/22 107/22 108/4 109/1 109/5 110/10 117/19 120/15 124/16 127/22 129/14 129/15 130/13 133/4 133/7 134/13 134/15 134/23 135/11 135/17 136/1 136/8 137/12 137/12 137/12 141/17 159/16 161/2 161/17 163/6 163/6 163/7 163/9 163/10 163/21 163/22 163/22 163/23 163/24 164/1 164/13 165/20 166/16 166/17 166/18 166/18 166/23 167/3 170/2 170/13 170/14 173/12 175/2 175/9 179/21 181/1 181/20 182/21 184/21 185/15 189/11 189/19 191/21 192/1 192/3 192/3 192/4 192/15 192/19 192/20 192/22 195/5 195/10 196/11 197/2 197/15 197/21 197/24 201/25 202/6 202/8 203/12 203/22 203/22 204/2 204/4 204/5 204/9 204/9 205/8 206/7 207/1 207/12 207/18 211/7 211/13 211/14 211/16 212/20 216/3 217/6 218/1 218/13 220/15 220/16 226/24 226/24 227/12 228/15 229/1 229/1 229/22 230/13 230/14 230/16 231/10 231/14 231/15 232/12 232/15 232/15 232/20 233/5 233/20 234/18 234/21 237/22 239/10 239/11 239/13 239/15 241/9 243/8 243/9 243/10 243/12 243/24 243/25 245/4 245/5 247/21
they're [5] 19/15 119/12 162/13 192/2 207/23
thing [25] 2/21 3/11 29/1 33/4 86/19 87/9 87/12 94/21 102/13 107/22 113/20 124/6 141/12 142/12 156/9 170/23 185/21 187/19 188/15 195/7 212/3 213/12 214/5 220/25 237/4
things [23] 6/25 41/19 65/12 87/11 98/20 115/6 130/15 132/15 163/9 168/2 170/12

F:

T

things... [12] 171/4 171/23 171/24 192/4 207/22 211/15 215/24 218/5 223/3 228/9 230/8 247/19
think [282]
thinking [14] 3/8 7/10 8/9 18/11 29/1 45/20 49/22 106/6 110/3 125/14 125/18 125/18 142/18 199/16
thinks [1] 73/7
third [9] 73/15 90/13 123/3 131/23 151/4 152/13 196/17 196/23 236/12
thirdly [1] 11/12
this [392]
Thomas [4] 36/15 36/20 42/13 107/17
Thomas's [1] 36/13
thorny [2] 192/7 192/8
thoroughly [1] 182/3
those [82] 1/9 4/23 4/24 15/11 20/13 27/10 29/4 36/20 39/7 41/15 41/15 44/5 47/3 49/9 56/16 59/4 59/17 60/1 60/3 63/1 63/12 63/22 65/14 69/22 79/8 82/25 84/10 85/4 89/9 90/14 95/13 97/4 97/5 99/19 104/4 109/23 122/5 125/11 129/13 131/17 133/20 141/8 142/12 162/11 168/6 172/21 180/5 180/18 188/24 189/1 189/10 189/21 190/5 190/15 195/17 198/3 198/13 200/14 202/18 202/24 203/2 210/6 218/13 220/24 224/3 224/19 224/20 225/4 225/14 226/23 227/9 227/15 230/19 235/16 238/17 239/5 244/10 246/4 246/17 246/21 246/25 247/11
though [12] 6/11 39/8 89/2 90/25 111/19 114/8 159/14 161/2 170/16 196/23 202/15 238/7
thought [53] 2/1 12/10 12/11 14/21 15/3 15/23 28/1 28/20 36/18 38/16 50/24 51/9 60/20 71/23 81/11 83/24 87/9 89/17 89/23 94/16 99/21 99/22 103/21 105/9 105/9 105/16 108/6 109/25 110/3 118/11 118/16 128/3 128/12 129/20 129/21 141/15 151/14 155/5 161/4 161/15 163/9 170/13 175/17 186/16 186/16 198/20 205/1 205/22 218/18 219/14 227/9 235/23 248/1
thoughts [2] 129/18 162/1
thousands [4] 76/24 77/5 197/23 197/23
thread [1] 205/16
threat [3] 36/24 102/15 239/23
threatening [2] 24/6 90/6
three [14] 4/18 5/10 10/12 11/6 26/6 26/6 99/8 100/5 108/13 108/25 139/11 173/1 176/19 188/1
thrombocytopenia [1] 220/22
through [39] 2/2 7/15 30/6 30/15 44/8 46/7 53/7 55/11 57/3 57/4 70/5 71/15 73/1 98/17 147/3 149/3 162/15 168/6 168/24 180/4 192/13 193/10 196/15 200/20 201/6 201/8 201/8 213/5 217/10 220/23 230/2 230/4 230/21 233/10 241/7 245/5 245/6 245/12 247/9
throughout [2] 192/25 234/23
throw [4] 99/9 185/24 224/25 225/6
Throwing [1] 225/7
thrown [2] 50/22 182/4
thunder [1] 241/2
thus [3] 106/14 121/16 172/20
ticking [1] 76/7
time [110] 12/10 14/16 21/20 22/20 25/9 25/22 27/5 27/12 27/14 28/23 39/4 50/7 50/11 50/20 50/24 51/3 52/14 53/10 53/25 56/5 56/6 56/14 57/9 62/24 65/1 72/9 72/15 73/18 76/7 86/19 86/24 87/18 90/2 92/2 98/3 98/11 100/1 100/5 100/9 105/9 105/14 113/12 114/13 118/2 129/19 135/11 138/21 142/2 143/6 148/2 153/18 154/7 154/20 158/16 162/21 165/19 166/23 168/12 169/7 169/9 171/3 179/25 181/18 181/18 182/1 182/13 185/5 187/25 188/2 189/14 190/1 190/18 193/24 194/15 196/14 203/20 206/18 207/9 207/10 209/8 209/9 210/3 216/17 216/25 218/6 218/8 220/16 222/9 223/1 224/3 224/9 224/23 225/5 225/10 226/7 229/10 229/14 230/3 230/14 233/14 237/13 237/17 237/23 241/10 241/19 242/2 242/15 244/16 244/24 248/5
timeline [1] 218/7
times [8] 6/11 18/3 185/11 199/7 223/25 233/20 245/15 245/16
timing [1] 120/25
tiny [1] 147/14
tip [7] 6/24 9/3 9/5 10/6 10/19 11/13 88/18
to [1615]
to find [1] 217/6
to rein [1] 219/1
today [4] 32/5 152/12 185/1 207/16
together [11] 48/16 80/17 120/9 140/17 150/8 165/15 204/7 209/25 210/5 232/15 232/16
toing [2] 167/18 169/6
told [18] 2/9 2/15 2/18 21/20 25/22 65/4 103/22 115/25 134/15 134/19 151/19 159/6 162/13 174/22 188/20 210/21 235/22 243/4
tomorrow [10] 145/18 148/1 150/3 158/12 169/1 169/4 169/24 191/12 248/11 248/12
too [15] 74/12 82/23 156/4 159/14 161/3 164/22 168/16 169/12 169/13 179/24 180/13 192/17 224/1 227/3 233/4
took [9] 60/3 105/14 159/4 191/6 212/21 225/24 231/10 233/3 238/3
top [15] 8/12 17/10 59/23 61/16 75/17 91/9 93/23 93/25 96/7 120/1 122/16 122/25 145/6 152/3 176/25
topic [7] 146/10 162/7 176/16 196/11 196/12 208/21 247/25
topics [2] 102/22 247/23
total [2] 4/8 88/25
totally [9] 28/2 33/4 48/11 50/12 77/12 81/8 88/14 89/1 125/24
touch [1] 239/7
touches [1] 208/25
Tovey [1] 198/24
towards [6] 29/6 117/13 122/16 185/25 186/4 231/23
town [1] 199/8
trace [4] 200/19 201/5 201/12 217/3
tract [1] 22/22
training [1] 170/11
tranche [1] 195/10
transfer [1] 26/8
transferred [1] 180/18
transformed [1] 50/18
transfusion [79] 13/20 19/18 27/17 27/18 28/19 29/14 30/8 43/2 44/17 46/9 48/21 48/25 54/6 54/12 55/18 56/7 56/11 58/9 66/14 67/19 68/12 68/14 113/24 133/25 140/9 160/21 164/25 165/14 166/1 167/7 168/21 168/22 170/20 177/6 179/19 179/23 180/4 180/23 182/1 182/17 182/19 183/8 183/11 183/25 189/16 189/18 195/6 195/8 195/12 195/16 200/9 203/14 208/6 210/22 210/23 211/1 211/7 211/12 214/19 217/13 218/4 220/10 220/13 220/17 221/1 221/3 221/8 221/12 228/11 231/22 232/5 232/14 232/19 233/12 233/18 239/2 239/10 239/15 239/18
transfusions [3] 138/3 177/9 217/15
translated [1] 194/3
transmissibility [2] 211/25 212/17
transmissible [7] 4/11 4/13 7/14 54/5 75/25 77/2 99/20
transmission [14] 4/15 5/22 8/1 9/7 11/9 20/19 34/7 78/14 136/11 149/1 149/8 160/10 203/24 204/13
transmit [4] 52/15 161/20 209/23 209/24
transmitted [15] 44/11 44/13 49/23 75/23 89/11 117/17 147/22 148/24 149/13 150/12 151/6 153/3 162/15 232/24 235/1
transmitting [2] 50/1 117/12
transplant [2] 217/21 228/14
trauma [1] 198/19
travel [2] 212/1 212/16
traveller [1] 241/18
treat [15] 22/7 23/1 32/16 64/6 64/7 64/8 72/14 97/19 112/18 121/15 127/4 127/18 229/8 236/20 236/21
treated [19] 43/11 47/6 61/2 90/4 94/22 102/17 189/2 189/2 203/16 203/17 203/20 203/22 216/3 228/13 236/14 236/15 237/10 238/4 238/9
treating [11] 22/3 82/15 126/9 132/13 132/19 133/3 134/15 136/5 152/15 229/5 229/12
treatment [36] 9/23 23/20 24/2 25/19 48/1 54/24 63/20 63/23 63/24 64/15 82/11 82/12 89/19 89/21 90/5 90/19 95/6 97/17 98/21 113/15 121/12 121/19 121/20 152/18 156/8 193/17 198/4 217/14 218/15 218/16 227/9 229/2 230/23 236/12 236/17 236/19
Treloar's [2] 115/22 116/1
trespassed [1] 116/16
trial [1] 224/8
Trials [1] 229/18
trick [1] 24/19
tried [6] 130/20 190/22 202/10 202/14 246/12 246/16
trigger [1] 74/9
trite [1] 158/7
trivial [1] 130/14
trouble [3] 47/9 58/19 169/6
troubled [1] 183/23
true [8] 19/12 23/17 45/23 90/25 141/2 158/19 182/7 233/11
truly [1] 198/20
truncated [1] 155/25
Trust [1] 171/14
truth [1] 226/4
truths [1] 226/6
try [13] 12/5 37/16 55/11 69/21 124/14 128/13 128/22 179/1 192/22 205/21 212/4 217/3 217/14
trying [14] 28/9 54/15 62/16 105/8 128/11 128/11 145/19 150/7 160/20 167/3 212/22 237/16 237/21 240/24
Tuesday [1] 221/11
turn [7] 137/14 137/20 161/1 161/4 225/16 230/1 230/21
turned [12] 6/25 25/25 33/9 162/4 166/14 166/25 206/1 229/13 235/12 238/6 239/9 245/10
turnoff [1] 171/7
twice [1] 51/3
two [34] 24/12 24/19 35/23 51/21 54/8 54/13 63/14 66/12 74/15 75/13 79/3 83/1 99/19 100/4 119/13 126/3 129/8 132/12 132/14 147/2 156/6 162/7 166/14 166/15 174/14 184/20 187/4 188/2 189/21 199/5 210/1 225/20 238/11 246/3
two-fold [1] 54/13
type [1] 72/20

U

ubiquity [1] 87/22
UK [71] 19/4 26/2 26/6 29/24 32/12 33/24 34/3 34/5 34/19 36/13 37/17 38/3 39/16 44/23 47/25 49/24 50/20 50/23 52/15

F:

U

UK... [52] 52/18 61/6 61/22 70/19 72/2 72/8 78/13 91/10 91/16 91/23 93/6 94/4 96/10 101/16 102/6 103/4 105/2 105/6 106/1 106/5 106/11 106/13 108/12 108/21 111/8 119/15 120/9 122/21 125/11 125/21 125/21 127/17 127/20 127/20 127/23 127/25 128/5 129/22 133/2 133/2 155/17 163/17 197/25 205/25 211/24 212/15 214/7 214/7 234/10 234/10 235/9 245/17
UK population [1] 214/7
UK's [2] 125/23 131/20
UK-derived [1] 52/15
UKHCDO [7] 64/5 98/2 98/14 101/1 135/25 140/8 182/25
ultimate [3] 193/25 194/2 225/24
ultimately [10] 26/5 41/8 42/5 64/21 87/5 90/8 145/9 159/24 160/24 191/6
unalterable [1] 13/14
unambiguous [2] 160/13 160/18
unavoidably [1] 221/7
uncertain [2] 82/21 166/3
uncertainty [4] 12/16 13/16 14/15 187/11
uncontrollable [1] 232/1
under [13] 14/16 61/5 62/8 79/16 81/3 81/9 81/22 82/8 109/12 113/5 138/22 141/14 147/16
Under-Secretary [1] 147/16
undergraduate [1] 216/15
underneath [1] 127/2
underplaying [1] 45/23
understand [38] 3/5 17/12 32/19 49/19 51/16 60/15 67/17 71/18 79/19 81/21 83/1 83/1 86/10 90/17 91/22 92/18 94/3 94/3 97/18 98/16 100/24 102/4 104/6 106/7 112/15 115/7 123/14 124/1 124/18 125/7 138/5 150/4 150/7 153/9 165/3 191/10 200/14 241/25
understandably [1] 191/3
understanding [27] 2/12 10/1 20/12 23/8 48/14 59/3 65/17 74/12 89/17 92/4 96/1 98/11 113/17 127/20 134/6 159/4 176/6 197/19 197/24 209/3 213/2 213/3 215/18 218/12 219/2 232/14 234/5
understood [9] 37/2 99/25 146/9 170/9 170/15 177/10 203/23 204/8 220/17
undertaken [1] 56/18
undertaking [1] 197/14
undesirable [1] 13/5
undoubtedly [3] 19/3 163/19 231/19
unease [1] 177/14
uneasy [1] 6/23
unethical [2] 222/25 225/8
unexplained [1] 67/3
unfair [1] 103/15
unfortunate [4] 113/17 114/8 154/2 159/13
unfortunately [10] 114/14 141/3 154/12 165/6 206/25 208/24 220/17 221/7 238/7 245/11
unhappy [1] 192/4
unified [1] 211/10
uniformly [1] 228/4
unifying [1] 183/7
uninterrupted [1] 13/3
unit [2] 229/18 239/16
United [5] 18/9 87/21 127/2 205/11 211/4
United Kingdom [4] 87/21 127/2 205/11 211/4
United States [1] 18/9
units [6] 25/16 39/6 72/10 87/22 112/6 228/14
unknown [7] 19/14 19/15 76/11 76/12 85/17 107/7 114/3
unless [6] 60/6 97/8 100/11 124/10 217/16 229/5
unproven [1] 7/12
unreasonable [1] 170/23
unrecognised [1] 85/18
unsafe [2] 105/17 106/8
unsettling [1] 52/16
until [17] 1/20 53/12 71/9 86/24 101/24 106/22 116/20 135/18 158/8 181/16 188/13 196/3 212/21 223/7 236/18 241/4 248/14
unto [1] 226/4
untreated [3] 24/6 90/3 95/15
unusual [1] 81/13
unwelcome [2] 165/12 165/25
unwilling [1] 13/13
up [66] 3/11 7/18 10/7 22/5 30/1 31/18 31/20 37/15 49/12 66/12 68/6 68/19 69/21 78/4 78/17 83/7 92/3 93/15 103/5 105/13 108/1 108/8 115/24 116/12 116/13 136/18 141/17 144/9 144/16 144/17 146/17 156/1 156/3 157/7 161/1 161/4 161/17 166/25 168/10 176/2 181/17 182/4 188/17 188/25 190/20 191/7 192/12 192/23 194/21 195/10 214/14 218/8 219/23 225/24 228/11 228/17 229/13 229/24 238/2 241/1 242/22 243/10 244/9 244/12 244/16 244/21
up Government [1] 194/21
up-date [1] 176/2
update [1] 7/4
updating [1] 66/20
upon [12] 16/18 21/25 56/3 75/18 76/11 86/14 92/4 135/19 165/8 185/4 239/24 247/7
upside [1] 25/25
urban [1] 5/18
URL [1] 12/6
us [55] 2/24 3/5 17/20 17/24 21/20 50/22 62/12 63/16 66/2 66/4 72/6 78/13 78/19 78/20 81/20 82/9 83/4 89/16 91/10 92/15 93/8 97/2 98/23 99/6 99/12 101/15 103/22 105/7 111/10 114/4 116/10 119/16 128/13 134/23 152/4 152/12 159/4 159/6 160/23 161/23 165/21 166/12 169/24 176/6 176/11 179/3 191/15 196/16 197/18 200/14 210/21 211/2 211/20 235/22 248/5
USA [17] 5/7 5/12 5/19 6/9 6/14 14/25 18/16 31/19 32/14 37/7 37/14 44/25 55/1 71/3 104/23 111/5 197/8
USA haemophiliacs [1] 6/14
USA's [1] 99/14
usable [1] 39/16
usage [2] 20/14 95/11
use [81] 13/6 13/20 24/11 30/9 31/9 31/19 34/19 39/17 40/24 41/15 41/15 49/20 51/2 51/13 72/12 82/1 82/9 82/17 89/12 93/8 94/2 94/4 96/11 96/19 97/1 97/2 97/11 97/11 101/16 102/6 104/22 104/24 105/4 105/16 105/21 106/3 106/21 108/3 111/5 111/8 111/13 112/14 119/13 121/7 121/17 122/3 123/10 123/24 126/11 127/11 128/11 128/17 128/22 129/9 131/15 143/17 149/12 163/20 163/23 164/1 175/8 177/2 177/5 177/7 180/6 201/8 213/4 214/1 214/1 218/18 220/7 222/3 223/14 225/1 225/4 225/5 232/10 245/15 245/16 245/16 246/12
used [31] 8/5 10/7 13/23 18/8 26/25 29/3 40/3 45/9 50/8 51/4 54/24 78/13 88/8 96/24 108/23 112/3 121/12 125/8 125/10 127/1 128/10 168/20 197/11 197/25 210/11 213/24 220/9 221/5 224/24 230/16 232/5
useful [3] 186/1 205/22 233/16
user [2] 201/8 239/16
using [20] 29/7 46/25 50/5 50/6 50/17 105/22 106/9 108/7 112/17 123/25 125/23 126/4 126/5 128/3 141/23 149/4 177/18 200/16 220/13 225/8
usual [4] 95/9 101/2 101/3 240/17
usually [2] 22/21 186/19
utilised [1] 146/17
utmost [2] 32/17 35/1

V

vaccine [1] 184/23
vaccines [3] 79/21 185/19 185/19
vacuum [1] 88/25
valid [1] 25/18
valuable [1] 224/19
value [3] 20/18 101/23 103/20
variable [1] 195/14
varied [1] 189/19
variety [1] 170/18
various [18] 14/9 48/20 54/1 79/18 82/22 104/4 114/2 154/5 157/24 162/25 163/1 168/5 204/1 205/13 205/23 209/2 209/7 240/8
vary [2] 31/22 231/9
vast [2] 23/20 129/12
vein [1] 115/21
ventilating [2] 82/12 98/17
verbatim [1] 186/22
verse [1] 231/19
version [1] 161/25
very [101] 3/17 5/3 11/15 11/24 12/4 12/25 14/11 21/13 25/3 25/18 36/15 45/8 45/24 48/23 53/7 57/2 59/11 62/5 66/15 67/18 67/21 73/12 75/11 76/7 76/23 77/4 84/20 86/18 87/12 96/21 100/12 100/12 105/18 106/2 109/21 109/23 125/24 130/8 134/22 134/23 138/18 141/24 146/6 146/6 151/22 155/2 158/21 159/13 160/2 163/12 166/8 166/24 170/16 171/22 173/9 173/9 173/11 181/1 186/1 186/4 186/4 187/9 187/12 187/19 189/23 192/8 192/19 193/20 194/24 195/14 197/16 199/6 199/10 199/24 201/4 201/11 201/11 203/6 206/8 207/1 208/22 210/1 210/16 211/13 212/18 213/19 213/22 225/20 227/8 227/23 229/21 234/22 237/3 237/3 237/15 237/23 238/19 239/8 246/11 246/18 248/4
via [2] 82/23 103/2
Vice [1] 17/18
view [49] 1/19 4/11 11/18 14/13 20/17 20/18 20/21 21/23 25/3 55/3 56/4 64/20 77/2 83/23 92/9 96/14 100/24 100/25 102/7 105/6 105/15 108/2 108/2 119/16 125/23 127/24 128/5 133/9 141/13 141/14 151/23 157/7 157/11 157/12 159/7 159/7 162/14 180/7 180/10 186/12 192/7 193/16 205/20 207/7 218/18 226/18 227/4 233/9 246/19
view: [1] 55/25
view: no [1] 55/25
viewed [2] 186/19 209/10
views [19] 12/12 21/9 28/12 48/24 58/15 67/1 67/5 68/25 76/5 201/23 201/24 206/3 209/4 209/6 209/12 226/12 226/14 227/2 247/22
VIII [63] 5/22 5/23 7/16 7/21 8/2 11/9 18/10 18/12 20/14 21/3 21/14 23/21 24/11 24/16 25/16 26/19 26/24 31/6 31/15 31/18 32/8 35/12 35/14 35/20 39/7 40/17 41/1 41/3 43/11 47/7 47/15 50/16 50/17 50/20 52/13 54/23 61/6 71/8 72/10 78/12 84/1 88/7 92/23 93/8 96/12 96/19 97/2 102/18 103/10 112/7 114/25 115/1 115/5 117/18 148/24 150/13 151/7 152/11 156/23 174/20 221/21 237/1 238/5
viral [4] 76/1 235/1

F:

V

viral... [2] 236/23 240/16
virological [1] 218/4
virus [10] 20/2 20/2 76/11 117/16 118/17 157/16 157/17 204/6 232/24 235/15
viruses [1] 241/16
visit [1] 94/25
vividly [1] 201/16
voice [3] 206/14 247/24 248/1
volume [2] 68/6 70/20
volumes [1] 56/8
voluntarily [3] 37/1 72/18 76/18
voluntary [1] 219/4
volunteer [1] 55/17
von [2] 64/7 95/5
von Willebrand's [2] 64/7 95/5

W

Wagstaff [6] 66/25 67/8 67/11 68/23 69/2 239/8
waiting [1] 72/11
Wales [5] 54/25 178/11 181/7 184/13 208/10
WALFORD [47] 1/3 2/13 12/7 20/4 53/8 53/17 57/2 57/24 58/1 59/3 60/25 61/19 64/17 68/16 74/21 75/3 77/21 79/8 81/19 82/13 84/23 91/8 93/24 95/10 98/16 104/5 107/16 113/3 116/24 121/3 122/19 126/23 134/18 139/17 152/25 165/21 172/5 172/12 174/8 178/2 184/19 195/18 196/9 215/11 225/21 245/25 247/2
Walford's [1] 172/6
want [40] 57/25 58/18 63/14 65/23 66/12 68/22 84/18 84/20 93/4 93/15 102/19 103/6 111/13 118/13 130/1 131/22 132/16 146/11 149/3 149/5 158/18 164/21 169/14 172/23 176/15 179/10 210/13 214/15 219/1 223/9 225/5 229/23 230/3 230/21 231/7 232/10 238/17 240/6 246/4 246/22
wanted [17] 1/22 3/25 11/7 20/15 33/6 39/17 41/2 102/5 107/22 160/8 161/18 162/2 164/2 165/14 167/22 174/14 198/8
wanting [3] 15/10 170/22 207/23
wants [3] 12/8 173/14 173/25
warmed [1] 247/25
was [808]
was agreed [1] 163/17
was: [1] 230/22
was: donor [1] 230/22
Washington [1] 104/3
washy [1] 161/16
wasn't [45] 15/18 25/7 27/5 40/25 50/24 55/24 62/18 63/3 64/22 106/21 112/11 115/9 123/22 125/9 137/6 142/2 144/12 146/17 148/4 155/6 158/4 158/21 159/1 159/11 162/6 165/11 165/12 169/12 171/15 181/16 184/8 194/21 196/20 202/11 205/20 217/25 220/18 226/15 229/24 236/8 239/17 241/3 244/22 245/19 245/20
waste [1] 218/25
watch [1] 61/3
Watt [2] 3/20 8/11
way [51] 17/13 18/24 20/1 25/6 32/24 33/9 37/4 60/15 65/8 65/16 75/24 80/22 81/1 92/16 96/23 100/2 104/25 105/25 106/4 112/8 114/10 126/9 128/8 130/18 141/16 142/20 144/3 145/3 154/24 158/25 159/21 159/25 161/5 161/16 164/12 173/19 175/23 186/15 203/12 207/16 212/6 212/12 212/24 224/15 228/4 229/5 237/16 240/17 244/4 246/20 246/24
ways [4] 136/23 142/11 216/4 247/5
we [431]
We spoke [1] 33/22
we'd [1] 64/1
we'll [24] 8/4 11/1 27/6 32/18 37/19 41/7 41/25 46/9 53/12 53/22 54/18 57/12 57/20 58/17 59/11 61/19 61/25 69/21 70/17 116/19 145/18 152/21 196/3 237/5
we're [18] 16/17 22/20 40/25 65/24 68/14 74/5 87/10 133/18 133/18 137/22 160/5 162/18 164/19 175/19 198/20 204/5 220/21 223/17
we've [22] 7/14 44/7 44/9 60/24 89/19 93/20 104/4 122/16 138/6 141/21 145/21 153/5 164/18 168/7 169/19 178/5 193/9 200/5 209/25 222/22 228/22 247/4
weak [5] 94/10 94/14 96/25 101/2 136/18
Wednesday [1] 1/1
week [4] 68/22 156/19 168/18 191/12
weight [3] 58/12 67/3 176/13
welcome [1] 206/5
welcomed [1] 165/11
well [133] 1/18 2/1 3/9 3/10 6/1 6/18 7/18 9/10 14/13 16/5 19/12 21/13 23/2 23/9 27/16 33/14 38/13 40/20 41/14 44/13 49/6 49/16 51/17 51/25 52/22 60/4 62/14 63/2 63/6 74/4 79/6 81/5 84/24 90/10 94/12 98/8 100/25 105/21 106/20 111/18 113/8 114/20 116/7 123/22 124/12 124/14 125/16 127/11 127/25 128/13 128/25 130/24 133/1 133/21 134/15 134/21 134/22 134/25 135/21 136/25 138/16 140/9 141/12 143/12 144/23 147/1 149/18 151/13 154/19 155/1 156/13 157/13 158/21 160/12 161/17 172/2 175/14 175/17 181/21 187/23 188/8 190/7 190/8 191/17 191/18 191/20 192/22 193/22 195/15 195/22 199/6 199/13 201/6 201/22 202/5 203/1 205/22 206/1 206/10 206/15 207/15 208/8 208/9 208/13 209/16 211/6 211/21 215/14 216/24 218/17 219/22 220/15 220/16 221/4 222/2 223/21 226/11 227/23 227/25 229/6 229/9 230/13 231/18 238/20 238/25 240/23 242/10 242/14 243/10 244/12 245/8 245/23 246/2
well-known [1] 21/13
well-respected [1] 206/10
Wellcome [1] 171/14
Welsh [2] 5/10 5/25
went [15] 1/25 57/2 83/12 85/6 138/19 145/12 160/21 160/22 166/8 168/18 169/5 216/18 218/6 218/8 225/24
were [311]
were: [1] 101/2
were: business [1] 101/2
weren't [9] 62/22 63/1 80/16 96/15 108/3 167/2 191/13 192/20 206/13
West [1] 231/24
what [273]
what I have [1] 30/13
what's [8] 7/5 24/8 56/12 62/12 137/25 170/1 192/5 211/21
whatever [19] 19/13 19/22 32/21 35/18 62/17 107/6 110/17 159/19 162/24 165/24 170/7 171/4 173/14 188/10 193/5 205/8 218/19 236/24 239/16
whatsoever [1] 45/10
wheelchair [1] 22/8
wheelchair-bound [1] 22/8
when [63] 1/6 2/1 2/4 14/22 21/20 26/22 28/10 29/21 30/18 30/21 32/25 33/7 33/12 33/15 33/18 39/3 61/21 63/7 68/21 85/7 88/2 99/10 100/20 103/22 112/5 113/3 120/21 123/11 123/20 124/11 124/22 125/1 125/8 126/1 136/12 136/25 143/6 148/9 151/21 154/10 155/23 157/5 161/7 162/21 163/13 165/12 166/22 169/3 183/24 197/15 205/13 206/16 216/17 218/10 219/23 223/18 228/9 235/22 236/7 240/14 240/21 242/11 244/13
whenever [3] 173/5 173/6 242/10
where [34] 2/12 10/18 15/22 28/23 38/25 39/22 50/4 52/20 60/23 75/12 85/13 94/24 111/23 122/5 128/21 131/18 145/25 159/24 162/1 179/10 179/20 188/8 194/2 194/4 195/2 199/8 199/21 221/3 229/15 239/5 239/11 241/24 243/25 247/21
whereabouts [1] 32/14
whereas [2] 90/10 115/16
whereby [3] 180/16 203/10 228/5
wherever [15] 121/8 121/25 122/1 123/16 123/16 123/23 124/3 124/4 125/6 125/25 127/15 127/15 128/8 131/15 229/13
whether [57] 1/16 1/18 13/17 14/18 15/23 27/21 27/22 30/10 32/11 34/3 34/20 36/7 37/21 38/18 41/9 43/1 43/3 45/23 48/21 51/2 63/15 63/21 63/23 67/24 69/14 77/7 77/16 77/18 79/15 85/8 89/17 90/15 92/2 103/13 103/18 107/13 107/18 109/4 112/19 113/24 140/21 142/8 145/12 150/21 150/24 172/7 184/1 188/22 212/7 215/10 218/9 218/11 220/15 231/15 241/20 242/7 244/6
which [202] 2/3 2/10 5/1 8/20 9/4 9/14 10/16 11/1 12/2 13/6 13/15 14/20 14/24 15/23 16/16 16/18 16/19 16/21 18/21 19/14 19/20 19/21 20/1 22/2 22/18 26/5 28/21 29/20 31/4 31/8 32/13 33/10 34/11 35/14 35/19 36/10 36/21 37/9 37/23 38/13 40/3 40/14 42/15 44/3 44/7 44/19 46/4 47/5 48/2 48/23 50/4 53/9 56/2 56/6 56/7 56/10 56/25 58/5 62/24 66/8 67/7 67/10 68/16 70/2 71/23 73/16 81/11 83/13 83/18 84/22 87/15 88/19 93/20 95/4 96/25 99/17 99/24 99/24 99/25 104/17 104/18 105/10 106/16 109/12 110/5 111/3 111/21 112/2 112/7 112/8 115/23 116/11 117/19 118/15 121/23 124/13 125/3 129/2 132/3 135/12 136/14 136/17 136/18 136/21 139/6 140/2 144/15 144/17 146/16 151/25 154/9 156/15 156/20 156/22 157/9 157/18 158/19 159/5 160/18 161/16 162/14 163/14 163/16 165/1 165/3 167/20 169/6 169/16 170/10 171/19 172/16 174/20 176/1 176/16 177/20 178/6 180/3 180/7 180/22 184/25 185/24 186/6 187/10 189/18 190/2 190/4 190/10 191/6 194/23 196/25 199/11 200/5 200/16 203/10 203/15 203/21 205/17 212/22 212/24 217/3 217/12 218/3 218/23 219/1 219/7 220/1 220/1 220/3 221/23 223/15 225/24 228/7 228/17 230/2 232/4 233/13 233/17 233/20 234/13 235/1 235/3 235/12 236/4 238/8 239/19 240/8 240/11 241/13 241/15 241/15 245/3 246/10 246/14 246/17 247/7 247/10 247/11 247/17 247/19 247/24 248/5 248/6
while [4] 46/13 100/1 119/8 247/23
whilst [7] 9/21 20/22 31/14 121/6 129/6 158/3 210/3
white [2] 10/13 161/6
Whitty [1] 191/24
who [124] 14/4 15/24

F:

W

who... [122] 16/4 16/10 17/6 18/2 18/24 22/3 23/1 26/2 27/17 29/12 39/11 39/24 49/17 51/18 52/4 52/18 65/14 76/15 77/9 77/10 77/24 79/22 84/10 85/3 85/3 85/22 87/4 89/9 89/25 90/12 90/17 90/23 90/25 92/20 92/21 97/5 97/6 97/7 97/25 98/6 102/16 107/15 112/17 114/12 114/17 114/21 116/1 117/11 129/12 129/13 129/17 130/19 133/3 133/9 133/24 135/7 138/25 140/25 142/25 150/1 152/9 152/15 153/18 155/15 155/18 156/1 159/3 160/15 161/2 163/3 163/8 166/4 172/13 172/21 173/25 174/17 178/7 188/5 188/19 189/1 191/11 193/7 193/12 194/14 196/24 198/13 205/6 206/2 207/8 207/12 207/14 209/23 209/24 210/6 210/12 212/5 214/8 215/17 217/4 217/5 217/6 218/21 223/22 225/24 227/3 227/9 228/19 230/4 231/9 231/10 232/23 233/25 235/16 235/20 238/17 241/6 241/17 243/18 244/10 245/12 246/4 246/7

who'd [1] 50/19

whoever [1] 161/24

whole [12] 34/6 50/17 110/19 115/6 143/19 170/17 177/21 185/12 186/1 200/24 201/10 230/4

wholesale [1] 16/6

wholly [1] 37/19

whom [9] 5/7 141/9 145/1 156/1 180/18 188/2 218/13 244/2 246/8

whose [3] 1/15 3/3 227/20

why [39] 36/18 49/20 51/21 63/16 64/16 66/2 66/4 79/7 84/16 92/13 92/18 105/6 109/22 115/7 115/12 124/8 127/16 134/4 138/17 150/17 151/24 153/16 156/15 158/17 159/4 166/24 170/6 170/7 170/19 175/8 187/6 189/22 203/23 204/9 205/13 205/20 205/20 244/18 246/10

wide [3] 35/8 213/4 235/11

widely [2] 1/12 35/5

wider [8] 138/1 157/3 163/10 163/15 185/16 189/13 205/21 206/12

Wild [1] 231/24

wilful [1] 202/13

will [73] 2/23 12/1 12/16 19/17 19/22 20/21 22/10 26/24 29/13 31/13 31/21 32/16 33/17 41/15 42/13 50/19 63/4 64/10 65/23 69/8 71/7 71/9 71/22 76/6 76/15 78/8 79/19 80/1 80/8 99/12 103/10 107/3 110/3 111/10 131/23 132/3 134/3 141/13 147/25 149/2 157/20 158/11 159/14 159/24 169/3 171/6 172/9 172/17 173/21 173/24 174/1 174/2 176/4 177/19 179/1 179/2 180/14 180/19 190/13 207/19 212/10 214/10 214/11 215/10 215/14 222/14 232/3 232/18 233/15 236/3 237/14 241/21 247/10

Willebrand's [2] 64/7 95/5

Windsor [1] 167/25

Winstanley [14] 66/20 69/7 69/20 167/13 167/21 167/24 174/11 176/13 177/24 178/8 178/21 179/6 179/9 179/12

Winstanley's [3] 168/15 181/4 182/4

wisdom [1] 180/9

wish [7] 31/14 31/17 60/9 69/8 154/14 170/4 247/15

wished [2] 165/21 226/7

wishy [1] 161/16

wishy-washy [1] 161/16

with [267]

withdraw [6] 16/6 16/23 82/1 107/3 110/6 201/13

withdrawal [1] 110/7

withdrawing [4] 16/13 91/3 91/10 99/6

withdrawn [4] 15/19 16/1 21/15 33/13

within [16] 2/16 27/11 27/16 39/5 39/15 54/9 92/6 103/3 119/24 130/2 159/7 197/7 199/24 208/2 218/12 219/13

without [12] 2/23 8/13 21/15 33/1 33/2 114/10 151/8 164/21 168/12 192/9 224/10 248/8

WITN [1] 93/17

WITN4461001 [1] 20/7

WITN4461129 [1] 119/23

WITN4461147 [1] 151/2

witness [6] 20/5 20/8 94/8 172/24 194/8 214/13

witnesses [2] 164/20 247/15

won't [9] 30/6 47/9 99/14 110/14 136/18 169/6 176/7 187/1 196/12

wonder [2] 11/19 83/3

wondered [2] 178/16 178/17

wondering [1] 157/23

word [9] 75/20 96/24 103/15 103/17 128/16 129/9 132/22 178/24 239/3

worded [1] 121/22

wording [4] 127/10 148/12 148/17 167/18

words [20] 9/3 26/25 56/10 94/11 97/1 113/6 123/19 129/20 129/22 155/12 159/14 159/15 160/10 162/2 162/12 165/19 186/4 186/10 246/3 247/8

work [9] 17/14 202/15 203/13 216/16 217/25 223/18 237/16 240/11 241/22

worked [1] 237/12

workers [1] 9/20

working [10] 2/16 140/17 140/19 178/25 205/17 211/7 212/6 217/12 221/12 241/8

world [12] 4/4 8/15 11/2 18/10 18/12 157/3 196/18 196/23 196/25 197/4 242/23 246/18

worried [1] 170/24

worry [2] 170/19 183/20

worst [1] 49/2

worth [2] 175/3 235/5

would [321]

would-be [1] 231/14

wouldn't [20] 25/18 32/25 50/10 60/5 63/7 65/20 67/20 97/15 126/7 130/13 175/22 178/15 184/9 186/10 187/18 207/5 227/23 229/4 229/23 232/10

Wrigglesworth [2] 70/11 102/24

writ [1] 208/12

write [4] 32/1 47/10 67/4 185/19

writing [9] 22/20 61/8 119/1 151/21 186/8 187/25 190/12 190/15 213/11

written [17] 10/2 26/5 67/13 74/15 111/1 150/25 151/14 151/20 152/24 166/9 184/6 186/15 188/15 207/2 207/4 238/20 241/1

wrong [9] 68/9 92/11 92/15 126/24 162/12 171/8 183/19 183/22 210/17

wrongly [2] 64/21 129/19

wrote [7] 27/20 28/15 29/10 134/1 148/12 152/1 185/22

Y

year [5] 18/3 24/12 100/4 185/11 223/21

years [14] 4/23 6/21 23/11 24/12 24/19 88/8 119/13 193/12 200/10 222/22 230/15 232/16 233/12 247/18

yellow [5] 219/18 219/25 220/3 220/7 220/14

Yellowlees [1] 199/2

yes [246] 2/19 7/7 7/20 7/23 8/1 8/7 9/25 10/7 10/24 11/23 12/6 12/18 12/24 20/3 23/25 24/4 27/15 29/23 29/25 36/6 37/6 38/9 41/17 42/12 42/12 44/4 44/18 44/21 47/4 48/6 48/17 48/20 51/25 52/11 53/1 53/5 53/12 53/20 54/20 58/3 58/16 60/13 60/14 60/17 61/12 62/2 64/19 66/17 69/12 69/13 70/13 72/6 72/19 72/21 72/25 74/22 74/24 75/5 76/3 80/21 84/17 85/9 86/9 86/12 86/17 88/15 92/1 92/7 92/10 92/10 93/14 93/14 93/22 94/1 94/6 95/7 95/12 97/20 99/4 99/7 99/15 99/23 100/3 100/9 100/13 100/16 100/18 100/22 101/7 102/10 103/21 108/22 108/24 109/3 109/8 111/16 112/21 115/10 115/15 116/19 117/2 119/22 120/14 120/24 122/12 123/18 124/1 125/15 126/18 126/21 127/7 127/9 131/25 132/2 132/4 135/6 135/10 135/15 136/16 137/3 137/12 137/24 138/4 138/20 140/1 140/6 142/7 145/16 146/13 148/11 149/10 149/15 150/16 152/8 153/13 153/14 155/7 156/11 158/10 160/11 160/14 160/17 161/9 161/10 164/17 165/2 165/6 165/9 167/14 167/17 167/19 168/17 168/23 169/2 169/10 169/18 169/25 172/14 175/7 176/18 177/22 179/8 183/6 183/9 183/14 183/20 184/24 185/7 186/25 187/17 189/5 189/8 194/11 195/25 198/1 198/6 198/11 198/15 200/7 200/11 200/13 200/18 200/21 203/17 204/19 205/19 207/11 208/4 212/10 212/20 213/9 213/15 213/18 214/17 216/9 217/18 219/10 219/12 219/16 219/19 221/14 226/2 226/5 227/11 227/18 227/25 228/25 229/3 229/25 230/6 230/9 230/12 230/25 231/2 231/12 233/1 233/7 234/9 234/20 234/20 235/2 235/5 235/5 235/25 235/25 236/22 237/2 237/7 237/10 238/16 238/25 240/4 241/23 242/1 242/5 242/5 242/6 242/19 242/21 242/24 243/3 243/5 243/7 243/20 244/15 245/23

yesterday [10] 1/6 18/4 20/10 25/17 27/9 74/20 117/1 146/15 157/14 219/6

yet [14] 44/12 54/11 71/13 84/6 87/3 87/17 88/8 108/23 119/9 131/19 169/19 202/2 210/25 233/22

yield [1] 237/24

you [792]

you'd [8] 25/19 25/20 66/13 135/2 162/20 174/22 219/1 223/10

you'll [6] 9/1 58/14 113/3 113/6 131/21 159/23

you're [29] 12/7 28/7 28/10 38/10 41/5 51/6 51/8 52/1 89/2 93/21 95/23 97/18 103/14 111/9 114/19 120/20 126/14 134/4 135/16 141/24 144/10 144/24 148/9 159/1 165/24 186/21 188/12 220/11 236/25

you've [36] 16/22 18/21 24/16 25/10 27/10 46/2 52/2 68/7 68/22 75/11 87/23 88/12 92/2 106/8 111/10 115/11 126/25 128/1 138/6 143/12 157/17 158/13 160/11 160/23 163/12 165/3 184/19 191/2 191/2 200/14 231/13 238/14 243/15 247/18 247/20 247/23

your [146] 3/22 3/25 7/9 11/20 20/5 20/8 20/11 21/8 21/23 21/25 28/4 30/11 32/1 32/18 32/22 33/20 35/4 37/14 37/20 42/1 48/13 48/18 50/12 53/25 56/12 57/4 57/10 58/17 59/3 60/1 60/25 64/18 68/8 69/25 70/14 73/17 74/16 75/11 79/1 81/2

Y

your... [106] 81/18 86/7 86/10 94/8 96/14 100/24 105/6 108/25 111/17 113/14 118/6 119/25 120/15 121/2 121/23 124/14 125/7 127/22 128/24 133/12 137/21 138/7 139/19 142/1 142/9 146/3 146/5 146/18 148/19 149/9 150/14 151/9 153/8 153/9 157/7 158/16 159/7 160/3 160/11 161/20 162/9 164/18 164/24 168/10 175/5 179/11 179/14 183/4 183/12 183/15 184/25 185/4 185/5 191/2 191/3 193/8 193/8 193/16 194/8 194/10 194/13 195/16 196/14 197/19 197/24 198/3 198/8 198/23 200/6 206/2 206/3 207/10 207/17 207/17 207/19 207/25 208/16 212/9 213/1 214/13 215/12 215/22 216/8 219/6 223/13 224/12 224/14 226/7 227/6 228/18 235/4 235/25 238/14 238/15 238/18 240/11 247/8 247/11 247/17 247/22 247/24 247/25 248/1 248/1 248/5 248/7

yourself [8] 21/18 62/22 63/1 99/22 134/25 174/13 188/25 207/20

Z

zoom [2] 152/21 153/5