Thursday, 17 June 2021

(10.00)

SIR BRIAN LANGSTAFF: Yes.

PRESENTATION RE LIVERPOOL HAEMOPHILIA CENTRE (continued)

MS RICHARDS: Good morning, sir. I'm going to pick up matters with the Royal Liverpool Hospital, the Liverpool Haemophilia Centre, and look at the topic of knowledge of risk and any response to risk or evidence of response to risk.

In terms of hepatitis, the UKHCDO minutes show that Dr Black was a regular attender on behalf of the Liverpool Centre at meetings in 1971, '74, and '75. But hepatitis risks were discussed at those meetings. Dr Boulton was a regular attender of UKHCDO meetings during his time at Liverpool in 1975 to 1980 and Dr McVerry a regular attender at UKHCDO meetings during his period as Director, '80 to '85.

Dr Mackie, who appears to have taken on the de facto role of director at that interregnum period between Dr McVerry leaving and Dr Hay starting, attended some UKHCDO meetings '85, '86. Then Professor Hay was a regular attender in his capacity as Director at Liverpool from 1987.

So it may reasonably be assumed that they would have been aware of the discussions taking place at those minutes, and would presumably have received -- those meetings -- and would have presumably have received copies of the minutes that were circulated subsequent to the meetings.

There are just a handful of additional documents in relation to hepatitis to refer to.

If we start with DHSC0103394_095, please, Soumik.

This is not directly concerned with post-transfusion hepatitis, but it's "Notes of the Symposium on Hepatitis held by the Association for the Study of Infectious Disease on ... December 1970".

If we go to the bottom of page 4, and we go to the bottom of the page, we can see there there's a heading "Hepatitis in Dialysis Units", and there is a presentation by a Dr Finn from Liverpool:

"Haemodialysis associated hepatitis in Liverpool.

"A total of 57 cases were reported during the period 1966-70. 16 patients, 33 staff and 8 relatives were involved, no deaths had occurred.

"The bloods of infected renal failure patients tended to remain highly infective over long periods, one patient remained antigen positive 4 years after being infected. 7 antigen positive patients remained

on home dialysis and were excluded from the unit being treated in isolation if they had to return to hospital.

"In the speaker's view, it was unethical to expose young nursing staff to a known risk of infection and if preventative measures could not reduce this risk to an acceptable level, there was a case for reducing the extent to which dialysis should be carried out."

"He advocated:-

"1. Screening of new patients.

"2. Reduction of transfusion to a minimum and using only biologically safe blood ie from a donor whose blood had been used on at leave five occasions without causing complications as well as being antigen tested before use;

"3. Reduction in the size of dialysis units;

"4. A strict code of practice designed to protect staff.

"It was thought that the virus could be non-toxic, liver damage being caused by antigen/antibody reaction. It seem logical therefore to give steroids early in the treatment of the disease."

So an early insight from a different

perspective, but in Liverpool, in relation to hepatitis in dialysis.

Returning then to direct evidence of --

SIR BRIAN LANGSTAFF: That must have been hepatitis B --

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: -- given the reference to antigen and testing.

MS RICHARDS: Yes, it must have been. Yes. And given the date, which is 1970.

Turning then to materials which are relevant to bleeding disorder patients directly, if we go to HCDO0001093, please, Soumik.

We've got the annual return for 1976 here, but if we go to the third page we can see a letter from Dr Boulton to Ms Spooner at Oxford, 23rd September 1977, sending the annual returns. There's a reference in the first paragraph, saying -- well, Dr Boulton says this:

"All I can say is that the final compilation has not been quite so easy as some of our medical records have the annoying habit of going missing just when they are wanted."

Then he says:

"... this is the best I can offer you at this stage. As you will remember from a telephone call some months ago I feel that I am not able to take part in Dr Kirk's jaundice survey, and this is a bit regrettable as two of our patients have had some form of hepatitis during 1976/77."

Then he amplifies on the two cases. In relation to the first, it appears that the hepatitis is attributed to batches or a batch of Kryobulin. And at the bottom of the page, Dr Boulton says this:

"... Mr [X] had the misfortune to contract a very mild form of hepatitis whilst I was out of the country at the end of last year, and the fact that he had contracted jaundice did not come to my attention until I eventually located his notes about a month ago. I can only apologise for the extremely bad light in which this has put the whole system at the Royal Infirmary."

Then over the page he refers to a second patient contracting jaundice, it would seem as a result of treatment with cryoprecipitate, and Dr Boulton says:

"All the units of [cryo] which were involved have been identified, and ... the Transfusion Centre ... notified."

So there is an example of information about patients infected with hepatitis being provided to Oxford.

And there are -- there's another letter the following -- I think two years later, 1979, from Dr Boulton, saying there hadn't been any further cases in '78 or '79 of hepatitis or jaundice.

In terms of Dr Boulton's own understanding of hepatitis risks, in the statement he's provided so far to the Inquiry, he has said this -- in relation to the period as at 1980, he says:

"I was ... aware as any of my colleagues responsible for the care of people with bleeding disorders such as haemophilia ..."

SIR BRIAN LANGSTAFF: "As aware", is it?

MS RICHARDS: "As aware", yes, sorry.

SIR BRIAN LANGSTAFF: Because that alters the sense a little.

MS RICHARDS: It does, yes.

"... that transfusion of human-derived blood products carries a risk of transmitting viral hepatitis to any recipient although in early 1980 the degree of that risk was uncertain."

He says also:

"It was suspected that blood products obtained commercially carried a greater risk than products produced by the NHS laboratories, which in turn carried a greater risk of transmission by cryoprecipitate from regional transfusion centres such as Liverpool."

Dr Boulton obviously gave evidence to the Penrose Inquiry, and although the focus of much of that evidence was his later period in the blood services in Scotland, he was asked about his knowledge of hepatitis in the 1970s and, if we go to PRSE0006024, we've got to the transcript of his oral evidence to the Penrose Inquiry.

If we go to page 8, please, Soumik.

He was asked if he recalled seeing the World in Action documentary, and at line 6 he says:

"I didn't see the programmes live but I was very shortly made aware of those programmes."

Then he refers to having a brother on the -- working with Granada on the World in Action team at the time and saying that he remembered being:

"... slightly cross with him because at that time -- and in fact on reflection, I think my brother was right -- I felt that the World in Action programme had exaggerated the problems. But I was then quite a young and not very experienced doctor and not quite so aware of how things would work out."

But he says then, in relation to the World in Action programme, this is line 19:

"... I certainly remember it very well and I remember conversations after it ..."

He says he wasn't actually yet in Liverpool at the time the programme came out. He was in the middle of moving.

Then if we go to the next page, bottom half of the page, he then sets out his recollection of hepatitis in a patient.

This was when he was working in London, Christmas Eve 1973. He says:

"... I ordered in ..."

This is line 23, bottom of the page:

"... a small amount of commercial Factor VIII, which was just becoming available at that time, and this mild haemophilic man in his 50s did receive some commercial Factor VIII, as a result of which he got both Hepatitis B and non-A, non-B. So that struck home to me very vividly."

This is before his move to Liverpool.

"So I had a rather rude awaking into the dangers of hepatitis from commercial -- in this case it was American -- Factor VIII.

"So one of the naive reactions that I had in Liverpool was when we bought commercial Factor VIII it was not American, it was European. It came from

Austria. So clearly there had been a concern that American products were to be avoided. I think that was a legitimate, or at least an understandable reaction to my experience of treating and giving a patient -- and we didn't know at that time exactly the consequences of non-A, non-B. It is very likely, if that man is still alive, and I remember him well, he would be in his mid-eighties now. It is quite likely that he would have had quite a significant dose of hepatitis and liver disease."

Then this sets out his understanding --

SIR BRIAN LANGSTAFF: The next question --

MS RICHARDS: Yes, it is:

"Where did Immuno get their plasma?"

From his understanding, Austria.

SIR BRIAN LANGSTAFF: And it goes on, the exchange.

MS RICHARDS: Yes.

"So [he says] it was Austrian plasma?

"Yes."

The question is:

"They didn't import --

And he says:

"Quite honestly, I did not at that time conduct a detailed enquiry into where all the donors came from ..."

Top of the next page:

"... and it is indeed quite possible that some of the plasma they procured and fractionated came from America. I would not know that but at the time I was clearly under the impression and had been told by their own director, Norman Berry, that the material was Austrian in origin but clearly from paid donors."

So that's Dr Boulton's evidence or part of Dr Boulton's evidence to the Penrose Inquiry. I'm not going to go through what was discussed at the UKHCDO meetings he attended, but the presentations from Dr Craske, the reports of the Hepatitis Working Party and so on, which we have looked at in earlier hearings, came up on a regular basis in the second half of the 1970s, when Dr Boulton was attending these meetings as the consultant from Liverpool.

In terms of Dr McVerry's understanding of the risks of hepatitis, his statement says that he did not, in the late seventies and early eighties, realise that non-A, non-B hepatitis could be serious. He was asked about whether patients were informed about the risks of non-A, non-B hepatitis and he says:

"Non-A, non-B was something that we did not understand."

And then his statement is not entirely clear as

to what he then means. He says:

"It was something where I did not think that here was a risk from factor concentrates in relation to non-A, non-B hepatitis."

He sets out a general recollection that it was an unknown entity and thought to be of minor significance and then says this:

"Whilst I can no longer recall what was said, it may have been that I would have avoided causing potential anxiety and so not informed them [by which he means patients] about a condition that I thought was benign."

So that's some of the evidence we have in relation to Dr Boulton's and Dr McVerry's knowledge of hepatitis in that period, 1975 to 1985. I'm not going to repeat anything about Professor Hay's evidence, which we heard orally last year, and he came on the scene in terms of Liverpool a little later, in mid-1987.

In terms of the risk of AIDS, HTLV-III, Dr McVerry in his statement says that he had no awareness of AIDS before he attended the UKHCDO meeting at which it was first discussed, which was September of 1982.

He refers to Professor Bloom having said even up

to mid-1984 that there was no proven association between HIV and the use of blood products. He says it was reasonably clear that there was a real risk that AIDS was transmitted through blood and blood products at the end of '83 or beginning of 1984, but difficult to say with any certainty.

He believes he would have read that January 1983 article by Dr Desforges in the New England article on AIDS because he had worked with her in the States in Boston. He says that the Royal Liverpool did not change its processes in response to the June '83 letter from Professor Bloom and Dr Rizza with recommendations, but says it broadly followed the position set out in that letter.

He's not sure what would have been said and when to patients about the risk of being infected with AIDS from factor concentrates due to uncertainties around the issue. He doesn't recall any reversion to cryoprecipitate as a response to the risk of AIDS. He says patients didn't like cryo. There were practical concerns with its use. But he doesn't set out any positive contemplation of a return to cryoprecipitate or increased use of cryoprecipitate as a response to the risk of AIDS. And then he has a recollection of a move to heat-treated Factor VIII in 1985.

One other document, although it doesn't involve Dr McVerry himself, but again, it does involve clinicians from Liverpool is RLIT0000567.

This is a letter published in The Lancet, 16 April 1983. If we go to the bottom of the page we can see there's a letter headed "Kaposi's sarcoma in patient with multiple myeloma, sideroblastic anaemia, and T-lymphocyte abnormalities."

If we go over to the second page, please, Soumik.

We can see, top left-hand, who this is from. So it includes Dr Bellingham, and it's from the Department of Haematology, Immunology and Dermatology, University of Liverpool and Royal Liverpool Hospital and, if we go back to the first page and look at the bottom right-hand corner, it's describing a particular patient -- not concerned actually with someone with bleeding disorders but a particular patient presenting with, well, possible Kaposi's sarcoma, and the last eight or so lines on the right-hand side say this:

"As yet we have no evidence of generalised Kaposi sarcoma in this patient", et cetera. Then it says this:

"He has received multiple blood transfusions, also thought to be associated with the development of AIDS ..."

So that would suggest --

SIR BRIAN LANGSTAFF: He gives reference for that.

MS RICHARDS: He does. The reference is, if we go to the second page.

SIR BRIAN LANGSTAFF: It is at the foot of the page.

MS RICHARDS: Oh, it is, sorry, no, bottom of the first page. His reference is the MMWR from 1982.

SIR BRIAN LANGSTAFF: That's probably the July edition, is it, or not?

MS RICHARDS: I can't say without checking whether it's the July or possibly the December 1982 edition. It doesn't give a date but we can check. It gives a reference and we can check which edition he's referring to. But certainly this is, as at April 1983, clinicians in the department of haematology in the Royal Liverpool Hospital recognising that the receipt of multiple blood transfusions was thought to be associated with the development of AIDS.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: You can take that down, thank you.

One issue which is of particular significance in relation to the Liverpool Centre is the question of the arrangements for testing patients for HTLV-III and

informing them of their diagnosis. You may recall Professor Hay giving evidence that when he arrived in 1987 in Liverpool, he had a number of concerns about the way in which testing and communication of diagnoses had been undertaken.

If we start with a publication, another publication in The Lancet, this one co-authored by Dr McVerry. It is PRSE0001758. This is February 1985, 9 February 1985, The Lancet, and the letter is the letter on the top half of the page, left-hand side, "Seroconversion for HTLV-III since 1980 in British haemophiliacs". It's authored by Dr Machin and Dr McVerry, amongst others, and says this:

"... Three UK cases of acquired immunodeficiency syndrome ... in haemophilic patients and several reports of a pre-AIDS-like syndrome have been recorded."

Then there's a reference to a number of studies including one, at least, of which that we've looked at.

Then we can see in the next paragraph, it refers to:

"... studies to determine the source of infection we have been able to test sera from a cohort

of 20 severe haemophiliacs with factor VIII:C levels below [a certain level]. Sera were collected in 1980-81 in September, 1982, and again in September, 1984. All these patients had received regular prophylactic home therapy with factor VIII concentrate, with an average annual treatment rate of 29,000 units. Between 1982 and 1984 60% (9/15) of these haemophiliacs seroconverted for HTLV-III antibody: only 1 was seropositive in 1980-81, 5 had antibody in 1982, and 14 were seropositive in 1984. These patients that received both NHS and commercial non-heat-treated factor VIII concentrates, and had 44-80% of their treatment requirements as commercial product."

If we look at the last paragraph:

"These results confirm the increasing seropositivity of British haemophiliacs exposed to regular infusions of factor VIII concentrate over the past four years. We do not know what proportion of seropositive patients will acquire AIDS or other HTLV-III related disease. All 16 who are seropositive are well including the 6 who were seropositive in 1982, and only 1 has thrombocytopenia and lymphopenia."

Now, this clearly involved Liverpool patients.

One of the striking things about this is the date, this is a publication in February 1985.

So some testing, some HTLV-III testing, in relation to Liverpool patients had presumably been undertaken in order for this study to be published but the records we have looked at and some of the witness evidence we have received, appears to show testing at Liverpool being undertaken rather later than this. So we've locked at sample medical records which indicate that it's after Dr McVerry leaves and when Dr Mackie and, to some extent, Dr Davies, are dealing with the care of patients with haemophilia, we see HTLV-III tests being undertaken, roughly from mid-1985 onwards. The evidence we have of the communication of the outcome of HTLV-III tests, again, places it more in the second half of 1985 and more into 1986 territory.

So it does raise the question as to why, if, as at early 1985, Dr McVerry was aware of this, as he must have been, given his co-authorship of this letter and his involvement in this study, more urgent steps were not being apparently taken to test all the patients in Liverpool and to inform them appropriately of the results of those tests.

SIR BRIAN LANGSTAFF: Well, this letter is co-authored by Cheinsong-Popov --

MS RICHARDS: It is.

SIR BRIAN LANGSTAFF: -- and it was her study reported in The Lancet in, I think, September --

MS RICHARDS: 1984.

SIR BRIAN LANGSTAFF: -- 1984, which reported on a series of tests conducted, presumably Middlesex, I think it was, by Tedder, and showed that at least a third were positive. In fact, that's Middlesex. So somewhere the cohort that they were talking about had been assembled and may have involved McVerry's patients from somewhere.

MS RICHARDS: It would certainly seem odd for Dr McVerry to be involved in the co-authorship of this if it didn't involve Liverpool patients, having been at Liverpool since 1980.

SIR BRIAN LANGSTAFF: It would be wrong to conclude from this that there were Liverpool patients necessarily involved in this study, wouldn't it?

MS RICHARDS: It's a matter of inference or possibility.

SIR BRIAN LANGSTAFF: It may have been the case?

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: But the point that you're raising this with me for is to show that McVerry had a working knowledge at any rate of the likelihood of positive testing, if it were undertaken, and the second last

sentence stands out to me, "We do not know what proportion of seropositive patients will acquire AIDS or other HTLV-III related disease", which would make it impossible for anyone reading this or taking that view, with that information, to say to a patient, "Oh, don't worry, because not very many people go on to get this disease, they're all well, the likelihood is they'll all stay well".

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: Because we may hear evidence to that effect said somewhere else later on today.

MS RICHARDS: We may. Obviously, wherever precisely this cohort of patients was drawn from, there were -- clearly there had been samples of sera taken over previous years and stored.

SIR BRIAN LANGSTAFF: Yes, and for some reason starting in 1980.

MS RICHARDS: Yes. If we go to a later study, which is RLIT0000127, you'll see this a publication in the British Journal of Haematology in 1986, and Dr McVerry is the first named author on this occasion. Again, we see Dr Machin, Cheinsong-Popov, Dr Tedder, who were all named on the earlier letter, and then a range of others. We can see it was received June 1985 accepted for publication October 1985. The summary records:

"44% of 63 British patients with either haemophilia A or B were HTLV-III antibody positive ... HTLV-III was more frequent in high factor VIII concentrate users and 75% of severely affected haemophilia A patients were HTLV-III."

Now, we know that this did include a cohort of Liverpool patients because we can see that set out on the second page, under the heading "Patients and methods", second paragraph:

"A cohort of 21 Liverpool haemophiliacs (19 haemophilia A, two haemophilia B; all but two haemophilia A patients were severely affected) were studied retrospectively since 1980/81 for HTLV-III antibody and in 1984 for T4/T8 subset ratios."

It also refers to the investigation of the wives of 14 HTLV-III patients being investigated. If we look at the bottom of the next page, we see again reference to a cohort of haemophiliacs attending the Royal Liverpool Hospital Haemophilia Centre, and we have there the seroconversion or what's suggested to be rough seroconversion dates or dates when patients were found to be positive, 1980, 1981, 1982 and 1984.

It may increase the likelihood that the earlier letter did involve a Liverpool cohort but, on any view, this, which must have been work completed by

June 1985, reveals HTLV-III testing and retrospective testing on a cohort of Liverpool patients and their partners, yet still there doesn't appear to have been a programme of testing of all of the Liverpool patients until after this time.

SIR BRIAN LANGSTAFF: Yes. The likelihood, given what is said here, is that this is the same cohort. The numbers broadly correspond.

MS RICHARDS: Yes, or that the first was a subset of this cohort.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: It does, and, given the date ranges that are being examined, it does seem likely.

Dr McVerry in his statement couldn't recall stored sera being tested before 1984. He doesn't recall the process for testing patients for HTLV-III. He doesn't recall testing in Liverpool outside the Machin studies and he accepts there was testing in relation to the Machin study. He can't recall what discussions took place with patients. He can't say whether patients knew that samples of their sera were being stored or understood the purpose of storage. He does say that the hospital centre would have obtained verbal permission to obtain the original samples for tests performed at the time the test was taken.

So that's the evidence we have in summary form from Dr McVerry. You'll recall Professor Hay telling the Inquiry that, when he arrived at the Liverpool centre, he found the records to be poor and uninformative. He was unable to obtain the results of HTLV-III tests which had apparently been carried out. He says he made enquiries with Dr McVerry about apparent testing on stored samples but didn't get an answer to his correspondence. Dr McVerry says he can't recall receiving such correspondence from Professor Hay.

Professor Hay also told the Inquiry he was told by Liverpool patients they'd been told they were HTLV-III positive by post. Dr McVerry can't recall what the arrangements were, but says he would have expected it to be asking the patient to make an appointment and telling them in person.

Before we look at some of the material on that particular topic that the Inquiry has received from patients at the Liverpool Centre, if we could look back at Professor Hay's HIV litigation document -- it's at NHBT0085908, thank you -- Mr Booker's test and the MMWR referred to in that footnote was the December 1982 MMWR.

SIR BRIAN LANGSTAFF: December?

MS RICHARDS: December.

SIR BRIAN LANGSTAFF: That's the San Francisco baby?

MS RICHARDS: Yes, exactly and the other cases of transfusion transmitted infection.

If we go to page 18, please. This was, we assume, Professor Hay's understanding as at the time this document was being prepared, so probably around 1989 or so, about the position in Liverpool. If we pick it up where it says paragraph 92(bh), it says:

"Both in Liverpool and in Sheffield, samples were sent to Dr Tedder, Middlesex Hospital for HIV testing in early 1985. This was very incomplete in Liverpool and Dr McVerry has left no record of his results even though he published them. Many Liverpool patients were not tested until late 1985 early 1986."

Professor Hay's recollection there is consistent with what we've seen from individual patient records.

He goes on to say:

"Some of the patients were informed of their HIV status by post. Parents of children were informed by Alder Hey in a similar way [and we'll be looking at Alder Hey later this morning]. Not all patients were informed with results until later in 1986."

Then bottom of the page he says:

"I was not in post and can not tell you (neither

can the notes) what pre-test counselling patients had. The counselling, and in most cases, the first test result is not documented.

"Most patients were not adequately counselled until Dr Mackie took over the centre in 1986 ...

"Most untested individuals were summoned by Dr Mackie in 1986 and most seen with their spouses. He counselled them and generally documented the counselling. This took place in his room or in OPD."

Yes, I think that's all we probably need to look at from Professor Hay.

SIR BRIAN LANGSTAFF: Well, the bottom of the page --

MS RICHARDS: Yes, very bottom:

"Parents and guardians were the responsibility of Dr John Martin, Alder Hey."

About whom we will be hearing more.

In terms, then, of the witness evidence that the Inquiry has received, and this is really just to give a flavour of it, it's not intended to be an exhaustive summary, the widow of a haemophilia B patient infected with HIV following treatment with Factor IX has described her husband attending the Centre and himself asking for a test. He had the test and she says:

"We received a letter in the post in the summer of 1985 stating that he was positive. I remember the letter."

Her husband read it to her and passed it to her. She recalls it was a short letter of no more than two or three sentences. She says, unsurprisingly, her husband should have been told in person:

"... and we weren't given any information to help us to understand or manage the infection."

The widow of a haemophilia A patient describes her husband being told during a routine appointment that a stored sample of blood had tested positive for HIV, despite the patient not knowing that his blood would be stored or tested, and says:

"We were told by the doctor not to worry about anything, the hospital would look after us."

The widow of another haemophilia A patient describes, again, her husband receiving the information that he had HIV during a routine appointment, her account is this, perhaps worth just reading out:

"This consultant was flicking through my husband's medical records and came to a page which was marked with the words 'HIV'. The consultant just said the words HIV in a very matter of fact way and then continued to flick through the notes. My husband stopped and said 'HIV, what is that? I did not know

anything about that'. The consultant basically said words to the effect of 'Yes, you have this'."

Another patient gives an account of being told in person that they were positive. The evidence about that patient suggests that that was later, that was 1987, might possibly have been told by Dr Hay.

Then I think it may be worth actually looking at a further account, which is at -- and I should say we don't yet have -- in relation to a number of these accounts, we don't have responses yet from Dr McVerry. Some of these do not necessarily involve Dr McVerry, they are talking about the later stage of HIV testing, which took place after he'd left, because not all patients had been tested while he was still there. Some of the accounts do involve Dr McVerry. The one I'm going to refer to next does. We haven't yet had a response from him, not I think through any fault of his own, so it may be he would have a different account to give.

But if we go to WITN1403001, please. This is a statement from a widow who it describes her husband's care at the Royal Liverpool Hospital. If we go to the second page, we can pick it up, paragraph 9, she says:

"[He] was not to my knowledge given any

information relating to the risks associated with the use of Factor VIII or any associated risks of infections, and neither was I.

"Whilst I have no specific dates or treatment batch information relating to [his] infection with HIV, it is clear [he] first, displayed clear indications of a suppressed immune system and a rapid decline in his health from 1984 onwards."

It refers to him undergoing surgery at the Royal Liverpool in 1984, after which his health started to deteriorate rapidly. They were told he had contracted a virus they suspected to be Salmonella and she was made to wear protective clothing when visiting him.

Next page, and I should say it's not clear whether the dates can be right, or entirely right, because they refer to Dr McVerry and Dr McVerry had left by this time. So either it's a different doctor or the dates may not be entirely right. But whatever it is, the thrust of the account is a remarkable one:

"The first discussion that we had with a doctor regarding the possibility of HIV infection was with a junior doctor at the Liverpool Royal Hospital in October 1985. This was long after I had suspected [he] had been infected and I had repeatedly asked medical professionals to test ... and offer him some

form of targeted treatment.

"The junior doctor confirmed that he believed [her husband] was suffering with AIDS ... this was never confirmed by [Dr] McVerry who was the consultant overseeing [his] care at the time. Dr McVerry simply dismissed my concerns.

"I had blood taken twice to be tested. I was never informed this was due to any risk of HIV but was told this was to test for Salmonella. I recall asking why our daughters were not being tested as we all ate the same food at home, but I was reassured this wasn't necessary as it was me who was in closest contact with [him]."

If we go down the page:

"The only information I was getting was from the media coverage. I read about symptoms of HIV/AIDS in the news and I thought they were very similar to the symptoms [he] was suffering from.

"When I raised my concerns with Dr McVerry that [he] was suffering from the symptoms of AIDS, he advised me that [my husband's] symptoms could be explained by numerous viruses or infections. He denied it was AIDS and told me not to be neurotic. In one such meeting with Dr McVerry, when I was frantically explaining how concerned I was for my husband's health, he was swinging around in a swivel chair whilst eating a KitKat. This shows the kind of treatment I received from Dr McVerry.

"Without confirmation of infection from the staff treating [my husband], I sought desperate measures for a firm diagnosis and treatment options."

She then describes in October 1985 travelling to Saint Mary's Hospital in an attempt to speak to Professor Pinching.

He was unavailable, she says, but staff at the hospital facilitated a telephone conversation during which Professor Pinching agreed that her husband's symptoms and history were likely to be associated with HIV and he agreed he would discuss her husband's case with Dr McVerry.

Then if we look at paragraph 21:

"After my consultation with Professor Pinching, Dr McVerry told me not to question his standing or undermine his opinions, as he was my husband's treating consultant; the clear implication was that he knew best."

Then she refers in paragraph 23 to her husband's records showing his sample bags sent for testing were labelled as "high risk", and we do have some documents, not I think relating to this individual patient but we've got some documents we've looked at from Liverpool which have that "high risk" label:

"They also show he was first tested for HTLV III in January 1985. There were also tests sent in June 1985 to the hospital for tropical diseases in London where he was tested for pneumocystis ... Neither of us was warned that [he] may be suffering from HIV or any potentially infectious disease."

Her husband died, as you will see, not long after that.

Leaving aside the issue about dates, and the fact that we know Dr McVerry had left some time in the course of 1985, I don't think we know the precise date, however. The account that's given there is not inconsistent with her husband having been one of that cohort of patients.

SIR BRIAN LANGSTAFF: One thing which I just want to be clear about this witness statement, does it identify her husband as having suffered haemophilia, or was there some other reason that he had the surgery?

MS RICHARDS: Severe haemophilia A.

SIR BRIAN LANGSTAFF: Thank you.

MS RICHARDS: Sorry, I didn't go to that passage, but yes, and received most of his care from the Royal Liverpool Hospital, received intensive Factor VIII concentrates in the first half of the 1980s.

I should just say there's a document at HSOC0011245. This is a letter sent from the same widow. It looks as though it was sent to The Haemophilia Society. It's a Haemophilia Society originated document, in any event. We don't have a date for it but you will see she gives, essentially, the same or very similar account to the account that is set out in the witness statement that she has kindly provided to the Inquiry, and refers to the fact that she was tested. If we go towards the bottom of the page, we see it refers to her speaking to Dr Pinching. As I say, we don't have, I think, a date for that, but it is clearly an account given -- an earlier account given of the same sequence of events.

Just again, to give an indication about dates of testing more generally in Liverpool, if we go to -- actually, I'm going to come to that later. There's a handful of documents and medical records, sample medical records that we've looked at which confirm a testing process being undertaken for other patients, as I say, in the second half of 1985 or later.

Then in terms of the communication of results in the period after Dr McVerry had left, if we look at WITN3381002. Sorry, actually, can we not put that up. I'm going to read out the letter. I'm not sure whether the name should have been redacted and hasn't been. I have an identical letter with a redacted form.

Yes. If we put up this version, Soumik. Yes, it's the same letter but with the full redactions. LBHT0000001_009.

We can see it's a later dated 1 July 1986, it's from Dr Davies, consultant haematologist. Again, it's in this interregnum period after Dr McVerry leaves and before Dr Hay takes over:

"We now have your final HTLV 3 results from Manchester and unfortunately they are positive. They do add the rider that we should repeat this test when next we see you but I think you should now assume that you are HLTV positive and take the precautions which we discussed the last time we met. I am sorry this is not good news, if you do want to discuss this further then of course I will see you in the department any time."

Now, it's a letter that suggests there had been some prior discussion that testing was going to be undertaken but you'll see the communication of the result is undertaken by post in this short fashion, and not in person.

There are others, as we've seen, who have been described being informed of their results by letter and that was clearly Dr Hay's understanding, Professor Hay's understanding when he took over.

There's another witness, who recalls being phoned at work, although in their case the result was negative. But that witness also describes a period of testing, that it goes on through 1986. So, again, it suggests that the process of testing all patients or all patients who were -- might have been infected at the Liverpool hospital was taking place really over a rather prolonged period of time and much later than you might think it should have been.

If we go to HSOC0015592, please, and if we go to the second page and we just zoom in on the heading "Wife infected in test delay":

"A haemophiliac who was found in hospital tests to be infected with the Aids virus was not told of the result for several months. He has now passed on the infection to his wife ...

"The couple, who come from Merseyside and have a young daughter, are furious that the wife's life was put needlessly at risk ...

"Their solicitor said that the husband, who is

30, had received treatment with Factor 8 blood [concentrate] through the Royal Liverpool Hospital."

So we don't know who that relates to but you'll see it being documented there.

There's then another account from a patient at -- I'm just going to read a handful of the relevant passages.

Sir, this is a patient who is deaf, with severe haemophilia A, treated both at Alder Hey as a child and would then, in the first half of the 1980s, see Dr McVerry at the Royal Liverpool Hospital.

Soumik, could we go to page 12 of WITN0375001, we pick it up at the bottom of the page:

"In 1981, when I was 20, I used to see Dr McVerry at the Royal Liverpool Hospital. Every six months, Dr McVerry, my foster father and I would be in a consultation. Dr McVerry would talk to my foster father, who would ask me to leave the room. A nurse would take me by the hand and place me in another room. I was always sent out. I wanted to stay. It seemed to me that Dr McVerry told my foster rather that I had to leave. He kept the nature of my illness between him and my foster father.

"After these appointments, I spoke to my father in the hospital café. I asked him what he was talking

to Dr McVerry about when I was not in the room. He would not say. He always said it was about my leg and about my foot. He would not tell me any detail, although I would always ask him."

Then in paragraph 54:

"In 1985, my Dad went into hospital so he could no longer attend my appointments."

Then he refers to going to appointments with his foster sister:

"Dr McVerry would talk to whichever foster sister attended with me, but not for long. I would have blood tests and go home. [They] would never tell me what Dr McVerry said."

He describes at the bottom of that page how he only learnt he had HIV in October 1991 -- so a number of years after, when he was told by Dr Hay. He recounts Dr Hay having looked through the medical records and found out the witness's foster family knew he had HIV and the records indicating that Dr McVerry had told the foster father but the patient himself, although an adult, had not been told.

SIR BRIAN LANGSTAFF: At the time he describes the conversations taking place, he says he was 20.

MS RICHARDS: Yes. He was an adult.

SIR BRIAN LANGSTAFF: So there are two concerning aspects,

if one accepts the account. The first is that an adult was not told and, secondly, that he plainly, according to his account, questioned his foster father several times but never spoke, never asked McVerry. So presumably he felt that he couldn't or shouldn't ask the person who would give him the information.

MS RICHARDS: Yes. It's part of a much longer statement, sir, which merits reading in full, but it does appear to show a very concerning delay in this young man, as he then was, being informed of --

SIR BRIAN LANGSTAFF: It's not simply the delay; it's the quality of the communication which he expected --

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: -- from the medical profession as he had experienced it.

MS RICHARDS: Yes. We can take that down, thank you, Soumik.

In terms of the numbers of patients infected, Dr Hay's information, as provided to the Inquiry, was 43 patients at the Royal Liverpool Hospital infected with HIV, of whom four were under the age of 18. The evidence we have suggests that the transfer from Alder Hey to the Royal Liverpool took place at around 16.

The table that we've more recently received from -- sorry, the table that the Inquiry team has put together based upon data received from UKHCDO gives a figure for the Royal Infirmary of 42. Whether it's 42 or 43, it's clearly a significant number of patients infected with HIV.

Just in terms then of process of testing for hepatitis C, if we consider, first, the undertaking of liver function tests prior to the availability of a hepatitis C test, Dr McVerry couldn't recall how regularly liver function tests were performed but he knew they did. He says:

"If a patient came in for a review then a liver function test would be done as one of a range of tests that were carried out at the patient review."

He can't recall what was said to patients about the results. He says:

"We were unsure what caused these abnormal results."

There are a couple of letters that I think it's instructive to look at, in that regard.

Soumik, can we look at LBHT0000001_005, please. This is a letter from Dr McVerry, 17 January 1983, to a GP about a particular patient.

"As you know, [the patient] had an episode of acute hepatitis, which most likely was related to his factor infusions."

It says:

"He is now completely recovered and his liver function tests are essentially normal."

If we then look at the same reference, Soumik, but 006.

It's just interesting to note that the letter from Dr McVerry to the patient on the same date uses the term "inflammation on your liver", doesn't use the term "hepatitis".

If we then -- in relation to the process for testing for hepatitis C, once a hepatitis C test became available, Professor Hay addressed that in his oral evidence and written evidence so I wouldn't go back over that, other than to remind you, sir, although I know you're well aware of this, that there are a number of patient accounts at Liverpool as at elsewhere of there being delays between patients being tested for hepatitis C and being informed of the outcome of those test results.

We've referred in our written note to a number of accounts in that regard.

If I then come to the question of the treatment arrangements, first of all, for HIV. Dr McVerry recalls little about treatment for HIV positive patients, but there are some accounts from individual

witnesses which paint a distressing picture of HIV care at the Royal Liverpool Hospital.

If we look at ... I'll just check the reference there. WITN2783001.

This is a statement from the widow of a patient with haemophilia A. If we go to page 4 -- again, it may, of course, be the case that Dr McVerry would say this was not him or give a different account, and so it's important to bear that in mind.

At the bottom of the page, she says:

"I recall that my husband and I attended a couple of group meetings at the Royal Liverpool University Hospital in the 1980s. This was some sort of help group and I recall that one of the doctors there, Dr McVerry, made the most derogatory comment to those attending to seek 'some so called support' that my husband never went back. The words used by Dr McVerry were 'Homo Haemo you can all start wearing handbags now'. This comment was so horrific and sufficiently so for me to recall the doctor's name after all this time.

"My husband was never offered any individual counselling or psychological support", she says.

Then if we look at WITN1147001, this is a statement from a witness describing his son's

infection with HIV and hepatitis C. And if we just pick this up at page 7, paragraph 31, the witness says that:

"[His son] had numerous hospital admissions in The Royal Liverpool Hospital where he was treated very badly and received extremely poor standards of care. It was horrendous. It was as if the nurses had nothing but contempt for the patients. It was necessary for me to visit him every day to ensure he was eating properly, he was washed properly and that he was receiving and taking his medication. They were many times his medication was strewn all over the floor and I would have to make arrangements to get it replaced. I would shower him when he was too weak to do it for himself and change his bed sheets after he had soiled himself and was lying in the dirt for hours at a time."

We don't, I think, know, sir, what particular period of time that description refers to.

The statement that we looked at a little earlier with the -- from the widow who spoke to Professor Pinching in order to try and find information about her husband's possible diagnosis also describes poor treatment at the Royal Liverpool Hospital, and this would have been in 1985, given when he became ill and died.

So if we just go back to WITN1403001, and we go to page 5. Paragraph 27. She recalls:

"[Her husband] was treated terribly whilst he was in the Royal Liverpool Hospital receiving treatment. It was largely left to me to change his clothing and bedding as the nurses appeared to not want to go in his room. On occasions when I was not present, food and drink was left on a trolley outside of his room and [he] was left unchanged lying in a dirty bed in his own faeces and body fluids with blood all over the floor."

Again, Dr Hay, Professor Hay told the Inquiry in his oral evidence and written evidence a little about the arrangements for treating HIV and HCV positive patients in his time as director at the Royal Liverpool Hospital, so in that period from 1987 through to the early 1990s, and we've summarised it. But as the Inquiry has heard that evidence orally, I'm not proposing to go through it again.

So that, sir, is the Royal Liverpool Hospital and the Liverpool Royal Haemophilia Centre for adults.

I'm going to turn now to Alder Hey, the Children's Hospital.

SIR BRIAN LANGSTAFF: You're going to go to Walton, are

you?

PRESENTATION RE ALDER HEY CHILDREN'S HOSPITAL

MS RICHARDS: Alder Hey. Oh, I'll deal with Walton very briefly after I've dealt with Alder Hey, because there's comparatively little information. I'm just going to move files round.

So the Alder Hey Children's Hospital was the principal treatment site for treatment of children with bleeding disorders, at least from the late 1970s onwards probably earlier. From the mid-1970s until 1989 the Centre Director was Dr John Martin, and we have a letter, I won't display it, but August 1975 Dr Martin writes that he has now taken over care of haemophiliacs at this hospital.

Dr Martin, however, appears to have been essentially a paediatrician or paediatric oncologist rather than a haematologist, and he is generally described or referred to as such in communications.

We do have a recent statement in response to various criticisms which I'll describe over the next period of time of Alder Hey. We have a statement from the current Director of Corporate Affairs at Alder Hey who has said that Dr Martin established one of the early childhood cancer centres at Alder Hey but was not a specifically trained paediatric haematologist.

Dr Martin ceased holding that position in 1989, Dr Lynne Ball took over as the Centre's director for about fourteen years, 1980 to 1993, and I'm going to refer to her statement at various stages.

And then Dr Paula Bolton-Maggs, who had previously, I think, spent a period of time, a relatively short period of time in a more junior capacity there, took over as director from 1993 to 2003, and she has also provided a statement to the Inquiry.

The evidence suggests that children, certainly younger children, those under the age of being a mid-teen, were the responsibility of Alder Hey rather than the Centre at the Royal Liverpool Hospital. That reflects both the evidence of Dr Boulton and the evidence of Dr McVerry. And it's consistent with the evidence that we've seen, which suggests that treatment decisions were the responsibility of Dr Martin.

In terms of the mechanics for supplying products, Dr Ball's understanding is that products were ordered and supplied via the adult Haemophilia Centre. So it received concentrates -- her understanding is by the -- telephoning the on-call haematologist at the Royal Liverpool Hospital, who

would then organise the provision of the concentrates or other products to Alder Hey.

There's then an article -- again, I'm not proposing to put it on screen, but there's an article from 1990 in The Haemophilia Society Bulletin from Professor Hay, in which he says that haemophilia care in Liverpool was traditionally divided between Alder Hey and the Royal Liverpool, with patients graduating from one to the other in their mid-teens.

I referred yesterday, when we started looking at the Liverpool Centre, to the relationship with North Wales, and that was also the position in relation to children and Alder Hey. So Dr David Edwards, again who I referred to yesterday, consultant haematologist at Glan Clwyd Hospital from 1982 to 2006, has explained in his statement to the Inquiry that paediatric cases were essentially managed by paediatricians with outreach consultants from Alder Hey Hospital in Liverpool.

There is some evidence of cryoprecipitate being provided directly from the Regional Transfusion Centre, the Mersey Regional Transfusion Centre, to Alder Hey.

Then there is some evidence to suggest that, just as with the Liverpool Centre at the Royal

Liverpool Hospital, the children's centre, the Alder Hey Centre, formed part of two regional groups: the Manchester supra-region and then a regional group of Mersey and North Wales haematologists. But it doesn't appear that Dr Martin played a significant part, or participated significantly in either of those groups, so we don't see, for example, in some of the meetings at the Manchester supra-region, we don't see Dr Martin attending, although it's right to say we don't have a full set of minutes in that regard. We do see Dr Martin attending at one meeting of the regional group, Mersey and North Wales haematologists, in November 1983.

Dr Bolton-Maggs's recollection as a senior registrar between '87 and '88 at Alder Hey was that there was no consultant haematologist, hence the care was undertaken by Dr Martin, and no specific facilities for patients with bleeding disorders. She says:

"Patients would have been seen for acute bleeding problems on the oncology ward and followed in general haematology outpatients."

And she says her understanding was that:

"Haemophilia child patients would have been under the care of Dr John Martin, consultant

oncologist, and additionally managed by rotating senior registrars in haematology, with advice as required from haematology consultants at the Royal Liverpool Hospital."

When Dr Ball took up her post as director in January 1989, she set out in her statement the critical observations of the position. If we just look at part of her statement, WITN4739001, and we go to page 13, she says:

"I started mid-January [1989] as Dr Martin took vacation commencing the first day of my tenure. I was not provided with any overview or patient summaries but was nonetheless required to take on all acute clinical inpatient and outpatient care for the whole unit as well as all diagnostic responsibility for the haematology laboratory including the on-call commitment single handed until his return to duties.

"In stark contrast to my experience at [Great Ormond Street] [where Dr Ball had previously worked] the provision of clinical and laboratory services offered to children with haemophilia especially those with HIV at the time of my appointment was severely compromised.

"There had been no investment in laboratory facilities or equipment for a decade. The automated

cell counter was out of date and on loan from Coulter and there was no onsite facility for monitoring anything other than basic coagulation screening. Pre-operative and therapeutic monitoring of Factor 8/9 levels had to be transported to the Royal Liverpool Hospital (a thirty-minute transport time) for analysis and any suspected inhibitors similarly analysed off site. Laboratory staff had no protective area to prepare contaminated samples prior to analysis and there were no facilities to monitor immunological parameters for affected children."

Then if we go over the page, I'm going to come back to what she says about the position of the HIV infected children at a later stage.

Third paragraph:

"There was no established treatment centre, no specialist nurse or social worker provision, no outpatient clinics, no immunological monitoring or screening and the majority of children had not received routine vaccination against Hepatitis B and there was a paucity of successful home treatment and self-administration programmes. This meant that for acute minor bleeds boys accessed the haematology-oncology ward (C3) and were treated with concentrate ordered and supplied ad hoc from the Royal

Liverpool Hospital. As there was no batch reservation to reduce donor exposure it was difficult to determine what the individual usage per child had been prior to my appointment. A large proportion of the clinical notes of children affected by HIV were on close inspection missing essential treatment and decision-making details. As far as I could ascertain there were no protocols for the use of alternatives such as cryoprecipitate or DDAVP."

Then the next page -- sorry, I should say she wrote an extensive case for the need for a second consultant, which she submitted to the newly-appointed medical director of the hospital, who was, in fact, Dr John Martin. Then she describes, on the advice of Dr Hay, who had taken over at the adult Centre more recently, she was able to access a regional fund to provide some additional funding for the provision of care at the Children's Hospital and to make out a case for a nurse social worker, and to develop the services and build up clinics.

SIR BRIAN LANGSTAFF: The description she gives amounts to there being no expert doctor, no expert nurse, so nobody in the clinical staff who actually has any developed expertise in what they're doing.

MS RICHARDS: Yes. Alder Hey were invited to respond to

Dr Ball's statement, and it's right to now note that they have done so. I have referred, I think, earlier to Erica Saunders, Director of Corporate Affairs at Alder Hey Children's Hospital, having responded, and perhaps if we look at WITN4194006, if we go to the third page, she says this at paragraph 9:

"Dr John Martin had established one of the early childhood cancer centres at Alder Hey. Due to the lack of specifically trained paediatric haematologists, much of the care of children with non-malignant haematological conditions defaulted to clinicians running the malignant service and was provided on the Oncology Ward. Very sadly, the information I have received is that this led to children with bleeding disorders being exposed to inappropriate treatment and delays in adopting improvements to their management."

She then says:

"The appointment of [and she's referring there to Dr Ball] was in recognition of the developing speciality of Paediatric Haematology but there was a lack of additional support for the non-malignant clinical elements and the laboratory service. The separation of clinical care of patients with inherited bleeding disorders with the Oncology service was

partly precipitated by the need to care for a cohort of boys infected with HIV."

I'll come back to that issue, that's about how the children infected with HIV were actually treated at Alder Hey, about which Dr Ball has a lot to say, and to which Ms Saunders has responded.

Sir, I'll come back to that and I'll come back to Ms Saunders' response, and indeed the apology she offers, when we get to that stage in relation to Alder Hey.

I'm going to pick matters up with the annual returns from Alder Hey from 1977 onwards, so it might be a good moment to take a break.

SIR BRIAN LANGSTAFF: Yes. Yes. Thank you.

MS RICHARDS: What time do you wish to return, sir?

SIR BRIAN LANGSTAFF: Sorry, yes, of course. I was just thinking about this -- this last piece of evidence. It's 25 to.

MS RICHARDS: Certainly.

SIR BRIAN LANGSTAFF: Twenty-five to 12.

(11.16 am)

(A short break)

(11.35 am)

MS RICHARDS: Sir, I'm going to look at the annual returns for Alder Hey starting in 1977. HCDO0001177.

We can see there reference to cryoprecipitate, 643 packs. And then in relation to NHS concentrate and commercial concentrates, it's said.

"All supplied by Dr FE Boulton Liverpool Royal Infirmary."

Then if we look to the comment, it's not entirely clear what it says, but it's "[Something] cryoprecipitate provided directly by" --

SIR BRIAN LANGSTAFF: "Only cryoprecipitate"?

MS RICHARDS: Yes.

"... by ..."

And then I'm not entirely sure what the last two letters are supposed to say. But may be a reference to the Transfusion Centre.

"All other preparations supplied via Liverpool Royal Infirmary."

So we don't have information directly from Alder Hey about the volume and type of products used.

If we go, however, to the next year, we can see the returns in a more standard form so HCDO0001274. We can see ten patients treated during the year. In terms of cryoprecipitate, 48,930 -- I'm not sure whether that's 20 or 30 units. But anyway, somewhere under 49,000 units of cryoprecipitate. And then it looks like just over 46,000 units of NHS factor

concentrate and then there's reference to a smaller amount of the Armour product, Factorate, being used, although I think there's -- no patients with von Willebrand's appear to have been treated during that year and I don't think we have details in relation to haemophilia B patients either.

1979 is HCDO0001343. We can see 13 haemophilic patients treated during that year, no haemophilia B patients treated. And then we can see, again, the volumes of cryoprecipitate: so 27,790 cryoprecipitate, what appears to be 37,500 units of NHS factor concentrate, and then 14,000 units of the Armour Factorate, used that year.

1980 is HCDO0001439. I think we see 16 patients with haemophilia A treated, no von Willebrand's and then we only have the packs or bottles rather than the units. So it's down as 114 packs of cryoprecipitate, 136 bottles of NHS concentrate, and 268 bottles of Armour Factorate. So we can see, in any event, the proportion of Armour being used increasing.

Then if we move to 1981, HCDO0001541. We're told 12 haemophilia A patients, no von Willebrand's. Again, we've got the information in terms of packs and bottles. So a greatly reduced volume of cryoprecipitate, four packs, an increased volume of

NHS concentrate, 386 bottles. And a smaller volume of the Armour Factorate, 29 bottles.

Then handwritten across appears to be "NB All HT", which presumably --

SIR BRIAN LANGSTAFF: Home treatment.

MS RICHARDS: -- is home treatment, "supplied by [Royal Liverpool Hospital] mil, from Alder Hey". So the annual returns may not be giving a clear or comprehensive reflection of what products were actually used to treat the Alder Hey patients.

If we go to 1982, HCDO0001639, we see 19 patients with haemophilia A treated, no von Willebrand's. Then we've got the figures in packs and bottles but with what appears to be units written in. So 16 packs of cryo, 1,120 units. 155 bottles of NHS concentrate, 38,750 units. And then this year by far and away the largest in terms of treatment is the Armour Factorate, 647 bottles, 161,750 units. So a marked change in the pattern of treatment in 1982. And we see over the page, one haemophilia B patient treated that year with NHS factor concentrate.

1983's return is at HCDO0001739. Again, it's a similar pattern. It's not, again, entirely easy to read. Eleven packs of cryo, so cryo in very modest use indeed. NHS concentrate, 218 bottles, which looks

like it's identified as being 54,500 units. And then the largest volume of treatment being with Armour Factorate: 749 bottles, given as 187,250 units.

It's not then easy to see what's written across, except it looks like something to similar effect as previously about the supplies for home treatment coming from the Royal Liverpool.

Then 1984, is HCDO0001831. 14 haemophilia A patients treated. No cryoprecipitate usage recorded at all. NHS concentrate, 339 bottles used in hospital. You'll see home treatment again is said to be supplied from the Royal Liverpool Hospital and then hospital treatment with Armour Factorate, 352 bottles. So the proportions are more evenly balanced in terms of home treatment there as between NHS and commercial concentrate.

Then we don't have a return for 1985.

If we look briefly at 1986, HCDO0002021. We can see 19 haemophilia A patients, two von Willebrand's patients treated. Again, we see no cryo. The figures in hospital show use of NHS concentrate and Armour. Presumably, in 1986, a heat-treated product.

We can see there's a reference "Other Human Factor VIII [Concentrate], 9,000 units", and someone has written "? which" and "Type not specified" and

then a small amount of concentrate for home treatment. And we see DDAVP being used for von Willebrand's patients.

There are also some stock cards, which may reflect usage of Alder Hey. So we looked at a sample yesterday of those in relation to the Liverpool Centre.

If we go, for example, to LUHT0000024, we can see that this is the Royal Liverpool Hospital's stock cards, but there's reference, if we go down the page, to Alder Hey. So we can see there a supply, for example, of the Elstree, the NHS product, to Alder Hey as well as to Dr Korn, Bangor.

Again, there are a handful of other stock cards, so if we go just by way of example, LUHT0000031, we can see there the first entry for Armour. It records products being sent to Alder Hey, as well, again, as to Dr Korn at Bangor and the like.

That's the information --

SIR BRIAN LANGSTAFF: When it provides for both home therapy and Alder Hey, it doesn't say how many of the home therapy treatments might have been Alder Hey patients.

MS RICHARDS: It doesn't, no.

SIR BRIAN LANGSTAFF: So we've just no way of knowing?

MS RICHARDS: We haven't, I'm afraid.

There are then two documents I want to refer to which are expert reports in relation to an individual patient but which throw some light, potentially, upon the approach to treatment at Alder Hey. The first is at DHSC0043164_068.

This is a medical report, it's date March 1992, and it's from Dr Savidge, St Thomas' Hospital, and it is looking at an individual patient treated at Alder Hey. If we go a little further down the page, we'll see it was a patient with severe haemophilia A, diagnosed as such as a baby. Just so that you note, it is someone born in 1980. The significance from that appears from the second paragraph on screen:

"The young boy was first treated on 01.03.82 ..."

So aged two.

"... with US commercial factor VIII concentrates. There is no documentation at that time to indicate that the treatment alternatives with single donor pool cryoprecipitate or NHS Factor VIII concentrates were ever entertained. During 1982, [he] was treated on 32 occasions with US concentrate (Armour) and on 5 occasions with NHS material (factor VIII concentrate). This year proved to be the

12 months prior to 1985 that required the most frequent hospital visits necessitating infusions with factor VIII concentrates. During 1982 some 19,000 units of factor VIII were used ... 1983, 7 treatments were administered with US commercial concentrates and 2 with NHS concentrates, totalling in all approximately 5,500 units. In 1984, 4 treatments were given with US commercial concentrates and 4 with NHS concentrates giving a total of approximately 4,000 units for the year. The last treatment given during 1984 was on 02.12.84 with Armour factor VIII concentrate [and the batch number is given]. This occasion was the only time this batch of unheated material was used."

Then:

"In 1985, [he] was treated on 9 occasions with heat treated US concentrates, on 2 occasions [this is 1985, and he's five] with the US unheated concentrates, on 2 occasions with NHS unheated concentrate and on 6 occasions with the earliest NHS heated factor VIII material ..."

Then details are given about the use of the unheated Armour product, reference to the batch.

"This unheated material was batch number Y 88908 which had not been administered to the patient before,

and was not used subsequently. To my knowledge, at other Centres, much of this unheated batch had been returned to the manufacturer, who consequently heated the product in one of their facilities in [West] Germany."

Then bottom of that page, so where we are.

"Although the child was seen on several occasions in 1985, the first documentation of blood sampling for anti-body to HTLV-III was on 05.08.85, and the result indicating HTLV-III seropositivity was reported on 08.08.85. No previous negative results were obtained in this case rendering a possible date for the initial viral transmission difficult or impossible."

And then if we go to Dr Savidge's or Professor Savidge's opinion, bottom half of the page, he says this:

"This case concerns a young child with severe haemophilia who was treated from 1982 to 1985 with unheated US commercial and NHS factor VIII concentrates for haemorrhagic symptoms. On 08.08.85, the patient was shown to have been infected with HTLV-III with out a previous negative test result, presumably by transmission of the virus through contaminated blood products. The major issue in this

case relating to possible negligence and causation rest upon the choice of therapeutic products to use treat haemorrhagic symptoms. The therapeutic policy adopted to manage this child is evaluated in terms of orthodox practice and knowledge of HTLV-III transmission from blood products at the time, and to the specific recommendations available in the medical literature and proposed by [UKHCDO]."

So you'll see that Dr Savidge's approach is not to look at things with the benefit of hindsight, but to try to compare what was done at Alder Hey with what would have been his view of the orthodox approach at the time.

Over the page he says this, under the heading "Use of Concentrates as opposed to Cryoprecipitate":

"There are two notable features of this case with respect to the adopted therapeutic approach. Firstly, there is no documentary evidence to suggest that single donor pool cryoprecipitate was ever contemplated in the management of this case, not even when the patient was initially treated. Secondly, there is evidence to indicate a defined preference to use US commercial products (45 treatments) over NHS factor VIII concentrate (9 treatments) during the period 1982-1985 when initially only unheated, but

subsequently heated products were available.

"In the late 1970s and early 1980s, the majority of UK paediatricians treating infants and children with severe haemophilia considered cryoprecipitate obtained from single blood donations to be the therapeutic product of choice, but if not available NHS factor VIII concentrate should be used."

Then he refers to an '85 publication by Dr Jones, and sets out the recommendation about treating children under the age of four with cryo, et cetera.

Then if we go to the bottom of the page, Professor Savidge then continues:

"At that time, this practice was deemed to confer a greater margin of safety from transfusion related viral diseases such as hepatitis B and non-A, non-B hepatitis, on the grounds that treatment with a small (less than 50 individual single donations) of cryoprecipitate preparations resulted in a reduced incidence of clinical and laboratory indices of hepatitis. In contrast, the donor pools of factor VIII concentrates were derived from several hundreds or thousands of plasma donations ..."

Then he gives an indication about pool sizes by reference to a UKHCDO minute in 1980.

"The increased morbidity in small children following infection with hepatitis B and non-A non-B hepatitis was an additional reason for choosing cryoprecipitate over concentrate.

"Furthermore, sufficient amounts of factor VIII necessary to control haemorrhagic symptoms in such small children, were available in only a few single donor bags of cryoprecipitate, providing a safe and highly cost-effective approach to such cases. The somewhat larger infusion volumes with such treatments compared to the smaller reconstitution volumes of concentrates were not considered to disadvantage the increased safety aspects of this therapeutic approach. As small amounts of cryoprecipitate were usually required to manage such children, availability of the material from the local BTS was in general no particular problem, and orders could be placed in advance to ensure adequate supplies for individual patients. The side effects occasionally encountered with cryoprecipitate (rashes, asthma-like symptoms) were usually easily controllable with antihistamines, and did not impose a relative or absolute contraindication for its use. As the child required treatment in hospital for each bleed, often leading to subsequent inpatient management, any perceived

additional convenience for using factor VIII concentrates cannot be considered a pertinent argument for their exclusive use over cryoprecipitate when the issues of safety and cost-effectiveness are also addressed.

"The lack of consideration and disregard of the then current therapeutic recommendations for the treatment of children under the age of 4 years regarding the use of cryoprecipitate in this case was negligent. Any argument that cryoprecipitate was in poor supply at the time is untenable since the material was being used in significant amounts for home therapy ... The overwhelming use of commercial US concentrates in preference to cryoprecipitate or NHS Factor VIII is remarkable, particularly in a large city such as Liverpool known to have an active [Blood Transfusion Service] with facilities for cryoprecipitate production and regularly supplying plasma to Elstree for fractionation. The lack of a well-defined therapeutic policy regarding preferential use of domestic plasma derivatives in children at this time was negligent, particularly since the factor VIII requirement in this case during 1983 and 1984 was so minimal ... that special reserves of cryoprecipitate or NHS factor VIII could have been

set aside. A reflection of the orthodox management of children at that time is apparent from the minutes of the UK Haemophilia Centre Directors Meeting of May 1983 ..."

That's that 13 May meeting we're familiar with.

"... when particular emphasis was placed upon use of domestic plasma derivatives."

Then there's a quote from that, and then Professor Savidge continues:

"Although a slightly modified version of these minutes were circulated as recommendations to all UK Haemophilia Centre Directors dated 24.06.83, they were clearly not followed in this case."

Top of the next page:

"During 1983 and 1984, both the mass media and the medical press were inundated with reports of AIDS cases in haemophilia and the potential dangers of large donor pool concentrates and by June 1984 ... it was clear that the factor VIII concentrates in their then present form, transmitted HTLV-III."

Then reference is made by Professor Savidge to reports in relation to the heat sensitivity of HTLV-III. He records that:

"US heat treated factor VIII products had just become available on a named patient basis in the UK."

Refers then to recommendations published in 1984 in the -- October 1984 in the US, and then says:

"These were closely followed in December 1984 by the UKHCDO AIDS advisory document to all UK Haemophilia Centre Directors ..."

And then there's a reference to the first meeting of the AIDS group of Haemophilia Centre Directors on the 11 January 1985.

Then Professor Savidge says this:

"Despite this information with which a competent practising paediatric haematologist could be expected to be conversant, and a further report by Bloom in January 1985 ... which stated that at least 2 batches of NHS concentrate had transmitted HIV and urged the use of heat treated concentrates, [the patient] was given two in fusions of unheated US concentrate in January 1985 and two infusions of unheated NHS concentrates in March 1985."

Just to remind you, the age of the patient at that point in time was around 5 years old.

The infusion of these untreated therapeutic agents at this times when heat treated concentrates were commercially available was negligent, and from the available data these treatments could have been the likely causation whereby HTLV-III was transmitted to the patient which subsequently led to the development of AIDS in this child."

Professor Savidge, it's fair to say, pulling no punches in his analysis of the approach to treatment taken in relation to this child at Alder Hey Hospital.

There is a draft report on the same patient -- and again, we're not identifying the patient -- from Dr Ludlam, April 1992. It's at DHSC0043164_067.

We'll see the date, 6 April 1992, at the bottom of the page. You'll also see reference -- sorry, if we just go back up again, the patient as identified as JKP 37, and we'll look at some of the internal documents relating to the HIV litigation in that regard.

Dr Ludlam's report details the patient's treatment and symptoms over a period of years. I'm not going to go into the detail of that, but I just ask you to look at page 7, when you will see, from just over halfway down the page, this child patient at Alder Hey died in 1989. He died at the age of around 9 years old, having been infected with HIV.

If we go over to page 9, it's right to say that Dr Ludlam is perhaps more circumspect in his observations, but nonetheless raises a number of questions, and we get some insight from this report

into what it was, apparently, that Dr Martin or -- and Dr McVerry had been saying about the availability of products. So under the heading "Opinion":

"[The patient] was first found to be anti-HTLV-III positive on a blood sample collected on 8th August 1985. Prior to this he had received infusions of factor VIII concentrate predominantly of commercial origin. It is likely therefore that he obtained the HIV infection from the factor VIII concentrate infusions.

"His haemophilic bleeds clearly required treatment but it would be useful to know the policy for treating children with severe haemophilia. In Dr Martin's evidence ..."

And we don't know what that refers to, sir. It may be something we'll try and track down. But it would appear, for the purposes of defending the litigation, information had been sought by Dr Martin -- from Dr Martin.

"In Dr Martin's evidence it is stated that he was aware of the risks of hepatitis transmission by concentrates, that cryoprecipitate was effectively phased out in 1980, and that treatment was advised by the Royal Liverpool Hospital. It is therefore necessary to know what policy was operated by the

Royal Liverpool hospital. Dr McVerry's evidence [and again we don't know what material was gathered from Dr McVerry in this regard] does not accord with this. Why was it decided to phase out cryoprecipitate in 1980? Was there a policy about which patients should receive NHS and which commercial concentrate? Why was concentrate purchased from Armour rather than another supplier? The patient could have been treated effectively with cryoprecipitate in the first few years of life whilst receiving treatment as an out-patient. If cryoprecipitate was not available then NHS concentrate would be the most appropriate therapy. In the absence of both these products then commercial should have been used."

Then we're told in the next paragraph:

"Dr Martin has no recollection of receiving the letter of 24th June 1983 from Professor Bloom and Dr Rizza. This same letter was presumably received by the [Royal Liverpool Hospital] Haemophilia Centre and it would be useful to learn of any changes in treatment policy which resulted."

Then Dr Ludlam suggests that Dr Martin should comment on the letter sent in December 1984 from Professor Bloom and Dr Rizza recommending a change to heat-treated products.

"When did Alder Hey Hospital change over to the use of heat treated concentrate?"

And then Dr Ludlam says:

"It is impossible from the clinical history to identify when the patient seroconvert to HIV. He had recurrent sore throats from early life which were most likely to have been caused by ordinary respiratory viruses and not HIV."

He refers to seroconversion rising rapidly in 1981 to 1983, but says:

"Many haemophiliacs ... became infected after 1983 from concentrate which was likely to contain an increasing amount of HIV.

"No mention is made in the case notes, or in Dr Martin's submission, about what was said either specifically, or in general, about the possibility of virus transmission by blood products. It would be useful to know what information was made available to patients or parents."

I should say we've seen no evidence of any information about the risks of AIDS being made available to patients or parents.

Again, expressed in different terms, but raising the same questions, essentially, as Professor Savidge's perhaps more forthrightly expressed conclusions but an indication that may give rise to a number of concerns about the approach to treatment of children in Alder Hey Children's Hospital in the 1980s.

SIR BRIAN LANGSTAFF: Well, contrary to the general practice, if Professor Savidge is right and, by implication, Professor Ludlam, cryoprecipitate was reduced --

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: -- in the general supply. Children were exposed, according to both doctors, to obviously an increased risk of contracting hepatitis and HIV infections. There was no recorded reason for differing from the usual practice which he gives. Both doctors, I think, identify exactly the same point, there was no available treatment protocol, and the letters which were later on, from the UKHCDO, do not appear to have alerted Dr Martin to anything.

MS RICHARDS: No. We cannot, of course, ask Dr Martin because he is dead.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: So we can't, I'm afraid, do anything other than explore through documents these alarming matters.

SIR BRIAN LANGSTAFF: Well, it may be -- well, I shall simply have to draw whatever inferences are proper

from this material.

MS RICHARDS: There's then some further information we can glean about the approach at Alder Hey from DHSC0045373_118.

Sir, this is the internal status report on medical negligence cases, and there are, I think, four Alder Hey cases. We looked at some of the Liverpool adult hospital cases yesterday. So if we go to page 10, the case of JKP 027, and there's a reference to Dr Martin, which is how we understand this to be an Alder Hey case. So:

"Severe haemophilia born [1984] (younger brother of [another plaintiff]), diagnosed at the age of 2 months and treated from that time onwards exclusively with Factor VIII concentrate."

So concentrates being given to a two-month old baby in 1984:

"There is no record of the type of concentrate given in August 1984, but he received commercial (Armour) concentrate from February 1985 to September 1986 (apart from a single dose of heat-treated NHS concentrate (8Y) on [January 1986]). He was switched to 8Y concentrate in November 1986 and continued to receive this through 1987. Heat-treated commercial concentrate became available at the

beginning of 1985, but I cannot tell from the batch numbers whether the material administered to the Plaintiff in 1985 was exclusively heat treated; in any event, the type of heat-treatment used by Armour subsequently proved to be incompletely effective in destroying HIV."

Then:

"The Statement of Claim gives the date of the first HIV positive test as [21 February 1987] but the notes contain no record of HIV test results before 1988. The note for [30 August 1985] states 'blood for HTLV taken again' and a letter from Dr John Martin in the notes of the Plaintiff's brother, dated [31 December 1985], states that both brothers were then HTLV3 ... positive, although the first mention of HIV positivity in the Plaintiff's own notes is in a letter dated [July 1987], it therefore appears that seroconversion took place in 1985 or earlier.

"The risk of AIDS to haemophiliacs, and the possibility of removing these risks by the heat-treatment of concentrate, were already beginning to be appreciated at the end of 1984 [that's obviously the perspective of this particular author, rather than necessarily a more widely accepted view], when the plaintiff was first treated ..."

Then the author says this:

"... I think it must be accepted that it was negligent to treat him with concentrate at this time rather than with cryoprecipitate. There appears to have been no good clinical reason (eg major haemorrhage, home treatment) for preferring concentrate to cryoprecipitate, and it would certainly be indefensible if any of the commercial concentrate given in 1985 was unheat-treated. If cryoprecipitate was unavailable at this time, then either heat-treated commercial concentrate or unheated NHS concentrate should have been used until such time as NHS heat-treated concentrate became available. Conclusion -- Negligence."

If we go over the page, we can see the case of what's said to be the brother, diagnosed November 1982, aged six months, treated exclusively with Factor VIII concentrate from that time onwards, so again another case of a baby being treated with concentrate, two doses in 1982, 16 in 1983, 19 in 1984 and about 30 in 1985:

"Commercial material was given in March 1983, but apart from this there is no record of source or batch numbers until December 1984 when he received a dose of NHS concentrate. From the 2nd to

19th January 1985, he was treated with a total of 26 ampoules of commercial concentrate batch Y88908: this was probably unheat-treated [so a baby or toddler being given unheat-treated commercial concentrates in January 1985], since heat-treated commercial concentrate only became available sometime during that month. A single dose of NHS concentrate was given on 29.3.85, and subsequently more commercial concentrate (presumably heat-treated) during 1985 and 1986."

Then, again, we can see it's an Alder Hey case from the reference to Dr Martin in the next paragraph:

"The first mention in the notes that the Plaintiff was HIV positive occurs in a letter from Dr Martin dated 31.12.85, but a note dated 8.8.85 states 'blood taken for HTLV3 screening'. There are no actual laboratory results of HIV testing earlier than 1988."

Then, again, the view given here may not accord with the views of others but, in any event, this is what the person analysing this for the purposes of defending the litigation says:

"I do not believe that it can be held to have been negligent to treat a baby boy with commercial Factor VIII concentrate at the end of 1982, when the risks of AIDS were not well appreciated. During the

following year however, and particularly after June 1983, when the Haemophilia Reference Centre Directors issued their first recommendations on treatment, the risk should have been recognised: a switch to cryoprecipitate at that time might still have protected the Plaintiff against HIV infection. In the light of the further recommendations of December 1984, it must have been held to have been negligent to treat the Plaintiff with unheat-treated commercial concentrate in January 1985 (if this was indeed the case). I do not think this case is defensible.

"Conclusion -- Negligence."

SIR BRIAN LANGSTAFF: Is this the same case as Professors Savidge and Ludlam were reporting on?

MS RICHARDS: No, because the date -- the year of birth doesn't match up.

SIR BRIAN LANGSTAFF: Right, the author of this takes a generous view of when risk was first appreciated -- generous that is, to the hospital --

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: -- but, even on that basis, comes the conclusion that there is set out at the end.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: So these are two brothers?

MS RICHARDS: Yes.

Then if we turn to page 19, there's less information available about this case, referred to as JKP 60:

"This child haemophiliac severe, born in ... 1976 died in ... 1986. It is alleged that from 1979 onwards treated with concentrate but his mother says he was on cryo up to the age of 3 with no adverse reaction.

"Professor Hardisty comments that the Plaintiff was treated at Alder Hey Hospital Liverpool until May 1984 ..."

Then we can see transferred, it would appear to home treatment from North Wales:

"Treatment was evidently with concentrate from an early age but the Liverpool notes are currently not available. Treatment in Wales was almost exclusively with NHS concentrate with the occasional doses of commercial concentrate presumably because of insufficient NHS material being available. HIV positive in July 1985 with no previous negative results although a sample was taken on the 30th January 1985 but evidently not reported on.

"Currently Professor Hardisty can only make the general point here that the treatment of a severely

affected infant or young child with concentrate is not of itself negligent, cryoprecipitate is unsuitable for home treatment in many instances and has many disadvantages. NHS concentrate should have been preferred to commercial from about mid-1983 but supplies were inadequate to adhere entirely to this counsel of perfection, only heat-treated concentrates should have been used from early 1985 as was indeed the case here.

"Needs reconsideration once Liverpool notes are available, in the meantime no evidence of negligence."

Again, the purpose of referring to this is really, as with all this, about what it indicates more widely about the approach taken to treatment at Alder Hey. It would appear here, the case of a child switched at the age of three from cryoprecipitate, to which the child had had no adverse reactions, to concentrate, and treated at Alder Hey with concentrates from 1979 to May 1984.

You can see here again reference to not having the Liverpool notes, at least at that point in time.

SIR BRIAN LANGSTAFF: The note retention and taking system seems to have been a mess.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: It confirms what we heard from

Professor Hay, I think.

MS RICHARDS: Well, Professor Hay is dealing with the adult centre but Dr Ball says the same thing about the Alder Hey notes and I'll come back to her statement, shortly.

Then the last Alder Hey case in this document is at page 24. So JKP 105:

"... severe haemophiliac child born in ... 1976 ... given no treatment other than concentrate save for one isolated treatment in 1982 with cryoprecipitate.

"Professor Hardisty [who has presumably been asked to give an opinion on these cases] states that in accordance with the policy at Liverpool Children's Hospital [Alder Hey] he was treated with concentrate from 1978 onwards."

So from the age of two, that would roughly place it:

"There are no records of the type or batch number until January 1983 when he received commercial concentrate, March 1983 NHS, and December 1983 commercial. In June and August 1984 he received NHS concentrate, and thereafter heat-treated concentrate first commercial and then NHS. There is a record that blood was taken for HIV testing in August 1985 but the earliest positive laboratory result is dated

December 1987 ..."

So again a very muddled picture in relation to the process for HIV testing of these children:

"... and there is no mention in the notes of his being HIV positive before this date.

"The Plaintiff was treated with Factor VIII concentrate from [I think that's 1979] onwards ie about four years before AIDS was described ... This was probably mainly commercial material since NHS concentrate was in very short supply in the early 1980s. An attempt was made in 1983 to switch to NHS concentrate, although the extent to which this was achieved cannot be judged in the absence of complete records."

Then the assertion is made by the author, again, of this document, presumably from the perspective of defending litigation:

"HIV infection was probably derived from concentrate before the risks were appreciated. A switch to cryoprecipitate in 1983 would have deprived the Plaintiff of the great advantage of home treatment and would probably have been too late in any event."

Quite what the basis for saying that is, given the paucity of information, is wholly unclear.

SIR BRIAN LANGSTAFF: Well, it relies on the absence of records, essentially.

MS RICHARDS: Yes.

Then there's a further status report. So that status report on cases is July 1991. There's one from September 1991, which provides some further insight into the approach at Alder Hey, it's DHSC0045721_051.

If we go to the second page, you'll see there's an update on the cases of JKP 27 and 28, the brothers whose cases were looked at in the previous note. Then if we look at the bottom of the page, we see a third case. This JKP 33, an Alder Hey case.

"Haemophiliac classified as mild/moderate. The notes are insufficiently detailed to identify whether all treatment given was NHS product but Dr Martin's statement confirms that no distinction was made at Alder Hey Hospital in terms of which product to prefer and the product he would have received would have been that which was available."

That would appear to give the clearest possible indication from Dr Martin that, whether it was NHS or commercial concentrate for the treatment of these young children, didn't seem to make any difference.

We then see a reference to the plaintiff having elective surgery for "bat ears" in 1983. If we go to

the top of the next page:

"Although Dr Martin says he did his best to discourage the operation, he did not do so in the specific context of the risk of viral infection or the risk of infection of AIDS and the parents were not warned in relation to these aspects."

Then it is suggested there needs to be a further review, and it's likely the case will need to be reclassified.

Towards the bottom of the page, you'll see JKP 37. That is, I think, the case that Professor Savidge and Dr Ludlam were discussing in their reports.

Then if we go over the page to page 4, please, Soumik. The case JKP 47:

"Mild haemophiliac child. Alder Hey Hospital case."

Second paragraph:

"After further investigations into the case with Dr Martin it would appear that the Plaintiff did receive commercial Factor VIII in December 1983 for a tooth extraction and this treatment would not seem to be justified. This appears to be a case for settlement."

So commercial concentrates, December 1983, child with mild haemophilia. Again, there doesn't appear to have been any particular distinction drawn at Alder Hey between the treatment of those with mild haemophilia and the treatment of those with severe haemophilia.

SIR BRIAN LANGSTAFF: Can we just go back to the very last line of the previous page?

MS RICHARDS: Certainly.

THE CHAIRMAN: This is an adult, I see.

MS RICHARDS: It is. I should say it's a Liverpool case. It's an adult Liverpool case. It might have been one of the ones we looked at yesterday, I'm afraid I can't remember the JKP number we looked at yesterday. That was the case of a mild haemophilia adult treated at Liverpool. If we go to the top of the next page, the first long paragraph, four lines from the end:

"Dr McVerry comments that no specific priority was given to mild haemophiliacs for treatment with NHS product at the time."

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: So it would appear, both in terms of adults and children, in the Liverpool area, a similar approach being adopted.

Then the last Alder Hey case in this document is top of page 5, JKP 92:

"Severe haemophiliac child. Alder Hey. He was regularly treated with concentrate at least some of it commercial after mid-1983. This case is therefore difficult to defend."

So that's the insights we get into the approach to treatment at Alder Hey.

We can take that down, thank you, Soumik.

Dr Bolton-Maggs was the senior registrar slightly later than this, 1987 to 1988, but her recollection is that DDAVP was not used until a later stage, the late 1980s.

Then, in relation to Dr Ball's evidence, we've already looked at her observation that when she came on the scene at Alder Hey in 1989 and looked at records, she could find no batch reservation system and she then also says in her statement:

"A large proportion of the clinical notes of children affected by HIV were on close inspection missing essential treatment and decision making details."

She observes, and it's consistent with what we've looked at here, that factor concentrates were used in mild cases before her tenure.

Then we have a witness statement, I'm not going to put it up on screen but I just want to read

a couple of passages from it aloud.

So it's a statement from a mother whose three children were treated at Alder Hey: two of them infected with HIV, and both died; the third child infected with hepatitis C. She describes incomplete records. She was not given information about risks. So she says this:

"We were not told anything about Factor VIII. We received no advice whatsoever. I didn't know where it was coming from. I thought it was something that was going to help them and it appeared to be better treatment than what my brother had received. He also suffered from haemophilia."

Again, hers is a -- well, given what happened to her family, an extraordinarily powerful statement to read, sir. And I'll return to a little of what she says about the process of learning about the HTLV-III diagnosis shortly.

In terms of what was known about the risks of hepatitis and HIV, or should have been known, at Alder Hey, it is notable that Dr Martin is not recorded as having attended UKHCDO meetings in the 1970s or 1980s, perhaps reflective of the fact that he was a paediatric oncologist rather than a haematologist or a specialist with bleeding

disorders, although there's no reason to think he wouldn't have been sent the minutes of those meetings.

There are a handful of documents about hepatitis. I'm not going to go to the individual documents but there are the hepatitis survey forms from time to time completed by Alder Hey. There's a form completed by a registrar to Dr Martin in March 1979 recording a patient treated with Factor VIII and Koate and developing hepatitis, for example.

But we don't have a clear idea of what Dr Martin's own personal understanding of hepatitis risks was, although you'll no doubt, sir, be able to draw appropriate conclusions as to what should have been known at the time.

Likewise, because he didn't attend UKHCDO meetings, he doesn't appear to have been present at the meetings at which AIDS was discussed and, as we've seen from the document we just looked at, his account apparently given within the context of the HIV litigation was an account of not recalling receiving the June 1983 letter from Professor Bloom and Dr Rizza.

He doesn't appear to have been asked or there is no reference to the receipt or otherwise of the

March 1983 letter which contained Dr Craske's report, and the forms for reporting AIDS symptoms in patients.

In terms of the arrangements then for testing patients for HTLV-III and informing them of their diagnosis, as with the Liverpool Centre at the Royal Liverpool Hospital, this is a significant issue at Alder Hey as well. If we go to Dr Ball's evidence, she says -- I don't think I need to put it up on screen it's just a few lines -- she says:

"I am not directly aware of the circumstance whereby the process of testing was undertaken. But parents informed me that they were not counselled before testing and received a 'positive' outcome by means of a letter addressed to the parents."

She recalls also in her statement one mother thinking that a positive test was a good outcome, unsurprisingly; and one mother hearing that letters had been sent was so distressed that she was unable to open the letter for months.

Dr Ball, again, also describes in her statement in relation to the question of telling the children themselves of their HIV infection, that was something that she would, once she came on board in 1989, discuss with parents and as to how and when the children themselves would be informed.

She refers to how difficult that was for parents and the atmosphere of stigmatisation at the time.

There is other evidence which is consistent with Dr Ball's understanding that HTLV-III test results were communicated by letter and that appears, when we looked at Professor Hay's HIV litigation statement, to have been his understanding of the position at Alder Hey as well.

We've got an example of one such letter, at DHSC0039356 -- 536, sorry. Yes. So it's 28 August 1985:

"We have now received the results of the special antibody test that we performed on your son as part of the screening programme for all children with haemophilia and related disorders. I have to tell you that [he] does show the presence of HTLVIII antibodies, ie he has evidence of antibodies against the virus that it has thought to cause AIDS. This does not mean that your son has AIDS but just that he has been exposed to the virus. Most people who are positive for HTLVIII antibody do indeed remain well and never develop features of AIDS. A small minority run a risk of developing this condition in the future."

SIR BRIAN LANGSTAFF: So this is not at all -- remember

I drew your attention to part of what was in the report, wasn't it, in the journal in which Dr McVerry was writing. So at the same time as the Liverpool Hospital was saying "We just don't know", he is saying, or the author of this is saying --

MS RICHARDS: If we go to the bottom of the page we'll see it's Dr Martin.

SIR BRIAN LANGSTAFF: Dr Martin, who had no particular knowledge of haemophilia care or the risks, is saying something he you could not possibly say --

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: -- on the state of knowledge at the time.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: There are statements from other witnesses who received the letter in similar or identical form.

Again, I won't put it up on screen but we've copies of effectively an identical letter. I'm sorry, if we just put that one back.

You'll see from the last paragraph:

"... we have arranged a short seminar on haemophilia and AIDS to endeavour to answer any questions you may have."

There's going to be a microbiologist, Dr Hart,

present, that's scheduled for 4 September 1985.

Again, there's a question as to why testing and provision of information about test results is taking place only in the late summer or early autumn of 1985.

There is an account from a witness of her attendance at that meeting, which I will just read out. Just check I've got the right one. Yes. So this is an account from a mother whose son was infected with HIV and hepatitis C. It says:

"The seminar took place in the C3 ward at Alder Hey on 4 September 1985. I attended the seminar with my husband and the room was full with between 60 and 100 people. The seminar was for families of those who had been tested for HIV and we knew many of the families from meeting them at Alder Hey. Dr Martin led the seminar and then handed over to Dr Hart who was a consultant microbiologist. People were shouting and asking questions and the meeting ended up being very emotional and hostile. No explanation was provided during the meeting about why this had happened and no one apologised or took blame. I felt as though it was pushed under the carpet that people had been infected with HIV. People left feeling upset and angry about what was raised during the meeting. Dr Martin was very abrupt and I clearly remember him saying 'If you think you can take this to court, you haven't got a case'."

Then just -- again, I'm not going to put it on the screen, but I'll just read very briefly from the statement of the mother of three boys, two of whom were infected with HIV and died.

She confirms that they -- well, in terms of the testing and the communication of the diagnosis she says:

"We were told that the boys needed to go for blood tests. I never even thought to ask what the tests were for as it was just the norm as they were haemophiliacs, they were always having blood taken. We later received a letter which said that they had been infected with HIV. My dad saw my extreme reaction to the letter and came over to ask what was wrong."

She observes, you may think unsurprisingly:

"I find it disgusting that I was informed of my sons' HIV status by a letter."

She then talks about being asked to go to Alder Hey the following week, maybe a reference to the same meeting.

"Dr Martin was standing there and he said 'I don't want you all coming up here with coughs and

colds'. He basically told us that if they had symptoms he didn't want them to bring them to hospital as not all symptoms was a result of HIV."

She says:

"I was not provided with any information about the virus itself. I was given no information as to the possible routes of transmission or risk of infection to others."

In terms of the numbers infected -- and sir, you'll have seen from the annual returns the kinds of numbers treated at Alder Hey Hospital over the years. So it ranges from ten patients in 1978 with haemophilia A to 19 patients in 1982, 16 patients with haemophilia A in 1983, 14 in 1984.

The provisional data supplied by the UKHCDO from the National Haemophilia Database to the Inquiry suggests that 13 patients at Alder Hey were infected with HIV, having tested positive in the course of 1985.

That's pretty consistent with Dr Ball's recollection that there were approximately 12 boys with haemophilia who were HIV positive. Her recollection was that as a proportion of children registered per Centre in the UK, this was one of the highest, if not the highest, proportion of HIV

positive haemophiliacs."

SIR BRIAN LANGSTAFF: Well, it's over 90 per cent.

MS RICHARDS: Yes. The statement I referred to a few minutes ago, the mother of two boys who died, also commented in her statement, she said:

"At Alder Hey it was like a conveyor belt of children dying. We would constantly get phone calls from other parents and families telling us that another child had died."

In relation to hepatitis C testing, sir, at Alder Hey, Dr Ball's recollection or understanding was that that began during Dr Bolton-Maggs' tenure, so after Dr Ball had left. She couldn't recall having direct involvement other than monitoring liver function. It may be because -- or she tells us in her statement she was absent but -- on maternity leave and then a period of illness from late 1991 for a period of time. So -- and during that period of time she says Dr Bolton-Maggs acted as locum. So the position, therefore, is not entirely clear as to when hepatitis C testing was undertaken at Alder Hey.

Dr Bolton-Maggs's recollection is that once the testing became available, and she thinks it was in 1992, patients would be screened and results would be passed to patients or parents as soon as possible.

Again, there is evidence of delays, as we've heard, in relation to many of the centres.

And then the last topic, I think, in relation to Alder Hey, is how children infected with HIV were treated for their HIV at Alder Hey. And again, I think I can probably best take this from the statement of Dr Ball.

If we put it back up on the screen, please, Soumik, it's WITN4739001. If we start at the bottom of page 13, very bottom of the page, she says:

"Unlike the boys in [Great Ormond Street], a number of children at the beginning of 1989 were already beginning to show evidence/signs of severe immune dysfunction as a result of the virus manifesting in the development of opportunistic infections."

Then if we go to page 16, she describes, in the bottom of the page, that:

"... it became evident that a significant proportion of the HIV affected boys were severely immune compromised, which at the time was not the experience of many paediatric haematology colleagues I consulted."

Then there's reference to starting the children on treatment.

And then top of the next page:

"Around this time the situation with the hospital management deteriorated. This resulted from one of the boys being acutely admitted to C3 [one of the individual wards] with severe pneumonia as a result of 'full-blown AIDS'. He was 8 years old. After his mother made it known to another parent that her son was HIV positive there was a distressing moment for all the parents who were very frightened and concerned about the infectivity risk and welfare of their children with cancer. Together with the ward senior sister, Doris Hackel, who had nursed these children from diagnosis to adulthood, we met the parents individually and felt that we had reassured them not only to safety issues, but also to the necessity of the child with a highly immune compromised state being cared for in a ward with expertise and surrounded by staff that he knew and trusted."

And then Dr Ball recounts this:

"I found that without consultation the child under my care [the eight-year-old child with severe pneumonia and AIDS] was moved to a general paediatric medical ward the following morning under the instructions of the acting senior ward consultant and Medical Director. No appeal by myself or the nursing staff could assuage him to change his decision. In fact, I was accused of deliberately influencing the nursing staff to be openly hostile to his decision. I have never understood why his animosity towards me manifested itself in such a way, but the nursing staff independently opposed this decision as one might expect from professionals who had for years provided care for this sub-group of children. I appealed directly to the Hospital Manager who refused to be involved in what he determined was a purely clinical matter.

"The edict didn't stop there as from that moment all children with haemophilia were no longer to be treated or admitted to ward C3 but would instead be seen on a general paediatric ward, with nurses who had no experience in the management of immune compromised children or bleeding disorders. The dismay and distress caused the parents of these boys was in my mind then as it is now as being cruel and unnecessary. The parents asked me to mediate but I was unable to convince my colleague to reverse this decision, but the hospital manager agreed to meet with the parents ..."

She thinks that was around February 1990, and he subsequently agreed to the provision of a dedicated unit. And that was how the paediatric Haemophilia Centre, she says, was finally established at Alder Hey.

If we go to page 21 -- sorry, I don't think I need to go to that.

Yes, if we just go to page 29.

SIR BRIAN LANGSTAFF: As a matter of interest, who was the medical director?

MS RICHARDS: It was Dr John Martin. He had by that time become medical director of the hospital.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: And there's a letter from a solicitor representing the parents of patients with has some observations to make, which I'll come to in a moment.

Before I do that, we're just looking at Dr Ball's statement. She just says this, this is some general reflections:

"My positions both at GOSH and Alder Hey were ones of caring for the consequences of previous treatments and trying to improve services directed at the care for children and families with haemophilia and life-threatening infection. This also required not only direct medical care but psychosocial support in a time when nationwide fear and stigmatisation were rampant and supportive care requirements were sadly lacking."

Then she talks about HIV being new and relatively unknown. She talks about the work that was undertaken at Great Ormond Street. Then she says this about Alder Hey:

"Alder Hey failed because there most insufficient staffing and attention to detail by those charged with the care of these patients. My appointment was in part to correct some of these deficiencies but lack of adequate funding and a hospital management team including the Medical Director were unwilling to assist in prioritising the care of these children, even though the government at the time was promising families and patients with haemophilia that they would as 'compensation' receive the highest quality of care the NHS offer. No amount of reasoning, cajoling or adversarial tactics or any other means I could muster affected a change in this institutional attitude."

And then if we look at DHSC002459_012, a letter from J Keith Park solicitors, Graham Ross representing a number of parents of haemophiliac children at Alder Hey. And he says in the second paragraph:

"I have been asked by parents of haemophiliac children at Alder Hey Hospital to advise regarding the standard of care current at the hospital and to write to the General Manager at the hospital, which I have done as attached.

"Your clients will be aware of an ongoing dispute that has led to a number of meetings between the parents and the General Manager. The general nature of the complaints are that the children, when requiring in-patient care, are being placed in a general ward together with children with infectious diseases, and no longer, unlike in the past, are being given the support of nursing staff with experience in haemophilia and HIV. Further, they are often passed around 'from pillar to post' at times of bet shortage, with no sense of priority. Finally, and unlike in the past, there is no reserved area to which parents can bring their children for day treatment.

"The above situation is prejudicial to the health of the children in that, whilst immunosuppressed, they are being closely exposed to all manner of infections and in an environment where the nursing staff are untrained and inexperienced to sufficiently identify early signs of damage. My clients are having to suffer the added strain of a constant fear that the lives of their children will

be shortened even further than they can already expect specifically because of the failure at the hospital to take sufficient steps for their protection. Further, the children and the parents alike desperately need to feel some continuity of staff and location and, generally, to know there is a place where they can come to, whether to collect supplies, or generally for help and counselling in their more difficult times, where they will feel known and welcomed."

The second paragraph, on the next page, refers to the parents' request for change being fully supported by Dr Ball, which is consistent with what Dr Ball has said in her statement.

If we can then pick it up in the fourth paragraph:

"I have to say that I am extremely concerned at the conduct, as reported to me, not only of Mr Butler, but of Dr Martin, the paediatric consultant, who formerly cared for these children and whose position, as Head of Medical Directorships, appears to have drawn him into administrative decisions that have led directly to these complaints. This is particularly distressing for the parents when, of course, it was the clinical decisions of Dr Martin that, in many cases, according to the allegations in the pleadings,

led to the HIV infection. It seems extraordinary that the hospital, seen by the parents as responsible, at least in general terms, for infecting their children, can be so inept at handling the patient relations as to bring about the present situation. It is perhaps significant that at no time has Dr Martin offered any personal sympathy or sense of regret to any of the parents."

I should, I think, make reference to the response -- again, of Ms Saunders, the -- from Alder Hey, responding to the issues raised in Dr Ball's statement.

So if we go back to WITN4194006. I read from parts of her statement previously. I can pick it up at the third page. So, paragraph 11, she's referring to the issues that we have just been discussing by reference to Dr Ball's statement, and the way in which the children with HIV were going to be cared for at the hospital. She says:

"The information provided to me I am afraid, is that this process appears to have happened without appropriate consultation with the families affected or a plan to educate the staff on the General Paediatric ward to which their care was transferred. Members of the Haematology Team welcomed this separation as they

felt that care of children with malignant conditions took precedence on the Oncology Unit.

"12. I very much regret that I cannot now explain these apparent failings."

Over the page, top of the page, Ms Saunders says that:

"... Alder Hey had not had the benefit of anyone with [Dr Ball's] knowledge and experience prior to her appointment."

Then this:

"Nor am I able to explain, looking back many years later, why having appointed someone with the degree of knowledge and specialism of this witness, her advice was not initially acted upon. Alder Hey prides itself upon being a learning organisation and we will reflect upon these matters and the lessons they provide even after so many years."

And then paragraph 15:

"Funding in the NHS is often an issue. There is never enough money to provide all of the care and treatments that are possible and that we would wish for our patients. If funding priorities at that time were wrong or lacked insight, I am very sorry and apologise on behalf of the Trust to all those who suffered as a result of those decisions."

She apologises in the next paragraph to Dr Ball. And then, paragraph 18, says this:

"Most of all, I would like to apologise on behalf of the Trust for the distress these shortcomings must have caused to patients and their families who have suffered such trauma and tragedy and deserved better. I am truly and deeply sorry."

So that's the response that we've had from the current -- those in charge at the current Alder Hey Trust.

I should say we have, and I'm not going to refer to it now, but we have, again, statements from parents about the way in which the children were cared for at Alder Hey at that period of time, and it describes -- well, it describes their experiences in a way which is very consistent with what we've seen related by Dr Ball and what we saw related by Mr Ross on their behalf in his solicitor's letter.

Sir, those are the key parts of the material relating to Alder Hey that I wanted to refer to.

I note the time. I wonder if we could take lunch now and then we can start with the remaining centres after lunch. I'm not going to rush any of them.

SIR BRIAN LANGSTAFF: No.

MS RICHARDS: It is right to say, however, that most of the rest of the centres that I'm proposing or hoping still to cover today have far fewer documents to look at, simply because there are far fewer revelatory or informative documents than there were in relation to these two centres we've been looking at this morning.

So I should still be able to cover a lot this afternoon but we'll see how we get on. If there isn't enough time to cover all of those, then we will cover them on another occasion rather than compress or rush any of them.

SIR BRIAN LANGSTAFF: Yes.

Can I just recap a little of what we have heard this morning? You've been absolutely right to take Alder Hey and, for that matter, to some extent, Liverpool, the Royal Liverpool Hospital, at the length that you have.

As Ms Saunders says, it may be an abject or an object lesson to be learned from the comparison in particular between the accounts you have given through your presentation in respect of Alder Hey, and what we heard yesterday from you about the Sheffield Children's Hospital.

They may be separated only by a few miles in the Pennines, but they're worlds apart in what you have

described and, to identify the essential differences, what are they? Are they that the treatment in Sheffield was led by the most up-to-date scientific knowledge at the time, by somebody expert in the field, that that led to a focus upon cryoprecipitate as the treatment of choice, and very great care to avoid, where possible, treatment with concentrates, certainly commercial, in facilities which had the additional support staff that you identified in a dedicated centre, in part, I think in Sheffield. Am I right about that?

MS RICHARDS: I can't remember the timings in terms of when the facilities were developed, but certainly there was a dedicated paediatric haematologist.

SIR BRIAN LANGSTAFF: And with access to, again, a team, in Sheffield generally, which had shown itself well aware of the particular risks of hepatitis non-A, non-B from an early stage. And plainly having the support of the hospital management at the time, and the region.

Are there any other significant differences that you would identify? Because the result couldn't be more different, could it? It's 90 per cent, over 90 per cent of children, some brothers from the same family, dying of infection with HIV in Liverpool, and

probably one only being -- seroconverting in Sheffield.

MS RICHARDS: Yes. There may be some similarities in the sense of, in terms of the provision of information to parents about risks, there's no particular evidence in relation to Sheffield -- in common with, I think, what we've learnt about the majority of places -- there doesn't appear to be evidence of a proactive approach to warning parents or patients about risks. But certainly what we see from Sheffield appears to have been a relationship between the Children's Hospital and the adult Centre, absolutely as we have in Liverpool, so mirrored in that sense, but in Sheffield it's underpinned by, perhaps no doubt the work of Professor Preston, the particular awareness of the risks of hepatitis, which led to a focus upon cryoprecipitate for children, not exclusively, but at least being a main form of treatment, in marked contrast to the position in Liverpool, where cryoprecipitate appears to have played little or no part in treatment, even for those of a very, very young age.

It is almost entirely commercial concentrates or very substantially commercial concentrates, with no apparent thought being given to the risk, no differentiation between mild, moderate and severe, and no alternatives being contemplated, is the picture which emerges from the documents we've seen.

SIR BRIAN LANGSTAFF: Well, there may be -- and if there are, I can hear about them in submissions in due course -- other underlying reasons, other than the particular personalities or views of those who were running the centres, which resulted in such differences in outcome and for, as far as I can see, from the witness statements, the degree of parental satisfaction.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: Yes. Well, thank you for that. If you've any more to say about those brief reflections, I couldn't let the Alder Hey presentation go without making some reflections on it. I shall have to think more carefully about quite where it fits into the overall picture.

MS RICHARDS: Yes, sir.

SIR BRIAN LANGSTAFF: But two o'clock.

MS RICHARDS: Thank you.

(1.00 pm)

(The luncheon adjournment)

(2.00 pm)

(Proceedings Delayed)

(2.03 pm)

SIR BRIAN LANGSTAFF: Yes?

PRESENTATION RE WALTON COMMUNITY HOSPITAL

MS RICHARDS: Sir, I'm going to deal briefly now with the centre at the Walton Hospital.

It was a recognised Haemophilia Centre in the sense that they had a UKHCDO number, number 66. It was a very small Centre, which we'll see from the numbers treated. The director in the 1970s was a Dr Patricia Rob, and then, from 1980, Dr PA Stevenson.

Dr McVerry, whose time in Liverpool was 1980 to 1985, says he had no involvement himself with the Walton Hospital and he wasn't even aware that there was such a centre there.

And it does appear that over the course of the early eighties there were very few patients treated at the Walton and such patients as had been treated there may have transferred to the Centre in Liverpool. There are no returns after 1985, and by 1990 it's been recorded that there is no longer a Haemophilia Centre at the Walton.

There is comparatively little information about what the source of products would have been. We know that Regional Transfusion Centre in Liverpool provided

some blood or blood products, or at least cryoprecipitate, in the seventies to the Walton.

Dr Stevenson does appear to have attended some of the regional meetings of the Mersey and North Wales haematologists in the course of the 1980s, and there is reference to Dr Stevenson raising an issue in November 1985 about difficulties in obtaining supplies of fresh frozen plasma.

In terms of treatment, the numbers treated at the Walton from 1976 onwards were as follows: five patients in 1976, five in 1977, four with haemophilia A, one von Willebrand's, four haemophilia A patients in '78, three patients in '79, three patients in 1980, two with haemophilia, one a carrier, two patients with haemophilia A in 1981. 1982, it's not entirely clear but may have been a single haemophilia A carrier patient. No patients treated in 1983 and one patient treated in 1984. But someone who was probably a visitor from Edinburgh rather than a registered patient at Walton.

But there are documents that suggest that there was a slightly larger number of patients, around nine or so, registered at the Walton in the early part of the 1980s, but the number treated, as I say, rather smaller.

In terms of the annual returns, what they show, essentially is 1976, treatment with cryoprecipitate, in 1977, treatment with cryoprecipitate, and a small amount of NHS factor concentrate. And it would appear that there was home treatment with cryoprecipitate in 1977. That's what the return seems to suggest.

Again, 1978, mostly cryoprecipitate with some NHS concentrate and a small amount of fresh frozen plasma.

The first year in which there's any commercial concentrate recorded is 1979. It's still predominantly cryoprecipitate so it's 55,000-odd units, but 6,000-odd units of commercial concentrate Factor VIII.

In 1980 it's cryoprecipitate.

1981, cryoprecipitate.

1982, it's unclear, but it appears to be NHS factor concentrate only.

As I said, no patients in 1983, and then a tiny amount of cryoprecipitate in 1984.

So the picture that emerges, therefore, is predominantly the use of cryoprecipitate with one year of a small amount of commercial concentrate.

There's little information to reveal what, as a matter of fact, either Dr Rob or Dr Stevenson's knowledge of the risks of hepatitis or HIV might have been.

Dr Rob doesn't appear to have attended many UKHCDO meetings. The second half of the seventies has Dr Rob attending the meeting in 1977 only. Dr Stevenson is not recorded as attending UKHCDO meetings in the 1980s.

And there is no information to suggest patients were infected with HIV at the Walton Centre.

In relation to hepatitis, the evidence the Inquiry has received is in relation to patients infected with hepatitis C following a blood transfusion.

So that, sir, is the position in relation to Walton.

PRESENTATION RE INVERNESS, SCOTLAND

MS RICHARDS: Can we move then to Scotland and to Inverness.

So the Haemophilia Centre in Scotland described by its director in the late seventies as the smallest centre in the UK was located at the Raigmore Hospital in Inverness.

Dr Cook was the director through the seventies until his death in 1982, and he is minuted as having attended UKHCDO meetings from 1968 onwards.

Then, following Dr Cook's death, Dr Taylor became the director in 1982, 1983.

Dr William Murray is a consultant haematologist, involved with the care of patients from '87 until 2010, and the haemophilia service was then taken over by Dr Craig.

In terms of facilities, we have a description from a witness treated at the Centre in the early 1980s describing a lack of facilities, children dealt together with adults, as the Haematology Centre was essentially a tiny room.

As was common in Scotland, there were close links between the Blood Transfusion Service and the provision of haemophilia care, and Dr Cook, as Director of the Centre, was also the regional director of the north of Scotland Blood Transfusion Service, from 1960 to 1982.

We've put a little bit of information in our written note about the Transfusion Service but we're going to be looking in more detail at hearings later in the year in relation to the blood services across the United Kingdom so we'll no doubt come back to those issues.

In terms of the numbers of patients registered or treated at the Centre, in the seventies, the

figures seemed to be between 14 and 18 patients on an annual basis. And the returns indicate that the treatment provided was almost exclusively Edinburgh Factor VIII and IX and that commercial products were not used.

I'll just look at a couple of returns by way of example.

So if we go to HCDO00002503, please, Soumik. I've given you too many zeroes --

SIR BRIAN LANGSTAFF: There are three zeroes, it must be --

MS RICHARDS: HCDO0002503, my apologies.

So we can see here the annual return for 1976, the director Iain Cook, 20 patients treated during the year, and then we can see, in terms of usage: 10,720 units of cryoprecipitate, but the bulk of the treatment is with Scottish NHS concentrate, 182,950.

That's pretty much the pattern we see if we then look at the 1977 return, HCDO0002504. We can see 19 patients treated, presumably haemophilia A patients treated, and one Christmas Disease patient treated.

If we look towards the bottom of the entry, so no cryoprecipitate usage recorded, "Other Materials" identified as "Factor VIII Edinburgh", 144,780 units.

If we look over the page, please, we can see

a separate form in relation to home treatment, and the figure there given is 35,270 units of Edinburgh Factor VIII for home treatment and, if we look at the comment below, we can see it said:

"It is our intention to increase the number of patients on home treatment in the next five-year period in view of the difficult problems occurring [from] long distances to this Centre in a scattered community."

Then it's really a similar pattern as we go through the years.

So HCDO000205. So 18 haemophilic patients treated. No haemophilia B patients treated that year. There's one patient with Factor VIII antibodies.

If we go to the bottom, we'll see the sole product identified there is the Edinburgh Factor VIII, 165,690 units.

There are, in relation to that year, identified on the various forms that are attached, I think two patients on regular home therapy.

If we go to the return for 1979, HCDO0002506, we can see 20 patients, haemophilic patients, treated during the year. One haemophilia B patient treated. And then we can see, again, it's Edinburgh concentrates being you'd for Factor VIII, 151,210, and then Factor IX, 5,100 units approximately.

And that's really the pattern that continues so I won't go through all the rest of the returns, but, again, 1980, it's 15 patients with haemophilia A treated, one haemophilia B. Only Edinburgh factor concentrates recorded.

The same is true for 1981, when there's 12 haemophilia A patients, one haemophilia B patient. Again. Only Edinburgh Factor VIII concentrates recorded.

If we go then, in relation to 1982, to HCDO002509, we see a letter from Dr Discombe, a local consultant haematologist, to Ms Spooner at Oxford, and it records that he's having a certain amount of trouble in compiling the data requested because Dr Cook died in August.

"... I arrived (so that's 1982) in late November and there has been considerable difficulty with some of our out-stations, which appear to be unable to maintain the desired records."

Dr Discombe refers to trying to get the information in a reasonable pattern. He says in the next paragraph:

"Preliminary studies suggest that 5 haemophilia A patients were treated under the control

of the Laboratory, and that all these 5 were on home treatment, and a total of 1357 bottles of Factor 8 concentrate, all from Edinburgh, were used.

"So far I have founding no evidence that Factor 9 Concentrate has been used for haemophilia B, and as yet we have not verified. The data enquired about a presence of inhibitors, but as far as I can see none of the patients have acquired one.

"We are doing our best to acquire the appropriate information ..."

That would probably appear to be something, probably, of an underestimate in terms of the number of patients treated, but that represents a snapshot at the time.

If we go to the second page of this document, it's a follow-up letter in July 1983 from the Transfusion Service, to Ms Spooner. And if we look at the last paragraph, it says:

"I regret the records are far from complete or guaranteed but when we get ourselves sorted out with a proper filing system in respect of the Haemophilia Centre the statistics will again be accurate."

Then if we just look at 1983, which is HCDO0002510, and we go to page 4, we can see there Dr Taylor now identified as the director,

13 haemophilia A patients, one von Willebrand's. Then we have the figures, NHS Factor VIII concentrate -- no reason to think that's anything other than Edinburgh concentrate -- and the figures given for inpatient and home therapy, so 183,360 hospital treatment, 176,580 home treatment, and then some cryoprecipitate and some NHS concentrate used for the treatment of patients with von Willebrand's.

And the same pattern, 1984 and 1985: 16 haemophilia A patients, two haemophilia B for 1984, only Edinburgh factor concentrates recorded. 1985 records the treatment of ten haemophilia A and one haemophilia B patient. Again, only the NHS Edinburgh factor concentrates recorded.

We see, when we look at 1986, which is HCDO0002513, the recording of -- at the bottom of the page, sorry -- the recording of DDAVP the first time.

But again, the main product used is the Edinburgh concentrates.

Then if we just look at a handful of bits and pieces of correspondence, we can see that there is correspondence between Dr Cook and John Watt at the PFC. And indeed correspondence with Dr Cook and others.

If we look at SBTS0000309_040, it's a response

to an enquiry about Factor VIII concentrate, June 1973 and Dr Cook writes to Dr Watt saying:

"Although I'm in charge of the 'Haemophilia Centre' here, the number of Haemophiliacs I have is only 16. It's just not possible to undertake any research into a new product as these people are so scattered and one cannot obtain the required specimens or the follow-up needed. The main decisions about this material will obviously [need] to be taken in Glasgow and Edinburgh and I'll be interested to hear what is decided in due course."

So it sounds like an invitation to participate in some form of trial or study in relation to a new SNBTS PFC product.

Then if we look at SBTS0000309_159, we'll see again a letter from Dr Cook to Dr Watt. This is 23 September 1975, and it gives an indication of what Dr Cook's approach to treatment may have been.

If we go further down the page, we can see halfway down that paragraph beginning "This is not a quibble", he says this:

"It did seem from last week's meeting that the really severe haemophiliacs might well need a dose twice weekly which would mean that [then two patients identified] could well use up the 12 ampoules between them. This is no doubt being very greedy at the start and I feel they are extremely fortunate to be given even one dose on a regular basis but I would like to hear whether it is possible that the amount to Inverness might be increased from twelve to eighteen and if so at what future date. No doubt my plan is too ambitious at this stage but you will, I am sure, appreciate that these demanding patients and their relatives do like to know where they stand ..."

It appears that Dr Cook was keen on being able to provide a greater amount and more regular treatment to some, at least, of the more severely affected patients.

There are then various letters -- I'm not proposing to go through them in any detail -- in 1975 showing a degree of fluctuating availability of product. So in October 1975 Dr Cook wrote saying:

"We've got a shortfall of Factor VIII, we've had to return to making more cryoprecipitate."

However, by the end of that year he says:

"Well, we're getting the lion's share of Factor VIII over the last three months, this is unfair, we're going to return to using cryoprecipitate and restrict our Factor VIII to a couple of severe haemophiliacs to restore the balance of fair play", as

he puts it, between the smaller centres.

He raised concerns about supply of Factor VIII in 1977 and talked about having to rely again on cryoprecipitate.

By June 1979 there's correspondence suggesting that there were three haemophiliacs at that stage at the centre on home treatment. Dr Cook is there now saying he's got an excess of Factor VIII stock. In 1981 he offered to reduce his Factor VIII allocation, and says:

"I'll be the first to shout if I think my 16 haemophiliac patients are being inadequately treated in the long term."

The conclusions of the Penrose Inquiry, in terms of the factual position in relation to this centre, was that between 1981 and 1985 almost no cryoprecipitate was used, that appears to be broadly consistent with the returns, and that only SNBTS products were used at the centre from 1974 onwards, and that heat-treated products were supplied to the Centre in December 1984.

That's the position in relation to what products were used as a matter of fact. There's no particular documentation casting any light on the policies or approaches towards treatment of different categories

of patient.

There's also little information about either Dr Cook's or Dr Taylor's knowledge of non-A, non-B hepatitis. They did, however, attend a number of UKHCDO meetings, and also local meetings, meetings of Scottish directors, at which there were discussions about the hepatitis risks.

Of course, Dr Cook in his role within the Transfusion Service was part of decision making in Scotland about the screening of blood donors for hepatitis in the early 1970s and, again, we'll no doubt come back to this when we look at the blood services later in the year, but we've identified in our note some correspondence from Dr Cook in relation to the introduction of hepatitis screening in the early 1970s. He is said, by 1975, to be testing every specimen for hepatitis B and there's, again, an interesting exchange of letters between Dr Cook and Dr Cash that we may want to look at in more detail when we examine the role of the blood services.

In terms of knowledge of risk of AIDS and response to risk, as we've heard, Dr Cook died in, I think, August 1982. The first meeting I have identified Dr Taylor attending, where issues relating to AIDS were discussed, was a meeting in January 1983.

That is at PRSE001736, we can see it's a meeting of the directors of the Scottish National Blood Transfusion Service and Haemophilia Directors held in St Andrew's House, Friday, 21 January 1983 and we can see present, towards the bottom of the list of attendees, Dr Taylor.

Then if we go to the last page, no, the seventh page, please Soumik, we can see item 6, about halfway down the page, is headed "Acquired Immune Deficiency Syndrome (AIDS)":

"Dr Cash drew members attention to recent articles in the United States and also in the Observer and the Lancet, about this problem. An MMWR extract ... had been circulated with his paper."

It seemed likely, given the timing, to be the December 1982 MMWR:

"Dr Ludlam informed members that in the UK a letter and questionnaire had been sent to haemophilia directors."

In fact, I think the position is there was a plan to send that letter out and it was actually sent out in March 1983 but, in any event, there is Dr Taylor receiving, in January 1983 what appears to be an update of the factual position in terms of those infected.

SIR BRIAN LANGSTAFF: Do we actually have a date for the time in January?

MS RICHARDS: The meeting is 21 January.

SIR BRIAN LANGSTAFF: Thank you.

MS RICHARDS: Of course, we have present, amongst others, Dr Forbes and Dr Ludlam. We've explored with Dr Ludlam obviously directly his knowledge and involvement in matters at the time. We've got the Immuno meeting taking place at London Airport in the same month, and so on. We know there were Reference Centre Director meetings going on in February 1983, so no reason to think that kind of information wouldn't be communicated to the directors of the smaller centres and this seems to be precisely what this minute of the meeting was doing.

We can see that Dr Taylor also attended a later meeting in February 1984 of the same group. PRSE0001556. So 2 February 1984, Dr Taylor is in the list of attendees. If we go to the second page, I think this is a document we looked at with Professor Ludlam, but just a little further down, so the paragraph (ii):

"Members discussed the suggestion that the production of cryoprecipitate could now be reduced. Dr Ludlam said that cryoprecipitate was preferred in

the treatment of children at present, because of the new danger of AIDS. Dr Hann concurred. A policy seemed to be emerging however to use less cryo for haemophilia A patients. It was agreed that a certain minimal amount of cryo was required and Dr Cash pointed out that TDs could produce it in emergencies."

Then there's a reference to the phasing in of heat-treated Factor VIII.

Again, Dr Taylor present at that meeting and for that discussion.

In terms, then, of the arrangements for patients to be tested for HTLV-III and informed of their diagnosis, Professor Ludlam told us he sent out invitations to a range of centres, or patients at centres, in respect of that group meeting that was held in Edinburgh in December 1984. There's no evidence, we've detected, of Inverness patients attending that.

However, we then have a template letter signed by Dr Taylor in February 1985, which is at HIGH0000011. So we can see it's a draft dated 12 February 1985, "Dear" and then it presumably intended to be sent to the patients of the Centre:

"As you are no doubt aware, there is considerable disquiet among people with Haemophilia

throughout the country, about the subject of AIDS and we have had several enquiries from patients. Reports in the Press and on Television are often biased and may be misleading. For this reason I am enclosing some notes which we have compiled in the hope that we can answer the questions most commonly asked. It is simply a Summary of what we know at present about this disorder, together with a few points of advice on how to minimise risk and brief details of the steps we are taking to combat the disorder.

"Obviously, some people will have questions which are not covered in this short Document and if you have any queries, we would be very happy to talk to you about them, either over the telephone or by appointment.

"With the large amount of research being done at present, our state of knowledge changes rapidly, and we will try to keep you updated. In the meantime I hope the enclosed Document is of some help."

We haven't, I think, got the document but it may be it's in the same or similar form to the document that we looked at, again during Professor Ludlam's evidence, that was being produced for circulation to patients.

Then, in terms of inviting patients to be

tested, there's a second template draft letter of the same date, 12 February 1985, at HIGH0000012:

"Dear [blank]

"Because of the recent problems with AIDS, we are now producing new types of Coagulation Factors.

"Before this can be issued, we need to do a blood test on each of our patients. Could you please telephone us here ... to discuss the most convenient [I don't know whether that's meant to be time or way] for you to have this done."

Whether that was the only invitation that was issued or whether more information was given, we're not currently clear. But, obviously, if that is the only communication, it doesn't explain what the blood test is for, if that's intended to be an invitation to be tested for HTLV-III.

If we then just look at some information we have about patients being told of their test results, we can look at a letter from Dr Pettigrew, GMCO0001690_055. This is a letter from Dr Pettigrew to Dr Taylor in Inverness about a patient who was formerly a patient at the Royal Hospital for Sick Children and Dr Pettigrew is seemingly informing Dr Taylor that this patient presumably is someone who may now be coming under Dr Taylor's care and had received mainly commercial Factor VIII concentrate, had been tested, or their stored samples had been tested by Dr Follett and found to be HTLV-III positive, and Dr Pettigrew says:

"... I thought you ought to be informed so that you can arrange for appropriate measures to be taken."

Now, the Inquiry has evidence from the patient who is the subject of the letter, whose recollection is of their parents being told of the HIV infection in around 1987, 1988 so two, possibly three years on from this, being told by Dr Taylor.

That witness's account is when his parents asked why they'd not been told earlier, but doctors said that it was not hospital policy to tell patients.

That issue appears to have triggered a letter from The Haemophilia Society, which is at LOTH0000006_028.

It's a letter from Mr Watters and it's to Dr Rizza, 22 May 1989, but it concerns patients at Inverness and Aberdeen:

"I have learnt recently that patients with haemophilia attending Raigmore Hospital in Inverness and Aberdeen Royal Infirmary are not necessarily being advised of their HIV status. This came to light recently when a boy of 14 was suddenly told of his HIV

antibody status -- his parents having assumed, and the lack of any information to the contrary, that he was negative. I also understand that there were two patients at Aberdeen Royal Infirmary where there was a long delay in giving the information to the patients or their families."

Mr Watters is asking Dr Rizza if UKHCDO has some policy on this which could be circulated.

Certainly, the evidence that the Inquiry has received from some witnesses is to the effect that patients were seen from their medical records that they were being tested for HTLV-III but they were not told at the time that they were being tested.

There's another letter from Dr Taylor in October 1988 which may cast some further light upon that. It's at HIGH -- let me just find it -- 0000020. It starts with a letter dated 6 September 1988 addressed to the registrar of the General Medical Council and it's from a Dr McClure, described as the honorary secretary of the Area Medical Committee of the Ayrshire & Arran Health Board, and it refers to a publication from the GMC entitled HIV Infection and AIDS: The Ethical Considerations, which I think we looked at in a presentation a few weeks ago:

"Doctors in this Area, as doctors elsewhere,

have received the above document from the General Medical Council. Sufficient concern has been expressed by individual members of the profession in Ayrshire and Arran to warrant discussion by the Area Medical Committee.

"Following this discussion, I have been asked to write to you to express our unanimous view that, while we will of course abide by the advice given, we disagree with the requirements imposed on the medical profession.

"We object to the advice on two grounds. Firstly, we do not feel that AIDS should not be treated differently to any other disease, and we would hope that we would extend the same standard of care and compassion to a patient with AIDS as to a patient with any other potentially fatal disease. We have all taken blood for wassermann reaction, for example, on antenatal patients, and never have sought patient consent or explained the catastrophic social consequences if a test were to prove to be positive.

"Secondly, your stress on confidentiality towards patients is irrational when, in the same paper, you insist that a doctor counselling a colleague who is HIV positive must 'inform' on that colleague should he or she not accept the advice on

changing practice offered.

"We would respectfully suggest that the General Medical Council reconsiders the advice to the profession. It is our view that, if the legal advice used by the GMC is valid in law, then the law requires amendment."

So that's the view being expressed by the Area Medical Committee. If we go over the page, we see then a supporting letter from Dr Taylor at Inverness:

"Thank you for forwarding the correspondence on this subject. Our department would give the strongest possible support to the views expressed by Dr McClure in his letter to Dr Paterson ..."

Now whether that is referring to the same letter or not is unclear but we've received these documents together, but the issue, is clear from the remainder of the sentence:

"... ie we feel it inappropriate, unethical and illogical that we have to seek patient consent before testing for HIV."

That would appear to be a pretty clear expression of Dr Taylor's views as at 1988, that it was positively inappropriate, unethical and illogical to seek patient consent before undertaking HIV testing.

In terms of the numbers infected with HIV in Inverness, the conclusion, as we understand it, of the Penrose Inquiry, although it was told by the director of the Centre in 2011 that there were no haemophilia patients considered to have been infected with HIV as a result of treatment in Inverness, the Penrose Inquiry's conclusion was that there were two patients, and that's consistent with the provisional data that we have received from the UKHCDO.

So if we go to INQY0000250, and we go to the last page. This is the table the Inquiry has put together from the data it has received from UKHCDO. Inverness is the last hospital, last Centre identified, and it records there, according, as we understand it, to the information held on the National Haemophilia Database, two patients testing positive in 1985.

In terms of the arrangements in relation to hepatitis C, we've little by way of documentary evidence. There's evidence the Inquiry has received from patients about being informed about hepatitis C diagnosis at routine appointments, which is a not unfamiliar story.

The Penrose Inquiry's conclusion, again in relation to patients with hepatitis C, was that, as at

2011, there were 26 living patients infected with hepatitis C at Inverness.

Sir, that's the position in relation to Inverness.

Just forgive me for a moment while I rearrange bundles, I'm going to turn to Aberdeen.

PRESENTATION RE ABERDEEN HAEMOPHILIA CENTRE

MS RICHARDS: So Aberdeen, Aberdeen Haemophilia Centre, located at the Aberdeen Royal Infirmary. Director was Dr Audrey Dawson from 1967 to 1996. She has provided a statement to the Inquiry which says she shared responsibilities as a team with Dr King, who was a paediatric haematologist, and Dr Bennett, who was a consultant haematologist.

Dr Dawson says that she spent much of her time developing the service for leukaemia and lymphoma and other malignant haematology services and that Dr Bennett was effectively the person with expertise in bleeding conditions, but she was officially the haemophilia director from that period, 1967 to 1996.

Dr King has also provided a statement to the Inquiry about his role at the Royal Aberdeen Children's Hospital and his role as a paediatric haematologist.

We've also a statement from Gina Andrew, who was

a nurse at the Aberdeen Royal Infirmary and working there in relation to the care of patients with bleeding disorders from 1985 to 1987. She has provided us with a description of the facilities in terms of haematology beds, based in ward 41 in the Royal Infirmary about nine beds and then it split off to ward 16 in around 1987 and then ward 112.

As with Inverness, there's a close relationship between the Blood Transfusion Service and the Haemophilia Centre, so the Aberdeen and North East of Scotland Blood Transfusion Service was also based at the Aberdeen Royal Infirmary. The director of that service was Dr Brodie Lewis in the 1970s, and then Dr Stan Urbaniak became the regional director in 1982.

Again, their role and policies and decision making will be explored in more detail in later hearings.

Dr Dawson in her statement to the Inquiry talks about the relationship between the Haemophilia Centre and the Blood Transfusion Service, explaining that the Haemophilia Centre received concentrates from the blood bank in the local Blood Transfusion Service, mostly SNBTS concentrates. She describes the blood bank staff keeping details of the amount of products used issued to each patient throughout the year.

She says there was a good relationship with the Blood Transfusion Service, that the Transfusion Service played a key role in maintaining records of treatment use. She says there were many discussions between the Scottish National Blood Transfusion Service and the Regional Transfusion Service about risk of infection from blood and blood products. She says:

"These weren't informal meetings but we tried to make the best decisions that we could based on what was known at the time."

If we go to STHB0000568, we can see a letter Dr Dawson wrote to the -- or wrote around the time of the Penrose Inquiry. If we just pick it up where she says, "We would like to make the following comments", paragraph 1. I should say she explains that this is following discussions she'd had with Dr Bennett. She says:

"We had several patients whose exposure to commercial concentrates before arrival was not accurately known to us. Aberdeen and North-East Scotland in the 1970s-80s were experiencing an economic boom related to North Sea oil, and we had many incomers, often transient. One man I remember treating was French, working off-shore on a Total rig, having not admitted to his French employers that he had haemophilia ... There were also other haemophiliacs, who were transient in Grampian, either working or on holiday. Also, our 'native' patients, even though treated probably exclusively with NEBTS material in Aberdeen, would have been exposed to commercial products when away from North-East Scotland."

Then she says in paragraph 2:

"With regard to the records of material which were used in treatment, the North-East Blood Transfusion Service actually obtained the material for us, and kept detailed records of batch numbers, etc; while we (ie Haemophilia Centre) kept only minimal records of this in the clinic/ward, and this mainly related to the amount of and type of material. Even these latter records would have fallen victim to the Grampian clinical records system, where material which was considered transitory was culled in the 1980s, in order to try to contain the bulk of the clinical notes."

So that was her recollection as set out in a letter to the Penrose Inquiry.

If we then look at the annual returns, we can pick it up with 1976, HCDO0002429. We can see

Dr Dawson there identified as director, haemophilic patients treated during the year, nine. Then, in terms of the products used, 49,630 units of cryoprecipitate, 818,450, it looks like, units of Edinburgh Factor VIII concentrate.

Then really it's a similar position in 1977, I won't go to that return, 14 haemophilia A, five von Willebrand's patients treated, treatment is cryoprecipitate and Edinburgh NHS Factor VIII.

If we go to the return for 1978, HCDO0002431, we can see 16 patients, haemophilic patients treated during the year, one with antibodies, and then, in terms of the treatment, 77,760 units of cryo, 96,370 units of Edinburgh Factor VIII, but then a small amount of commercial product, so Hemofil, being used -- it looks like 4,590 -- for the first time in the returns that we have.

There's a similar picture, again I won't go through each of the documents on the screen, but there's a similar picture for 1979: cryoprecipitate, Edinburgh factor concentrates, and then a similar amount of Hemofil being used, also FEIBA for the first time recorded for 1979.

Then we see FEIBA being recorded in 1980 and 1981 and 1982, as well as cryoprecipitate in Edinburgh

NHS factor products. We don't see Hemofil or any other commercial concentrate recorded after 1979.

If we then pick matters up in 1983, HCDO0002436. We can see the directors identified as Dr Bennett and Dr Dawson jointly.

Twelve haemophilia A patients, one carrier, eight von Willebrand's patients treated.

We can see the bulk of the treatment for home treatment, in fact exclusively, is the NHS Factor VIII concentrates -- again, presumably, Edinburgh concentrate -- 255,908 units. 87,000-odd units being used in hospital. Cryoprecipitate being used only for the treatment of von Willebrand's patients, and a small amount of NHS concentrate being used for the same purpose, and then we can see, bottom of the page, a small amount of porcine Factor VIII concentrate and then a much larger quantity, 246,000 units, of FEIBA.

And then I don't think we have the return in terms of haemophilia B but the pattern, as far as we can see, is Edinburgh concentrates only.

Then 1984 is a similar picture, HCDO0002437.

We can see 16 haemophilia A patients, two carriers, nine von Willebrand's patients.

A very small amount of cryoprecipitate being used for the treatment of haemophilia A patients, but

the bulk of the treatment is with the NHS concentrate. Again, presumably, I think, Edinburgh concentrate. And there's a reference there to material sent to the islands.

And then a small amount of cryoprecipitate used for carriers of haemophilia A and von Willebrand's, and reference there to Factor IX being used again in a small quantity.

Then it's a similar picture in relation to 1985, I wouldn't go to the return itself. We have 18 haemophilia A, two von Willebrand's patients treated that year, one haemophilia B patient. Cryo, Edinburgh NHS products, FEIBA and plasma recorded.

In terms of paediatric patients, Dr King has indicated in his statement to the Inquiry, in terms of figures of patients, that as at 1985 he thinks there were three severe haemophilia A patients, four haemophilia A patients who were mild or moderate, no haemophilia B patients and five with von Willebrand's disease.

Dr Dawson in her statement has said that, due to the passage of time, she has little or no recall of the processes in place for ordering factor concentrates. Her recollection is that they were sourced from the PFC -- or the blood products were sourced from the PFC in Edinburgh, and she says:

"When we didn't have enough of a product we would have used commercial factor, although I think in Aberdeen that was rarely the case."

And that appears to be borne out by the returns.

There is one additional document which indicates the purchase of Hemofil in 1979. That is at SBTS0000233_008 -- I think I said it wrong, SBTS0000223_008.

It's headed "Purchase of commercial blood products as reported by transfusion directors". For Aberdeen Royal Infirmary, we see there recorded Hemofil. It's a larger number of units than appears on the annual return: 9,780 units the year to 31 August '79, FEIBA, and then Buminate, which I think is albumin, there recorded.

SIR BRIAN LANGSTAFF: Can we just go back to 2432?

HCDO0002432. Scroll down a bit, please.

Yes, that's what I thought. The number of units there is 4,860.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: If we go back to what we've just been looking at, SBTS000223_008.

MS RICHARDS: It's 9,000, I think, yes.

SIR BRIAN LANGSTAFF: Yes, double, almost.

MS RICHARDS: Yes. We don't know whether that relates to a longer time period or -- we don't know what the explanation for that is.

SIR BRIAN LANGSTAFF: Because, well, if it's the two added together, because there's no Hemofil after 1979, the first bit of tiny Hemofil was in '78 -- 2431. That's 0002431, HCDO.

MS RICHARDS: It's not far off the amounts recorded for -- (overspeaking) --

SIR BRIAN LANGSTAFF: Well, it's exactly the same, pretty much --

MS RICHARDS: It's about 30 units out, I think, on my quick mental arithmetic.

SIR BRIAN LANGSTAFF: So it doesn't add up, not exactly.

MS RICHARDS: No --

SIR BRIAN LANGSTAFF: And yet the figures are quite specific.

MS RICHARDS: Yes. That's the data that we have.

The conclusion of the Penrose Inquiry in terms of what was being done at Aberdeen was that the use of imported commercial concentrates was very infrequent throughout the material time. That at least appears to be borne out by the returns that we have.

In terms of the approach to treatment, Dr Dawson has said in her statement to the Inquiry that:

"Most of the boys and men that we treated that severe haemophilia and so had no alternative to factor concentrates."

So that was her perspective.

Her view was that home therapy with cryoprecipitate wasn't much of an option.

Gina Andrew, the nurse, recalls Dr Dawson and Dr Bennett as being keen to get as many patients as possible onto home treatment, and she describes -- this is the nurse -- describes how once most of the patients were on home treatment the numbers coming into the ward decreased dramatically as they no longer required admission.

Dr Dawson's recollection is that for mild haemophiliacs DDAVP would have been used. We don't see it recorded on the annual returns, but then that's been quite a common feature in different parts of the United Kingdom.

In terms of knowledge of risk, of hepatitis, Dr Dawson has told the Inquiry that she was aware in the early 1970s that hepatitis B could be transmitted by blood. She has told the Inquiry that in the 1970s she became aware of non-A, non-B hepatitis. In common, again, with other centres, we see data being provided to Oxford which recorded cases of jaundice, and Dr Dawson, along with other directors, participating in the UKHCDO's hepatitis survey.

Dr Dawson attended a number of UKHCDO meetings in the 1970s, so she was there in 1971 where Dr Biggs summarised her report on the incidence of jaundice and inhibitors.

Dr Dawson and Dr Bennett both attended the 1972 UKHCDO meeting. Again, there was a discussion about jaundice. Dr Dawson was there in November 1974, when not only was there a further update from Dr Biggs about the jaundice survey but Dr Craske discussed the epidemic or outbreak of hepatitis in Bournemouth from commercial products.

She attended in 1975, where there was again a discussion about hepatitis and, in 1979, when Dr Craske presented material about non-A, non-B hepatitis.

What she said to the Inquiry was that when she became aware of non-A, non-B hepatitis in the seventies:

"It did not change treatment much, as it did not appear to be a progressive condition, and none of the patients were dying of liver disease but would have suffered seriously if we'd stopped their Factor VIII treatment."

In terms of knowledge of AIDS, again, Dr Dawson, as a Centre Director, would have had access to the minutes of the UKHCDO meetings or such meetings as she was herself unable to attend.

She has said in her statement that the risk of AIDS was highlighted in meetings of the Scottish Haemophilia Centre Directors. She wasn't at that January 1983 meeting that we looked at a few minutes ago. But she was -- I think Dr Bennett -- I'll double check, I think Dr Bennett was in attendance at that meeting.

There are various Scottish meetings, 1985, 1986, and UKHCDO meetings where either Dr Dawson or Dr Bennett attend. So while there were no particular documents to refer you to, no reason to think that they would have been any less equipped to follow reports in the medical press and what was being discussed at meetings than anyone else.

In terms of the process of testing, we have relatively little information about the process itself, but in terms of patients being told of their diagnosis, Dr Dawson says patients would not have been told as a group, but in individual appointments.

There is one patient who has told the Inquiry that he was informed of his HIV infection face-to-face

by Dr Bennett in a side room, recalls no real information being provided.

Dr Dawson doesn't think the testing of family members was offered as a matter of routine but said it would have been available if the request was made. In terms of the treatment of patients with HIV, she said there would have been referral to colleagues in the infection unit locally.

Then if we look at -- I think I've got the right note here, SBTS0000652_083. This is a 1990 letter from Dr Dawson to Professor Cash, referring to a letter she has received from a lawyer representing a haemophiliac with inhibitors who'd -- well, who was known to be HIV positive in October 1985. That is the first test which was performed that we have records of, and there's no blood stored before that time, so that might assist in giving some indication about the timings for the undertaking of HTLV-III tests in relation to Aberdeen patients.

Dr Cash's response is at SBTS0000635_069, 11 January 1991. He refers to how Dr Urbaniak will provide the details he requires but his observations:

"It should be a fascinating investigation. My money would be on the FEIBA!"

Presumably as the source of the infection, is

what he's saying.

We looked a few minutes ago, in the context of Inverness, at that letter from David Watters of The Haemophilia Society May 1989 to Dr Rizza. I wouldn't go back to it, but you'll recall from it that, as well as referring to an Inverness patient not being advised of HIV status, the letter referred to two patients at Aberdeen where there was a long delay in the diagnosis being provided to the patient or families.

In terms of numbers affected with HIV, Dr Dawson's recollection was that there were three patients at the centre infected with HIV, all of whom had severe haemophilia A. The evidence provided by the subsequent director, Dr Henry Watson, to the Penrose Inquiry, again was of three patients. That evidence suggested two had severe haemophilia A, one had moderate haemophilia A. The Penrose Inquiry then received information from UKHCDO to suggest that there were seven patients associated with Aberdeen who tested positive for HIV, and that's consistent, again, with the date the UKHCDO has supplied to the Inquiry at INQY0000250.

Then if we go to the last page, we can see Aberdeen is Centre 160, and there is identified a total of seven HIV cases to 1988.

The data there would suggest that UKHCDO holds some records that would indicate tests being carried out on broad samples, because we have one test attributed to 1982 -- or one result, I should say, attributed to 1982, one 1984, four 1985, and one in 1986, giving a total of seven HIV cases.

SIR BRIAN LANGSTAFF: Seems a strange discrepancy, the three as against the seven.

MS RICHARDS: Yes. And it may be a matter we'll need to try to investigate more. But as I say, it did come up following -- the Penrose Inquiry report set out its analysis of those three cases, and then there was later information received by the Penrose Inquiry to suggest seven. So what the difference is between, on the one hand, Dr Dawson's recollection, which may, for all we know, be not an independent recollection but based upon what she understands was said to be the Penrose Inquiry, or may indeed be her own independent recollection, what explains that on the one hand as against the UKHCDO data that it then supplied to Penrose and has supplied to us, we don't know.

In terms of testing for hepatitis C, Dr Dawson's evidence to the Inquiry says that, upon the advent of hepatitis C testing, the Centre tested some of the patients but she says:

"We didn't know what to tell the patients because we were not sure how the virus behaved and whether having it meant that the patients would go on to have liver disease or be able to transmit it or not."

She said in the statement there was a policy of offering hepatitis C testing to all patients who came to attention, and who'd had treatment with factor concentrates in the seventies and eighties.

It's not entirely clear what's meant by "came to attention". It may be that that's patients as and when they presented to the Centre on a routine appointment were tested, rather than a proactive reaching out to patients.

Again, not dissimilar to accounts we've heard in relation to other centres across the United Kingdom. The Inquiry's received statements from individuals or their families critical about how the information about hepatitis C was provided to them.

There's one witness, for example, who describes following -- finding out about her infection when Dr Dawson walked into the room, and said, "Make sure you put the tissues in the red bin, we don't want to catch anything from you". And it was only when the patient asked about it that, she says, "The

doctor said I had hepatitis C."

Similarly, there are concerns expressed by witnesses that they were not given clear information about what hepatitis C was or how they should understand its implications.

Dr King has indicated that one paediatric patient was infected with hepatitis C. In terms of treatment for hepatitis C, Dr Dawson has referred to the use of interferon. She recalls telling patients that the most common side effect was feeling as if you had flu. Again, others have recorded doctors giving that as the indication but the real experience being very different.

Sir, that's the picture in relation to Aberdeen.

The third Scottish Centre I'm going to turn to is Dundee. It might be sensible if we could take a short break now because, although it's relatively short, I won't complete it in five minutes.

SIR BRIAN LANGSTAFF: Yes, well, we will take a break for just over 20 minutes, and come back at half past.

MS RICHARDS: Yes, sir, I should say it's apparent that I'm not going to get through all of the rest of the centres today without doing an injustice to the individual centres. So I'm certainly not going to get to Cambridge or Norfolk and Norwich. I'll be able to

complete Dundee and Bristol, possibly also Truro, and we'll have to see where we get to with Southampton as to whether we're able to do that appropriately or not.

SIR BRIAN LANGSTAFF: East Anglia will have to wait.

MS RICHARDS: It might have to wait, and I apologise to those who had any particular interest in hearing that evidence.

(3.09 pm)

(A short break)

(3.30 pm)

PRESENTATION RE DUNDEE

MS RICHARDS: Sir, the third Scottish centre or source of provision of haemophilia care is relating to Dundee.

It wasn't a formal Haemophilia Centre in the 1970s. From 1972, however, adult haemophiliacs in Dundee were under the care of Dr Tudhope. He was based, from 1975, in ward 5 and 6 at Ninewells Hospital in Dundee.

In terms of paediatric provision from the 1970s or late 1970s, Dr Sydney Wilson was in charge of paediatric patients based at ward 30 in Ninewells Hospital. There's evidence to suggest that Dr Wilson and Dr Tudhope held joint clinics during parts of the 1980s.

Dr Tudhope retired around 1986. Dr Heppleston,

who was a consultant haematologist, was given effectively the title of Haemophiliac Director and was in charge of the care of adult patients until 1991, but his successor, who was Dr Philip Cachia, who took over in 1992, has said that Dr Heppleston wasn't a haemophilia specialist and had a very heavy clinical load looking after patients with haematological malignancies.

Then Dr Cachia was --

SIR BRIAN LANGSTAFF: Dr Heppleston, you mean?

MS RICHARDS: No, sorry, so that was Dr Heppleston until 1991 --

SIR BRIAN LANGSTAFF: Dr Cachia?

MS RICHARDS: Dr Cachia took over in 1992 until 2004, formally established the Tayside Haemophilia Centre in 1992. We've a statement from him to the Inquiry. Then Dr Ron Kerr, who took over effectively as a locum and then as the consultant haematologist and director in around 2004, has also provided a statement to the Inquiry, although obviously his evidence is focused very much more on the modern position.

At the time that the Tayside Centre was formally established in 1992 by Dr Cachia there were around 25 patients with severe haemophilia.

We've got a description from Dr Cachia of the picture he identified when he arrived in around 1992: no specific centre or dedicated location for haemophilia care, patients seen on the general haematology ward or day unit. He says:

"It was essentially a crisis intervention service. There was no managed or organised system of routine or prospective review of patients with clotting disorders, in terms of their general health, joint disease, or any of the complications of haemophilia or its treatment. Adults on home therapy obtained supplies by contacting a technician from the SNBTS laboratory and were issued with the required product without regular medical supervision or formal review of their treatment."

He says there were no formal liaisons between the haematology department and key specialist services essential for the provision of comprehensive haemophilia care, including the HIV service and hepatology.

He has also told the Inquiry that when he arrived in 1992:

"The haematology department did not keep records of factor concentrate stocks, batch numbers, issues to patients or home treatment use. Details of factor concentrates given in Ninewells Hospital were

inconsistently recorded in the relevant patients' medical records."

And he says this:

"The situation was in part due to the underdeveloped haemophilia service and in part due to the unusual circumstance of a regional SNBTS service situated in the main hospital and providing services of both a regional transfusion centre and the local hospital transfusion and cross matching services."

So, as alluded to by Dr Cachia, there were close links in the years before that between the haemophilia service and the local transfusion service.

Dr Charles Cameron was the director of the East of Scotland Blood Transfusion Service until 1981, and he was then succeeded by Dr Brookes in 1981, and there are close links between the two.

So we see, for example, Dr Brookes representing Dr Tudhope at a Haemophilia Centre Directors meeting in October '83.

That's the meeting at which the issue of reversion to cryoprecipitate and AIDS was discussed.

And Dr Cachia himself says there was a close working relationship with the director and staff of the regional Scottish National Blood Transfusion Service based in Ninewells Hospital and, again, no

doubt, we will explore later in the year, when we look at the blood services in detail, more about the Blood Service.

I will just note, however, in light of those close working relationships, there's an interesting exchange of correspondence which, as I say, we will no doubt look at later in the year, between Dr Brookes and Dr Cash and others where Dr Brookes is raising concerns about the collection of blood in prisons and borstals in Scotland, and she provided a witness statement to the Penrose Inquiry when she explained that her concerns about the use of blood in prisons was based on her experience in the seventies working in London.

Again, that's in issue we'll clearly want to pick up on, but it's relevant, obviously, to the question of local products, Scottish product, and the potential risk of transmission of viral infection.

If we then look at numbers of patients treated, we won't look at all the returns, but a sample of them. We can pick it up in 1976 at HCDO003224.

Sir, this is the 1976 return. It's described here as the "East of Scotland Haemophilia Centre". It's Dr Tudhope identified as director. 12 treated during the year, one with Factor VIII antibodies, six

Christmas disease patients.

Then we can see, in terms of the units, cryoprecipitate looks like 9,860 units, NHS concentrate, it looks like there's -- it's, I think, a combination of 61,000 and 51,000 used, although it's not entirely clear. Then there's a reference to Factor IX concentrate further down.

Again, no reason to think that's anything other than local, as in from Edinburgh rather than from BPL.

We can see that from the 1977 return, HCDO0002445, where Edinburgh is specified as the source of the concentrate. So that year we have ten patients treated, identified as haemophilic patients, six haemophilia B patients. We can see cryoprecipitate still being used to a significant extent, 77,360 units, and then Edinburgh Factor VIII concentrate, 89,400 units. And Edinburgh Factor IX concentrate, 38,100 units.

And that's the pattern that follows over the years. If we go briefly to 1978, HCDO0002446, we can see the amount of concentrate in relative terms reducing, and more treatments being by reference to the Edinburgh concentrate. So it's 46,960 cryo and 86,000 Edinburgh Factor VIII concentrate and then, again, Factor IX concentrate, 61,800.

If we then look at 1980, HCDO0002448.

It's not entirely easy to read. We can see it's nine haemophilia A patients, three von Willebrand's, and the reason for going to this is that we can see it's broken down into hospital and home treatment, the forms now. Again, cryoprecipitate in use, 35,120, but solely hospital, not for home treatment.

And then two figures given. The main figure is 188,940. That's described as "Total used for all patients". And then we have a rather more indistinct breakdown between hospital and home treatment, I think.

If we go to 1981, HCDO0002449, we can see -- we don't have clear records of the number of patients treated but if we look at the products used, again, we've got cryoprecipitate in hospital, looks like 45,440, and then factor concentrate, a much larger amount now being used: 300,000 odd -- or 308,000, rather, concentrate for hospital, and 204,100 units for home treatment. We can see the return expressly says in relation to the commercial concentrates and other materials, "None purchased or used".

And that's the pattern over the following years. So that we get, I think, to 1982 before we see anything else. That is at HCDO0002450.

Again, we see it's cryoprecipitate, and NHS concentrate. And then the only other product is Hyate:C, purchased from Speywood, 22,750 units.

Then the remaining returns, for '83, '84, show only the use of Scottish concentrates and cryoprecipitate.

From '85 shows only Scottish concentrates, no cryoprecipitate.

And the number of patients treated ranges from: 14 haemophilia A, six haemophilia B, two von Willebrand's in 1983; ten haemophilia A, four with haemophilia B, in 1984; twelve haemophilia A, seven haemophilia B in 1985. So that gives a flavour of the kind of numbers of patients treated.

Dr Cachia told the Penrose Inquiry that only SNBTS products were used at Ninewells, and with that limited exception of the purchase of Hyate:C from Speywood, that's borne out by the UKHCDO annual returns.

The Penrose Inquiry's conclusion is that, in relation to Dundee, the picture was clearly one of a preference for NHS products, and the use of imported commercial concentrates was very infrequent throughout the material time.

And the Hyate:C appears to be in relation

specifically to a patient who had developed an inhibitor. The Penrose Inquiry also found, and again it's borne out by the returns, that although cryoprecipitate was a feature of treatment, it accounted for a relatively small proportion of total therapy, which was based predominantly on the use of the Edinburgh Factor VIII.

In terms of home treatment it's not clear precisely how many patients were on home treatment. There's a letter in January 1983 from Dr Brookes to Dr Watt saying that there had been, over the previous two years, several patients established on home treatment. So some at least receiving home therapy but the precise number is unclear.

Other than that, we've no particular indication as to the approach to treatment, or particular approaches in relation to patients, for example, with mild haemophilia as opposed to severe haemophilia.

In terms of knowledge of risk, there's no specific documentary evidence which casts any light on Dr Tudhope's knowledge of or response to the risk of hepatitis. He did attend a number of UKHCDO meetings at which there were discussions or presentations about hepatitis. So he attended the meeting in April '71, in September '75, in January '77 and October '81, in

which there were presentations on hepatitis.

He didn't attend the '72 meeting, but he was represented by a Dr Todd in 1974 and 1979, and it may not be unreasonable to assume that he would have received the minutes of the UKHCDO meetings that he didn't attend. Likewise, there's nothing specific that casts any light on his developing knowledge or understanding of the risk of AIDS.

He was not in attendance at that January 1983 meeting that we looked at in relation to Inverness, where Dr Cash drew attention to recent articles in the US and in The Observer and in The Lancet.

However, again, it may be reasonable to assume that Dr Tudhope would have received the communications sent to directors from UKHCDO as well as copies of minutes, so, one would expect, perhaps, him to have received the March and June 1983 letters in relation to the risk of AIDS.

The Penrose report references to Dr Peter Foster of the PFC, giving presentations in March 1983 to clinicians and haematologists in Edinburgh and Dundee on the issue of AIDS, and you may be able to hear about that at later hearings firsthand from Dr Foster.

In terms of the process for undertaking tests for HTLV-III, again, there's not very much, I'm afraid, documentary information that we have.

The medical records of one patient refer to him attending a special clinic for haemophiliacs on 11 January 1985, arranged along with Dr Tudhope, so that the problem of AIDS could be explained, with blood being taken for testing and the samples sent to Edinburgh along with others obtained at the same time from other haemophiliacs.

That was a witness who was a child at the time.

The witness's evidence to the Inquiry is that his parents have no recollection of either attending that clinic or receiving the results of that test.

The evidence given to the Penrose Inquiry was to the effect that no patients with bleeding disorders appear to have been infected with HIV as a result of treatment at Dundee. That reflects also the material which UKHCDO has provided to us. So if we go back to INQY0000250, and go to the last page, we can see five lines up from the bottom, centre 161: Dundee. And the figure that UKHCDO have provided to the Inquiry is zero cases.

Dr Cachia in his statement has explained that during his time as director the Centre did care for one haemophilia patient with HIV. That was a patient who'd been treated and diagnosed with -- treated for

haemophilia and diagnosed with HIV at a different Centre before transferring to Dundee.

Dr Cachia's provided the Inquiry, however, with information about the process for testing for hepatitis C. So he has said that when he arrived at Ninewells Hospital in 1992, Dr Heppleston:

"... provided me with a box of file cards containing the name and details of all patients with inherited bleeding disorders who had attended or been registered with the department. Dr Heppleston also had a list of around 30 of these patients whose stored serum had been tested for HCV antigen when the first test was introduced in 1991. From memory, around 25 of these patients had tested positive."

So the evidence would suggest that there were stored samples, that those stored samples have then been tested in 1991. It doesn't appear that that was something known to the patients.

Dr Cachia's own conclusion following discussions internally within the hospital was that the samples had been analysed without any patients' consent. He did not know whether the patients had consented to having their serum samples stored in the first place. He then says in his statement that:

"Appointments were arranged to undertake a full

review and to counsel for blood-borne virus infections."

He says that for each of the patients who had been tested for HCV, he explained to them what had happened and requested their consent to repeat the hepatitis C testing on a fresh blood sample and then, if there was a confirmatory HCV test, he met the patients' partners if appropriate to explain the diagnosis and implications.

It's not entirely clear, I think, when that process or how long that process took. Again, there are accounts given by individuals to the Inquiry about there being delays between what their records showed was the date of them being tested and the date upon which they were informed and that may, at least in part indeed, entirely be explained about what Dr Cachia has explained in his statement was the position he inherited.

So by way of example, we have a witness whose records show first testing positive in November 1992, being told of the infection in January of 1995. Another being told of their infection in 1998. Another describing her father being given a diagnosis around 1995 when attending a routine haemophilia appointment and having been unaware that they'd been

tested.

In terms of numbers, Dr Cachia's understanding, as told to us, is that around 25 patients were infected with hepatitis C at Ninewells.

The data gathered by the Penrose Inquiry as at 2011 recorded 21 living patients and nine patients who had died as at 2011. So there's a slight difference between those figures, or a not insignificant difference, I should say, between those two figures.

Dr Cachia, and then, in terms of the current position, Dr Kerr, have provided information in their statements about the process of treatment for hepatitis C, treatment with interferon and ribavirin in the early years, and then Dr Kerr has talked about how the Centre has more recently been able to treat patients with the modern hepatitis C treatments.

Sir, that's the position, then, in relation to Dundee.

PRESENTATION RE BRISTOL HAEMOPHILIA CENTRE

MS RICHARDS: I'm going to move next to Bristol. In light of the time, I think it's reasonable to complete Bristol, but to continue then to look at Truro and Southampton will result either in sitting very late or compressing both of those centres into a speedier presentation than they merit. So it might be wise, sir, to finish at Bristol today and then, I'm afraid -- and again apologies to anyone listening with a particular interest in those centres -- that Truro, and Southampton, along with Cambridge, Norfolk and Norwich, may have to await a later hearing.

SIR BRIAN LANGSTAFF: I think it is only right that we should hear about them in appropriate detail, and we don't want to rush that. That would be far greater an insult to those who have been waiting to hear today than it would be for them to have to wait, in my judgment. So that's what we'll do.

MS RICHARDS: Sir, certainly the presentation notes themselves have been disclosed to at least the Core Participants and legal representatives, so that the information in them is already available.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: So Bristol, then. So the Bristol Haemophilia Centre effectively covers straddles two hospitals, two haemophilia departments the Bristol Children's Hospital and Bristol Royal Infirmary, sometimes they're collectively referred to as the Bristol Centre, sometimes they're talked about as the Children's Hospital being an associate centre of the Royal Infirmary.

In terms of directors, the Royal Infirmary,

Dr Raper was director from 1968 to 1976, and he was then succeeded by Dr Scott, who held that position until 2000. At the Children's Hospital, Dr David Berman was in post from 1978 until 1987, and both Dr Scott and Dr Berman were invited to UKHCDO meetings, although looking at the minutes it appears in practice it was usually one or the other who would attend rather than both.

Then Dr Helena Daly was senior registrar in the haematology department at the Bristol Royal Infirmary from 1979 to 1985, and we have couple of witness statements from Dr Daly, whose evidence will also be relevant when we look at the later hearing at Truro.

So Bristol sat within the Oxford Haemophilia Centre supra-region, and there are minutes of the supra-region Haemophilia Centre Directors and Blood Transfusion Centre directors meeting, for example, in June 1978 when both Dr Berman and Dr Scott attended.

We have a description from Dr Daly of the facilities at the haematology department at the Royal Infirmary during her time there from 1979 to 1985. She describes a comprehensive clinical and laboratory haematology service, so that's overall haematology not uniquely haemophilia service. She says there was a well-equipped laboratory, a designated haematology

day unit, and inpatients cared for in a ward shared, within what she describes as the professorial unit.

She has given information about the haematology staff, so as well as Dr Scott as consultant, there were two senior registrars, of which she was one, one registrar, rotating senior house officers, and various nurses. But again, those do not appear to have been dedicated to haemophilia but to haematology services more generally.

In terms of decisions about treatment policies, Dr Daly's recollection was that Dr Scott was responsible for product selection both at the Royal Infirmary and effectively at the Children's Hospital. If we go to WITN4685002, we can see it's a letter from Dr Scott to Dr Daly, who was going to be giving evidence to the Lindsay Tribunal. If we go over the page, we can see Dr Scott setting out his recollection there. He says:

"I confirm that I was the Director of the Bristol Haemophilia Centre based at the Bristol Royal Infirmary and Bristol Children's Hospital in 1984 and I remain in this post at the present time. I was not and never have been a Director of the Blood Transfusion Service at Bristol. It was always my policy to use plasma-derived products from English and

Welsh donors which were fractionated at the NHS-managed blood products laboratory at Elstree, in preference to commercial products. (Scotland had its own blood transfusion and blood products service). My belief was that the NHS products carried less risk of infection, particularly hepatitis and HIV than commercially derived products from the USA. Allocation of these products was determined by the amount of plasma which was collected by each regional blood transfusion centre, and as the Bristol centre serving the South West Regional Health Authority had a very good record for plasma collection our allocation was above average. Nevertheless it was not sufficient to cover our needs and therefore commercial blood products had to be purchased to make up the deficit. Priority for NHS products was given to children and adults who had previously received little treatment and were known to be hepatitis and HIV negative. I think that my decision was justified by the fact that the incidence of HIV infection amongst haemophiliacs in Bristol was lower than in many other parts of the country.

"In late 1984 heat treated commercial products became available but not in sufficient supply to provide our needs. The first heat treated products were received in the Bristol Haemophilia Centre in December 1984. There was discussion amongst haemophilia centre directors and also by the Haemophilia Society although I do not have documentary proof available about whether heat treated commercial products were preferable to NHS products. The efficacy of heat treatment had not been fully established and it was believed by many physicians dealing with haemophilia that NHS concentrates although not heated were preferable.

"Heat treated NHS Factor VIII became available in March 1985 although our quota was not sufficient to meet our needs. It was the policy to give heat treated NHS concentrates to children and mildly affected adults who had not received much treatment previously. We continued to use non heat treated NHS product and also heat treated commercial product.

"In August 1985 all the NHS product was heat treated. We were asked to return all non heat treated product. We did not keep a large stock nor did any patients but all the patients were asked to return their non heat treated product and it was replaced. The non heat treated product was returned to Elstree. Our allocation was still not enough to meet our needs and therefore commercial heat treated product was used

as well. In October 1985 the new NHS intermediate purity heat treated product VIIIY was introduced and from that time it became our major treatment product and commercial Factor VIII was gradually withdrawn."

Top of the next page:

"NHS Factor IX has always been used in the Centre and the supply has always been adequate so that there has been no necessity to purchase commercial product. At the ending of October 1985 heat treated Factor IX became available from Elstree, all non heat treated was withdrawn and patients were asked to return their non heat treated material."

So that's Dr Scott's account as at June 2000. Dr Daly, who was involved in discussions about product choices with Dr Scott in the first half of the 1980s recalls similarly that selection was based on a preference for UK donor plasma, single donor products for mild/moderately affected individuals or with no previous exposure, and heat-treated concentrates from 1984.

Going back a little further in time, we can see Dr Scott voicing concerns about the supply of products in 1975. That's CBLA0005695, please. Sir, this is a letter from Dr Scott to Dr Maycock at BPL, 2 July 1975:

"As I told you during our telephone conversation the other morning, we are encountering difficulties over supply of Factor VIII material for the treatment offer our patients with haemophilia. There are fifteen patients with severe haemophilia registered at this Centre and a number of others who attend infrequently for treatment."

Then, if we go towards the bottom of the page, he says about ten lines up from the bottom:

"I have reviewed the treatment of each patient, and I am sure that the current usage of Factor VIII is justified, and that if it was to be reduced, then the standard of patient care would be seriously affected."

Then if we go over the page, he says:

"Our current usage of Cryoprecipitate is running at approximately 1,000 units (ie material obtained from single donations) per month, and this is being provided by the Regional Blood Transfusion Centre at Southmead. In addition, we have been purchasing between 6 and 7 thousand units of Factor VIII in the form of concentrates from commercial sources, namely Hyland, and Immuno Products, and this has been used for home treatment programmes and to cover minor surgery. The current cost of this is in the region of 7 to 8 hundred pounds monthly, which is going to mean

an increase in the drug bill to the District of between 8 and 9 thousand pounds in the current year."

Then he says:

"I have been able to maintain a high standard of patient care, only to the efforts of the Regional Blood Transfusion Centre in meeting our demands for cryoprecipitate and to the understanding of the District Administrators who have allowed me so far to purchase commercial Factor VIII without question."

Then he goes on in the next paragraph to explain that the Regional Blood Transfusion Centre can't guarantee more than 800 units of cryoprecipitate each month:

"... they are faced with the dilemma of processing increased amounts of plasma to produce Cryoprecipitate or supplying more plasma for fractionation by your Department."

He refers also to there having been depletion of the stock of cryoprecipitate previously held for emergency demands and he asks as to whether it is possible to have a regular supply of Elstree Factor VIII concentrate.

In terms of a response, I'm not sure that we traced one. But we can see if we then look at CBLA0009063, later that same month, Dr Tovey of the

Regional Transfusion Centre wrote to Dr Maycock referring to a letter from Dr Maycock and says:

"Dr Scott has undertaken to restrict the amount of cryoprecipitate being transfused to haemophiliacs at the Bristol Royal Infirmary to a lower figure and to use more Hemofil in an emergency. As a result of this we are planning to step up the amount of fresh frozen plasma we send you to about 100-120 packs per quarter."

So it doesn't appear as though Dr Scott's request resulted in his desired answer. It seems to have resulted in less use of cryoprecipitate and then the plasma was going to be used, then, to try to provide -- well, to enable the Transfusion Centre to send more plasma to BPL but, in terms of treatment for those with haemophilia, the gap was going to be filled with Hemofil.

In late 1976, Dr Maycock wrote to Dr Scott saying "BPL concentrate, can you now please obtain it from the Regional Transfusion Centre?" and that appears to have been the practice thereafter, and that's Dr Daly's recollection too, that commercial concentrates would be purchased by the Bristol Royal Infirmary's hospital pharmacy, but that the BPL products would be distributed via the Regional

Transfusion Centre.

Dr Daly also recalls there being a close relationship between the Bristol Royal Infirmary and the Blood Transfusion Service.

If we then look at annual returns, and we pick the picture up in 1976, at HCDO0000023_002, we can see number of patients treated, 39 haemophilic, seven Christmas Disease. Then we can see substantial usage of cryoprecipitate, 442,680 units; NHS concentrate, 132,500 it looks like that might be, but then a range of different commercial products being used, Profilate, Factorate, Koate, Hemofil and Kryobulin all being purchased in the quantities there set out.

That's the picture which, to some extent, continues. So if we look at the return for 1978, HCDO0001238, I think. I may have misread my handwriting there, Soumik, so I apologise.

If we go to page 6, we can see there annual return for 1978, 36 haemophilic patients, six Christmas Disease patients. The usage of cryoprecipitate is now 158,480. There's 269,000 units of NHS concentrate; and then a much larger figure for the Armour product, 462,800; 110,520 units of Koate; 74,600 units of Hemofil. So again, commercial concentrates and more than one type of commercial

concentrate featuring significantly.

If we just look at page 2, we can see in the forms that we're no doubt now familiar with, patients receiving more than one type of commercial concentrate, or receiving Elstree and one or more types of commercial concentrate. So there's no obvious indication, at this stage at least, of any adherence to a policy of restricting patients to one type of product.

In 1978, if we go to BPLL0009270_006, Dr Scott wrote to Dr Tovey in February 1978 at the Regional Transfusion Centre complaining about the solubility or effectiveness of the Elstree Factor VIII product and, picking it up about halfway down that paragraph, he says:

"Because of its insolubility ..."

Sorry, two-thirds of the way down:

"... I feel that I cannot use this material for home treatment any longer and this will mean a considerable increase in the amount of commercial Factor VIII which has to be purchased. I thought I ought to let you know so that you could perhaps pass on my comments to Elstree. Talking to other Haemophilia Centre Directors I do not think that I am alone in finding the Elstree concentrate

unsatisfactory."

If we then go to 1979, we see an increase in that year of cryoprecipitate usage.

HCDO0001307.

Sir, we can see cryoprecipitate, 258,970 units, NHS concentrate, 171,720. And again, we see a range of commercial concentrates being used, Profilate, Factor VIII, Koate and Hemofil, in relatively large quantities, in particular the Koate, 247,870.

Then again, I think if we look at page 7 we can see there an indication that there are some patients, and it's not true by any stretch of the imagination, for all the patients receiving a range of more than one type of concentrate. In fact we've got one patient there we can see being treated with cryoprecipitate Elstree Factor VIII, Profilate, Factorate, Koate and Hemofil in the course of one year.

Around this time, and according to Dr Daly, home therapy was being commenced at the children's hospital by Dr Berman for children with severe haemophilia and regular bleeds, from about the age of four. The indication is that that was using BPL products. Cryoprecipitate, Dr Daly says, was considered impractical for home therapy.

If we then go to the return for 1980, which is at HCDO0001402, of the numbers of patients treated, 31 haemophilia A, four von Willebrand's, and then if we zoom in a little closer to the figures we can see cryoprecipitate still in usage in hospital, 250,400. And NHS concentrate, an increase, and so a significant amount being used for home treatment, 227,550. But then again, a range of commercial concentrates in use for home treatment. So Profilate, 179,000 plus. Factor VIII, just under 60,000. Koate, 66,990. Kryobulin, just under 50,000. And 72,000 units of Speywood's Humanate.

Then in relation to 1981, which is HCDO0001500, again we can see, number of patients: 35 haemophilia A, six von Willebrand's, and in terms of the figures we again see a range of different commercial products, not perhaps as many as the previous year. So there's still significant usage of cryoprecipitate in hospital and a small amount for home treatment, you'll note.

A significant amount or larger amount of NHS concentrate used for home treatment, so 452,647. But also significant amounts of Profilate, Koate being used for home treatment, and then Kryobulin and Humanate also being used for home treatment.

And then if we go to 1982, HCDO0001603, we can see that figures in terms of usage there set out. So, again, there's an increase in the amount of NHS concentrate being used: 562,956 for home treatment. But still reasonably significant amounts of commercial concentrate, particularly Koate, being used. So 246,590 units of Koate. And then a smaller amount of Kryobulin, and 65,000 plus units of Profilate being used.

We don't see any reference there to DDAVP, and Dr Daly's recollection is that DDAVP became available in 1983, and that cryoprecipitate was used for the treatment of patients with mild and moderate haemophilia as well as the treatment of patients with von Willebrand's disease.

You'll recall, sir, the evidence of Mr and Mrs Turton about the treatment of their son, Lee, being switched from cryoprecipitate to NHS factor concentrate in 1982, apparently because cryoprecipitate was not available, but it is apparent that there were substantial quantities of cryoprecipitate available to the Centre.

If we look at DHSC0001313, these are notes made by Mr Milne of The Haemophilia Society 1982 following the meeting of UKHCDO directors in September 1982, and

if we go to the third page, he reports a conversation with Dr Daly, and says:

"Dr Daly ... was representing Dr Scott. She stated that special arrangements had been made to supply cryo to three patients who particularly requested it, but that it might not be possible to continue the arrangement indefinitely."

We don't get any further insight into that from the document, unfortunately.

Then if we look at 1983, HCDO0001795.

We can see cryoprecipitate used in hospital, and an amount being used for home treatment. So 21,800 units used in home treatment, 160,000 plus units in hospital. The bulk of home treatment is with NHS concentrate, over 500,000, but also a significant volume of Koate being used, 173,980 units for home treatment, as well as some usage of Koate and Hemofil in hospital.

So that's 1984. Then if we just finally look at 1985, HCDO --

SIR BRIAN LANGSTAFF: Sorry, have we missed one? We've done '83, so we now want to look at '84.

MS RICHARDS: I'm so sorry, I think I've gone ahead of myself in my own --

SIR BRIAN LANGSTAFF: In fact, we just were looking at '84

there, on the screen.

MS RICHARDS: We were. Let me just find the reference to 1983. Can we try HCDO0001603.

SIR BRIAN LANGSTAFF: No, that's '82.

MS RICHARDS: Is it? Let me try 1699 then. Here we are. Thank you, sir.

48 haemophilia A patients. So we can see this is representing both the Royal Infirmary and the Children's Hospital, 48 haemophilia A patients,nine von Willebrand's. And there we have cryoprecipitate, NHS and Koate as the three products used in that year.

Now that records a significant amount of cryoprecipitate use for home treatment, so nearly 119,000 units, as well as usage of cryo in hospital.

The main product for home treatment is the NHS concentrate, nearly 438,000, but also significant usage in hospital, and then also a substantial volume of Koate, 155,000 used for home treatment.

And then I should say the picture in relation to von Willebrand's is fairly consistent across the years. It's cryo and/or NHS concentrate.

I haven't looked at the haemophilia B figures but, again, it's NHS Factor IX concentrate that we see being used.

So, sorry, that's 1984.

SIR BRIAN LANGSTAFF: No, that's 1983.

MS RICHARDS: 1983.

SIR BRIAN LANGSTAFF: Then we had 1984.

MS RICHARDS: Then if we just go, to complete the picture, to 1985, HCDO0001887. And of course we know that heat-treated products became available at various stages in the course of the year. We've got there the numbers treated: 47 haemophilia A, six von Willebrand's.

Then we can see limited use of cryoprecipitate for home treatment, still used in hospital. And then the main sources of product for home treatment are NHS concentrate and Koate, but also Profilate and Factor VIII to some extent. And then there's a small amount of Scottish product referred to as being used.

And there's evidence also of use there, in that year, of Koate to treat patients with von Willebrand's.

We'll look at the articles that were authored by Dr Daly and Dr Scott in a moment, but in one of -- in a 1985-article authored by Dr Daly and Dr Scott, they refer to a growing reluctance by patients in 1983 to use commercial concentrate. And of course, that may be tied in with what we know about the Bristol patient, which I'll come on to shortly.

SIR BRIAN LANGSTAFF: Well, as you've been setting out the figures, I've been drawing up a very rough, and it may not be entirely accurate because it's been done pretty quickly, idea of the proportion of the -- when Factor VIII concentrate has been used, the proportion which is NHS and the proportion which is commercial. And it has been pretty well throughout, until 1981, three times as much commercial as NHS. And then the NHS starts off to be a slightly higher proportion, two parts to three. And then, 1982, the NHS is in greater quantity than the commercial. Which may fit with what you've just described from the literature. 1983, the high point I think, roughly three times as much NHS as commercial. '84, I make it about five to two in favour of NHS. '85 dropping off a bit.

But that's the rough proportions. If someone can check those, because they may not be accurate --

MS RICHARDS: We will, sir.

SIR BRIAN LANGSTAFF: They're very broad, to get an idea of the proportion which was used, which may be an easier way of looking at it at the moment than simply trying to remember figures.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: In due course, as you've said, you're going to provide this graphically.

MS RICHARDS: We will.

I should, sir, just say, in relation to use of DDAVP, there is some contemporaneous documentary evidence to support Dr Daly's recollection of DDAVP being used from 1983, because there's -- she wrote to Dr Bloom about DDAVP and received a response in July of 1983 encouraging its usage.

There's also some evidence in relation to heat-treated products to show that Dr Scott entered the trial of heat-treated Factor VIII in the spring of 1984.

If we then turn to the issue of knowledge of risk, Dr Scott was a regular attender of UKHCDO meetings, not every meeting, but attended a number of them in the 1970s and in the 1980s, and indeed into the 1990s. So -- and would presumably also have received the minutes, so would have been aware of the discussions taking place.

There is also evidence, unsurprisingly, of Dr Scott participating in the hepatitis survey, reporting cases of jaundice to Oxford. And there is, for example, communications in the 1970s between Dr Scott and Dr Maycock about haemophiliacs developing serum hepatitis. And indeed, communications between Dr Tovey of the Transfusion Service and Dr Maycock referring to reports from Dr Scott about the development of serum hepatitis.

So a fairly familiar picture that emerges from the contemporaneous documents. There's no particular evidence one way or another in terms of documents about the provision of information about risks but the picture that emerges from the evidence given by witnesses who were patients or their family members to the Inquiry is to the effect that they were not informed about the risks associated with the blood products that they were given.

In terms of the knowledge of risk of AIDS, again, it would be the expectation of Dr Scott and, indeed, Dr Berman being familiar with what was being discussed at UKHCDO meetings, either through attendance or through the receipt of minutes, and what was being reported in the medical literature. But there's then a particular issue in relation to the knowledge of the risks from AIDS associated with Bristol, because one of the first patients to die from AIDS in the United Kingdom was a Bristol patient, who died in August of 1983.

If we just pick matters up in Dr Daly's witness statement, WITN4685001, and if we go to page 32, Dr Daly says:

"I first heard of AIDS in the ... (MMWR) reports in late 1982. I followed the USA and UK literature over the following years.

"32.2. Following the death from AIDS of one of our haemophilia patients in August 1983, 18 months after intensive treatment with commercial concentrate of US origin, I believed that there was a definite risk that this was in some way due to factor concentrate."

Then she tells us a little more about that patient.

"At the time of his acute illness in [January] 1981, having excluded other causes, I thought it was an 'acute viral infection ? related to factor concentrate'. In May 1983 we suspected AIDS. My consultant identified a histopathologist who was immune to hepatitis B and who kindly agreed to do a post mortem which confirmed the diagnosis. Subsequently my consultant had to insist on the report being published in the Lancet after it was initially rejected."

And:

"By the end of 1984 we had results of HIV tests on patients at the BRI and learned that many of our patients, mainly those who had been heavily treated,

were HIV positive."

And there were two publications to look at. If we look, first of all, at an application(?) relating to that specific patient, it is at PRSE0004509. It's the top left -- thank you.

So we've looked at this before.

"Fatal AIDS in a haemophiliac in the UK."

And we can see it being reported in the last sentence of the first paragraph:

"We report here a fatal case of AIDS in the haemophiliac who received intensive treatment with factor VIII ... concentrate of US origin."

And there is then documented the development of that patient's condition, so admission to hospital in January 1982, in the third paragraph.

February 1982, he was still unwell, lethargic and irritable. Reference to a diagnosis being made of non-A, non-B hepatitis in the last sentence of that paragraph. If we then go back to the main text of the letter, we can see March 1982 and July 1982, up to August -- October 1982, updates being provided. February 1982, admitted again. And May 1982 records various opportunistic infections.

If we go back to the full page, we can see, top of the page, they say, "At this time AIDS was

suspected".

And then we can see below the table an account of the patient's illness and deterioration in the course of August of 1983, resulting in the patient's death.

If we look then towards the bottom of the page, last paragraph:

"Our patient became unwell (and remained so until his death 18 months later) a few weeks after receiving treatment with a large volume of commercial FVIII concentrate of North American origin over a short period of time. This was his first exposure to a commercial product. It seems highly probable that the development of AIDS (and hepatitis B and non-A, non-B hepatitis) was related to this treatment. This case provides further evidence for a link between exposure to blood products and AIDS."

And that was authored by Dr Daly and by Dr Scott.

SIR BRIAN LANGSTAFF: If you go back to her witness statement, she suggests the patient began treatment in '81.

MS RICHARDS: It looks like it should have been January '82.

SIR BRIAN LANGSTAFF: But the 18 months doesn't make sense

because it is plainly the same patient.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: And so it must be January '82.

MS RICHARDS: Yes, I think so.

And then we can see, if we look at a second publication, later in time, but it tells us about what was happening in Bristol in the course of '83, it's at GLEW0000677.

Sir, it's a 1985 publication, "AIDS surveillance in haemophilia", by Dr Daly, Dr Palmer, Dr Scott and Dr Lee. We can see from the date it was a publication received 2 April 1984.

And it refers in the summary:

"We suspected a patient attending our Haemophilia Centre had developed ... (AIDS) and therefore immunological evaluation was performed on 43 patients with haemophilia and von Willebrand's disease attending the Centre."

If we look further down the page, under the heading "Patients" it says:

"Forty-three patients (35 male and eight female) aged 13-78 ... attending the Bristol Haemophilia Centre were studied between May and October 1983."

Then there's an analysis that was undertaken as to the treatment that had been received by the patients, which continues over the page. In fact, actually we should pick it up -- I don't want to skate over that too quickly. Bottom of the previous page, sorry, Soumik.

So if we go to the analysis for severe and moderate haemophilia A and von Willebrand's disease, which accounted for 28 of these 43 patients, was receipt of cryo, NHS concentrate and Factor VIII concentrates, an average amount of treatment of 48,000 per patient per year.

It says the patient who died of AIDS was in this group but was unusual in that his average amount of treatment was 5,000 units per year. So that's the first category analysed.

The second was of those with mild haemophilia A and moderate von Willebrand's, ten patients had received cryoprecipitate only, many treated on one occasion only. And then, haemophilia B, five patients who were treated exclusively with NHS Factor IX concentrate.

So it would appear that their experience with this individual patient led to the particular study of these 43 patients.

If we look to the third page, we can see that there were analyses undertaken of hepatitis status and

T4/T8 ratios.

And if we go to page 6, there's then a discussion -- sir, just pausing there, I should say what's not clear is the extent to which any of these patients were aware of any of these studies being undertaken.

So there's a discussion then on page 6, continuing over to page 7. So it sets out details in relation to T-cell findings, lymphopenia and other immunological abnormalities. We can see from the date this is a point in time at which the testing for HTLV-III was not available.

And then if we look on page 7, the last main paragraph:

"Thirteen other patients received treatment from the same batches of concentrate as the index case ... So far none of these patients has developed AIDS although three have suspicious features."

Then there's, again, a reference to the first case in developing non-A, non-B hepatitis:

"We think the important reasons why our patient developed AIDS were the administration of a large volume of a contaminated batch of concentrate, and possibly lack of immunity to hepatitis B."

Then the last paragraph:

"The first death from AIDS of a haemophiliac in this country caused considerable anxiety among patients attending the Centre. The total amount of treatment used at this Centre decreased in 1983. This is due to a growing reluctance by patients to use commercial concentrate."

So those were the findings of the study of the 43 patients in those categories at the Bristol Centre undertaken in 1983.

There's also a letter sent by Dr Scott in October 1983 to a patient and his wife, HSOC0003486. It's dated 3 October. It's not clear whether this was simply sent to these recipients because of concerns they'd expressed or whether it was a wider communication, but it says:

"As I am sure you know one of the patients attending the Bristol Haemophilia Centre has recently died of AIDS. The cause of this condition is still unknown but there is evidence to suggest that it is due to an infection which can be transmitted by blood or blood products. There is reason to believe that the source of the infection in this case was imported Factor VIII concentrates but this is not proven and it cannot be said with certainty that these were the source of infection. I can understand that you are

extremely worried that you have contracted a similar condition by using imported blood products. However, I would like to make it clear that the risk of this is extremely small. Thousands of Haemophiliacs in Europe and America have been treated with Factor VIII concentrates for over ten years and the number of reports of AIDS have been extremely small.

"As far as possible we are avoiding the use of imported Factor VIII concentrates but there is not enough NHS produced Factor VIII available at the moment to meet our needs so we will have to continue to use some commercial Factor VIII for the time being. The production of NHS concentrate is being increased and hopefully we shall be self-sufficient in the not too distant future. In the meantime I think that the dangers of refusing treatment if only commercial concentrate is available is greater than the danger of contracting AIDS. It is also the opinion of The Haemophilia Society which is set out in their latest bulletin.

"I hope that this allays your fears but if you have any further problems please feel free to discuss it with me or any of the other Medical Staff."

This is a rare example in the material we have seen, and this is across the United Kingdom, not related simply to Bristol, of written information about the risk of AIDS being provided by a haemophilia director to an individual patient. But there is then the question as to the terms in which it is expressed and whether the intention really was to, as is said at the end, allay fears by saying, ultimately, this isn't something we should worry about.

SIR BRIAN LANGSTAFF: Well, I'm afraid it appears, at least as I understand matters at the moment, it appears to confuse risk with observed incidence.

MS RICHARDS: Yes, which is an issue --

SIR BRIAN LANGSTAFF: We have explored before.

MS RICHARDS: -- something of a theme over the last months.

SIR BRIAN LANGSTAFF: The advice is based upon her perception of the risk that is the incidence. She doesn't --

MS RICHARDS: It's him. It's Dr Scott, not --

SIR BRIAN LANGSTAFF: Sorry, Dr Scott not Dr Daly. Yes, it's him. His perception is based upon the numbers that had been affect, as opposed to the risk that a greater number might be in the future.

MS RICHARDS: Yes. It's also relevant to note October 1983, it's on the 17 October 1983, that the UKHCDO meeting takes place at which Dr Scott gave details of the Bristol AIDS case to his fellow directors, following a presentation by Dr Craske.

In terms of testing, there is little by way of documentary evidence as to the process that was undertaken. Dr Daly's recollection is that there was not formal pre-test counselling. She thought she spoke to patients as she was monitoring them, explained that sera was being stored. She says this:

"Later, after I received the results of the initial tests and when testing further patients, I did provide a form of pre-test counselling. I can't remember for certain if I recorded that in the clinical records."

She does say, in terms of the communication of results:

"Patients were informed in person, in private and usually by me, initially."

She also says that:

"Until 1986 or 1987, patients were given an uncertain prognosis as doctors were still optimistic that seropositivity would not necessarily lead to AIDS."

Again, you'll recall, although this is in relation to the Children's Hospital and Dr Berman rather than Dr Scott specifically, that Mr and Mrs Turton, Colin and Denise, gave evidence in relation to Lee, under the care of the Children's Hospital, that he was tested for HIV and found to be positive in March 1985 in circumstances where they were unaware of the test being undertaken and they were not informed of the diagnosis until June 1985.

We looked at some letters from Dr Daly to Dr Berman, and then on behalf of Dr Berman to Lee's GP, in the course of their evidence, and we have set those out in our notes but, again, on the theme of the letter we just looked at, it might be useful to look at one of them.

WITN1575010. You may recall this letter, sir. So it's from Dr Donaldson, senior registrar to Dr Berman, dated 14th June 1985 to the GP. It refers to having seen Lee's parents following a report from the laboratory that he was HTLV-III positive, and if we look at the fourth paragraph it says:

"The chance of Lee developing AIDS is therefore extremely small and I stressed this to his parents."

So again, we have Dr Scott's letter where it might be said to be over-optimistic in terms of the risk of being infected and then here what might be said to be over optimism as to what the implications of a positive test result were.

In terms of the numbers infected, if we go to INQY0000250 again, and we go to -- I can't find Bristol when I need it -- page 2, so Centre 13 Bristol Infirmary and Children's, so you'll see there again the two hospitals being essentially identified as a single Centre, and the figure given provisionally by UKHCDO to the Inquiry is 13. Again, the spread of years would tend to suggest stored sera samples and retrospective testing, because we are given two for 1981, one for 1982, two for 1983, two for 1984, four for 1985, two for 1986.

So that's the apparently available evidence in relation to HIV infections.

In relation to the testing for hepatitis C, Dr Daly has said that samples were stored in the hope of a future test for non-A, non-B hepatitis, and she says:

"That was part of the hepatitis monitoring, serum stored in the public health laboratory in Bristol and the microbiology department at RCH-T because at the time we did not know the cause of the abnormal LFTs and there was a lot of research going on to determine this."

She left Bristol in 1985, we will pick up her evidence when we return to Truro at a later stage because she subsequently became director in Truro.

In terms of hepatitis C, again the Inquiry has received evidence expressing concern about the circumstances in which the diagnosis was communicated and the extent to which proper information was provided.

Again, more broadly on the issue of consent, the Inquiry has received evidence from individuals treated at Bristol to indicate that they were tested without their knowledge or consent.

Sir, that's a summary of the evidence in relation to Bristol. As I said earlier, it being quarter to five, it's probably not helpful to anyone to embark upon Southampton or Truro now.

SIR BRIAN LANGSTAFF: No, that's enough, I think, for today.

Well, we now have a break until Monday, do we?

MS RICHARDS: We do.

SIR BRIAN LANGSTAFF: We have a full week next week?

MS RICHARDS: We have a full week. I'm afraid I haven't got, unless I turn on my phone, the patient names, the pupils from Treloars giving evidence, some, in any event, are anonymous. But we start on Monday with -- we'll start with effectively a presentation on Treloars and the idea is that the presentation is

going to be woven in and out of the oral evidence in the course of the week.

SIR BRIAN LANGSTAFF: Yes.

MS RICHARDS: So we will then hear from a number of oral witnesses, Monday, Tuesday and Wednesday, those who were pupils at Treloars and, in one instance, the father of two pupils from Treloars. Then on Thursday, we're going to hear from the former headteacher at Treloars, and then we'll conclude the presentation -- we're currently timetabled to conclude that on Friday. It's possible we might complete it on Thursday, but it's probably more realistic to think it will run into Friday and be a full week.

Again, we don't want to rush any part of the evidence.

SIR BRIAN LANGSTAFF: No.

So next Monday, ten o'clock, to start our Treloars week.

MS RICHARDS: Yes.

SIR BRIAN LANGSTAFF: Thank you.

(4.46 pm)

(Adjourned until 10.00 am on Monday, 21 June 2021)

INDEX

PRESENTATION RE LIVERPOOL HAEMOPHILIA 1
CENTRE (continued)
PRESENTATION RE ALDER HEY CHILDREN'S 42
HOSPITAL
PRESENTATION RE WALTON COMMUNITY HOSPITAL 106
PRESENTATION RE INVERNESS, SCOTLAND 109
PRESENTATION RE ABERDEEN HAEMOPHILIA .. 130
CENTRE
PRESENTATION RE DUNDEE 147
PRESENTATION RE BRISTOL HAEMOPHILIA CENTRE 160

MS RICHARDS: [107] 1/5 4/5 4/8 6/13 6/16 9/13 9/17 14/4 14/7 14/11 14/22 18/1 18/4 18/12 18/19 18/21 19/9 19/12 19/18 21/9 21/12 23/1 23/3 24/13 30/21 30/23 35/24 36/7 36/13 36/16 42/3 48/25 50/15 50/19 50/24 51/10 53/6 55/24 56/1 69/9 69/19 69/22 70/2 74/16 74/21 74/24 75/1 76/24 77/2 79/3 81/8 81/10 81/21 87/6 87/11 87/14 87/16 91/3 95/10 95/13 102/1 103/12 104/3 105/12 105/19 105/21 106/4 109/17 111/12 121/3 121/5 130/8 137/21 137/24 138/1 138/8 138/12 138/15 138/18 144/9 146/21 147/5 147/12 148/11 148/14 160/20 161/12 161/17 175/23 176/2 176/5 177/2 177/4 178/18 178/23 179/1 183/23 184/2 184/4 189/11 189/13 189/18 189/23 193/18 193/20 194/4 194/19
SIR BRIAN LANGSTAFF: [103] 1/3 4/4 4/6 6/12 6/14 9/12 9/16 14/3 14/6 14/9 14/21 17/24 18/2 18/5 18/16 18/20 18/22 19/10 19/16 21/6 21/11 22/25 23/2 24/12 30/17 30/22 35/22 35/25 36/11 36/14 41/25 48/21 50/14 50/16 50/20 51/9 53/5 55/20 55/25 69/5 69/10 69/21 69/24 74/14 74/18 74/22 74/25 76/22 76/25 79/1 81/6 81/20 86/25 87/8 87/12 87/15 91/2 95/8 95/12 101/25 102/12 103/15 105/4 105/13 105/20 106/2 111/10 121/1 121/4 137/17 137/22 137/25 138/4 138/10 138/14 138/16 144/7 146/19 147/4 148/10 148/13 161/6 161/16 175/21 175/25 176/4 177/1 177/3 178/1 178/19 178/24 183/20 183/25 184/3 189/8 189/12 189/15 189/19 193/15 193/19 194/3 194/16 194/20
THE CHAIRMAN: [1] 81/9

'

'71 [1] 155/24
'72 [1] 156/2
'74 [1] 1/12
'75 [2] 1/12 155/25
'77 [1] 155/25
'78 [3] 6/4 107/13 138/6
'79 [3] 6/4 107/13 137/15
'80 [1] 1/17
'81 [2] 155/25 183/22
'82 [3] 176/4 183/24 184/3
'83 [6] 12/5 12/11 150/19 154/4 175/22 184/7
'84 [4] 154/4 175/22 175/25 178/14
'85 [5] 1/17 1/21 60/8 154/7 178/15
'86 [1] 1/21
'87 [2] 45/15 110/4
'88 [1] 45/15
'acute [1] 181/14
'blood [2] 71/11 73/15
'compensation' [1] 96/16
'from [1] 97/14
'full [1] 93/6
'full-blown AIDS' [1] 93/6
'Haemophilia [1] 116/3
'HIV [1] 25/25
'HIV' [1] 25/22
'Homo [1] 39/18
'I [1] 89/25
'I don't [1] 89/25
'If [1] 89/1
'inform' [1] 127/24
'native' [1] 133/4
'positive' [1] 85/13
'some [1] 39/16
'Yes [1] 26/2

0

0000020 [1] 126/16
0002431 [1] 138/7
002 [1] 170/6
005 [1] 37/20
006 [2] 38/5 171/10
008 [3] 137/8 137/9 137/23
009 [1] 32/8
01.03.82 [1] 56/16
012 [1] 96/21
02.12.84 [1] 57/11
027 [1] 70/9
028 [1] 125/17
040 [1] 115/25
05.08.85 [1] 58/9
051 [1] 79/7
055 [1] 124/20
067 [1] 65/8
068 [1] 56/6
069 [1] 142/20
08.08.85 [2] 58/11 58/21
083 [1] 142/10
095 [1] 2/7

1

1 July 1986 [1] 32/9
1,000 [1] 167/16
1,120 [1] 53/15
1.00 [1] 105/22
10 [1] 70/9
10,720 [1] 111/15
10.00 [2] 1/2 194/22
100 [1] 88/13
100-120 [1] 169/8
105 [1] 77/7
11 [1] 99/15
11 January 1985 [2] 64/8 157/4
11 January 1991 [1] 142/21
11.16 [1] 50/21
11.35 [1] 50/23
110,520 [1] 170/23
112 [1] 131/7
114 [1] 52/17
118 [1] 70/4
119,000 units [1] 176/14
12 [6] 34/12 50/20 57/1 100/3 116/25 151/24
12 boys [1] 90/21
12 February 1985 [2] 122/22 124/2
12 haemophilia [1] 113/8
12 haemophilia A [1] 52/22
120 [1] 169/8
13 [5] 46/9 90/17 92/10 192/3 192/7
13 haemophilia A [1] 115/1
13 haemophilic [1] 52/7
13 May [1] 63/5
13-78 [1] 184/22
132,500 [1] 170/10
1357 [1] 114/2
136 [1] 52/18
14 [7] 16/10 20/16 54/8 90/14 111/1 125/25 134/7
14,000 [1] 52/12
144,780 [1] 111/24
14th June 1985 [1] 191/15
15 [2] 16/7 100/18
15 patients [1] 113/4
151,210 [1] 112/25
155 bottles [1] 53/15
155,000 [1] 176/18
158,480 [1] 170/21
159 [1] 116/15
16 [12] 2/20 16/21 36/23 52/14 53/15 72/20 90/13 92/17 115/9 116/5 131/7 134/11
16 April 1983 [1] 13/5
16 haemophilia A [1] 135/22
16 haemophiliac [1] 118/12
160 [1] 143/24
160,000 [1] 175/13
161 [1] 157/19
161,750 [1] 53/18
165,690 units [1] 112/17
1699 [1] 176/5
17 January 1983 [1] 37/21
17 June 2021 [1] 1/1
17 October 1983 [1] 189/24
171,720 [1] 172/6
173,980 [1] 175/16
176,580 [1] 115/5
179,000 [1] 173/9
18 [7] 23/5 36/21 101/2 111/1 112/12 181/5 183/25
18 haemophilia A [1] 136/11
18 months [1] 183/9
182,950 [1] 111/17
183,360 [1] 115/5
187,250 [1] 54/3
188,940 [1] 153/9
19 [5] 7/25 20/10 53/11 72/20 75/2
19 haemophilia A [1] 54/19
19 patients [2] 90/13 111/20
19,000 [1] 57/3
1960 [1] 110/17
1966-70 [1] 2/20
1967 [2] 130/10 130/20
1968 [2] 109/25 162/1
1970 [2] 2/12 4/9
1970s [18] 7/7 10/15 42/9 42/10 60/2 83/23 106/9 119/11 119/16 131/13 139/21 139/22 140/4 147/15 147/19 147/20 179/15 179/22
1970s-80s [1] 132/22
1971 [2] 1/12 140/4
1972 [2] 140/7 147/15
1973 [2] 8/10 116/1
1974 [3] 118/19 140/9 156/3
1975 [11] 1/15 11/15 42/12 116/17 117/15 117/17 119/16 140/14 147/17 166/23 166/25
1976 [13] 4/13 75/6 77/8 107/10 107/11 108/2 111/13 133/25 151/21 151/22 162/1 169/18 170/6
1977 [11] 4/16 50/12 50/25 107/11 108/3 108/6 109/5 111/19 118/3 134/6 152/10
1978 [11] 77/15 90/12 108/7 134/10 152/20 162/4 162/18 170/15 170/19 171/10 171/11
1979 [19] 6/2 52/7 75/6 76/19 78/7 84/8 108/11 112/21 118/5 134/20 134/23 135/2 137/7 138/5 140/15 156/3 162/11 162/21 172/2
1980 [21] 1/15 6/8 6/19 15/12 18/15 19/17 20/22 43/3 52/14 56/13 60/25 66/23 67/5 106/10 106/12 107/14 108/15 113/4 134/24 153/1 173/1
1980-81 [2] 16/3 16/9
1980/81 [1] 20/13
1980s [16] 31/1 34/10 39/13 60/2 69/4 78/11 82/11 83/23 107/5 107/24 109/7 110/9 133/19 147/24 166/15 179/15
1981 [17] 20/22 34/14 52/21 68/10 107/15 108/16 113/7 118/9 118/16 134/25 150/14 150/15 153/13 173/13 178/7 181/13 192/10
1982 [48] 11/24 14/8 14/12 16/3 16/7 16/10 16/23 20/22 22/24 44/15 53/11 53/19 56/22 57/3 58/19 72/17 72/20 73/24 77/10 90/13 107/16 108/17 109/24 110/2 110/17 113/11 113/17 119/23 120/16 131/14 134/25 144/4 144/5 153/24 174/1 174/19 174/24 174/25 178/10 181/2 182/15 182/16 182/20 182/20 182/21 182/22 182/22 192/10
1982-1985 [1] 59/25
1983 [65] 12/7 13/5 14/16 37/21 45/13 57/4 62/24 63/4 63/15 67/17 68/10 68/12 72/20 72/22 74/2 76/5 77/19 77/20 77/20 78/11 78/20 79/25 80/21 80/25 82/3 84/22 85/1 90/14 107/18 108/19 110/2 114/16 114/23 119/25 120/4 120/22 120/23 121/11 135/3 141/8 154/11 155/10 156/9 156/17 156/20 174/12 175/10 176/3 177/1 177/2 177/22 178/12 179/5 179/7 180/22 181/5 181/15 183/4 184/23 187/4 187/9 187/11 189/24 189/24 192/10
1983's [1] 53/22
1984 [55] 12/1 12/5 16/4 16/7 16/10 18/4 18/5 20/14 20/22 21/15 27/8 27/10 54/8 57/7 57/11 62/24 63/15 63/18 64/1 64/2 64/3 67/23 70/12 70/17 70/19 71/22 72/20 72/24 74/8 75/12 76/19 77/21 90/14 107/18 108/20 115/9 115/10 118/21 121/17 121/18 122/16 135/21 144/5 154/12 163/21 164/23 165/2 166/20 175/19 176/25 177/3 179/11 181/23 184/12 192/10
1985 [87] 11/15 12/25 15/9 15/9 17/2 17/13

1

1985... [81] 17/16 17/18 19/24 19/25 21/1 23/12 23/15 24/25 27/23 29/7 30/4 30/5 30/13 31/23 35/6 40/25 54/17 57/1 57/16 57/18 58/8 58/19 59/25 64/8 64/13 64/17 64/18 66/6 70/20 71/1 71/3 71/11 71/14 71/18 72/9 72/21 73/1 73/5 73/9 74/10 75/21 75/23 76/8 77/24 86/11 88/1 88/4 88/11 90/19 106/13 106/20 107/7 115/9 115/11 118/16 122/20 122/22 124/2 129/17 131/3 136/9 136/16 141/12 142/14 144/5 154/13 157/4 162/11 162/21 165/12 165/18 166/1 166/9 175/20 177/5 184/9 191/4 191/6 191/15 192/11 192/24
1986 [21] 17/16 19/20 23/15 23/23 24/5 24/7 32/9 33/9 54/18 54/22 70/21 70/22 70/23 73/9 75/6 115/15 141/12 144/6 147/25 190/19 192/11
1987 [15] 1/23 11/19 15/3 26/6 41/17 70/24 71/9 71/17 78/1 82/9 125/10 131/3 131/7 162/4 190/19
1988 [8] 71/11 73/17 82/9 125/10 126/15 126/17 128/22 143/25
1989 [11] 23/8 42/11 43/1 46/6 46/10 65/20 82/14 85/23 92/12 125/19 143/4
1990 [4] 44/5 94/25 106/20 142/10
1990s [2] 41/18 179/16
1991 [9] 35/15 79/5 79/6 91/17 142/21 148/3 148/12 158/13 158/17
1992 [12] 56/7 65/8 65/9 91/24 148/5 148/14 148/16 148/23 149/1 149/21 158/6 159/20
1993 [2] 43/3 43/8
1995 [2] 159/21 159/24
1996 [2] 130/10 130/20
1998 [1] 159/22
19th January 1985 [1] 73/1

2

2 February 1984 [1] 121/18
2 July 1975 [1] 166/25
2 occasions [1] 57/19
2.00 [1] 105/24
2.03 [1] 106/1
20 [7] 16/1 34/14 35/23 51/23 111/14 112/22 146/20
2000 [2] 162/3 166/13
2003 [1] 43/9
2004 [2] 148/14 148/19
2006 [1] 44/15
2010 [1] 110/5
2011 [4] 129/4 130/1 160/6 160/7
2021 [2] 1/1 194/22
204,100 [1] 153/19
21 [4] 20/10 29/16 95/5 194/22
21 February 1987 [1] 71/9
21 January [1] 121/3
21 January 1983 [1] 120/4
21 living [1] 160/6
21,800 [1] 175/12
218 [1] 53/25
22 May 1989 [1] 125/19
22,750 [1] 154/3
227,550 [1] 173/7
23 [2] 8/12 29/22
23 September 1975 [1] 116/17
23rd September 1977 [1] 4/16
24 [1] 77/7
24.06.83 [1] 63/12
2431 [1] 138/6
2432 [1] 137/17
246,000 [1] 135/17
246,590 units [1] 174/7
247,870 [1] 172/9
24th June 1983 [1] 67/17
25 [2] 50/18 158/13
25 patients [2] 148/24 160/3
250,400 [1] 173/5
255,908 [1] 135/11
258,970 [1] 172/5
26 [2] 73/1 130/1
268 [1] 52/18
269,000 [1] 170/21
27 [2] 41/3 79/9
27,790 [1] 52/10
28 [2] 79/9 185/7
28 August 1985 [1] 86/11
29 [1] 95/7
29 bottles [1] 53/2
29,000 [1] 16/7
29.3.85 [1] 73/8
2nd [1] 72/25

3

3 October [1] 187/12
3.09 [1] 147/8
3.30 [1] 147/10
30 [6] 34/1 51/23 72/21 138/12 147/21 158/11
30 August 1985 [1] 71/11
300,000 [1] 153/18
308,000 [1] 153/18
30th January 1985 [1] 75/23
31 [2] 40/2 173/2
31 August '79 [1] 137/15
31 December 1985 [1] 71/14
31.12.85 [1] 73/14
32 [1] 180/24
32 occasions [1] 56/23
32.2 [1] 181/4
33 [2] 2/20 79/12
339 [1] 54/10
35 [2] 173/14 184/21
35,120 [1] 153/6
35,270 [1] 112/2
352 [1] 54/13
36 [1] 170/19
37 [2] 65/12 80/11
37,500 units [1] 52/11
38,100 [1] 152/18
38,750 units [1] 53/16
386 bottles [1] 53/1
39 [1] 170/7

4

4 September 1985 [2] 88/1 88/11
4 treatments [1] 57/7
4 with [1] 57/8
4 years [2] 2/24 62/8
4,000 units [1] 57/10
4,590 [1] 134/16
4,860 [1] 137/20
4.46 [1] 194/21
41 [1] 131/5
42 [2] 37/2 37/3
43 [4] 37/3 184/16 185/7 185/23
43 patients [2] 36/20 187/8
438,000 [1] 176/16
44 [1] 20/1
44-80 [1] 16/13
442,680 [1] 170/9
45 [1] 59/23
45,440 [1] 153/17
452,647 [1] 173/22
46,000 [1] 51/25
46,960 [1] 152/23
462,800 [1] 170/23
47 [2] 80/15 177/8
48 [1] 176/7
48 haemophilia A [1] 176/9
48,000 [1] 185/9
48,930 [1] 51/22
49,000 [1] 51/24
49,630 [1] 134/3

5

5 occasions [1] 56/24
5 years [1] 64/20
5,000 [1] 185/13
5,100 [1] 113/1
5,500 [1] 57/7
50 [1] 60/18
50,000 [1] 173/11
500,000 [1] 175/15
50s [1] 8/15
51,000 [1] 152/5
536 [1] 86/10
54 [1] 35/5
54,500 [1] 54/1
55,000-odd [1] 108/12
562,956 [1] 174/4
57 [1] 2/19

6

6 occasions [1] 57/20
6 September 1988 [1] 126/17
6,000-odd [1] 108/13
60 [3] 16/7 75/4 88/12
60,000 [1] 173/10
61,000 [1] 152/5
61,800 [1] 152/25
63 [1] 20/1
643 packs [1] 51/2
647 [1] 53/18
65,000 plus [1] 174/8
66 [1] 106/7
66,990 [1] 173/10

7

7 thousand [1] 167/20
7 treatments [1] 57/4
70 [1] 2/20
72,000 units [1] 173/11
74,600 [1] 170/24
749 [1] 54/3
75 [1] 20/4
77 [1] 5/4
77,360 [1] 152/16
77,760 [1] 134/13
78 [1] 184/22

8

8 years [1] 93/6
8.8.85 [1] 73/14
80 [1] 16/13
800 [1] 168/12
80s [1] 132/22
81 [3] 16/3 16/9 20/13
818,450 [1] 134/4
86,000 [1] 152/24
87,000-odd [1] 135/11
88908 [1] 57/24
89,400 [1] 152/17
8th [1] 66/6
8Y [2] 70/22 70/23

9

9 February 1985 [1] 15/9
9 thousand [1] 168/2
9 years [1] 65/21
9,000 [2] 54/24 137/24
9,780 units [1] 137/14
9,860 [1] 152/3
9/15 [1] 16/7
90 [1] 91/2
90 per cent [2] 103/23 103/24
92 [2] 23/9 81/25
96,370 [1] 134/13

A

A, [4] 8/17 9/6 10/23 103/18
Aberdeen [23] 125/20 125/23 126/4 130/6 130/7 130/8 130/8 130/9 130/22 131/1 131/10 131/12 132/21 133/6 137/4 137/12 138/20 142/19 143/8 143/19 143/24 146/14 195/8
abide [1] 127/8
abject [1] 102/18
able [13] 5/1 15/25 48/16 84/13 100/11 102/7 117/10 145/4 146/25 147/3 156/22 160/15 168/4
abnormal [2] 37/16 192/22
abnormalities [2] 13/8 186/10
about [151] 5/13 5/23 7/6 10/21 10/21 11/11 11/16 12/16 15/3 17/1 18/9 22/7 23/8 24/16 25/13 26/1 26/4 26/12 28/16 30/11 30/18 31/17 35/1 35/2 35/3 37/14 37/22 38/24 40/23 41/14 43/3 47/13 50/3 50/5 50/17 51/18 54/6 57/22 60/9 60/24 66/2 67/5 68/15 68/16 68/21 69/2 70/3 72/21 75/3 76/5 76/13 76/14 77/3 78/8 83/6 83/8 83/17 83/17 83/19 84/3 88/3 88/20 88/24 89/21 90/5 93/10 96/3 96/4 96/6 99/5 101/13 102/22 103/11 104/5 104/7 104/9 105/5 105/14 105/17 106/23 107/7 110/19 114/7 116/1 116/8 118/2 118/3 119/2 119/7 119/10 120/8 120/13 123/1 123/7 123/14 124/18 124/21 129/21 129/21 130/22 131/6 131/19 132/6 138/12 140/8 140/11 140/15 140/16 141/20 142/17 145/18 145/19 145/21 145/25 146/4 151/2 151/9 151/12 155/23 156/23 158/4 159/12 159/16 160/12 160/14 161/7 161/22 163/3 163/10 165/5 166/14 166/22 167/9 169/8 171/12 171/14 172/22 174/17 177/24 178/14 179/6 179/23 180/1 180/6 180/6 180/10 181/10 184/6 189/2 189/7 193/3
above [3] 97/18 127/1 164/13
abrupt [1] 88/25
absence [3] 67/13 78/13 79/1
absent [1] 91/16
absolute [1] 61/22
absolutely [2] 102/14 104/12
accept [1] 127/25
acceptable [1] 3/7
accepted [3] 19/24 71/24 72/2

A

accepts [2] 21/18 36/1
access [3] 48/16 103/15 141/2
accessed [1] 47/23
accord [2] 67/3 73/18
accordance [1] 77/13
according [5] 36/3 69/11 98/25 129/14 172/19
account [21] 25/18 26/3 26/8 26/19 27/19 30/14 31/8 31/8 31/14 31/15 34/5 36/1 36/3 39/8 84/19 84/21 88/5 88/8 125/12 166/13 183/2
accounted [2] 155/5 185/7
accounts [8] 26/10 26/15 38/16 38/21 38/25 102/20 145/15 159/12
accurate [3] 114/22 178/3 178/17
accurately [1] 132/21
accused [1] 94/3
achieved [1] 78/13
acquire [3] 16/20 19/2 114/9
acquired [3] 15/15 114/8 120/9
across [6] 53/3 54/4 110/21 145/16 176/20 188/25
acted [2] 91/19 100/14
acting [1] 93/25
Action [4] 7/12 7/16 7/20 7/25
active [1] 62/16
actual [1] 73/16
actually [12] 8/3 13/17 26/7 31/19 32/1 48/23 50/4 53/10 120/21 121/1 133/12 185/2
acute [5] 37/24 45/20 46/13 47/23 181/12
acutely [1] 93/4
ad [1] 47/25
ad hoc [1] 47/25
add [2] 32/15 138/14
added [2] 97/24 138/4
addition [1] 167/19
additional [7] 2/5 48/17 49/22 61/3 62/1 103/9 137/6
additionally [1] 46/1
addressed [4] 38/12 62/5 85/14 126/18
adequate [3] 61/18 96/11 166/7
adequately [1] 24/4
adhere [1] 76/6
adherence [1] 171/8
Adjourned [1] 194/22
adjournment [1] 105/23
administered [3] 57/5 57/25 71/2
administration [2] 47/22 186/22
administrative [1] 98/21
Administrators [1] 168/8
admission [2] 139/13 182/14
admissions [1] 40/4
admitted [4] 93/4 94/15 133/1 182/22
adopted [3] 59/4 59/17 81/23
adopting [1] 49/16
adult [13] 35/21 35/24 36/2 43/22 48/15 70/8 77/3 81/9 81/11 81/14 104/12 147/15 148/3
adulthood [1] 93/13
adults [6] 41/22 81/21 110/10 149/10 164/17 165/15
advance [1] 61/18
advantage [1] 78/21
advent [1] 144/23
adversarial [1] 96/18
adverse [2] 75/8 76/17
advice [11] 46/2 48/14 83/9 100/14 123/8 127/8 127/11 127/25 128/3 128/4 189/15
advise [1] 97/1
advised [4] 28/21 66/23 125/24 143/6
advisory [1] 64/4
advocated [1] 3/10
Affairs [2] 42/22 49/3
affect [1] 189/21
affected [14] 20/4 20/12 47/11 48/5 76/1 82/18 92/20 96/19 99/22 117/12 143/10 165/15 166/18 167/13
afraid [8] 56/1 69/22 81/12 99/20 157/1 161/2 189/8 193/20
after [33] 2/24 8/2 17/10 21/5 25/14 26/13 27/10 27/23 29/17 30/10 31/25 32/11 34/24 35/16 39/21 40/15 42/4 68/11 74/1 80/19 82/3 91/13 93/7 100/17 101/23 106/20 135/2 138/5 148/7 181/6 181/20 183/9 190/9
afternoon [1] 102/8
again [104] 13/2 16/3 17/15 19/21 20/17 25/16 31/17 32/10 33/9 39/6 41/13 41/20 44/3 44/13 52/9 52/23 53/22 53/23 54/11 54/20 55/14 55/17 65/7 65/11 67/2 68/23 72/19 73/10 73/18 76/12 76/20 78/2 78/15 81/1 83/14 85/20 87/18 88/2 89/3 92/1 92/5 99/10 101/12 103/15 108/7 112/24 113/4 113/9 114/22 115/13 115/18 116/16 118/3 119/11 119/17 122/9 123/22 129/24 131/15 134/18 135/10 136/2 136/7 139/24 140/8 140/14 141/1 143/15 143/20 145/15 146/11 150/25 151/15 152/8 152/25 153/6 153/15 154/1 155/2 156/13 156/25 159/11 161/2 163/7 170/24 172/6 172/10 173/8 173/14 173/16 174/3 176/23 180/13 182/22 186/19 190/23 191/10 191/21 192/2 192/4 192/7 193/2 193/7 194/14
again' [1] 71/12
against [5] 47/20 74/6 86/17 144/8 144/20
age [13] 36/21 43/12 60/10 62/8 64/19 65/20 70/13 75/8 75/16 76/16 77/16 104/22 172/22
aged [3] 56/17 72/17 184/22
agents [1] 64/22
ago [6] 5/1 5/14 91/4 126/24 141/9 143/2
agreed [6] 29/12 29/14 94/23 95/1 122/4 181/17
ahead [1] 175/23
AIDS [73] 11/20 11/22 12/4 12/9 12/16 12/19 12/24 14/1 14/20 15/17 16/20 19/2 28/3 28/16 28/20 28/23 33/19 63/16 64/4 64/7 65/2 68/21 71/19 73/25 78/8 80/5 84/18 85/2 86/18 86/19 86/22 87/23 93/23 119/21 119/25 120/10 122/2 123/1 124/4 126/23 127/12 127/15 141/1 141/6 150/21 156/8 156/18 156/22 157/5 180/12 180/19 180/21 181/1 181/4 181/16 182/7 182/10 182/25 183/14 183/17 184/9 184/15 185/11 186/17 186/22 187/1 187/18 188/7 188/18 189/2 190/1 190/22 191/19
AIDS' [1] 93/6
Airport [1] 121/9
alarming [1] 69/23
albumin [1] 137/16
Alder [94] 23/21 23/22 24/15 34/9 36/22 41/23 42/2 42/3 42/4 42/7 42/21 42/22 42/24 43/13 44/2 44/7 44/13 44/18 44/23 45/1 45/15 48/25 49/4 49/8 50/5 50/10 50/12 50/25 51/17 53/7 53/10 55/5 55/11 55/12 55/17 55/21 55/22 56/5 56/10 59/11 65/5 65/20 68/1 69/3 70/3 70/7 70/11 73/10 75/11 76/14 76/18 77/4 77/6 77/14 79/7 79/12 79/17 80/16 81/3 81/24 82/1 82/6 82/14 83/3 83/21 84/6 85/7 86/8 88/11 88/15 89/22 90/11 90/17 91/6 91/11 91/21 92/4 92/5 95/4 95/19 96/6 96/7 96/24 97/1 99/11 100/7 100/14 101/9 101/14 101/20 102/15 102/21 105/15 195/5
Alder Hey [62] 23/21 23/22 42/7 44/2 50/10 55/11 55/12 55/17 55/21 55/22 56/5 56/10 59/11 65/5 65/20 68/1 69/3 70/3 70/7 73/10 75/11 76/18 77/4 77/6 77/14 79/7 79/12 79/17 80/16 81/3 81/24 82/1 82/6 82/14 83/3 83/21 84/6 85/7 86/8 88/11 89/22 90/11 90/17 91/11 91/21 92/4 92/5 95/4 95/19 96/6 96/7 96/24 97/1 99/11 100/7 100/14 101/9 101/14 101/20 102/15 102/21 105/15
alerted [1] 69/18
alike [1] 98/4
alive [1] 9/7
all [62] 4/19 5/20 9/24 16/4 16/21 17/21 19/7 19/8 19/23 20/11 21/4 23/22 24/10 26/13 28/10 33/10 33/11 38/23 39/18 39/21 40/12 41/12 46/13 46/15 51/4 51/15 53/3 54/10 57/6 63/11 64/4 76/13 79/15 86/14 86/25 89/25 90/3 93/9 94/14 97/21 100/20 100/24 101/3 102/9 113/3 114/1 114/3 127/16 143/12 144/16 145/7 146/22 151/20 153/9 158/8 165/18 165/19 165/21 166/10 170/12 172/13 182/3
allay [1] 189/6
allays [1] 188/21
allegations [1] 98/25
alleged [1] 75/6
allocation [4] 118/9 164/8 164/13 165/24
allowed [1] 168/8
alluded [1] 150/10
almost [5] 75/17 104/23 111/3 118/16 137/25
alone [1] 171/25
along [4] 140/1 157/4 157/7 161/4
aloud [1] 83/1
already [5] 71/21 82/13 92/13 98/1 161/15
also [57] 6/21 13/25 20/15 22/12 30/3 30/4 33/8 40/24 43/9 44/12 55/4 62/4 65/10 82/16 83/12 85/15 85/20 91/4 93/15 95/23 110/15 119/2 119/5 120/12 121/16 126/3 130/21 130/25 131/11 133/2 133/4 134/22 147/1 148/19 149/20 155/2 157/16 158/10 162/12 165/3 165/17 168/18 170/2 173/23 173/25 175/15 176/16 176/17 177/13 177/16 179/8 179/16 179/19 187/10 188/18 189/23 190/18
alternative [1] 139/2
alternatives [3] 48/8 56/20 105/2
alters [1] 6/14
although [30] 6/19 7/4 13/1 33/7 35/4 35/21 38/15 45/9 52/3 58/7 63/10 71/15 75/22 78/12 80/2 84/1 84/13 116/3 129/3 137/3 146/17 148/20 152/5 155/3 162/6 165/4 165/10 165/12 186/18 190/23
always [7] 34/20 35/2 35/4 89/13 163/24 166/6 166/7
am [17] 5/1 32/18 50/21 50/23 85/10 98/16 99/20 100/11 100/23 101/7 103/10 117/7 123/4 167/11 171/24 187/16 194/22
ambitious [1] 117/7
amendment [1] 128/6
America [2] 10/4 188/5
American [4] 8/22 8/25 9/2 183/11
among [2] 122/25 187/2
amongst [4] 15/13 121/5 164/20 165/2
amount [40] 8/13 52/2 55/1 68/13 96/17 108/4 108/8 108/20 108/23 113/14 117/4 117/11 122/5 123/16 131/24 133/16 134/15 134/22 135/14 135/16 135/24 136/5 152/21 153/18 164/9 169/3 169/7 171/20 173/7 173/19 173/21 173/21 174/3 174/8 175/12 176/12 177/15 185/9 185/12 187/3
amounts [8] 48/21 61/5 61/14 62/12 138/8 168/15 173/23 174/5
amplifies [1] 5/5
ampoules [2] 73/2 116/25

A

an Alder Hey [1] 70/11
an answer [1] 22/9
an earlier [1] 31/15
an early [1] 75/16
an increased [1] 69/12
an indication [2] 69/1 116/17
an individual [1] 189/3
an infection [1] 187/20
an injustice [1] 146/23
an insult [1] 161/9
an uncertain [1] 190/20
an update [1] 79/9
anaemia [1] 13/7
analysed [3] 47/7 158/21 185/14
analyses [1] 185/25
analysing [1] 73/20
analysis [6] 47/6 47/9 65/4 144/12 184/24 185/5
Andrew [2] 130/25 139/7
Andrew's [1] 120/4
Anglia [1] 147/4
angry [1] 88/24
animosity [1] 94/5
annoying [1] 4/21
annual [16] 4/13 4/16 16/6 50/11 50/24 53/8 90/10 108/1 111/2 111/13 133/24 137/14 139/16 154/18 170/5 170/18
anonymous [1] 193/23
another [17] 6/1 15/6 25/15 26/3 33/6 34/5 34/19 67/7 70/13 72/19 91/9 93/7 102/10 126/14 159/22 159/23 180/5
answer [4] 22/9 87/23 123/6 169/11
antenatal [1] 127/18
anti [2] 58/9 66/5
anti-body [1] 58/9
anti-HTLV-III [1] 66/5
antibodies [5] 86/17 86/17 112/14 134/12 151/25
antibody [8] 3/22 16/9 16/10 20/2 20/14 86/13 86/21 126/1
antigen [6] 2/24 2/25 3/15 3/22 4/6 158/12
antigen/antibody [1] 3/22
antihistamines [1] 61/21
anxiety [2] 11/10 187/2
any [70] 1/8 6/3 6/9 6/19 12/6 12/18 12/21 18/24 20/24 25/6 26/17 26/25 27/2 28/8 30/8 31/6 32/20 35/3 39/22 46/12 47/7 48/23 52/19 61/25 62/10 67/20 68/20 71/3 72/8 73/19 78/22 79/23 81/2 87/23 90/5 96/18 99/6 99/7 101/23 102/11 103/21 105/14 108/10 116/5 117/15 118/24 120/22 123/13 126/2 127/13 127/16 135/1 141/16 147/6 149/9 155/20 156/7 158/21 165/20 171/7 171/19 172/12 174/10 175/8 186/4 186/5 188/22 188/23 193/22 194/14
anyone [5] 19/4 100/7 141/18 161/2 193/13
anything [11] 11/16 25/14 26/1 47/3 69/18 69/22 83/8 115/3 145/24 152/8 153/25
anyway [1] 51/23
apart [3] 70/21 72/23 102/25
apologies [2] 111/12 161/2
apologise [5] 5/14 100/24 101/3 147/5 170/17
apologised [1] 88/21
apologises [1] 101/1
apology [1] 50/8
apparent [6] 22/8 63/2 100/4 104/25 146/21 174/20
apparently [6] 17/21 22/6 66/1 84/20 174/19 192/12
appeal [1] 94/1
appealed [1] 94/9
appear [28] 21/3 36/8 45/5 52/4 66/17 69/18 75/13 76/15 79/20 80/20 81/1 81/21 84/17 84/24 104/8 106/16 107/3 108/4 109/3 113/19 114/11 128/21 140/22 157/15 158/17 163/7 169/10 185/21
appeared [2] 41/7 83/11
appears [29] 1/18 5/6 17/7 42/15 52/11 53/3 53/14 56/14 71/17 72/4 80/23 86/5 98/20 99/21 104/10 104/20 108/17 117/10 118/17 120/23 125/15 137/5 137/13 138/22 154/25 162/6 169/21 189/8 189/10
application [1] 182/3
appointed [2] 48/12 100/12
appointment [11] 22/17 25/9 25/18 46/22 48/4 49/19 96/10 100/9 123/15 145/13 159/25
appointments [6] 34/24 35/7 35/8 129/22 141/23 158/25
appreciate [1] 117/8
appreciated [4] 71/22 73/25 74/19 78/19
approach [17] 56/5 59/9 59/12 59/17 61/9 61/13 65/4 69/2 70/3 76/14 79/7 81/23 82/5 104/8 116/18 138/24 155/16
approaches [2] 118/25 155/17
appropriate [7] 67/12 84/14 99/22 114/10 125/6 159/8 161/7
appropriately [2] 17/22 147/3
approximately [5] 57/7 57/9 90/21 113/1 167/16
April [6] 13/5 14/16 65/8 65/9 155/24 184/12
April '71 [1] 155/24
April 1983 [1] 14/16
April 1984 [1] 184/12
April 1992 [2] 65/8 65/9
are [90] 2/5 4/10 4/22 6/1 16/21 16/22 17/11 21/12 26/12 32/14 32/17 33/2 33/23 35/25 37/18 38/3 38/16 38/25 41/25 51/13 54/14 55/4 55/14 56/2 56/3 57/22 58/6 59/16 62/4 69/25 70/6 73/15 74/25 75/16 76/10 77/18 79/14 84/3 84/5 86/20 87/16 97/8 97/9 97/11 97/13 97/20 97/22 97/24 100/21 101/19 102/4 103/2 103/2 103/21 105/5 106/20 107/21 111/10 112/18 112/19 114/9 114/19 116/6 117/2 117/14 118/12 122/24 123/3 123/9 123/12 124/5 125/23 138/16 141/12 146/2 150/16 159/12 162/15 167/2 167/4 168/14 169/7 172/11 174/23 176/5 177/12 187/25 188/8 192/9 193/23
area [7] 47/8 81/22 97/16 126/20 126/25 127/4 128/7
argument [2] 62/2 62/10
arithmetic [1] 138/13
Armour [17] 52/2 52/12 52/19 52/20 53/2 53/18 54/3 54/13 54/21 55/16 56/24 57/11 57/23 67/7 70/20 71/4 170/23
Armour Factorate [1] 54/3
around [22] 12/17 23/7 29/1 36/23 64/20 65/20 93/2 94/25 97/14 107/22 125/10 131/7 132/13 147/25 148/19 148/23 149/1 158/11 158/13 159/24 160/3 172/19
Arran [2] 126/21 127/4
arrange [1] 125/6
arranged [3] 87/22 157/4 158/25
arrangement [1] 175/7
arrangements [9] 14/25 22/15 38/23 40/13 41/15 85/3 122/11 129/18 175/4
arrival [1] 132/20
arrived [6] 15/2 22/3 113/17 149/1 149/21 158/5
article [5] 12/8 12/8 44/3 44/4 177/21
articles [3] 120/12 156/11 177/19
as [254]
ascertain [1] 48/7
aside [2] 30/11 63/1
ask [7] 34/18 35/4 36/6 65/18 69/19 89/11 89/16
asked [18] 7/6 7/11 10/21 27/24 34/25 36/4 77/12 84/24 89/21 94/21 96/25 123/6 125/12 127/6 145/25 165/19 165/21 166/11
asking [5] 22/16 24/23 28/9 88/18 126/7
asks [1] 168/20
aspects [3] 35/25 61/13 80/6
assembled [1] 18/10
assertion [1] 78/15
assist [2] 96/13 142/17
associate [1] 161/23
associated [9] 2/17 13/25 14/19 27/1 27/2 29/13 143/19 180/10 180/19
association [2] 2/11 12/1
assuage [1] 94/2
assume [4] 23/6 32/16 156/4 156/13
assumed [2] 1/24 126/1
asthma [1] 61/20
asthma-like [1] 61/20
ate [1] 28/10
atmosphere [1] 86/2
attached [2] 97/4 112/19
attempt [2] 29/8 78/11
attend [10] 35/7 84/16 119/4 141/4 141/14 155/22 156/2 156/6 162/7 167/6
attendance [4] 88/6 141/10 156/9 180/16
attended [18] 1/21 10/11 11/22 35/11 39/11 83/22 88/11 107/3 109/3 109/25 121/16 140/3 140/7 140/14 155/24 158/9 162/18 179/14
attendees [2] 120/6 121/19
attender [5] 1/11 1/14 1/16 1/22 179/13
attending [19] 10/15 20/18 24/22 39/16 45/9 45/11 109/5 109/6 119/24 122/18 125/22 157/3 157/11 159/24 184/14 184/18 184/22 187/3 187/17
attention [7] 5/12 87/1 96/8 120/11 145/8 145/11 156/11
attitude [1] 96/20
attributed [3] 5/7 144/4 144/5
Audrey [1] 130/10
August [15] 42/12 66/6 70/19 71/11 77/21 77/24 86/11 113/16 119/23 137/15 165/18 180/22 181/5 182/21 183/4
August 1975 [1] 42/12
August 1982 [1] 119/23
August 1983 [1] 181/5
August 1984 [2] 70/19 77/21
August 1985 [3] 66/6 77/24 165/18
Austria [2] 9/1 9/15
Austrian [2] 9/18 10/7
author [6] 19/21 71/23 72/1 74/18 78/15 87/5
authored [6] 15/7 15/12 17/24 177/19 177/21 183/18
Authority [1] 164/11
authorship [2] 17/19 18/13
automated [1] 46/25
autumn [1] 88/4
availability [4] 37/7 61/15 66/2 117/16
available [36] 8/14 38/12 59/7 60/1 60/6 61/7 63/25 64/23 64/24 67/11 68/18 68/22 69/16 70/25 72/13 73/6 75/3 75/17 75/20 76/11 79/19 91/23 142/5 161/15 164/24 165/5 165/11 166/10 174/11 174/20 174/22 177/6 186/12 188/10 188/17 192/12
average [4] 16/6 164/13 185/9 185/12
avoid [1] 103/7
avoided [2] 9/2 11/9
avoiding [1] 188/8
await [1] 161/5
awaking [1] 8/20
aware [19] 1/25 6/9 6/12 6/13 7/14 7/23 17/18 38/15 66/21

A

aware... [10] 85/10 97/5 103/17 106/14 122/24 139/20 139/23 140/19 179/17 186/5
awareness [2] 11/22 104/15
away [2] 53/17 133/7
Ayrshire [2] 126/21 127/4

B

baby [6] 23/2 56/12 70/17 72/19 73/3 73/23
back [27] 13/15 22/21 38/14 39/17 41/2 47/13 50/3 50/7 50/7 65/11 77/4 81/6 87/20 92/8 99/13 100/11 110/22 119/12 137/17 137/22 143/5 146/20 157/17 166/21 182/19 182/24 183/20
bad [1] 5/14
badly [1] 40/6
bags [2] 29/23 61/8
balance [1] 117/25
balanced [1] 54/14
Ball [14] 43/2 46/5 46/19 49/20 50/5 77/3 85/20 91/13 92/7 93/20 98/12 98/13 101/1 101/17
Ball's [11] 43/21 49/1 82/12 85/7 86/4 90/20 91/11 95/17 99/12 99/17 100/8
Bangor [2] 55/13 55/18
bank [2] 131/22 131/24
based [14] 37/1 131/5 131/11 132/10 144/17 147/17 147/21 150/25 151/13 155/6 163/20 166/16 189/15 189/20
basic [1] 47/3
basically [2] 26/1 90/1
basis [6] 10/14 63/25 74/22 78/24 111/2 117/3
bat [1] 79/25
batch [16] 5/7 27/5 48/1 57/12 57/13 57/23 57/24 58/2 71/1 72/24 73/2 77/18 82/15 133/13 149/23 186/23
batches [3] 5/7 64/13 186/16
be [188] 1/24 3/9 3/20 9/2 9/8 10/20 11/6 13/25 14/19 17/5 18/13 18/16 20/21 20/22 22/4 22/16 23/21 24/16 24/19 25/12 26/7 26/18 27/12 27/15 27/18 28/7 28/21 28/23 29/13 30/7 30/17 32/23 33/19 34/16 37/12 39/7 47/5 50/13 51/13 52/11 53/3 53/8 53/14 54/12 56/25 60/5 60/7 61/17 62/2 64/11 64/12 66/4 66/12 66/16 67/12 67/20 68/17 69/24 70/10 71/5 71/22 72/2 72/8 72/16 73/22 78/13 80/7 80/8 80/23 80/23 83/11 84/13 85/25 87/25 91/15 91/24 91/24 94/4 94/10 94/14 94/15 97/5 98/1 99/4 99/18 102/7 102/18 102/19 102/24 103/22 104/3 104/8 105/4 108/17 110/20 111/1 111/11 113/19 114/11 114/22 116/9 116/10 117/2 117/5 118/11 118/17 119/16 120/15 120/24 121/13 121/14 121/24 122/3 122/12 122/23 123/4 123/13 123/21 123/25 124/6 124/9 124/15 124/16 124/25 125/3 125/5 125/6 126/8 127/12 127/20 128/21 131/16 137/5 138/23 139/21 140/22 142/14 142/23 142/24 144/9 144/16 144/17 144/18 145/4 145/11 146/16 146/25 154/25 156/4 156/13 156/22 157/5 159/16 160/25 161/8 161/10 162/12 163/15 164/15 164/18 167/12 167/13 169/13 169/16 169/23 169/25 170/10 171/21 175/6 177/24 178/3 178/9 178/17 178/20 180/13 184/3 187/20 187/24 188/14 189/22 191/3 191/11 191/22 191/22 191/23 191/24 194/1 194/13
bear [1] 39/9
became [20] 38/12 41/1 68/11 70/25 72/13 73/6 91/23 92/19 110/2 131/14 139/23 140/19 164/24 165/11 166/3 166/10 174/11 177/6 183/8 193/1
because [37] 6/14 7/18 12/9 19/6 19/10 20/7 26/13 27/16 42/4 69/20 74/16 75/19 84/16 91/15 96/7 98/2 102/4 103/22 113/15 122/1 124/4 138/4 138/5 144/3 145/2 146/17 171/16 174/19 178/3 178/17 179/5 180/20 184/1 187/13 192/9 192/21 193/1
become [2] 63/25 95/11
becoming [1] 8/14
bed [2] 40/15 41/11
bedding [1] 41/7
beds [2] 131/5 131/6
been [147] 1/25 3/14 4/4 4/8 4/20 5/21 6/3 9/1 10/5 11/9 12/15 15/5 15/17 15/25 17/4 17/19 18/9 18/14 18/20 19/14 20/25 21/3 22/6 22/13 25/5 26/6 26/14 27/24 30/15 32/3 32/4 32/22 33/2 33/11 33/14 35/21 40/25 42/15 45/20 45/24 46/24 48/3 52/4 55/22 57/25 58/2 58/22 59/12 62/25 64/24 65/21 66/2 66/18 67/8 67/14 68/7 72/5 72/12 73/23 74/4 74/8 74/8 76/4 76/8 76/23 77/11 78/22 79/18 81/2 81/11 83/20 84/2 84/15 84/17 84/24 85/18 86/7 86/20 88/14 88/23 89/15 96/25 99/16 102/6 102/14 104/11 106/18 106/20 106/24 107/16 109/2 113/18 114/5 116/18 120/14 120/18 125/2 125/2 125/13 127/2 127/6 129/5 133/6 137/23 139/15 139/17 141/16 141/22 142/5 142/7 155/11 157/15 157/25 158/9 158/12 158/17 158/21 159/4 159/25 159/25 160/15 161/9 161/13 163/7 163/23 165/7 166/6 166/7 166/8 167/19 167/22 168/4 168/18 169/21 175/4 178/1 178/2 178/3 178/5 178/7 179/17 181/25 183/23 184/25 188/5 188/7 189/21
before [24] 3/16 8/19 11/22 21/15 22/18 32/12 57/25 71/10 78/5 78/8 78/19 82/23 85/13 95/16 124/6 128/19 128/24 132/20 142/16 150/11 153/24 158/2 182/6 189/12
began [2] 91/12 183/21
beginning [6] 12/5 71/1 71/21 92/12 92/13 116/20
behalf [5] 1/11 100/24 101/4 101/18 191/8
behaved [1] 145/2
being [137] 2/25 3/1 3/15 3/21 5/24 7/17 12/16 17/8 17/13 17/21 20/16 21/13 21/15 21/22 23/7 25/9 26/3 28/10 31/22 33/3 33/6 34/4 36/10 38/17 38/17 38/18 43/12 44/20 48/22 49/15 52/2 52/20 54/1 54/2 55/2 55/17 62/12 68/21 70/16 72/19 73/4 75/20 78/5 81/23 88/18 89/21 93/4 93/17 94/20 96/3 97/9 97/11 97/20 98/11 100/15 104/1 104/18 104/25 105/2 112/25 117/1 117/10 118/12 123/16 123/23 124/18 125/9 125/11 125/23 126/12 126/13 128/7 129/21 134/15 134/22 134/24 135/11 135/12 135/14 135/24 136/7 138/20 139/8 139/24 141/17 141/21 142/2 143/6 143/9 144/2 146/12 152/15 152/22 153/18 157/6 159/13 159/14 159/21 159/22 159/23 161/23 167/17 169/4 170/2 170/11 170/13 172/7 172/15 172/20 173/7 173/23 173/25 174/4 174/6 174/9 174/18 175/12 175/16 176/24 177/15 179/5 180/14 180/14 180/17 181/20 182/8 182/17 182/21 186/5 188/12 188/13 189/2 190/8 191/5 191/23 192/5 193/12
belief [1] 164/5
believe [2] 73/22 187/21
believed [3] 28/2 165/8 181/7
believes [1] 12/7
Bellingham [1] 13/12
below [3] 16/2 112/4 183/2
belt [1] 91/6
benefit [2] 59/10 100/7
benign [1] 11/12
Bennett [10] 130/13 130/18 132/17 135/4 139/8 140/7 141/9 141/10 141/14 142/1
Berman [9] 162/4 162/5 162/18 172/21 180/14 190/24 191/8 191/8 191/15
Berry [1] 10/6
best [6] 4/24 29/21 80/2 92/6 114/9 132/10
bet [1] 97/14
better [2] 83/11 101/7
between [40] 1/20 12/2 16/7 34/23 38/17 44/7 45/15 54/15 81/3 88/12 97/6 102/20 104/11 105/1 110/13 111/1 115/22 116/25 118/1 118/16 119/18 131/9 131/19 132/5 144/14 149/15 150/11 150/16 151/7 153/11 159/13 160/8 160/9 167/20 168/2 170/3 179/22 179/24 183/16 184/23
between HIV [1] 12/2
bh [1] 23/9
biased [1] 123/3
Biggs [2] 140/4 140/10
bill [1] 168/1
bin [1] 145/23
biologically [1] 3/13
birth [1] 74/16
bit [5] 5/2 110/18 137/18 138/6 178/15
bits [1] 115/20
Black [1] 1/11
blame [1] 88/21
blank [1] 124/3
bleed [1] 61/24
bleeding [14] 4/11 6/10 13/18 42/9 45/18 45/21 49/15 49/25 83/25 94/18 130/19 131/3 157/14 158/9
bleeds [3] 47/23 66/11 172/22
blood [79] 3/13 3/14 6/17 6/22 7/5 12/2 12/4 12/4 13/24 14/18 25/10 25/11 28/7 34/1 35/12 41/12 58/8 58/25 59/6 60/5 62/16 66/5 68/17 77/24 89/11 89/13 107/1 107/1 109/12 110/13 110/16 110/21 119/10 119/12 119/20 120/2 124/7 124/14 127/17 131/9 131/11 131/20 131/22 131/22 131/23 132/2 132/5 132/7 132/7 133/11 136/25 137/10 139/22 142/16 150/14 150/24 151/2 151/2 151/9 151/12 157/6 159/1 159/6 162/16 163/23 164/2 164/4 164/4 164/10 164/15 167/18 168/6 168/11 170/4 180/10 183/17 187/20 187/21 188/2
blood-borne [1] 159/1
bloods [1] 2/22
Bloom [7] 11/25 12/12 64/12 67/17 67/24 84/22 179/6
blown [1] 93/6
board [2] 85/23 126/21
body [2] 41/11 58/9
Bolton [6] 43/5 45/14 82/8 91/12 91/19 91/22
Bolton-Maggs [1] 43/5
Booker's [1] 22/22
boom [1] 132/23
born [4] 56/13 70/12 75/5 77/8
borne [5] 137/5 138/23 154/18 155/3 159/1
borstals [1] 151/10
Boston [1] 12/10
both [22] 8/17 16/11 23/10 34/9 43/15

B

both... [17] 55/20 63/15 67/13 69/11 69/15 71/14 81/21 83/4 95/19 140/7 150/8 160/24 162/4 162/8 162/18 163/12 176/8
bottles [14] 52/16 52/18 52/18 52/24 53/1 53/2 53/14 53/15 53/18 53/25 54/3 54/10 54/13 114/2
bottom [36] 2/13 2/14 5/8 8/6 8/12 13/5 13/16 14/7 20/17 23/24 24/12 24/13 31/11 34/13 35/14 39/10 58/6 58/16 60/12 65/9 79/11 80/10 87/6 92/9 92/10 92/18 111/22 112/15 115/16 120/5 135/15 157/19 167/8 167/9 183/6 185/3
bought [1] 8/24
Boulton [10] 1/14 4/15 4/18 5/8 5/19 6/3 7/3 10/15 43/16 51/4
Boulton's [4] 6/5 10/8 10/9 11/14
Bournemouth [1] 140/12
box [1] 158/7
boy [3] 56/15 73/23 125/25
boys [11] 47/23 50/2 89/5 89/10 90/21 91/4 92/11 92/20 93/4 94/19 139/1
BPL [6] 152/9 166/24 169/15 169/19 169/24 172/23
BPLL0009270 [1] 171/10
break [6] 50/13 50/22 146/17 146/19 147/9 193/17
breakdown [1] 153/11
BRI [1] 181/24
brief [2] 105/14 123/9
briefly [5] 42/4 54/18 89/4 106/4 152/20
bring [3] 90/2 97/17 99/5
Bristol [38] 147/1 160/19 160/20 160/22 161/1 161/17 161/17 161/19 161/20 161/22 162/10 162/14 163/20 163/20 163/21 163/24 164/10 164/21 165/1 169/5 169/23 170/3 177/24 180/20 180/21 184/7 184/22 187/8 187/17 189/1 190/1 192/3 192/3 192/20 192/24 193/9 193/12 195/11
British [4] 15/12 16/17 19/20 20/1
broad [2] 144/3 178/19
broadly [4] 12/13 21/8 118/17 193/7
Brodie [1] 131/13
broken [1] 153/5
Brookes [5] 150/15 150/17 151/7 151/8 155/10
brother [6] 7/15 7/19 70/12 71/13 72/16 83/12
brothers [4] 71/14 74/25 79/9 103/24
BTS [1] 61/16
build [1] 48/20
bulk [5] 111/16 133/20 135/8 136/1 175/14
bulletin [2] 44/5 188/20
Buminate [1] 137/15
bundles [1] 130/6
but [193] 1/13 2/10 4/1 4/13 7/13 7/21 7/24 10/4 10/7 10/11 12/5 12/13 12/21 13/2 13/18 14/13 14/15 17/5 18/22 20/11 20/24 22/8 22/15 26/20 27/18 28/8 28/11 29/10 30/1 30/23 31/7 31/14 32/7 32/16 32/24 33/8 34/3 35/11 35/20 36/4 36/8 37/9 38/5 38/25 40/8 41/19 42/12 42/24 44/4 45/4 46/13 49/21 51/7 51/13 51/23 53/14 55/10 56/4 59/10 59/25 60/6 65/17 65/24 66/12 66/16 68/10 68/23 69/1 70/19 71/1 71/9 72/23 73/14 73/19 74/22 75/7 75/16 75/23 76/5 77/3 77/24 79/15 82/9 82/25 84/5 84/11 85/11 86/19 87/18 89/4 91/16 93/15 94/6 94/15 94/21 94/22 95/24 96/11 98/18 101/12 102/8 102/25 103/13 104/9 104/13 104/17 105/20 107/16 107/18 107/21 107/24 108/13 108/17 110/19 111/16 113/3 114/7 114/13 114/20 115/18 117/3 117/7 119/13 120/22 121/21 123/20 124/13 125/13 125/19 126/12 128/15 128/16 130/19 132/9 134/14 134/19 135/19 135/25 139/16 140/11 140/23 141/9 141/21 141/23 142/4 142/22 143/5 144/10 144/16 144/25 146/12 148/4 151/16 151/20 153/6 153/15 155/14 156/2 160/22 163/7 163/8 164/24 165/21 168/24 169/15 169/24 170/10 173/7 173/22 174/5 174/20 175/6 175/15 176/16 176/23 177/13 177/20 178/16 179/14 180/6 180/17 183/25 184/6 185/12 187/15 187/19 187/23 188/9 188/21 189/3 191/10 193/23 194/11
Butler [1] 98/17
by [150] 2/11 2/16 3/21 6/24 6/25 10/5 11/10 12/8 15/7 15/12 17/24 18/7 20/25 22/13 22/14 23/20 23/20 24/6 25/13 26/6 27/17 28/4 28/22 32/25 33/3 34/19 35/16 39/17 43/24 44/17 45/17 46/1 48/5 50/1 51/4 51/8 51/11 53/6 53/16 55/15 58/24 59/8 60/8 60/24 63/18 63/21 64/3 64/12 66/18 66/21 66/23 66/25 67/18 68/7 68/17 69/6 71/4 71/20 78/15 82/18 84/6 84/7 85/13 86/5 89/20 90/15 93/18 94/1 95/10 96/8 96/25 98/12 99/2 99/16 101/16 101/17 102/24 103/3 103/4 104/14 106/20 109/20 110/6 111/6 117/20 118/5 119/16 122/20 123/14 125/3 125/11 127/3 127/4 127/8 128/5 128/7 128/12 129/3 129/19 137/5 137/11 138/23 139/22 142/1 143/13 144/13 145/10 146/2 148/23 149/11 150/10 150/15 152/22 154/18 155/3 156/3 159/12 159/19 160/5 162/2 164/8 164/9 164/19 165/3 165/8 167/18 168/17 169/23 172/12 172/21 174/24 177/19 177/21 177/22 180/7 181/23 183/18 184/10 184/25 187/5 187/10 187/20 188/2 189/2 189/6 190/2 190/3 190/17 192/6

C

C3 [4] 47/24 88/10 93/4 94/15
Cachia [12] 148/4 148/9 148/13 148/14 148/23 148/25 150/10 150/22 154/15 157/22 159/17 160/10
Cachia's [3] 158/3 158/19 160/2
café [1] 34/25
cajoling [1] 96/18
call [3] 4/25 43/24 46/16
called [1] 39/16
calls [1] 91/7
Cambridge [2] 146/25 161/4
came [14] 8/4 8/25 9/24 10/3 10/14 11/17 25/21 37/11 82/13 85/23 89/16 125/24 145/7 145/10
Cameron [1] 150/13
can [127] 2/14 4/14 4/19 4/24 5/14 11/8 13/6 13/11 14/13 14/14 14/22 15/22 19/24 20/7 23/25 24/1 26/23 27/15 32/1 32/9 36/16 37/20 39/18 51/1 51/19 51/21 52/7 52/9 52/19 54/18 54/23 55/8 55/11 55/16 70/2 72/15 73/10 73/22 75/13 75/24 76/20 81/6 82/7 89/1 92/6 97/16 98/1 98/6 98/14 99/4 99/14 101/22 102/13 105/5 105/9 109/17 111/13 111/15 111/19 111/25 112/4 112/22 112/24 114/7 114/24 115/21 116/19 120/1 120/4 120/8 121/16 122/21 123/6 124/6 124/19 125/6 132/12 133/24 133/25 134/11 135/4 135/8 135/15 135/20 135/22 137/17 143/23 151/21 152/2 152/10 152/14 152/20 153/2 153/4 153/13 153/20 157/18 163/14 163/17 166/21 168/24 169/19 170/6 170/8 170/18 171/2 172/5 172/10 172/15 173/4 173/14 174/1 175/11 176/3 176/7 177/10 178/17 182/8 182/20 182/24 183/2 184/5 184/11 185/24 186/10 187/20 187/25
can't [12] 14/11 21/19 21/20 22/10 22/14 37/14 69/22 81/12 103/12 168/11 190/11 192/2
cancer [3] 42/24 49/8 93/11
cannot [8] 62/2 69/19 71/1 78/13 100/3 116/7 171/18 187/24
capacity [2] 1/22 43/8
cards [4] 55/4 55/10 55/14 158/7
care [45] 6/10 17/12 26/22 28/5 30/24 39/2 40/6 42/13 44/6 45/16 45/25 46/14 48/18 49/10 49/24 50/1 87/9 93/22 94/9 95/22 95/24 96/1 96/9 96/14 96/17 97/2 97/9 99/24 100/1 100/20 103/6 110/4 110/14 124/25 127/14 131/2 147/13 147/16 148/3 149/3 149/18 157/23 167/13 168/5 191/2
cared [5] 93/17 98/19 99/18 101/13 163/1
carefully [1] 105/17
caring [1] 95/20
carpet [1] 88/22
carried [7] 3/9 6/23 6/25 22/6 37/13 144/2 164/5
carrier [3] 107/15 107/17 135/6
carriers [2] 135/23 136/6
carries [1] 6/18
case [49] 3/8 8/21 18/20 29/14 33/7 39/7 48/11 48/18 58/12 58/18 59/1 59/16 59/20 62/9 62/23 63/13 68/14 70/9 70/11 72/15 72/19 73/10 74/11 74/11 74/14 75/3 76/9 76/15 77/6 79/12 79/12 80/8 80/11 80/15 80/17 80/19 80/23 81/10 81/11 81/14 81/24 82/3 137/4 182/10 183/16 186/16 186/20 187/22 190/1
case' [1] 89/2
cases [24] 2/19 5/5 6/3 15/15 23/3 24/2 44/17 61/9 63/17 70/6 70/7 70/8 77/12 79/5 79/9 79/10 82/23 98/25 139/25 143/25 144/6 144/12 157/21 179/21
Cash [6] 119/19 120/11 122/5 142/11 151/8 156/11
Cash's [1] 142/20
cast [1] 126/15
casting [1] 118/24
casts [2] 155/20 156/7
catastrophic [1] 127/19
catch [1] 145/24
categories [2] 118/25 187/8
category [1] 185/14
causation [2] 59/1 64/25
cause [3] 86/18 187/18 192/21
caused [6] 3/21 37/16 68/7 94/19 101/5 187/2
causes [1] 181/13
causing [2] 3/15 11/9
CBLA0005695 [1] 166/23
CBLA0009063 [1] 168/25
ceased [1] 43/1
cell [2] 47/1 186/9
cent [3] 91/2 103/23 103/24
centre [122] 1/4 1/7 1/12 5/21 14/24 20/19 21/23 22/4 22/20 24/5 24/22 41/22 42/11 43/14 43/23 44/11

C

centre... [106] 44/22 44/22 44/25 45/1 45/2 47/16 48/15 51/14 55/7 63/3 63/12 64/5 64/7 67/19 74/2 77/3 85/5 90/24 95/3 103/10 104/12 106/5 106/6 106/8 106/15 106/19 106/21 106/25 109/9 109/19 109/21 110/8 110/10 110/15 110/25 112/8 114/22 118/7 118/15 118/19 118/21 121/11 122/23 129/4 129/13 130/7 130/8 131/10 131/19 131/21 133/14 141/2 141/7 143/12 143/24 144/24 145/12 146/15 147/12 147/14 148/15 148/22 149/2 150/8 150/18 151/23 157/19 157/23 158/2 160/15 160/19 161/18 161/22 161/23 162/15 162/16 162/17 163/20 164/10 164/10 165/1 165/3 166/7 167/6 167/18 168/6 168/11 169/1 169/14 169/20 170/1 171/12 171/24 174/22 184/15 184/18 184/23 187/3 187/4 187/8 187/17 192/3 192/6 195/4 195/9 195/11
Centre 160 [1] 143/24
Centre' [1] 116/4
Centre's [1] 43/2
centres [19] 7/1 42/24 49/8 58/2 92/2 101/23 102/2 102/6 105/8 118/1 121/14 122/14 122/15 139/24 145/16 146/23 146/24 160/24 161/3
certain [4] 16/2 113/14 122/4 190/12
certainly [13] 8/1 14/15 18/12 43/11 50/19 72/7 81/8 103/8 103/13 104/10 126/9 146/24 161/12
certainty [2] 12/6 187/24
cetera [2] 13/22 60/11
chair [1] 29/2
chance [1] 191/19
change [10] 12/11 40/15 41/6 53/19 67/24 68/1 94/2 96/19 98/11 140/21
changes [2] 67/20 123/17
changing [1] 128/1
charge [4] 101/9 116/3 147/20 148/3
charged [1] 96/9
Charles [1] 150/13
check [6] 14/13 14/14 39/3 88/7 141/10 178/17
checking [1] 14/11
Cheinsong [2] 17/25 19/22
Cheinsong-Popov [2] 17/25 19/22
child [24] 34/9 45/24 48/3 58/7 58/18 59/4 61/23 65/2 65/5 65/19 75/5 76/1 76/15 76/17 77/8 80/16 80/25 82/1 83/4 91/9 93/16 93/21 93/22 157/9
childhood [2] 42/24 49/8
children [65] 23/20 42/8 43/11 43/12 44/13 46/21 47/11 47/14 47/19 48/5 49/10 49/15 50/4 60/3 60/10 61/1 61/7 61/15 62/8 62/22 63/2 66/13 69/3 69/10 78/3 79/23 81/22 82/18 83/3 85/21 85/25 86/14 90/23 91/7 92/4 92/12 92/24 93/11 93/13 94/9 94/14 94/18 95/22 96/14 96/23 97/1 97/8 97/10 97/17 97/19 97/25 98/4 98/19 99/3 99/18 100/1 101/13 103/24 104/17 110/9 122/1 124/23 164/17 165/14 172/21
children's [22] 41/24 42/2 42/7 45/1 48/18 49/4 69/3 77/13 102/23 104/11 130/23 161/20 161/23 162/3 163/13 163/21 172/20 176/9 190/24 191/2 192/4 195/5
choice [3] 59/2 60/6 103/6
choices [1] 166/15
choosing [1] 61/3
Christmas [5] 8/10 111/21 152/1 170/8 170/20
Christmas Eve [1] 8/10
circulated [4] 2/3 63/11 120/14 126/8
circulation [1] 123/23
circumspect [1] 65/23
circumstance [2] 85/10 150/6
circumstances [2] 191/4 193/4
city [1] 62/16
Claim [1] 71/8
classified [1] 79/13
clear [25] 10/25 12/3 27/6 27/6 27/14 29/20 30/18 51/7 53/8 63/19 84/11 91/20 107/16 124/13 128/16 128/21 145/10 146/3 152/6 153/14 155/8 159/10 186/4 187/12 188/3
clearest [1] 79/20
clearly [13] 9/1 10/5 10/7 16/25 19/14 31/14 33/4 37/3 63/13 66/11 88/25 151/15 154/21
clients [2] 97/5 97/24
clinic [3] 133/15 157/3 157/12
clinic/ward [1] 133/15
clinical [17] 46/14 46/20 48/4 48/23 49/23 49/24 60/20 68/4 72/5 82/17 94/11 98/24 133/18 133/20 148/6 162/22 190/13
clinicians [4] 13/3 14/16 49/12 156/21
clinics [3] 47/18 48/20 147/23
close [9] 48/5 82/18 110/12 131/8 150/10 150/16 150/22 151/5 170/2
closely [2] 64/3 97/20
closer [1] 173/4
closest [1] 28/12
clothing [2] 27/13 41/7
clotting [1] 149/8
Clwyd [1] 44/15
co [4] 15/7 17/19 17/24 18/13
co-authored [2] 15/7 17/24
co-authorship [2] 17/19 18/13
coagulation [2] 47/3 124/5
code [1] 3/18
cohort [12] 15/25 18/9 19/13 20/6 20/10 20/18 20/24 21/2 21/7 21/10 30/16 50/1
colds' [1] 90/1
Colin [1] 191/1
colleague [3] 94/22 127/24 127/25
colleagues [3] 6/9 92/22 142/7
collect [1] 98/7
collected [3] 16/2 66/5 164/9
collection [2] 151/9 164/12
collectively [1] 161/21
combat [1] 123/10
combination [1] 152/5
come [16] 5/12 31/19 33/22 38/22 47/12 50/3 50/7 50/7 77/4 95/15 98/7 110/22 119/12 144/10 146/20 177/25
comes [1] 74/22
coming [5] 54/7 83/10 89/25 124/25 139/11
commenced [1] 172/20
commencing [1] 46/11
comment [5] 39/15 39/19 51/6 67/23 112/4
commented [1] 91/5
comments [4] 75/10 81/17 132/15 171/23
commercial [88] 8/13 8/16 8/21 8/24 16/11 16/13 51/3 54/15 56/18 57/5 57/8 58/20 59/23 62/13 66/8 67/6 67/14 70/19 70/25 72/8 72/11 72/22 73/2 73/4 73/5 73/8 73/23 74/10 75/19 76/5 77/19 77/21 77/23 78/9 79/22 80/21 80/25 82/3 103/8 104/23 104/24 108/10 108/13 108/23 111/4 125/1 132/20 133/7 134/15 135/2 137/3 137/10 138/21 140/13 153/21 154/23 164/3 164/14 164/23 165/5 165/17 165/25 166/4 166/8 167/21 168/9 169/22 170/11 170/24 170/25 171/4 171/6 171/20 172/7 173/8 173/17 174/6 177/23 178/6 178/8 178/11 178/14 181/6 183/10 183/13 187/6 188/12 188/16
commercially [3] 6/23 64/23 164/7
commitment [1] 46/17
Committee [3] 126/20 127/5 128/8
common [5] 104/6 110/12 139/17 139/24 146/10
commonly [1] 123/6
communicated [3] 86/5 121/13 193/4
communication [9] 15/4 17/14 31/24 32/24 36/12 89/8 124/14 187/15 190/14
communications [4] 42/18 156/14 179/22 179/24
community [3] 106/3 112/9 195/6
comparatively [2] 42/5 106/23
compare [1] 59/11
compared [1] 61/11
comparison [1] 102/19
compassion [1] 127/15
competent [1] 64/10
compilation [1] 4/19
compiled [1] 123/5
compiling [1] 113/15
complaining [1] 171/12
complaints [2] 97/8 98/22
complete [7] 78/13 114/19 146/18 147/1 160/21 177/4 194/11
completed [3] 20/25 84/6 84/7
completely [1] 38/2
complications [2] 3/15 149/9
comprehensive [3] 53/9 149/17 162/22
compress [1] 102/10
compressing [1] 160/24
compromised [4] 46/23 92/21 93/17 94/17
concentrate [141] 16/6 16/18 20/4 34/2 47/25 51/2 52/1 52/12 52/18 53/1 53/16 53/21 53/25 54/10 54/16 54/21 54/24 55/1 56/23 56/25 57/12 57/20 59/24 60/7 61/4 64/14 64/16 66/7 66/10 67/6 67/7 67/12 68/2 68/12 70/15 70/18 70/20 70/22 70/23 70/25 71/21 72/3 72/7 72/8 72/11 72/11 72/13 72/18 72/20 72/25 73/2 73/6 73/7 73/8 73/24 74/10 75/7 75/15 75/18 75/19 76/1 76/4 76/18 77/9 77/14 77/20 77/22 77/22 78/7 78/10 78/12 78/19 79/22 82/2 108/4 108/8 108/11 108/13 108/18 108/23 111/17 114/3 114/5 115/2 115/4 115/7 116/1 125/1 134/5 135/2 135/11 135/14 135/16 136/1 136/2 149/23 152/4 152/7 152/12 152/17 152/18 152/21 152/23 152/24 152/25 153/17 153/19 154/2 168/22 169/19 170/9 170/22 171/1 171/5 171/6 171/25 172/6 172/14 173/6 173/22 174/4 174/6 174/19 175/15 176/16 176/21 176/23 177/13 177/23 178/5 181/6 181/9 182/12 183/11 185/8 185/20 186/16 186/23 187/6 188/13 188/17
concentrate' [1] 181/15
concentrates [70] 11/3 12/17 16/12 30/25 43/23 44/1 51/3 56/19 56/22 57/3 57/5 57/6 57/8 57/9 57/17 57/19 58/21 59/15 60/22 61/12 62/2 62/14 63/18 63/19 64/15 64/18 64/22 66/22 70/16 73/4 76/7 76/19 80/25 82/22 103/7 104/23 104/24 112/25 113/6 113/9 115/11 115/14 115/19 131/21 131/23 132/20 134/21 135/10 135/20 136/24 138/21 139/3 145/9 149/25 153/21 154/5 154/7 154/23

C

concentrates... [12] 165/9 165/14 166/20 167/21 169/23 170/25 172/7 173/8 185/9 187/23 188/6 188/9
concern [3] 9/1 127/2 193/3
concerned [5] 2/9 13/17 28/25 93/10 98/16
concerning [2] 35/25 36/9
concerns [13] 12/21 15/3 28/6 28/19 58/18 69/2 118/2 125/19 146/2 151/9 151/12 166/22 187/13
conclude [3] 18/16 194/9 194/10
conclusion [9] 72/14 74/13 74/23 129/2 129/7 129/24 138/19 154/20 158/19
conclusions [3] 69/1 84/14 118/14
concurred [1] 122/2
condition [6] 11/11 86/23 140/22 182/14 187/18 188/2
conditions [3] 49/11 100/1 130/19
conduct [2] 9/23 98/17
conducted [1] 18/6
confer [1] 60/15
confidentiality [1] 127/21
confirm [3] 16/16 31/21 163/19
confirmation [1] 29/4
confirmatory [1] 159/7
confirmed [3] 28/2 28/4 181/18
confirms [3] 76/25 79/16 89/7
confuse [1] 189/10
consent [7] 127/19 128/19 128/24 158/21 159/5 193/7 193/10
consented [1] 158/22
consequences [3] 9/6 95/20 127/20
consequently [1] 58/3
consider [1] 37/6
considerable [4] 113/18 122/25 171/20 187/2
consideration [1] 62/6
Considerations [1] 126/23
considered [6] 60/4 61/12 62/2 129/5 133/19 172/24
consistent [11] 23/16 43/17 82/21 86/3 90/20 98/12 101/16 118/18 129/8 143/20 176/20
constant [1] 97/25
constantly [1] 91/7
consultant [22] 10/16 25/20 25/22 26/1 28/4 29/20 32/10 44/14 45/16 45/25 48/12 88/17 93/25 98/18 110/3 113/13 130/14 148/1 148/18 163/4 181/16 181/19
consultants [2] 44/18 46/3
consultation [4] 29/17 34/17 93/21 99/22
consulted [1] 92/23
contact [1] 28/12
contacting [1] 149/11
contain [3] 68/12 71/10 133/20
contained [1] 85/1
containing [1] 158/8
contaminated [3] 47/9 58/25 186/23
contemplated [2] 59/20 105/2
contemplation [1] 12/22
contemporaneous [2] 179/3 180/4
contempt [1] 40/8
context [3] 80/4 84/20 143/2
continue [3] 160/22 175/7 188/11
continued [5] 1/4 25/24 70/24 165/16 195/4
continues [5] 60/13 63/9 113/2 170/15 185/1
continuing [1] 186/8
continuity [1] 98/5
contract [1] 5/9
contracted [3] 5/12 27/11 188/1
contracting [3] 5/18 69/12 188/18
contraindication [1] 61/23
contrary [2] 69/5 126/2
contrast [3] 46/18 60/21 104/19
control [2] 61/6 113/25
controllable [1] 61/21
convenience [1] 62/1
convenient [1] 124/9
conversant [1] 64/12
conversation [3] 29/11 167/1 175/1
conversations [2] 8/2 35/23
conveyor [1] 91/6
convince [1] 94/22
Cook [15] 109/23 110/14 111/14 113/16 115/22 115/23 116/2 116/16 117/10 117/17 118/7 119/8 119/14 119/18 119/22
Cook's [3] 110/1 116/18 119/3
copies [3] 2/3 87/19 156/15
Core [1] 161/13
corner [1] 13/16
Corporate [2] 42/22 49/3
correct [1] 96/10
correspond [1] 21/8
correspondence [9] 22/9 22/10 115/21 115/22 115/23 118/5 119/14 128/10 151/6
cost [3] 61/9 62/4 167/24
cost-effective [1] 61/9
cost-effectiveness [1] 62/4
coughs [1] 89/25
could [29] 3/6 3/20 10/20 22/20 28/21 34/12 35/6 48/7 61/17 62/25 64/11 64/24 67/8 82/15 87/10 94/2 96/19 101/21 103/23 116/25 121/24 122/6 124/7 126/8 132/10 139/21 146/16 157/5 171/22
couldn't [6] 21/14 36/5 37/8 91/13 103/22 105/15
Coulter [1] 47/1
Council [3] 126/19 127/2 128/3
counsel [2] 76/7 159/1
counselled [3] 24/4 24/8 85/12
counselling [8] 24/1 24/2 24/9 39/23 98/8 127/23 190/6 190/11
counter [1] 47/1
country [4] 5/11 123/1 164/22 187/2
couple [7] 33/22 37/18 39/12 83/1 111/6 117/24 162/11
course [23] 30/13 32/20 39/7 50/16 69/19 90/18 98/23 105/6 106/16 107/5 116/11 119/8 121/5 127/8 172/17 177/5 177/7 177/23 178/24 183/4 184/7 191/9 194/2
court [1] 89/1
cover [6] 102/3 102/7 102/9 102/9 164/14 167/23
coverage [1] 28/16
covered [1] 123/12
covers [1] 161/18
Craig [1] 110/6
Craske [4] 10/12 140/11 140/16 190/2
Craske's [1] 85/1
crisis [1] 149/5
critical [2] 46/7 145/18
criticisms [1] 42/20
cross [2] 7/18 150/9
cruel [1] 94/20
cryo [17] 5/20 12/20 53/15 53/24 53/24 54/20 60/10 75/8 122/3 122/5 134/13 136/12 152/23 175/5 176/14 176/21 185/8
cryoprecipitate [108] 5/19 7/1 12/19 12/22 12/23 44/20 48/9 51/1 51/8 51/9 51/22 51/24 52/10 52/10 52/17 52/25 54/9 56/21 59/15 59/19 60/4 60/19 61/4 61/8 61/14 61/20 62/3 62/9 62/10 62/14 62/18 62/25 66/22 67/4 67/9 67/11 69/7 72/4 72/7 72/9 74/5 76/2 76/16 77/10 78/20 103/5 104/17 104/20 107/2 108/2 108/3 108/5 108/7 108/12 108/15 108/16 108/20 108/22 111/16 111/23 115/6 117/19 117/23 118/4 118/17 121/24 121/25 134/4 134/9 134/20 134/25 135/12 135/24 136/5 139/6 150/21 152/3 152/15 153/6 153/16 154/1 154/6 154/8 155/4 167/15 168/7 168/12 168/16 168/19 169/4 169/12 170/9 170/21 172/3 172/5 172/16 172/24 173/5 173/19 174/12 174/18 174/20 174/22 175/11 176/10 176/13 177/10 185/17
culled [1] 133/19
current [10] 42/22 62/7 97/2 101/9 101/9 160/10 167/11 167/15 167/24 168/2
currently [4] 75/16 75/24 124/13 194/10

D

dad [2] 35/6 89/15
Daly [18] 162/9 162/12 162/19 163/15 166/14 170/2 172/19 172/24 175/2 175/3 177/20 177/21 180/25 183/18 184/10 189/19 191/7 192/15
Daly's [6] 163/11 169/22 174/11 179/4 180/23 190/5
damage [2] 3/21 97/23
danger [2] 122/2 188/17
dangers [3] 8/20 63/17 188/16
data [12] 37/1 64/24 90/15 113/15 114/6 129/8 129/12 138/18 139/24 144/1 144/20 160/5
Database [2] 90/16 129/16
date [24] 4/9 14/13 17/1 21/12 30/14 31/7 31/13 38/7 47/1 56/7 58/12 65/9 71/8 74/16 78/5 103/3 117/6 121/1 124/2 143/21 159/14 159/14 184/11 186/10
dated [11] 32/9 63/12 71/13 71/17 73/14 73/14 77/25 122/21 126/17 187/12 191/15
dates [7] 20/21 20/21 27/4 27/15 27/18 30/11 31/17
daughter [1] 33/23
daughters [1] 28/10
David [3] 44/13 143/3 162/3
David Watters [1] 143/3
Davies [2] 17/11 32/10
Dawson [21] 130/10 130/15 131/18 132/13 134/1 135/5 136/21 138/24 139/7 139/20 140/1 140/3 140/7 140/9 141/1 141/13 141/22 142/3 142/11 145/22 146/8
Dawson's [4] 139/14 143/11 144/15 144/22
day [5] 40/9 46/11 97/17 149/4 163/1
DDAVP [10] 48/9 55/2 82/10 115/17 139/15 174/10 174/11 179/3 179/4 179/6
de [1] 1/19
de facto [1] 1/19
dead [1] 69/20
deaf [1] 34/8
deal [2] 42/3 106/4
dealing [3] 17/11 77/2 165/9
dealt [2] 42/4 110/9
Dear [2] 122/22 124/3
death [6] 109/24 110/1 181/4 183/5 183/9 187/1
deaths [1] 2/21
decade [1] 46/25
December [18] 2/12 14/12 22/24 22/25 23/1 64/3 67/23 71/14 72/24 74/8 77/20 78/1 80/21 80/25 118/21 120/16 122/16 165/2
December 1970 [1] 2/12
December 1982 [3] 14/12 22/24 120/16
December 1983 [3] 77/20 80/21 80/25
December 1984 [7] 64/3 67/23 72/24 74/8 118/21 122/16 165/2
December 1987 [1] 78/1
decided [2] 67/4 116/11
decision [9] 48/7 82/19 94/2 94/4 94/7 94/22 119/9 131/15 164/19
decision-making [1] 48/7
decisions [7] 43/18

D

decisions... [6] 98/21 98/24 100/25 116/8 132/10 163/10
decline [1] 27/8
decreased [2] 139/12 187/4
dedicated [5] 95/1 103/10 103/14 149/2 163/8
deemed [1] 60/14
deeply [1] 101/7
defaulted [1] 49/11
defend [1] 82/4
defending [3] 66/17 73/21 78/17
defensible [1] 74/12
deficiencies [1] 96/11
Deficiency [1] 120/9
deficit [1] 164/16
defined [2] 59/22 62/20
definite [1] 181/7
degree [4] 6/20 100/13 105/10 117/16
delay [5] 33/17 36/9 36/11 126/5 143/8
Delayed [1] 105/25
delays [4] 38/17 49/16 92/1 159/13
deliberately [1] 94/3
demanding [1] 117/8
demands [2] 168/6 168/20
denied [1] 28/23
Denise [1] 191/1
department [11] 13/13 14/16 32/20 128/11 149/16 149/22 158/10 162/10 162/20 168/17 192/20
departments [1] 161/19
depletion [1] 168/18
deprived [1] 78/21
derivatives [2] 62/21 63/7
derived [5] 6/17 60/22 78/18 163/25 164/7
Dermatology [1] 13/13
derogatory [1] 39/15
describe [1] 42/20
described [10] 24/22 33/3 42/18 78/8 103/1 109/19 126/19 151/22 153/9 178/12
describes [20] 25/8 25/16 26/21 29/7 33/8 35/14 35/22 40/24 48/14 83/5 85/20 92/17 101/14 101/15 131/23 139/9 139/10 145/20 162/22 163/2
describing [4] 13/16 39/25 110/9 159/23
description [6] 40/19 48/21 110/7 131/4 148/25 162/19
deserved [1] 101/7
Desforges [1] 12/8
designated [1] 162/25
designed [1] 3/18
desired [2] 113/20 169/11
desperate [1] 29/5
desperately [1] 98/4
despite [2] 25/11 64/10
destroying [1] 71/6
detail [9] 35/3 65/17 96/8 110/20 117/15 119/19 131/16 151/2 161/7
detailed [3] 9/24 79/14 133/13
details [12] 48/7 52/5 57/22 65/15 82/20 123/9 131/24 142/22 149/24 158/8 186/8 190/1
detected [1] 122/17
deteriorate [1] 27/11
deteriorated [1] 93/3
deterioration [1] 183/3
determine [3] 15/24 48/2 192/23
determined [2] 94/11 164/8
develop [2] 48/19 86/22
developed [6] 48/24 103/13 155/1 184/15 186/17 186/22
developing [8] 49/20 84/9 86/23 130/16 156/7 179/23 186/20 191/19
development [7] 13/25 14/20 65/2 92/15 180/2 182/13 183/14
DHSC0001313 [1] 174/23
DHSC002459 [1] 96/21
DHSC0039356 [1] 86/10
DHSC0043164 [2] 56/6 65/8
DHSC0045373 [1] 70/4
DHSC0045721 [1] 79/7
DHSC0103394 [1] 2/7
diagnosed [5] 56/12 70/13 72/16 157/25 158/1
diagnoses [1] 15/5
diagnosis [17] 15/1 29/6 40/23 83/18 85/5 89/8 93/13 122/13 129/22 141/22 143/8 159/9 159/23 181/18 182/17 191/6 193/4
diagnostic [1] 46/15
dialysis [5] 2/15 3/1 3/8 3/17 4/2
did [30] 5/12 8/15 9/14 9/23 10/18 10/23 11/2 12/10 20/6 20/24 25/25 37/10 61/22 68/1 80/2 80/3 80/20 116/22 119/4 140/21 140/21 144/10 149/22 155/22 157/23 158/22 165/20 165/20 190/10 192/21
didn't [16] 7/13 9/5 9/21 12/20 18/14 22/8 30/23 79/23 83/9 84/16 90/2 94/13 137/2 145/1 156/2 156/6
die [1] 180/20
died [15] 30/9 41/1 65/20 65/20 75/6 83/4 89/6 91/4 91/9 113/16 119/22 160/7 180/22 185/11 187/18
difference [4] 79/23 144/14 160/7 160/9
differences [3] 103/1 103/21 105/9
different [12] 3/25 26/18 27/17 39/8 68/23 103/23 118/25 139/17 146/13 158/1 170/11 173/16
differentiation [1] 105/1
differently [1] 127/13
differing [1] 69/14
difficult [7] 12/5 48/2 58/13 82/4 86/1 98/8 112/7
difficulties [2] 107/7 167/2
difficulty [1] 113/18
dilemma [1] 168/14
direct [3] 4/3 91/14 95/24
directed [1] 95/21
directly [9] 2/9 4/11 44/21 51/8 51/17 85/10 94/10 98/22 121/7
director [44] 1/17 1/19 1/23 10/6 41/16 42/11 42/22 43/2 43/8 46/5 48/13 49/3 94/1 95/9 95/11 96/13 106/9 109/20 109/23 110/2 110/15 110/15 111/14 114/25 121/11 129/3 130/9 130/20 131/12 131/14 134/1 141/2 143/14 148/2 148/18 150/13 150/23 151/24 157/23 162/1 163/19 163/23 189/3 193/1
directors [23] 63/3 63/12 64/5 64/8 74/3 119/6 120/2 120/3 120/19 121/13 135/4 137/11 140/1 141/7 150/18 156/15 161/25 162/16 162/17 165/3 171/24 174/25 190/2
Directorships [1] 98/20
dirt [1] 40/16
dirty [1] 41/11
disadvantage [1] 61/12
disadvantages [1] 76/4
disagree [1] 127/9
disclosed [1] 161/13
Discombe [2] 113/12 113/21
discourage [1] 80/3
discrepancy [1] 144/7
discuss [5] 29/14 32/19 85/24 124/8 188/22
discussed [11] 1/13 10/10 11/23 32/18 84/18 119/25 121/23 140/11 141/18 150/21 180/15
discussing [2] 80/12 99/16
discussion [10] 27/20 32/23 122/10 127/4 127/6 140/8 140/15 165/2 186/3 186/7
discussions [9] 1/25 21/20 119/6 132/4 132/17 155/23 158/19 166/14 179/18
disease [20] 2/12 3/24 9/10 16/21 19/3 19/7 30/8 111/21 127/13 127/16 136/20 140/23 145/4 149/9 152/1 170/8 170/20 174/15 184/17 185/6
diseases [3] 30/5 60/16 97/11
disgusting [1] 89/19
dismay [1] 94/18
dismissed [1] 28/6
disorder [3] 4/11 123/8 123/10
disorders [13] 6/11 13/18 42/9 45/18 49/15 49/25 84/1 86/15 94/18 131/3 149/8 157/14 158/9
display [1] 42/12
displayed [1] 27/6
dispute [1] 97/6
disquiet [1] 122/25
disregard [1] 62/6
dissimilar [1] 145/15
distances [1] 112/8
distant [1] 188/15
distinction [2] 79/16 81/2
distress [2] 94/19 101/4
distressed [1] 85/18
distressing [3] 39/1 93/8 98/23
distributed [1] 169/25
District [2] 168/1 168/8
divided [1] 44/7
do [30] 16/19 19/1 26/11 26/15 29/24 32/15 32/19 40/15 42/19 45/10 50/15 69/17 69/22 73/22 74/11 80/3 86/21 95/16 117/9 121/1 124/6 127/12 147/3 161/11 163/7 165/4 171/24 181/17 193/17 193/18
doctor [9] 7/22 25/13 27/17 27/20 27/22 28/2 48/22 127/23 146/1
doctor said [1] 146/1
doctor's [1] 39/20
doctors [8] 39/14 69/11 69/15 125/13 126/25 126/25 146/11 190/20
document [19] 13/1 22/21 23/7 31/2 31/6 64/4 77/6 78/16 81/24 84/19 114/15 121/20 123/12 123/19 123/20 123/21 127/1 137/6 175/9
documentary [8] 7/12 59/18 129/19 155/20 157/1 165/4 179/3 190/4
documentation [3] 56/19 58/8 118/24
documented [4] 24/3 24/8 34/4 182/13
documents [18] 2/5 29/25 30/1 31/20 56/2 65/13 69/23 84/3 84/5 102/3 102/5 105/3 107/21 128/15 134/19 141/15 180/4 180/5
does [16] 6/16 13/2 14/4 17/17 21/12 21/13 21/23 26/16 30/18 36/8 67/3 86/16 86/19 106/16 107/3 190/14
does it [1] 30/18
doesn't [24] 12/18 12/21 13/1 14/13 21/3 21/15 21/17 38/8 45/4 55/21 55/24 74/17 81/1 84/17 84/24 104/8 109/3 124/14 138/14 142/3 158/17 169/10 183/25 189/17
doing [4] 48/24 114/9 121/15 146/23
domestic [2] 62/21 63/7
don't [35] 19/6 26/9 26/10 30/13 31/6 31/13 34/3 40/18 45/7 45/8 45/9 51/17 52/5 54/17 66/15 67/2 84/11 85/8 87/4 89/25 95/5 124/9 135/1 135/18 138/1 138/2 139/15 144/21 145/23 153/14 161/8 174/10 175/8 185/2 194/14
Donaldson [1] 191/14
donations [4] 60/5 60/18 60/23 167/17
done [9] 37/12 49/2 59/11 97/4 123/16 124/10 138/20 175/22 178/3
donor [9] 3/13 48/2 56/21 59/19 60/21 61/8 63/18 166/17 166/17
donors [4] 9/24 10/7 119/10 164/1
Doris [1] 93/12
Doris Hackel [1] 93/12
dose [6] 9/9 70/21 72/25 73/7 116/23

D

dose... [1] 117/3
doses [2] 72/20 75/18
double [2] 137/25 141/9
doubt [10] 84/13 104/14 110/22 117/1 117/6 119/12 122/24 151/1 151/7 171/3
down [19] 14/22 28/14 36/16 52/17 55/10 56/10 65/19 66/16 82/7 116/19 116/20 120/9 121/21 137/18 152/7 153/5 171/14 171/17 184/19
Dr [435]
Dr Audrey [1] 130/10
Dr Ball [13] 46/5 46/19 49/20 50/5 77/3 85/20 91/13 92/7 93/20 98/12 98/13 101/1 101/17
Dr Ball's [11] 43/21 49/1 82/12 85/7 86/4 90/20 91/11 95/17 99/12 99/17 100/8
Dr Bellingham [1] 13/12
Dr Bennett [10] 130/13 130/18 132/17 135/4 139/8 140/7 141/9 141/10 141/14 142/1
Dr Berman [8] 162/5 162/18 172/21 180/14 190/24 191/8 191/8 191/15
Dr Biggs [2] 140/4 140/10
Dr Black [1] 1/11
Dr Bloom [1] 179/6
Dr Bolton-Maggs [2] 82/8 91/19
Dr Bolton-Maggs' [1] 91/12
Dr Bolton-Maggs's [2] 45/14 91/22
Dr Boulton [9] 1/14 4/15 4/18 5/8 5/19 6/3 7/3 10/15 43/16
Dr Boulton's [4] 6/5 10/8 10/9 11/14
Dr Brodie [1] 131/13
Dr Brookes [5] 150/15 150/17 151/7 151/8 155/10
Dr Cachia [11] 148/9 148/13 148/14 148/23 148/25 150/10 150/22 154/15 157/22 159/17 160/10
Dr Cachia's [3] 158/3 158/19 160/2
Dr Cash [5] 119/19 120/11 122/5 151/8 156/11
Dr Cash's [1] 142/20
Dr Charles [1] 150/13
Dr Cook [14] 109/23 110/14 113/16 115/22 115/23 116/2 116/16 117/10 117/17 118/7 119/8 119/14 119/18 119/22
Dr Cook's [3] 110/1 116/18 119/3
Dr Craig [1] 110/6
Dr Craske [4] 10/12 140/11 140/16 190/2
Dr Craske's [1] 85/1
Dr Daly [17] 162/12 162/19 163/15 166/14 170/2 172/19 172/24 175/2 175/3 177/20 177/21 180/25 183/18 184/10 189/19 191/7 192/15
Dr Daly's [6] 163/11 169/22 174/11 179/4 180/23 190/5
Dr David [2] 44/13 162/3
Dr Davies [2] 17/11 32/10
Dr Dawson [20] 130/15 131/18 132/13 134/1 135/5 136/21 138/24 139/7 139/20 140/1 140/3 140/7 140/9 141/1 141/13 141/22 142/3 142/11 145/22 146/8
Dr Dawson's [4] 139/14 143/11 144/15 144/22
Dr Desforges [1] 12/8
Dr Discombe [2] 113/12 113/21
Dr FE [1] 51/4
Dr Follett [1] 125/3
Dr Forbes [1] 121/6
Dr Foster [1] 156/23
Dr Hann [1] 122/2
Dr Hart [1] 87/25
Dr Hay [7] 1/20 26/6 32/12 35/16 35/17 41/13 48/15
Dr Hay's [2] 33/4 36/19
Dr Helena [1] 162/9
Dr Henry [1] 143/14
Dr Heppleston [5] 147/25 148/10 148/11 158/6 158/10
Dr John [6] 24/15 42/11 45/25 48/14 49/7 95/10
Dr Jones [1] 60/9
Dr Kerr [2] 160/11 160/14
Dr King [4] 130/12 130/21 136/14 146/6
Dr Kirk's [1] 5/2
Dr Korn [2] 55/13 55/18
Dr Lee [1] 184/11
Dr Ludlam [8] 65/8 65/23 67/22 68/3 80/12 120/17 121/7 121/25
Dr Ludlam's [1] 65/15
Dr Lynne [1] 43/2
Dr Machin [2] 15/13 19/22
Dr Mackie [4] 1/18 17/10 24/5 24/7
Dr Martin [33] 42/13 42/15 42/23 43/1 43/19 45/5 45/8 45/11 45/17 46/10 66/1 66/19 66/19 67/16 67/22 69/18 69/19 70/10 73/11 73/14 79/21 80/2 80/20 83/21 84/7 87/7 87/8 88/15 88/25 89/24 98/18 98/24 99/6
Dr Martin's [5] 66/14 66/20 68/15 79/15 84/12
Dr Maycock [6] 166/24 169/1 169/2 169/18 179/23 179/25
Dr McClure [1] 128/12
Dr McVerry [52] 1/16 1/20 11/21 13/2 15/8 15/13 17/10 17/18 18/12 19/20 21/14 22/2 22/7 22/9 22/14 23/13 26/10 26/11 26/15 27/16 27/16 28/5 28/19 28/24 29/3 29/15 29/18 30/12 31/25 32/11 34/11 34/15 34/16 34/17 34/21 35/1 35/10 35/13 35/19 37/8 37/21 38/7 38/23 39/7 39/15 39/18 43/16 66/2 67/3 81/17 87/2 106/12
Dr McVerry's [3] 10/17 11/14 67/1
Dr PA [1] 106/10
Dr Palmer [1] 184/10
Dr Paterson [1] 128/13
Dr Paula [1] 43/5
Dr Peter [1] 156/19
Dr Pettigrew [4] 124/19 124/20 124/23 125/4
Dr Philip [1] 148/4
Dr Pinching [1] 31/13
Dr Raper [1] 162/1
Dr Rizza [7] 12/12 67/18 67/24 84/23 125/19 126/7 143/4
Dr Rob [3] 108/25 109/3 109/5
Dr Ron Kerr [1] 148/17
Dr Savidge [1] 56/8
Dr Savidge's [2] 58/15 59/9
Dr Scott [28] 162/2 162/18 163/4 163/11 163/15 163/17 166/15 166/22 166/24 169/3 169/18 171/10 175/3 177/20 177/21 179/9 179/13 179/20 179/23 180/1 180/13 183/19 184/10 187/10 189/18 189/19 189/25 190/25
Dr Scott's [3] 166/13 169/10 191/21
Dr Stan [1] 131/14
Dr Stevenson [3] 107/3 107/6 109/6
Dr Stevenson's [1] 108/25
Dr Sydney [1] 147/20
Dr Taylor [14] 110/1 114/25 119/24 120/6 120/23 121/16 121/18 122/9 122/20 124/21 124/24 125/11 126/14 128/9
Dr Taylor's [3] 119/3 124/25 128/22
Dr Tedder [2] 19/22 23/11
Dr Tovey [3] 168/25 171/11 179/25
Dr Tudhope [7] 147/16 147/23 147/25 150/18 151/24 156/14 157/4
Dr Tudhope's [1] 155/21
Dr Urbaniak [1] 142/21
Dr Watt [3] 116/2 116/16 155/11
Dr William Murray [1] 110/3
Dr Wilson [1] 147/22
draft [3] 65/6 122/21 124/1
dramatically [1] 139/12
draw [2] 69/25 84/14
drawing [1] 178/2
drawn [3] 19/13 81/2 98/21
drew [3] 87/1 120/11 156/11
drink [1] 41/9
dropping [1] 178/15
drug [1] 168/1
due [12] 12/17 28/8 49/8 105/5 116/11 136/21 150/4 150/5 178/24 181/8 187/5 187/20
Dundee [13] 146/16 147/1 147/11 147/13 147/16 147/18 154/21 156/21 157/16 157/19 158/2 160/18 195/10
during [33] 1/15 1/17 2/19 5/4 25/9 25/17 29/11 51/21 52/4 52/8 56/22 57/3 57/11 59/24 62/23 63/15 73/6 73/9 73/25 88/20 88/24 91/12 91/18 111/14 112/23 123/22 134/2 134/12 147/23 151/25 157/23 162/21 167/1
during 1976/77 [1] 5/4
duties [1] 46/17
dying [3] 91/7 103/25 140/23
dysfunction [1] 92/14

E

each [8] 61/24 124/7 131/25 134/19 159/3 164/9 167/10 168/12
earlier [11] 10/13 19/23 20/23 31/15 40/20 42/10 49/2 71/18 73/16 125/13 193/12
earliest [2] 57/20 77/25
early [25] 3/23 3/25 6/19 10/19 17/18 23/12 23/15 41/18 42/24 49/7 60/2 68/6 75/16 76/8 78/10 88/4 97/23 103/18 106/17 107/23 110/8 119/11 119/16 139/21 160/14
ears [1] 79/25
easier [1] 178/21
easily [1] 61/21
East [7] 131/10 132/21 133/7 133/11 147/4 150/13 151/23
East Anglia [1] 147/4
easy [4] 4/20 53/23 54/4 153/2
eating [2] 29/2 40/10
economic [1] 132/23
edict [1] 94/13
Edinburgh [34] 107/19 111/3 111/24 112/3 112/16 112/24 113/5 113/9 114/3 115/3 115/11 115/13 115/19 116/10 122/16 134/5 134/9 134/14 134/21 134/25 135/10 135/20 136/2 136/13 137/1 152/9 152/11 152/16 152/17 152/23 152/24 155/7 156/21 157/7
Edinburgh Factor VIII [1] 112/3
edition [3] 14/9 14/12 14/14
educate [1] 99/23
Edwards [1] 44/13
effect [7] 19/11 26/2 54/5 126/10 146/10 157/14 180/9
effective [2] 61/9 71/5
effectively [9] 66/22 67/9 87/19 130/18 148/2 148/17 161/18 163/13 193/24
effectiveness [2] 62/4 171/13
effects [1] 61/19
efficacy [1] 165/7
efforts [1] 168/5
eg [1] 72/5
eight [4] 13/20 93/22 135/7 184/21
eight-year-old [1] 93/22
eighteen [1] 117/5
eighties [4] 9/8 10/19 106/17 145/9
either [14] 20/1 27/17 45/6 52/6 68/15 72/10 108/25 119/2 123/14 133/3 141/13 157/11 160/23 180/15
elective [1] 79/25
elements [1] 49/23
Eleven [1] 53/24
else [3] 19/11 141/18 153/25
elsewhere [2] 38/17

E

elsewhere... [1] 126/25
Elstree [11] 55/12 62/19 164/2 165/23 166/10 168/21 171/5 171/13 171/23 171/25 172/16
embark [1] 193/14
emergencies [1] 122/6
emergency [2] 168/20 169/6
emerges [4] 105/3 108/21 180/3 180/7
emerging [1] 122/3
emotional [1] 88/19
emphasis [1] 63/6
employers [1] 133/1
enable [1] 169/14
enclosed [1] 123/19
enclosing [1] 123/4
encountered [1] 61/19
encountering [1] 167/2
encouraging [1] 179/7
end [9] 5/11 12/5 71/22 73/24 74/23 81/16 117/20 181/23 189/6
endeavour [1] 87/23
ended [1] 88/18
ending [1] 166/9
England [1] 12/8
English [1] 163/25
enough [6] 100/20 102/9 137/2 165/24 188/10 193/15
enquired [1] 114/6
enquiries [2] 22/7 123/2
enquiry [2] 9/24 116/1
ensure [2] 40/9 61/18
entered [1] 179/9
entertained [1] 56/22
entirely [16] 10/25 27/15 27/18 51/7 51/12 53/23 76/6 91/20 104/23 107/16 145/10 152/6 153/2 159/10 159/16 178/3
entitled [1] 126/22
entity [1] 11/6
entry [2] 55/16 111/22
environment [1] 97/21
epidemic [1] 140/12
episode [1] 37/23
equipment [1] 46/25
equipped [2] 141/16 162/25
Erica [1] 49/3
especially [1] 46/21
essential [4] 48/6 82/19 103/1 149/17
essentially [10] 31/7 38/3 42/16 44/17 68/24 79/2 108/2 110/11 149/5 192/5
established [8] 42/23 47/16 49/7 95/3 148/15 148/23 155/12 165/8
et [2] 13/22 60/11
et cetera [2] 13/22 60/11
etc [1] 133/13
Ethical [1] 126/23
Europe [1] 188/4
European [1] 8/25
evaluated [1] 59/4
evaluation [1] 184/16
Eve [1] 8/10
even [13] 11/25 23/14 59/20 74/22 89/11 96/14 98/1 100/17 104/21 106/14 117/3 133/5 133/16
evenly [1] 54/14
event [7] 31/6 52/19 71/4 73/19 78/23 120/22 193/23
events [1] 31/16
eventually [1] 5/13
ever [2] 56/22 59/19
every [4] 34/15 40/9 119/16 179/14
evidence [85] 1/8 4/3 7/3 7/5 7/9 10/8 10/9 11/13 11/16 13/21 15/2 17/7 17/14 19/10 22/1 24/17 26/4 36/22 38/13 38/13 41/14 41/14 41/19 43/11 43/15 43/16 43/17 44/20 44/24 50/17 59/18 59/22 66/14 66/20 67/1 68/20 76/11 82/12 85/7 86/3 86/17 92/1 92/13 104/5 104/8 109/10 114/4 122/17 123/23 125/7 126/9 129/20 129/20 143/13 143/16 144/23 147/7 147/22 148/20 155/20 157/10 157/13 158/15 162/12 163/16 174/16 177/16 179/4 179/8 179/19 180/5 180/7 183/16 187/19 190/4 191/1 191/9 192/12 192/25 193/3 193/8 193/11 193/22 194/1 194/15
evidence/signs [1] 92/13
evident [1] 92/19
evidently [2] 75/15 75/23
exactly [5] 9/5 23/3 69/15 138/10 138/14
exaggerated [1] 7/21
examine [1] 119/20
examined [1] 21/13
example [16] 5/23 45/7 55/8 55/12 55/15 84/10 86/9 111/7 127/17 145/20 150/17 155/17 159/19 162/17 179/22 188/24
except [1] 54/5
exception [1] 154/17
excess [1] 118/8
exchange [3] 9/16 119/18 151/6
excluded [2] 3/1 181/13
exclusive [1] 62/3
exclusively [9] 70/14 71/3 72/17 75/17 104/17 111/3 133/5 135/9 185/19
exhaustive [1] 24/19
expect [3] 94/8 98/1 156/16
expectation [1] 180/13
expected [3] 22/16 36/12 64/11
experience [9] 9/4 46/18 92/22 94/17 97/12 100/8 146/12 151/13 185/21
experienced [2] 7/22 36/15
experiences [1] 101/15
experiencing [1] 132/22
expert [4] 48/22 48/22 56/3 103/4
expertise [3] 48/24 93/18 130/18
explain [5] 100/4 100/11 124/14 159/8 168/10
explained [10] 28/22 44/16 127/19 151/11 157/5 157/22 159/4 159/16 159/17 190/8
explaining [2] 28/25 131/20
explains [2] 132/16 144/19
explanation [2] 88/19 138/3
explore [2] 69/23 151/1
explored [3] 121/6 131/16 189/12
expose [1] 3/5
exposed [6] 16/17 49/15 69/11 86/20 97/20 133/6
exposure [5] 48/2 132/19 166/19 183/12 183/17
express [1] 127/7
expressed [8] 68/23 69/1 127/3 128/7 128/12 146/2 187/14 189/4
expressing [1] 193/3
expression [1] 128/22
expressly [1] 153/20
extend [1] 127/14
extensive [1] 48/11
extent [9] 3/8 17/11 78/12 102/15 152/16 170/14 177/14 186/4 193/5
extract [1] 120/13
extraction [1] 80/22
extraordinarily [1] 83/15
extraordinary [1] 99/1
extreme [1] 89/15
extremely [8] 5/14 40/6 98/16 117/2 188/1 188/4 188/7 191/20

F

face [2] 141/25 141/25
face-to-face [1] 141/25
faced [1] 168/14
facilitated [1] 29/11
facilities [11] 45/18 46/25 47/10 58/4 62/17 103/8 103/13 110/7 110/9 131/4 162/20
facility [1] 47/2
fact [17] 5/11 7/19 18/8 25/23 30/12 31/10 48/13 83/23 94/3 108/25 118/23 120/20 135/9 164/20 172/14 175/25 185/1
facto [1] 1/19
factor [128] 8/13 8/16 8/22 8/24 11/3 12/17 12/25 16/1 16/5 16/12 16/18 20/3 24/21 27/2 30/25 34/1 37/25 47/4 51/25 52/11 53/21 54/24 56/18 56/21 56/25 57/3 57/4 57/11 57/21 58/20 59/24 60/7 60/22 61/5 62/1 62/15 62/23 62/25 63/19 63/24 66/7 66/9 70/15 72/18 73/24 78/6 80/21 82/22 83/8 84/9 108/4 108/14 108/18 111/4 111/24 112/3 112/14 112/16 112/25 113/1 113/5 113/9 114/2 114/5 115/2 115/11 115/14 116/1 117/18 117/22 117/24 118/2 118/8 118/9 122/8 125/1 134/5 134/9 134/14 134/21 135/1 135/9 135/16 136/7 136/23 137/3 139/2 140/24 145/8 149/23 149/24 151/25 152/7 152/16 152/17 152/24 152/25 153/17 155/7 165/11 166/4 166/6 166/10 167/3 167/11 167/20 168/9 168/22 171/13 171/21 172/8 172/16 173/10 174/18 176/23 177/14 178/5 179/10 181/8 181/15 182/12 185/8 185/19 187/23 188/5 188/9 188/10 188/12
Factor 8 [1] 114/2
Factor 8/9 [1] 47/4
Factor 9 [1] 114/5
Factor IX [10] 24/21 113/1 136/7 152/7 152/17 152/25 166/6 166/10 176/23 185/19
factor VIII [85] 8/13 8/16 8/22 8/24 12/25 16/5 16/12 16/18 20/3 27/2 30/25 54/24 56/18 56/21 56/25 57/3 57/4 57/11 57/21 58/20 59/24 60/7 60/22 61/5 62/1 62/15 62/23 62/25 63/19 66/7 66/9 70/15 72/18 73/24 78/6 80/21 83/8 84/9 108/14 111/4 111/24 112/14 112/16 113/9 115/2 116/1 117/18 117/22 117/24 118/2 118/8 118/9 122/8 125/1 134/5 134/9 134/14 135/9 135/16 140/24 152/16 152/24 155/7 165/11 166/4 167/3 167/11 167/20 168/9 168/22 171/13 171/21 172/8 172/16 173/10 177/14 178/5 179/10 182/12 185/8 187/23 188/5 188/9 188/10 188/12
factor VIII:C [1] 16/1
Factorate [9] 52/2 52/13 52/19 53/2 53/18 54/3 54/13 170/12 172/17
Factors [1] 124/5
factual [2] 118/15 120/24
faeces [1] 41/11
failed [1] 96/7
failings [1] 100/4
failure [2] 2/22 98/2
fair [2] 65/3 117/25
fairly [2] 176/20 180/3
fallen [1] 133/17
familiar [4] 63/5 171/3 180/3 180/14
families [10] 88/13 88/15 91/8 95/22 96/15 99/22 101/6 126/6 143/9 145/18
family [5] 35/18 83/15 103/25 142/3 180/8
far [15] 6/6 48/7 53/17 102/3 102/4 105/9 114/4 114/7 114/19 135/19 138/8 161/8 168/8 186/17 188/8
fascinating [1] 142/23
fashion [1] 32/25
fatal [3] 127/16 182/7 182/10
father [8] 34/16 34/18 34/23 34/24 35/20 36/3 159/23 194/7
fault [1] 26/17
favour [1] 178/15
FE [1] 51/4
fear [2] 95/25 97/25
fears [2] 188/21 189/6
feature [2] 139/17 155/4
features [3] 59/16 86/22 186/18
featuring [1] 171/1
February [15] 15/9 15/9 17/2 70/20 71/9 94/25 121/11 121/17 121/18 122/20 122/22 124/2 171/11 182/16 182/22
February 1978 [1]

F
February 1978... [1] 171/11
February 1982 [2] 182/16 182/22
February 1984 [1] 121/17
February 1985 [4] 15/9 17/2 70/20 122/20
February 1990 [1] 94/25
feel [8] 5/1 98/5 98/9 117/2 127/12 128/18 171/18 188/22
feeling [2] 88/23 146/10
FEIBA [6] 134/22 134/24 135/17 136/13 137/15 142/24
fellow [1] 190/1
felt [5] 7/20 36/5 88/21 93/14 100/1
female [1] 184/21
few [11] 61/7 67/9 85/9 91/3 102/24 106/17 123/8 126/24 141/8 143/2 183/9
fewer [2] 102/3 102/4
field [1] 103/5
fifteen [1] 167/5
figure [7] 37/2 112/2 153/8 157/20 169/5 170/22 192/6
figures [16] 53/13 54/20 111/1 115/2 115/4 136/16 138/16 153/8 160/8 160/9 173/4 173/16 174/2 176/22 178/2 178/22
file [1] 158/7
files [1] 42/6
filing [1] 114/21
filled [1] 169/16
final [2] 4/19 32/13
finally [3] 95/3 97/15 175/19
find [6] 40/22 82/15 89/19 126/16 176/2 192/2
finding [2] 145/21 171/25
findings [2] 186/9 187/7
finish [1] 161/1
Finn [1] 2/16
firm [1] 29/6
first [53] 4/17 5/6 11/23 13/15 14/8 19/21 21/9 24/2 27/6 27/20 30/3 31/1 34/10 36/1 37/6 38/23 46/11 55/16 56/5 56/15 58/8 64/6 66/4 67/9 71/9 71/15 71/25 73/12 74/3 74/19 77/23 81/16 108/10 115/17 118/11 119/23 134/16 134/22 138/6 142/15 158/12 158/23 159/20 164/25 166/15 180/20 181/1 182/3 182/9 183/12 185/14 186/19 187/1
first page [1] 14/8
firsthand [1] 156/23
Firstly [2] 59/18 127/12
fit [1] 178/11
fits [1] 105/17
five [13] 3/14 50/20 57/18 107/10 107/11 112/6 134/7 136/19 146/18 157/18 178/14 185/18 193/13
five-year [1] 112/6
flavour [2] 24/19 154/13
flick [1] 25/24
flicking [1] 25/20
floor [2] 40/13 41/12
flu [1] 146/11
fluctuating [1] 117/16
fluids [1] 41/11
focus [3] 7/4 103/5 104/16
focused [1] 148/20
Follett [1] 125/3
follow [3] 114/16 116/8 141/16
follow-up [1] 116/8
followed [5] 12/13 45/21 63/13 64/3 181/2
following [20] 6/2 24/21 61/2 74/1 89/22 93/24 109/12 110/1 127/6 132/15 132/17 144/11 145/21 153/23 158/19 174/24 181/3 181/4 190/2 191/16
follows [2] 107/10 152/19
food [2] 28/11 41/9
foot [2] 14/6 35/3
footnote [1] 22/23
Forbes [1] 121/6
forgive [1] 130/5
form [15] 5/3 5/10 22/1 28/1 32/5 51/20 63/20 84/7 87/17 104/18 112/1 116/13 123/21 167/21 190/11
formal [4] 147/14 149/13 149/15 190/6
formally [2] 148/15 148/22
formed [1] 45/2
former [1] 194/8
formerly [2] 98/19 124/22
forms [5] 84/5 85/2 112/19 153/6 171/3
forthrightly [1] 68/25
fortunate [1] 117/2
Forty [1] 184/21
Forty-three [1] 184/21
forwarding [1] 128/10
foster [11] 34/16 34/17 34/21 34/23 35/9 35/10 35/18 35/20 36/3 156/19 156/23
found [9] 20/22 22/4 33/18 35/18 66/4 93/21 125/3 155/2 191/3
founding [1] 114/4
four [15] 16/19 36/21 52/25 60/10 70/6 78/8 81/16 107/11 107/12 136/17 144/5 154/11 172/22 173/3 192/10
four packs [1] 52/25
fourteen [1] 43/3
fourth [2] 98/14 191/18
fractionated [2] 10/3 164/1
fractionation [2] 62/19 168/17
Francisco [1] 23/2
frantically [1] 28/25
free [1] 188/22
French [2] 132/25 133/1
frequent [2] 20/3 57/2
fresh [4] 107/8 108/8 159/6 169/7
Friday [3] 120/4 194/10 194/13
frightened [1] 93/9
from [285]
from AIDS [1] 180/19
from: [1] 154/10
from: 14 haemophilia A [1] 154/10
frozen [3] 107/8 108/8 169/8
full [9] 32/7 36/8 45/10 88/12 158/25 182/24 193/19 193/20 194/13
fully [2] 98/11 165/7
function [5] 37/7 37/9 37/12 38/3 91/15
fund [1] 48/16
funding [4] 48/17 96/11 100/19 100/22
furious [1] 33/23
further [25] 6/3 26/8 32/19 56/10 64/12 70/2 74/7 79/4 79/6 80/7 80/19 97/13 98/1 98/3 116/19 121/21 126/15 140/10 152/7 166/21 175/8 183/16 184/19 188/22 190/10
Furthermore [1] 61/5
fusions [1] 64/16
future [5] 86/24 117/6 188/15 189/22 192/16
FVIII [1] 183/11

G
gap [1] 169/16
gathered [2] 67/2 160/5
gave [3] 7/3 189/25 191/1
general [21] 11/5 45/22 61/16 68/16 69/5 69/10 75/25 93/23 94/16 95/18 97/3 97/7 97/7 97/10 99/3 99/23 126/18 127/1 128/2 149/3 149/8
generalised [1] 13/21
generally [7] 24/8 31/18 42/17 98/6 98/7 103/16 163/9
generous [2] 74/19 74/20
Germany [1] 58/5
get [18] 9/14 19/6 22/8 40/13 50/9 65/25 82/5 91/7 102/8 113/21 114/20 139/8 146/22 146/24 147/2 153/24 175/8 178/19
getting [2] 28/15 117/21
Gina [2] 130/25 139/7
give [12] 3/23 14/13 24/18 26/19 31/17 36/6 39/8 69/1 77/12 79/20 128/11 165/13
given [56] 4/6 4/8 17/19 21/6 21/12 25/6 26/25 30/14 31/14 31/15 40/25 54/3 57/8 57/10 57/12 57/22 64/16 70/16 70/19 72/9 72/22 73/4 73/7 73/18 77/9 78/24 79/15 81/18 83/6 83/14 84/20 90/6 97/12 102/20 104/25 111/9 112/2 115/4 117/2 120/15 124/12 127/8 146/3 148/1 149/25 153/8 157/13 159/12 159/23 163/3 164/16 180/7 180/11 190/19 192/6 192/9
gives [11] 14/3 14/13 26/3 31/7 37/1 48/21 60/24 69/14 71/8 116/17 154/13
giving [11] 9/4 15/2 53/8 57/9 126/5 142/17 144/6 146/11 156/20 163/15 193/22
Glan [1] 44/15
Glasgow [1] 116/10
glean [1] 70/3
GLEW0000677 [1] 184/8
GMC [2] 126/22 128/5
GMCO0001690 [1] 124/20
go [112] 2/13 2/13 4/11 4/14 7/7 7/10 8/6 10/10 13/5 13/9 13/15 14/4 19/6 19/18 23/5 26/20 26/23 28/14 30/23 31/11 31/18 33/15 33/15 34/12 35/12 38/13 39/6 41/2 41/2 41/8 41/20 41/25 46/8 47/12 49/5 51/19 53/11 55/8 55/10 55/15 56/10 58/15 60/12 65/11 65/17 65/22 70/8 72/15 79/8 79/25 80/14 81/6 81/15 84/4 85/7 87/6 89/10 89/21 92/17 95/5 95/6 95/7 99/13 105/15 111/8 112/10 112/15 112/21 113/3 113/11 114/15 114/24 116/19 117/15 120/7 121/19 128/8 129/10 129/10 132/12 134/7 134/10 134/18 136/10 137/17 137/22 143/5 143/23 145/3 152/20 153/13 157/17 157/18 163/14 163/16 167/8 167/14 170/18 171/10 172/2 173/1 174/1 175/1 177/4 180/24 182/19 182/24 183/20 185/5 186/2 192/1 192/2
go to [1] 185/5
goes [4] 9/16 23/18 33/9 168/10
going [45] 1/5 4/21 10/10 11/15 26/16 31/19 32/2 32/23 34/6 35/8 41/23 41/25 42/6 43/3 47/12 50/11 50/24 65/17 82/24 83/11 84/4 87/25 89/3 99/18 101/11 101/23 106/4 110/20 117/23 121/11 130/6 146/15 146/22 146/24 153/4 160/20 163/15 166/21 167/25 169/13 169/16 178/25 192/22 194/1 194/8
gone [1] 175/23
good [7] 1/5 32/19 50/13 72/5 85/16 132/1 164/12
GOSH [1] 95/19
got [19] 4/13 7/8 8/16 30/1 52/23 53/13 86/9 88/7 89/2 117/18 118/8 121/8 123/20 142/9 148/25 153/16 172/14 177/7 193/21
government [1] 96/14
GP [3] 37/22 191/9 191/15
gradually [1] 166/4
graduating [1] 44/8
Graham [1] 96/22
Grampian [2] 133/3 133/18
Granada [1] 7/16
graphically [1] 178/25
great [5] 46/18 78/21 92/11 96/5 103/6
greater [8] 6/23 6/25 60/15 117/11 161/8 178/10 188/17 189/22
greatly [1] 52/24
greedy [1] 117/1
grounds [2] 60/17 127/11
group [10] 39/12 39/14 45/3 45/12 64/7 94/9 121/17 122/15 141/23 185/12
groups [2] 45/2 45/6
growing [2] 177/22 187/5
guarantee [1] 168/12
guaranteed [1] 114/20
guardians [1] 24/14

H
habit [1] 4/21
Hackel [1] 93/12
had [141] 2/21 3/2

H

had... [139] 3/14 5/3 5/9 5/12 7/21 8/20 8/23 9/1 9/9 10/5 11/21 12/9 15/3 15/5 16/4 16/9 16/12 17/4 18/9 18/23 19/14 22/6 24/1 24/23 25/10 25/17 26/14 26/16 27/11 27/16 27/20 27/23 27/24 27/24 28/7 30/12 30/20 31/25 32/22 34/1 34/22 35/15 35/19 35/20 35/21 36/15 37/23 40/4 40/7 40/16 43/5 46/19 46/24 47/5 47/8 47/19 48/3 48/15 49/7 57/25 58/2 63/24 64/14 66/2 66/6 66/18 68/5 76/17 76/17 83/12 85/18 87/8 88/14 88/20 88/23 89/14 90/1 91/9 91/13 93/12 93/14 94/8 94/16 95/10 100/7 100/7 101/8 103/8 103/16 106/7 106/13 106/18 117/18 120/14 120/18 123/2 124/25 125/2 125/2 132/17 132/19 132/23 133/2 139/2 141/2 143/13 143/16 143/17 145/8 146/1 146/11 147/6 148/6 155/1 155/11 158/9 158/11 158/12 158/14 158/21 158/22 159/3 159/4 160/7 164/3 164/11 164/15 164/17 165/7 165/15 175/4 177/3 181/19 181/23 181/25 184/15 184/25 185/16 189/21
hadn't [1] 6/3
haematological [2] 49/11 148/7
haematologist [16] 32/10 42/17 42/25 43/25 44/14 45/16 64/11 83/25 103/14 110/3 113/13 130/13 130/14 130/24 148/1 148/18
haematologists [5] 45/4 45/12 49/10 107/5 156/21
haematology [24] 13/13 14/17 19/20 45/22 46/2 46/3 46/16 47/24 49/21 92/22 99/25 110/10 130/17 131/5 149/4 149/16 149/22 162/10 162/20 162/23 162/23 162/25 163/3 163/8
haematology-oncology [1] 47/24
Haemo [1] 39/18
Haemodialysis [1] 2/17
haemophilia [184] 1/4 1/7 6/11 17/12 20/2 20/5 20/11 20/11 20/12 20/19 24/20 25/8 25/15 30/19 30/21 31/5 31/5 34/9 39/6 41/22 43/22 44/5 44/6 45/24 46/21 52/6 52/8 52/15 52/22 53/12 53/20 54/8 54/19 56/11 58/19 60/4 63/3 63/12 63/17 64/5 64/7 66/13 67/19 70/12 74/2 81/1 81/4 81/5 81/14 83/13 86/15 87/9 87/23 90/13 90/14 90/16 90/22 94/14 95/2 95/22 96/16 97/13 106/6 106/21 107/12 107/13 107/14 107/15 107/17 109/19 110/5 110/14 111/20 112/13 112/23 113/4 113/5 113/8 113/8 113/25 114/5 114/21 115/1 115/10 115/10 115/12 115/13 120/3 120/19 122/4 122/25 125/16 125/22 129/4 129/16 130/7 130/8 130/20 131/10 131/19 131/21 133/2 133/14 134/7 135/6 135/19 135/22 135/25 136/6 136/11 136/12 136/17 136/18 136/19 139/2 141/7 143/4 143/13 143/16 143/17 147/13 147/14 148/6 148/15 148/24 149/3 149/10 149/18 150/5 150/11 150/18 151/23 152/14 153/3 154/10 154/10 154/11 154/12 154/12 154/13 155/18 155/18 157/24 158/1 159/24 160/19 161/18 161/19 162/14 162/16 162/24 163/8 163/20 165/1 165/3 165/4 165/9 167/4 167/5 169/16 171/24 172/21 173/3 173/15 174/14 174/24 176/7 176/9 176/22 177/8 181/5 184/10 184/15 184/17 184/22 185/6 185/15 185/18 187/17 188/19 189/2 195/3 195/8 195/11
haemophilia A [41] 20/2 20/5 20/11 20/12 25/15 30/21 34/9 39/6 52/15 53/12 54/8 56/11 90/13 90/14 107/12 107/13 107/15 107/17 111/20 113/4 113/25 115/10 115/12 122/4 134/7 135/6 135/25 136/6 136/17 136/18 143/13 143/16 143/17 153/3 154/11 154/12 173/3 173/15 176/7 177/8 185/15
haemophilia B [20] 20/11 52/6 52/8 53/20 112/13 112/23 113/5 113/8 114/5 115/10 115/13 135/19 136/12 136/19 152/14 154/10 154/12 154/13 176/22 185/18
haemophiliac [14] 33/18 75/5 77/8 79/13 80/16 82/1 96/23 96/25 118/12 142/13 148/2 182/7 182/11 187/1
haemophiliacs [25] 15/12 16/1 16/8 16/17 20/10 20/18 42/14 68/11 71/19 81/18 89/13 91/1 116/4 116/23 117/25 118/6 133/3 139/15 147/15 157/3 157/8 164/21 169/4 179/23 188/4
haemophilic [11] 8/15 15/16 52/7 66/11 112/12 112/22 134/1 134/11 152/13 170/7 170/19
haemorrhage [1] 72/6
haemorrhagic [3] 58/21 59/3 61/6
half [11] 8/6 10/15 15/10 17/16 31/1 31/23 34/10 58/16 109/4 146/20 166/15
halfway [4] 65/19 116/20 120/8 171/14
hand [7] 13/11 13/16 13/20 15/11 34/19 144/15 144/19
handbags [1] 39/19
handed [2] 46/17 88/16
handful [6] 2/5 31/20 34/6 55/14 84/3 115/20
handling [1] 99/4
handwriting [1] 170/17
handwritten [1] 53/3
Hann [1] 122/2
happened [4] 83/14 88/21 99/21 159/5
happening [1] 184/7
happy [1] 123/13
Hardisty [3] 75/10 75/24 77/11
Hart [2] 87/25 88/16
has [83] 4/19 5/15 6/7 12/24 13/24 16/23 22/19 23/13 24/18 24/21 31/9 33/20 36/25 41/19 42/13 42/23 43/9 44/15 48/23 50/5 50/6 54/25 67/16 76/3 77/11 86/17 86/18 86/19 86/20 95/14 97/6 98/13 99/6 109/4 109/11 113/18 114/5 125/7 126/7 126/9 127/2 129/11 129/12 129/20 130/10 130/21 131/3 136/14 136/21 136/22 138/25 139/20 139/22 141/5 141/24 142/12 143/21 144/21 146/6 146/8 148/5 148/19 149/20 157/17 157/22 158/5 159/17 160/14 160/15 163/3 166/6 166/7 166/8 167/22 169/3 171/21 178/5 178/7 186/17 187/17 192/15 193/2 193/8
hasn't [1] 32/3
have [234]
haven't [6] 26/16 56/1 89/2 123/20 176/22 193/20
having [28] 7/15 11/25 18/14 30/15 30/19 35/17 49/4 65/21 76/20 79/24 83/22 89/13 90/18 91/13 97/24 100/12 103/18 109/24 113/14 118/3 126/1 133/1 145/3 158/23 159/25 168/18 181/13 191/16
Hay [18] 1/20 1/22 15/2 22/2 22/11 22/12 24/11 26/6 32/12 35/16 35/17 38/12 41/13 41/13 44/6 48/15 77/1 77/2
Hay's [8] 11/16 22/21 23/6 23/16 33/4 33/5 36/19 86/6
HCDO [2] 138/7 175/20
HCDO0000023 [1] 170/6
HCDO00002503 [1] 111/8
HCDO0001093 [1] 4/12
HCDO0001177 [1] 50/25
HCDO0001238 [1] 170/16
HCDO0001274 [1] 51/20
HCDO0001307 [1] 172/4
HCDO0001343 [1] 52/7
HCDO0001402 [1] 173/2
HCDO0001439 [1] 52/14
HCDO0001500 [1] 173/13
HCDO0001541 [1] 52/21
HCDO0001603 [2] 174/1 176/3
HCDO0001639 [1] 53/11
HCDO0001739 [1] 53/22
HCDO0001795 [1] 175/10
HCDO0001831 [1] 54/8
HCDO0001887 [1] 177/5
HCDO0002021 [1] 54/18
HCDO000205 [1] 112/12
HCDO0002429 [1] 133/25
HCDO0002431 [1] 134/10
HCDO0002432 [1] 137/18
HCDO0002436 [1] 135/3
HCDO0002437 [1] 135/21
HCDO0002445 [1] 152/11
HCDO0002446 [1] 152/20
HCDO0002448 [1] 153/1
HCDO0002449 [1] 153/13
HCDO0002450 [1] 153/25
HCDO0002503 [1] 111/12
HCDO0002504 [1] 111/19
HCDO0002506 [1] 112/21
HCDO0002510 [1] 114/24
HCDO0002513 [1] 115/16
HCDO002509 [1] 113/12
HCDO003224 [1] 151/21
HCV [4] 41/15 158/12 159/4 159/7
he [239]
he'd [1] 26/13
he's [7] 6/6 12/15 14/14 57/18 113/14 118/8 143/1
Head [1] 98/20
headed [3] 13/6 120/9 137/10
heading [6] 2/15 20/8 33/16 59/14 66/3 184/20
headteacher [1] 194/8
health [8] 27/8 27/10 29/1 97/19 126/21 149/8 164/11 192/19
hear [9] 19/10 105/5 116/10 117/4 156/22 161/7 161/9 194/4 194/8
heard [9] 11/17 41/19 76/25 92/2 102/13 102/22 119/22 145/15 181/1
hearing [5] 24/16 85/17 147/6 161/5 162/13
hearings [4] 10/14 110/20 131/17 156/23
heat [44] 12/25 16/12 54/22 57/17 63/22 63/24 64/15 64/22 67/25 68/2 70/22 70/24 71/3 71/4 71/21 72/10 72/13 73/5 73/9 76/7 77/22 118/20 122/8 164/23 164/25 165/5 165/7 165/11 165/13 165/16 165/17

H

heat... [13] 165/18 165/19 165/22 165/23 165/25 166/2 166/9 166/10 166/12 166/19 177/6 179/9 179/10
heat-treated [17] 12/25 54/22 67/25 70/22 70/24 72/10 72/13 73/5 73/9 76/7 77/22 118/20 122/8 166/19 177/6 179/9 179/10
heat-treatment [2] 71/4 71/21
heated [4] 57/21 58/3 60/1 165/10
heavily [1] 181/25
heavy [1] 148/6
held [9] 2/11 73/22 74/8 120/3 122/16 129/15 147/23 162/2 168/19
Helena [1] 162/9
help [5] 25/7 39/14 83/11 98/8 123/19
helpful [1] 193/13
Hemofil [14] 134/15 134/22 135/1 137/7 137/13 138/5 138/6 169/6 169/17 170/12 170/24 172/8 172/17 175/17
hence [1] 45/16
Henry [1] 143/14
hepatitis [106] 1/10 1/13 2/6 2/10 2/11 2/15 2/17 4/2 4/4 5/4 5/6 5/10 5/24 6/4 6/6 6/19 7/7 8/8 8/17 8/21 9/10 10/12 10/18 10/20 10/22 11/4 11/15 37/6 37/8 37/24 38/9 38/11 38/11 38/18 40/1 47/20 60/16 60/17 60/21 61/2 61/3 66/21 69/12 83/5 83/20 84/4 84/5 84/9 84/12 88/9 91/10 91/21 103/17 104/16 109/1 109/10 109/12 119/4 119/7 119/11 119/15 119/17 129/19 129/21 129/25 130/2 139/19 139/21 139/23 140/2 140/12 140/15 140/17 140/19 144/22 144/24 145/7 145/19 146/1 146/4 146/7 146/8 155/22 155/24 156/1 158/5 159/6 160/4 160/13 160/16 164/6 164/18 179/20 179/24 180/2 181/17 182/18 183/14 183/15 185/25 186/20 186/24 192/14 192/16 192/18 193/2
hepatitis B [9] 4/4 8/17 47/20 60/16 61/2 119/17 139/21 183/14 186/24
hepatitis C [29] 37/6 38/11 38/11 38/18 40/1 83/5 88/9 91/10 91/21 109/12 129/19 129/21 129/25 130/2 144/22 144/24 145/7 145/19 146/1 146/4 146/7 146/8 158/5 159/6 160/4 160/13 160/16 192/14 193/2
hepatology [1] 149/19
Heppleston [6] 147/25 148/5 148/10 148/11 158/6 158/10
her [63] 12/9 18/2 24/22 25/2 25/2 25/2 25/4 25/9 25/16 25/18 26/21 28/3 29/12 29/14 29/22 30/9 30/15 30/19 31/12 40/23 41/4 43/4 43/23 45/23 46/5 46/6 46/8 77/4 82/9 82/13 82/16 82/23 83/15 85/15 85/20 88/5 90/22 91/5 91/15 93/8 98/13 99/14 100/8 100/14 130/15 131/18 133/22 136/21 136/24 138/25 139/4 139/5 140/5 141/5 144/18 145/21 151/12 151/13 159/23 162/21 183/20 189/15 192/24
here [18] 4/13 11/3 21/7 73/18 75/25 76/9 76/15 76/20 82/22 89/25 111/13 116/4 124/8 142/10 151/23 176/5 182/10 191/23
hers [1] 83/14
herself [1] 141/4
Hey [94] 23/21 23/22 24/15 34/9 36/23 41/23 42/2 42/3 42/4 42/7 42/21 42/22 42/24 43/13 44/2 44/8 44/13 44/19 44/23 45/2 45/15 48/25 49/4 49/8 50/5 50/10 50/12 50/25 51/18 53/7 53/10 55/5 55/11 55/12 55/17 55/21 55/22 56/5 56/10 59/11 65/5 65/20 68/1 69/3 70/3 70/7 70/11 73/10 75/11 76/15 76/18 77/4 77/6 77/14 79/7 79/12 79/17 80/16 81/3 81/24 82/1 82/6 82/14 83/3 83/21 84/6 85/7 86/8 88/11 88/15 89/22 90/11 90/17 91/6 91/11 91/21 92/4 92/5 95/4 95/19 96/6 96/7 96/24 97/1 99/11 100/7 100/14 101/9 101/14 101/20 102/15 102/21 105/15 195/5
high [6] 20/3 29/24 30/2 126/16 168/4 178/13
HIGH0000011 [1] 122/21
HIGH0000012 [1] 124/2
higher [1] 178/9
highest [3] 90/25 90/25 96/17
highlighted [1] 141/6
highly [4] 2/23 61/9 93/16 183/13
him [23] 7/18 9/7 26/17 27/9 27/13 27/25 28/13 34/23 34/25 35/4 36/6 39/8 40/9 40/14 72/3 88/25 94/2 98/21 148/16 156/16 157/2 189/18 189/20
himself [7] 13/2 24/22 35/20 40/15 40/16 106/13 150/22
hindsight [1] 59/10
his [100] 1/15 1/17 1/22 5/13 7/5 7/6 7/8 8/7 8/15 8/19 9/8 9/11 9/15 10/18 10/25 11/21 14/8 17/19 17/20 21/14 22/9 23/13 24/9 25/11 26/18 27/5 27/8 27/10 28/5 29/18 29/19 29/23 30/24 33/21 35/8 36/3 36/3 37/24 38/2 38/12 39/25 40/4 40/11 40/12 40/15 41/6 41/8 41/10 41/11 41/14 41/16 44/16 46/17 59/12 65/4 65/23 66/11 75/7 78/4 80/2 84/19 86/7 93/7 94/2 94/4 94/5 101/18 109/24 118/9 119/8 120/14 121/7 125/12 125/25 126/1 128/13 130/22 130/23 133/1 136/15 141/25 142/22 148/4 148/20 156/7 157/11 157/22 157/23 158/24 159/17 163/17 169/11 181/12 183/9 183/12 185/12 187/11 189/20 190/1 191/20
histopathologist [1] 181/16
history [2] 29/13 68/4
HIV [105] 12/2 22/21 23/11 23/19 24/21 25/11 25/17 25/23 26/12 27/6 27/21 28/8 28/16 29/14 30/8 35/15 35/19 36/21 37/4 38/23 38/24 39/1 40/1 41/15 46/22 47/13 48/5 50/2 50/4 64/14 65/13 65/21 66/9 68/5 68/8 68/13 69/12 71/6 71/9 71/10 71/16 73/13 73/16 74/6 75/20 77/24 78/3 78/5 78/18 82/18 83/4 83/20 84/20 85/22 86/6 88/9 88/14 88/23 89/6 89/15 89/20 90/3 90/18 90/22 90/25 92/4 92/5 92/20 93/8 96/3 97/13 99/1 99/18 103/25 109/1 109/9 125/9 125/24 125/25 126/22 127/24 128/20 128/24 129/1 129/5 141/25 142/6 142/14 143/7 143/10 143/12 143/20 143/25 144/6 149/18 157/15 157/24 158/1 164/6 164/18 164/20 181/23 182/1 191/3 192/13
HIV infection [1] 99/1
HIV positive [1] 93/8
HIV positivity [1] 71/16
HIV/AIDS [1] 28/16
HLTV [1] 32/17
hoc [1] 47/25
holding [1] 43/1
holds [1] 144/1
holiday [1] 133/4
home [62] 3/1 8/18 16/5 28/11 35/12 47/21 53/5 53/6 54/6 54/11 54/15 55/1 55/20 55/22 62/13 72/6 75/14 76/3 78/21 108/5 112/1 112/3 112/6 112/20 114/1 115/5 115/6 118/7 135/8 139/5 139/9 139/11 149/10 149/24 153/5 153/7 153/11 153/20 155/8 155/9 155/12 155/13 167/23 171/19 172/19 172/25 173/7 173/9 173/20 173/22 173/24 173/25 174/4 175/12 175/13 175/14 175/16 176/13 176/15 176/18 177/11 177/12
honestly [1] 9/23
honorary [1] 126/20
hope [5] 123/5 123/19 127/14 188/21 192/15
hopefully [1] 188/14
hoping [1] 102/2
horrendous [1] 40/7
horrific [1] 39/19
hospital [129] 1/6 3/3 13/14 14/17 20/19 21/23 23/11 25/14 26/22 27/22 29/8 29/11 30/5 30/25 33/12 33/18 34/2 34/11 34/15 34/25 35/6 36/20 39/2 39/13 40/4 40/5 40/25 41/5 41/17 41/21 41/24 42/2 42/7 42/14 43/15 43/25 44/15 44/19 45/1 46/4 47/6 48/1 48/13 48/18 49/4 53/7 54/11 54/12 54/13 54/21 56/8 57/2 61/24 65/5 66/24 67/1 67/19 68/1 69/3 70/8 74/20 75/11 77/14 79/17 80/16 85/6 87/4 90/2 90/11 93/3 94/10 94/23 95/11 96/12 97/1 97/2 97/3 98/2 99/2 99/19 102/16 102/23 103/19 104/11 106/3 106/5 106/14 109/21 115/5 124/22 125/14 125/22 129/13 130/23 135/12 147/18 147/22 149/25 150/7 150/9 150/25 153/5 153/7 153/11 153/16 153/19 158/6 158/20 161/20 161/23 162/3 163/13 163/21 169/24 172/20 173/5 173/19 175/11 175/14 175/18 176/9 176/14 176/17 177/11 182/14 190/24 191/3 195/5 195/6
hospital treatment [1] 54/13
Hospital's [1] 55/9
hospitals [2] 161/19 192/5
hostile [2] 88/19 94/4
hours [1] 40/16
house [2] 120/4 163/6
how [21] 7/23 28/25 35/14 37/8 50/3 55/21 70/10 85/24 86/1 92/4 95/2 102/8 123/8 139/10 142/21 145/2 145/18 146/4 155/9 159/11 160/15
however [14] 30/14 42/15 51/19 74/1 102/1 117/20 119/4 122/3 122/19 147/15 151/4 156/13 158/3 188/2
HSOC0003486 [1] 187/11
HSOC0011245 [1] 31/3
HSOC0015592 [1] 33/15
HT [1] 53/4
HTLV [40] 11/20 14/25 15/11 16/8 16/21 17/3 17/12 17/15 19/3 20/2 20/3 20/5 20/13 20/16 21/1 21/16 22/6 22/14 30/3 32/13 58/9 58/10 58/23 59/5 63/20 63/23 64/25 66/5 71/12 83/17 85/4 86/4 122/12 124/16 125/3 126/12 142/18 156/25 186/12 191/17
HTLV-III [36] 11/20 14/25 15/11 16/8 16/21 17/3 17/12 17/15 19/3 20/2 20/3 20/5 20/13 20/16 21/1 21/16 22/6 22/14 58/9 58/10 58/23 59/5 63/20 63/23 64/25 83/17 85/4 86/4 122/12 124/16 125/3 126/12 142/18 156/25 186/12 191/17
HTLV3 [2] 71/15 73/15
HTLVIII [2] 86/16 86/21
human [2] 6/17 54/23
human-derived [1] 6/17

H

Humanate [2] 173/12 173/25
hundred [1] 167/25
hundreds [1] 60/23
husband [17] 24/22 25/2 25/5 25/9 25/16 25/24 28/3 29/5 30/9 30/15 30/19 33/25 39/11 39/17 39/22 41/4 88/12
husband's [9] 25/21 26/22 28/21 29/1 29/12 29/14 29/19 29/22 40/23
Hyate:C [3] 154/3 154/17 154/25
Hyland [1] 167/22

I

I able [1] 100/11
I also [1] 126/3
I am [5] 32/18 100/23 123/4 167/11 187/16
I apologise [2] 147/5 170/17
I arrived [1] 113/17
I asked [1] 34/25
I attended [2] 39/11 88/11
I can [10] 4/19 4/24 5/14 11/8 92/6 99/14 105/5 105/9 114/7 187/25
I can't [4] 14/11 81/12 103/12 192/2
I cannot [2] 71/1 171/18
I certainly [1] 8/1
I clearly [1] 88/25
I confirm [1] 163/19
I could [1] 48/7
I couldn't [1] 105/15
I did [3] 11/2 25/25 190/10
I didn't [3] 7/13 30/23 83/9
I do [5] 73/22 74/11 95/16 165/4 171/24
I don't [7] 30/13 52/5 85/8 95/5 124/9 135/18 185/2
I drew [1] 87/1
I eventually [1] 5/13
I feel [3] 5/1 117/2 171/18
I felt [2] 7/20 88/21
I find [1] 89/19
I first [1] 181/1
I followed [1] 181/2
I found [1] 93/21
I had [4] 8/20 27/24 28/7 146/1
I have [10] 32/4 49/2 49/14 97/3 98/16 114/4 116/4 119/23 167/10 168/4
I haven't [2] 176/22 193/20
I hope [2] 123/19 188/21
I just [4] 30/17 65/17 82/25 102/13
I know [1] 38/15
I may [1] 170/16
I need [3] 85/8 95/6 192/3
I note [1] 101/21
I ordered [1] 8/11
I ought [1] 171/22
I raised [1] 28/19
I read [2] 28/16 99/13
I rearrange [1] 130/5
I recall [3] 28/9 39/11 39/14
I received [2] 29/3 190/9
I recorded [1] 190/12
I referred [3] 44/10 44/14 91/3
I regret [1] 114/19
I remain [1] 163/22
I remember [4] 8/2 9/7 24/25 132/24
I right [1] 103/11
I said [3] 108/19 137/8 193/12
I say [5] 31/13 31/23 107/24 144/10 151/6
I see [1] 81/9
I should [15] 26/8 27/14 48/10 68/20 81/10 99/9 101/11 102/7 132/16 144/4 146/21 160/9 176/19 179/2 186/3
I spoke [1] 34/24
I started [1] 46/10
I stressed [1] 191/20
I then [1] 38/22
I think [55] 6/2 9/2 18/3 18/6 24/10 26/7 26/17 29/25 31/13 32/16 37/18 40/18 43/6 49/2 52/3 69/15 70/6 72/2 77/1 78/7 80/11 92/3 92/6 99/9 103/10 104/6 112/19 118/11 119/23 120/20 121/20 126/23 136/2 137/3 137/8 137/15 137/24 138/12 141/9 141/10 142/9 152/4 153/12 153/24 159/10 160/21 161/6 164/19 170/16 172/10 175/23 178/13 184/4 188/15 193/15
I thought [6] 28/17 83/10 125/5 137/19 171/21 181/14
I told [1] 167/1
I turn [1] 193/21
I used [1] 34/14
I very [1] 100/3
I want [1] 56/2
I wanted [1] 34/20
I was [18] 5/10 6/9 7/13 10/4 23/25 28/7 28/24 28/25 34/14 34/20 35/1 41/8 46/11 50/16 90/5 90/6 94/3 94/21
I will [3] 32/20 88/6 151/4
I won't [5] 42/12 87/18 113/3 134/7 134/18
I would [8] 10/4 34/16 35/4 40/13 40/14 101/3 117/3 188/3
I wouldn't [3] 38/13 136/10 143/4
I'll [16] 39/3 42/3 42/20 50/3 50/7 50/7 77/4 83/16 89/4 95/15 111/6 116/10 118/11 141/9 146/25 177/25
I'm [43] 1/5 10/9 11/15 26/16 31/19 32/2 32/2 34/6 41/19 41/23 42/5 43/3 44/3 47/12 50/11 50/24 51/12 51/22 56/1 65/16 69/22 81/12 82/24 84/4 87/19 89/3 101/11 101/23 102/2 106/4 116/3 117/14 130/6 146/15 146/22 146/24 156/25 160/20 161/1 168/23 175/23 189/8 193/20
I've [6] 42/4 88/7 111/9 142/9 175/23 178/2
Iain [1] 111/14
Iain Cook [1] 111/14
idea [4] 84/11 178/4 178/19 193/25
identical [3] 32/4 87/17 87/19
identified [20] 5/21 54/1 65/11 103/9 111/24 112/16 112/18 114/25 116/25 119/13 119/24 129/14 134/1 135/4 143/24 149/1 151/24 152/13 181/16 192/5
identify [7] 30/18 68/5 69/15 79/14 97/23 103/1 103/22
identifying [1] 65/7
ie [6] 3/13 78/7 86/17 128/18 133/14 167/16
if [187] 2/7 2/13 3/2 3/6 4/11 4/14 7/7 7/10 7/11 8/6 9/7 13/5 13/9 13/15 14/4 15/6 16/15 17/17 18/13 18/25 19/18 20/16 22/20 23/5 23/8 26/20 26/22 28/14 29/16 31/11 31/18 31/25 32/6 32/19 33/15 33/15 36/1 37/6 37/11 38/4 38/10 38/22 39/3 39/6 39/24 40/1 40/7 41/2 46/7 47/12 49/5 49/5 51/6 51/19 52/21 53/11 54/18 55/8 55/10 55/15 56/10 58/15 60/6 60/12 65/10 65/22 67/11 69/6 70/8 72/8 72/9 72/15 74/10 75/2 79/8 79/11 79/25 80/14 81/15 85/7 87/6 87/20 90/1 90/25 92/8 92/9 92/17 95/5 95/7 96/21 98/14 99/13 100/22 101/21 102/8 105/4 105/13 111/8 111/18 111/22 111/25 112/3 112/15 112/21 113/11 114/15 114/17 114/23 115/20 115/25 116/15 116/19 117/6 118/11 120/7 121/19 123/12 124/13 124/15 124/17 126/7 127/20 128/4 128/8 129/10 132/12 132/14 133/24 134/10 135/3 137/22 138/4 140/24 142/5 142/9 143/23 146/10 146/16 151/19 152/20 153/1 153/13 153/15 157/17 159/7 159/8 163/14 163/16 167/8 167/12 167/14 168/24 170/5 170/15 170/18 171/2 171/10 172/2 172/10 173/1 173/3 174/1 174/23 175/1 175/10 175/19 177/4 178/16 179/12 180/23 180/24 182/2 182/19 182/24 183/6 183/20 184/5 184/19 185/5 185/24 186/2 186/13 188/16 188/21 190/12 191/17 192/1
ii [1] 121/22
III [38] 11/20 14/25 15/11 16/8 16/21 17/3 17/12 17/15 19/3 20/2 20/3 20/5 20/13 20/16 21/1 21/16 22/6 22/14 30/3 58/9 58/10 58/23 59/5 63/20 63/23 64/25 66/5 83/17 85/4 86/4 122/12 124/16 125/3 126/12 142/18 156/25 186/12 191/17
ill [1] 41/1
illness [4] 34/22 91/17 181/12 183/3
illogical [2] 128/19 128/23
imagination [1] 172/12
immune [7] 27/7 92/14 92/21 93/16 94/17 120/9 181/17
immunity [1] 186/24
Immuno [3] 9/14 121/9 167/22
immunodeficiency [1] 15/15
immunological [4] 47/10 47/18 184/16 186/10
Immunology [1] 13/13
immunosuppressed [1] 97/20
implication [2] 29/20 69/7
implications [3] 146/5 159/9 191/24
import [1] 9/21
important [2] 39/9 186/21
imported [5] 138/21 154/22 187/22 188/2 188/9
impose [1] 61/22
imposed [1] 127/9
impossible [3] 19/4 58/14 68/4
impractical [1] 172/25
impression [1] 10/5
improve [1] 95/21
improvements [1] 49/17
inadequate [1] 76/6
inadequately [1] 118/12
inappropriate [3] 49/16 128/18 128/23
incidence [5] 60/20 140/5 164/20 189/10 189/16
include [1] 20/6
includes [1] 13/12
including [5] 15/20 16/22 46/16 96/12 149/18
incomers [1] 132/24
incomplete [2] 23/12 83/5
incompletely [1] 71/5
inconsistent [1] 30/15
inconsistently [1] 150/1
increase [7] 20/23 112/5 168/1 171/20 172/2 173/6 174/3
increased [8] 12/23 52/25 61/1 61/13 69/12 117/5 168/15 188/13
increasing [3] 16/16 52/20 68/13
indeed [12] 10/2 50/8 53/25 74/11 76/8 86/21 115/23 144/18 159/16 179/15 179/24 180/14
indefensible [1] 72/8
indefinitely [1] 175/7
independent [2] 144/16 144/18
independently [1] 94/7
index [1] 186/16
indicate [6] 17/9 56/20 59/22 111/2 144/2 193/9
indicated [2] 136/15 146/6
indicates [2] 76/13 137/6
indicating [2] 35/19 58/10
indication [11] 31/17 60/24 69/1 79/21 116/17 142/17 146/12 155/15 171/7 172/11 172/23
indications [1] 27/7
indices [1] 60/20
indistinct [1] 153/10
individual [16] 23/17 29/25 38/25 39/22 48/3 56/3 56/9 60/18 61/18 84/4 93/5 127/3 141/23 146/24 185/22 189/3
individually [1] 93/14
individuals [5] 24/6

I

individuals... [4] 145/17 159/12 166/18 193/8
inept [1] 99/4
inexperienced [1] 97/22
infant [1] 76/1
infants [1] 60/3
infected [39] 2/22 2/25 5/24 12/16 24/20 27/24 33/11 33/17 33/19 36/18 36/20 37/4 47/14 50/2 50/4 58/22 65/21 68/11 83/4 83/5 88/9 88/23 89/6 89/15 90/9 90/17 92/4 109/9 109/12 120/25 129/1 129/5 130/1 143/12 146/7 157/15 160/4 191/23 192/1
infecting [1] 99/3
infection [36] 3/6 15/25 23/4 25/7 27/5 27/21 29/4 33/21 40/1 61/2 66/9 74/6 78/18 80/4 80/5 85/22 90/8 95/23 99/1 103/25 125/9 126/22 132/7 141/25 142/8 142/25 145/21 151/18 159/21 159/22 164/6 164/20 181/14 187/20 187/22 187/25
infections [8] 27/3 28/22 69/13 92/16 97/21 159/2 182/23 192/13
infectious [3] 2/12 30/8 97/10
infective [1] 2/23
infectivity [1] 93/10
inference [1] 18/19
inferences [1] 69/25
Infirmary [22] 5/16 37/2 51/5 51/16 125/23 126/4 130/9 131/1 131/6 131/12 137/12 161/20 161/24 161/25 162/10 162/21 163/13 163/21 169/5 170/3 176/8 192/4
Infirmary's [1] 169/24
inflammation [1] 38/8
influencing [1] 94/3
inform [1] 17/22
informal [1] 132/9
information [55] 5/23 19/5 25/6 25/17 27/1 27/5 28/15 36/6 36/19 40/23 42/5 49/14 51/17 52/23 55/19 64/10 66/18 68/18 68/21 70/2 75/3 78/25 83/6 88/3 90/5 90/6 99/20 104/4 106/23 108/24 109/8 110/18 113/22 114/10 119/2 121/12 124/12 124/17 126/2 126/5 129/15 141/20 142/2 143/18 144/13 145/18 146/3 157/1 158/4 160/11 161/15 163/3 180/6 189/1 193/5
informative [1] 102/5
informed [21] 10/21 11/10 23/19 23/20 23/23 28/8 33/3 36/10 38/18 85/12 85/25 89/19 120/17 122/12 125/5 129/21 141/25 159/15 180/10 190/16 191/6
informing [3] 15/1 85/4 124/23
infrequent [2] 138/21 154/23
infrequently [1] 167/7
infusion [2] 61/10 64/21
infusions [6] 16/18 37/25 57/2 64/17 66/7 66/10
inherited [3] 49/24 158/9 159/18
inhibitor [1] 155/2
inhibitors [4] 47/7 114/7 140/6 142/13
initial [2] 58/13 190/10
initially [5] 59/21 59/25 100/14 181/20 190/17
injustice [1] 146/23
inpatient [3] 46/14 61/25 115/4
inpatients [1] 163/1
Inquiry [58] 6/7 7/4 7/9 10/9 22/3 22/12 22/19 24/18 31/10 36/19 36/25 41/13 41/19 43/10 44/16 90/16 109/11 118/14 125/7 126/9 129/3 129/11 129/20 130/11 130/22 131/18 132/14 133/23 136/15 138/19 138/25 139/20 139/22 140/18 141/24 143/15 143/17 143/21 144/11 144/13 144/18 144/23 148/16 148/20 149/20 151/11 154/15 155/2 157/10 157/13 157/20 158/3 159/12 160/5 180/9 192/7 193/2 193/8
Inquiry's [4] 129/7 129/24 145/17 154/20
INQY0000250 [4] 129/10 143/22 157/18 192/2
insight [5] 3/25 65/25 79/6 100/23 175/8
insights [1] 82/5
insignificant [1] 160/8
insist [2] 127/23 181/19
insolubility [1] 171/16
inspection [2] 48/6 82/18
instance [1] 194/6
instances [1] 76/3
instead [1] 94/15
institutional [1] 96/20
instructions [1] 93/25
instructive [1] 37/19
insufficient [2] 75/20 96/8
insufficiently [1] 79/14
insult [1] 161/9
intended [3] 24/19 122/23 124/15
intensive [3] 30/25 181/6 182/11
intention [2] 112/5 189/5
interest [3] 95/8 147/6 161/3
interested [1] 116/10
interesting [3] 38/6 119/18 151/5
interferon [2] 146/9 160/13
intermediate [1] 166/1
internal [2] 65/12 70/5
internally [1] 158/20
interregnum [2] 1/19 32/11
intervention [1] 149/5
into [19] 8/20 9/24 17/16 35/6 65/17 66/1 79/7 80/19 82/5 98/21 105/17 116/6 139/12 145/22 153/5 160/24 175/8 179/15 194/12
into administrative [1] 98/21
introduced [2] 158/13 166/2
introduction [1] 119/15
inundated [1] 63/16
INVERNESS [19] 109/16 109/18 109/22 117/5 122/17 124/21 125/20 125/22 128/9 129/2 129/6 129/13 130/2 130/4 131/8 143/3 143/6 156/10 195/7
investigate [1] 144/10
investigated [1] 20/16
investigation [2] 20/15 142/23
investigations [1] 80/19
investment [1] 46/24
invitation [3] 116/12 124/11 124/15
invitations [1] 122/14
invited [2] 48/25 162/5
inviting [1] 123/25
involve [6] 13/1 13/2 18/14 20/24 26/11 26/15
involved [9] 2/21 5/20 16/25 18/10 18/13 18/18 94/11 110/4 166/14
involvement [4] 17/20 91/14 106/13 121/8
irrational [1] 127/22
irritable [1] 182/17
islands [1] 136/4
isn't [2] 102/8 189/6
isolated [1] 77/10
isolation [1] 3/2
issue [17] 12/18 14/23 30/11 50/3 58/25 85/6 100/19 107/6 125/15 128/16 150/20 151/15 156/22 179/12 180/18 189/11 193/7
issued [5] 74/3 124/6 124/12 131/25 149/12
issues [7] 62/4 93/15 99/11 99/16 110/23 119/24 149/23
it's [120] 2/10 13/12 13/16 14/11 15/12 17/10 18/19 22/22 24/19 27/14 27/17 31/5 32/7 32/9 32/9 32/10 32/22 36/7 36/11 36/11 37/2 37/3 37/18 38/6 39/9 43/16 45/9 49/1 50/18 51/3 51/6 51/7 52/17 53/22 53/23 54/1 54/4 56/7 56/8 65/3 65/8 65/22 73/10 79/7 80/8 81/10 81/11 82/21 83/2 85/9 86/10 87/7 91/2 92/9 103/23 104/14 106/20 107/16 108/11 108/12 108/15 108/17 112/10 112/24 113/4 114/16 115/25 116/5 120/1 122/21 123/21 125/18 125/18 126/16 126/19 134/6 136/9 137/10 137/13 137/24 138/4 138/8 138/10 138/12 145/10 146/17 146/21 151/16 151/22 151/24 152/4 152/5 152/23 153/2 153/2 153/5 154/1 155/3 155/8 159/10 160/21 163/14 172/12 176/21 176/23 178/3 182/4 184/7 184/9 187/12 187/12 189/18 189/18 189/20 189/23 189/24 191/14 193/13 194/11 194/12
item [1] 120/8
item 6 [1] 120/8
its [10] 12/11 12/21 61/23 109/20 144/11 146/5 149/10 164/3 171/16 179/7
itself [7] 76/2 90/6 94/6 100/15 103/16 136/10 141/21
IX [11] 24/21 111/4 113/1 136/7 152/7 152/17 152/25 166/6 166/10 176/23 185/19

J

J Keith [1] 96/22
January [30] 12/7 30/4 37/21 46/6 46/10 64/8 64/13 64/17 70/22 73/1 73/5 74/10 75/23 77/19 119/25 120/4 120/23 121/2 121/3 141/8 142/21 155/10 155/25 156/9 157/4 159/21 181/13 182/15 183/24 184/3
January '77 [1] 155/25
January '82 [2] 183/24 184/3
January 1982 [1] 182/15
January 1983 [7] 12/7 77/19 119/25 120/23 141/8 155/10 156/9
January 1985 [5] 30/4 64/13 64/17 73/5 74/10
January 1986 [1] 70/22
January 1989 [1] 46/6
jaundice [9] 5/2 5/12 5/18 6/4 139/25 140/5 140/9 140/11 179/21
JKP [10] 65/12 70/9 75/4 77/7 79/9 79/12 80/11 80/15 81/13 81/25
JKP 027 [1] 70/9
JKP 37 [2] 65/12 80/11
JKP 47 [1] 80/15
JKP 92 [1] 81/25
John [8] 24/15 42/11 45/25 48/14 49/7 71/12 95/10 115/22
John Watt [1] 115/22
joint [2] 147/23 149/9
jointly [1] 135/5
Jones [1] 60/9
journal [2] 19/20 87/2
judged [1] 78/13
judgment [1] 161/11
July [10] 14/9 14/12 32/9 71/17 75/21 79/5 114/16 166/25 179/7 182/20
July 1982 [1] 182/20
July 1983 [1] 114/16
July 1985 [1] 75/21
July 1987 [1] 71/17
July 1991 [1] 79/5
June [18] 1/1 12/11 19/24 21/1 30/5 63/18 67/17 74/2 77/21 84/22 116/1 118/5 156/17 162/18 166/13 191/6 191/15 194/22
June '83 [1] 12/11
June 1973 [1] 116/1
June 1978 [1] 162/18
June 1979 [1] 118/5
June 1983 [3] 74/2 84/22 156/17
June 1984 [1] 63/18
June 1985 [3] 19/24 21/1 30/5
June 2000 [1] 166/13
junior [3] 27/22 28/2 43/7
just [71] 2/5 4/21 8/14 24/18 25/18 25/22 30/17 31/2 31/17 33/16 34/6 37/5 38/6 39/3 40/1 41/2 42/5 44/25 46/7 50/16 51/25 55/15 55/25 56/12 63/24 64/19 65/11 65/17 65/19

J

just... [42] 81/6 82/25 84/19 85/9 86/19 87/4 87/20 88/6 88/7 89/3 89/4 89/12 95/7 95/16 95/17 99/16 102/13 111/6 114/23 115/20 116/5 121/21 124/17 126/16 130/5 132/14 137/17 137/22 146/20 151/4 171/2 173/10 173/11 175/19 175/25 176/2 177/4 178/12 179/2 180/23 186/3 191/11
justified [3] 80/23 164/19 167/12

K

Kaposi [1] 13/22
Kaposi's [2] 13/6 13/19
keen [2] 117/10 139/8
keep [3] 123/18 149/22 165/20
keeping [1] 131/24
Keith [1] 96/22
kept [3] 34/22 133/13 133/14
Kerr [3] 148/17 160/11 160/14
key [3] 101/19 132/3 149/16
kind [3] 29/2 121/12 154/14
kindly [2] 31/10 181/17
kinds [1] 90/10
King [4] 130/12 130/21 136/14 146/6
Kingdom [5] 110/22 139/18 145/16 180/21 188/25
Kirk's [1] 5/2
KitKat [1] 29/2
knew [6] 21/21 29/21 35/18 37/10 88/14 93/18
know [36] 9/5 10/4 16/19 19/1 20/6 25/25 30/12 30/13 34/3 37/23 38/15 40/18 66/12 66/15 66/25 67/2 68/18 83/9 87/4 98/6 106/24 117/9 121/10 123/7 124/9 138/1 138/2 144/16 144/21 145/1 158/22 171/22 177/5 177/24 187/16 192/21
knowing [2] 25/11 55/25
knowledge [26] 1/8 7/6 11/14 18/24 26/25 58/1 59/5 87/9 87/12 100/8 100/13 103/4 109/1 119/3 119/21 121/7 123/17 139/19 141/1 155/19 155/21 156/7 179/12 180/12 180/19 193/10
known [12] 3/5 62/16 83/19 83/20 84/15 93/7 98/9 132/11 132/21 142/14 158/18 164/18
Koate [16] 84/9 170/12 170/23 172/8 172/9 172/17 173/10 173/23 174/6 174/7 175/16 175/17 176/11 176/18 177/13 177/17
Korn [2] 55/13 55/18
Kryobulin [5] 5/7 170/12 173/11 173/24 174/8

L

label [1] 30/2
labelled [1] 29/24
laboratories [1] 6/24
laboratory [15] 46/16 46/20 46/24 47/8 49/23 60/20 73/16 77/25 114/1 149/12 162/22 162/25 164/2 191/17 192/19
lack [8] 49/9 49/22 62/6 62/19 96/11 110/9 126/2 186/24
lacked [1] 100/23
lacking [1] 96/2
Lancet [7] 13/4 15/7 15/9 18/3 120/13 156/12 181/20
large [9] 48/4 62/15 63/18 82/17 123/16 165/20 172/8 183/10 186/22
largely [1] 41/6
larger [7] 61/10 107/22 135/17 137/13 153/17 170/22 173/21
largest [2] 53/17 54/2
last [29] 5/11 11/17 13/19 16/15 18/25 32/18 50/17 51/12 57/10 77/6 81/6 81/24 87/21 92/3 114/18 116/22 117/22 120/7 129/11 129/13 129/13 143/23 157/18 182/8 182/18 183/7 186/13 186/25 189/13
late [15] 10/19 23/15 42/9 60/2 78/22 82/11 88/4 91/17 109/20 113/17 147/20 160/23 164/23 169/18 181/2
later [35] 6/2 7/5 11/18 17/8 19/11 19/18 23/22 23/23 26/5 26/12 31/19 31/23 32/9 33/13 47/14 69/17 82/9 82/10 89/14 100/12 110/20 119/13 121/16 131/16 144/13 151/1 151/7 156/23 161/5 162/13 168/25 183/9 184/6 190/9 192/25
latest [1] 188/19
latter [1] 133/17
law [2] 128/5 128/5
lawyer [1] 142/12
LBHT0000001 [2] 32/8 37/20
lead [1] 190/22
leading [1] 61/24
learn [1] 67/20
learned [2] 102/19 181/24
learning [2] 83/17 100/15
learnt [3] 35/15 104/7 125/21
least [17] 9/3 15/20 18/7 42/9 64/13 76/21 82/2 99/3 104/18 107/1 117/12 138/22 155/13 159/15 161/13 171/7 189/9
leave [4] 3/14 34/18 34/22 91/16
leaves [2] 17/10 32/11
leaving [2] 1/20 30/11
led [10] 49/14 65/1 88/16 97/6 98/21 99/1 103/3 103/5 104/16 185/22
Lee [4] 174/17 184/11 191/2 191/19
Lee's [2] 191/8 191/16
left [14] 13/11 15/11 23/13 26/13 27/17 30/12 31/25 41/6 41/9 41/10 88/23 91/13 182/5 192/24
left-hand [2] 13/11 15/11
leg [1] 35/2
legal [2] 128/4 161/14
legitimate [1] 9/3
length [1] 102/16
less [6] 60/18 75/2 122/3 141/16 164/5 169/12
lesson [1] 102/19
lessons [1] 100/16
let [5] 105/15 126/16 171/22 176/2 176/5
lethargic [1] 182/16
letter [76] 4/14 6/1 12/12 12/14 13/4 13/6 15/10 15/10 17/19 17/24 19/23 20/24 24/24 25/1 25/3 31/3 32/2 32/4 32/7 32/22 33/3 37/21 38/6 42/12 67/17 67/18 67/23 71/12 71/17 73/13 84/22 85/1 85/14 85/19 86/5 86/9 87/17 87/19 89/14 89/16 89/20 95/13 96/21 101/18 113/12 114/16 116/16 120/18 120/21 122/19 124/1 124/19 124/20 125/8 125/15 125/18 126/14 126/17 128/9 128/13 128/14 132/12 133/23 142/10 142/12 143/3 143/7 155/10 163/14 166/24 169/2 182/20 187/10 191/11 191/13 191/21
letters [8] 37/18 51/13 69/17 85/17 117/14 119/18 156/17 191/7
leukaemia [1] 130/16
level [2] 3/7 16/2
levels [2] 16/1 47/5
Lewis [1] 131/13
LFTs [1] 192/22
liaisons [1] 149/15
life [4] 33/23 67/10 68/6 95/23
life-threatening [1] 95/23
light [10] 5/14 56/4 74/7 118/24 125/24 126/15 151/4 155/20 156/7 160/20
like [21] 12/20 15/17 51/25 54/1 54/5 55/18 61/20 91/6 101/3 116/12 117/3 117/9 132/15 134/4 134/16 152/3 152/4 153/16 170/10 183/23 188/3
likelihood [4] 18/24 19/7 20/23 21/6
likely [11] 9/6 9/9 21/13 29/13 37/24 64/25 66/8 68/7 68/12 80/8 120/15
Likewise [2] 84/16 156/6
limited [2] 154/17 177/10
Lindsay [1] 163/16
line [4] 7/12 7/25 8/12 81/7
line 19 [1] 7/25
line 23 [1] 8/12
lines [5] 13/20 81/16 85/9 157/19 167/9
link [1] 183/16
links [3] 110/13 150/11 150/16
lion's [1] 117/21
list [3] 120/5 121/19 158/11
listening [1] 161/2
literature [4] 59/8 178/12 180/17 181/2
litigation [7] 22/21 65/13 66/18 73/21 78/17 84/21 86/6
little [23] 6/15 11/18 38/24 40/20 41/14 42/5 56/10 83/16 102/13 104/20 106/23 108/24 110/18 119/2 121/21 129/19 136/22 141/20 164/17 166/21 173/4 181/10 190/3
live [1] 7/13
liver [10] 3/21 9/10 37/7 37/9 37/11 38/2 38/8 91/14 140/23 145/4
LIVERPOOL [108] 1/4 1/6 1/7 1/12 1/15 1/23 2/16 2/18 4/1 7/2 8/3 8/19 8/24 10/16 11/18 12/10 13/3 13/14 13/14 14/17 14/24 15/3 16/25 17/4 17/8 17/22 18/14 18/15 18/17 20/7 20/10 20/19 20/24 21/2 21/4 21/17 22/3 22/13 22/20 23/8 23/10 23/13 23/14 26/22 27/10 27/22 30/2 30/24 31/18 33/12 34/2 34/11 34/15 36/20 36/23 38/16 39/2 39/12 40/5 40/24 41/5 41/17 41/21 41/22 43/14 43/25 44/7 44/8 44/11 44/19 44/25 45/1 46/4 47/5 48/1 51/4 51/15 53/7 54/7 54/12 55/6 55/9 62/16 66/24 67/1 67/19 70/7 75/11 75/16 76/10 76/21 77/13 81/10 81/11 81/15 81/22 85/5 85/6 87/3 102/16 102/16 103/25 104/13 104/19 106/12 106/19 106/25 195/3
lives [1] 97/25
living [2] 130/1 160/6
load [1] 148/7
loan [1] 47/1
local [8] 61/16 113/12 119/5 131/22 150/8 150/12 151/17 152/9
locally [1] 142/8
located [3] 5/13 109/21 130/9
location [2] 98/5 149/2
locked [1] 17/9
locum [2] 91/19 148/17
logical [1] 3/22
London [4] 8/9 30/6 121/9 151/14
long [10] 2/23 27/23 30/9 35/11 81/16 112/8 118/13 126/5 143/8 159/11
longer [9] 11/8 35/7 36/7 94/14 97/11 106/21 138/2 139/12 171/19
look [70] 1/7 13/15 16/15 20/17 22/18 22/20 24/10 25/14 29/16 31/25 37/19 37/20 38/4 39/3 39/24 46/8 49/5 50/24 51/6 54/18 59/10 65/12 65/18 79/11 96/21 102/3 111/6 111/19 111/22 111/25 112/4 114/17 114/23 115/15 115/20 115/25 116/15 119/12 119/19 124/17 124/19 133/24 142/9 151/1 151/7 151/19 151/20 153/1 153/15 160/22 162/13 168/24 170/5 170/15 171/2 172/10 174/23 175/10 175/19 175/22 177/19 182/2 182/3 183/6 184/5 184/19 185/24 186/13 191/11 191/18
looked [27] 10/13 15/21 17/6 30/1 31/21 35/17 40/20 55/5 70/7 79/10 81/12 81/13 82/13 82/14 82/22 84/19 86/6 121/20 123/22 126/24 141/8

L

looked... [6] 143/2 156/10 176/22 182/6 191/7 191/11
looked at [16] 10/13 15/21 17/6 30/1 31/21 40/20 55/5 81/12 81/13 82/14 84/19 121/20 141/8 156/10 176/22 182/6
looking [13] 23/21 26/7 44/10 56/9 95/16 100/11 102/6 110/20 137/23 148/7 162/6 175/25 178/21
looks [11] 31/4 51/25 53/25 54/5 134/4 134/16 152/3 152/4 153/16 170/10 183/23
lot [3] 50/5 102/7 192/22
LOTH0000006 [1] 125/17
lower [2] 164/21 169/5
Ludlam [13] 65/8 65/23 67/22 68/3 69/7 74/15 80/12 120/17 121/6 121/7 121/21 121/25 122/13
Ludlam's [2] 65/15 123/22
LUHT0000024 [1] 55/8
LUHT0000031 [1] 55/15
lunch [2] 101/22 101/23
luncheon [1] 105/23
lying [2] 40/16 41/10
lymphocyte [1] 13/8
lymphoma [1] 130/16
lymphopenia [2] 16/24 186/9
Lynne [1] 43/2

M

Machin [4] 15/13 19/22 21/18 21/19
Mackie [4] 1/18 17/10 24/5 24/7
made [16] 7/14 22/7 27/13 39/15 63/21 68/14 68/18 68/21 78/11 78/15 79/16 93/7 142/5 174/23 175/4 182/17
Maggs [3] 43/5 82/8 91/19
Maggs' [1] 91/12
Maggs's [2] 45/14 91/22
main [9] 104/18 115/18 116/8 150/7 153/8 176/15 177/12 182/19 186/13
mainly [4] 78/9 125/1 133/15 181/25
maintain [2] 113/20 168/4
maintaining [1] 132/3
major [3] 58/25 72/5 166/3
majority [3] 47/19 60/2 104/7
make [15] 19/3 22/16 40/13 48/18 75/24 79/23 95/15 99/9 132/10 132/15 145/22 164/15 178/14 183/25 188/3
making [6] 48/7 82/19 105/16 117/19 119/9 131/16
male [1] 184/21
malignancies [1] 148/8
malignant [5] 49/11 49/12 49/22 100/1 130/17
man [4] 8/15 9/7 36/9 132/24
manage [3] 25/7 59/4 61/15
managed [4] 44/17 46/1 149/6 164/2
management [8] 49/17 59/20 61/25 63/1 93/3 94/17 96/12 103/19
manager [4] 94/10 94/23 97/3 97/7
Manchester [3] 32/14 45/3 45/8
manifested [1] 94/6
manifesting [1] 92/15
manner [1] 97/21
manufacturer [1] 58/3
many [24] 19/6 23/14 40/12 55/21 68/11 76/3 76/3 88/14 92/2 92/22 98/24 100/11 100/17 109/3 111/9 132/4 132/24 139/8 155/9 164/21 165/8 173/17 181/24 185/17
March [12] 56/7 64/18 72/22 77/20 84/8 85/1 120/22 156/17 156/20 165/12 182/20 191/4
March 1979 [1] 84/8
March 1982 [1] 182/20
March 1983 [4] 77/20 85/1 120/22 156/20
March 1985 [3] 64/18 165/12 191/4
March 1992 [1] 56/7
margin [1] 60/15
marked [3] 25/22 53/19 104/18
Martin [40] 24/15 42/11 42/13 42/15 42/23 43/1 43/19 45/5 45/8 45/11 45/17 45/25 46/10 48/14 49/7 66/1 66/19 66/19 67/16 67/22 69/18 69/19 70/10 71/12 73/11 73/14 79/21 80/2 80/20 83/21 84/7 87/7 87/8 88/15 88/25 89/24 95/10 98/18 98/24 99/6
Martin's [5] 66/14 66/20 68/15 79/15 84/12
Mary's [1] 29/8
mass [1] 63/15
match [1] 74/17
matching [1] 150/9
material [31] 10/6 22/18 56/24 57/14 57/21 57/24 61/16 62/12 67/2 70/1 71/2 72/22 75/20 78/9 101/19 116/9 133/6 133/10 133/12 133/16 133/18 136/3 138/22 140/16 154/24 157/16 166/12 167/3 167/16 171/18 188/24
materials [3] 4/10 111/23 153/22
maternity [1] 91/16
matter [9] 18/19 25/23 94/12 95/8 102/15 108/25 118/23 142/4 144/9
matters [8] 1/6 50/11 69/23 100/16 121/8 135/3 180/23 189/9
may [60] 1/24 11/9 15/1 18/10 18/20 19/10 19/12 20/23 26/7 26/18 27/18 30/7 39/7 51/13 53/8 55/4 63/4 63/5 66/16 69/1 69/24 73/18 75/12 76/19 87/24 89/18 91/15 102/18 102/24 104/3 105/4 106/19 107/16 116/18 119/19 123/4 123/20 124/25 125/19 126/15 143/4 144/9 144/15 144/18 145/11 156/3 156/13 156/22 159/15 161/5 170/16 177/23 178/2 178/11 178/17 178/20 181/15 182/22 184/23 191/13
May 1982 [1] 182/22
May 1983 [2] 63/4 181/15
May 1984 [2] 75/12 76/19
May 1989 [1] 143/4
maybe [1] 89/22
Maycock [6] 166/24 169/1 169/2 169/18 179/23 179/25
McClure [2] 126/19 128/12
McVerry [55] 1/16 1/20 11/21 13/2 15/8 15/13 17/10 17/18 18/12 18/23 19/20 21/14 22/2 22/7 22/9 22/14 23/13 26/10 26/11 26/15 27/16 27/16 28/4 28/5 28/19 28/24 29/3 29/15 29/18 30/12 31/25 32/11 34/11 34/15 34/16 34/17 34/21 35/1 35/10 35/13 35/19 36/4 37/8 37/21 38/7 38/23 39/7 39/15 39/18 43/16 66/2 67/3 81/17 87/2 106/12
McVerry's [4] 10/17 11/14 18/10 67/1
me [30] 8/18 18/23 19/1 28/12 28/21 28/23 29/18 34/18 34/19 34/19 34/21 35/3 35/11 35/13 39/20 40/9 41/6 85/12 94/5 94/21 98/17 99/20 126/16 130/5 158/7 168/8 176/2 176/5 188/23 190/17
mean [5] 86/19 116/24 148/10 167/25 171/19
means [4] 11/1 11/11 85/14 96/19
meant [4] 47/22 124/9 145/3 145/10
meantime [3] 76/11 123/18 188/15
measures [3] 3/6 29/6 125/6
mechanics [1] 43/20
media [2] 28/16 63/15
mediate [1] 94/21
medical [34] 4/20 17/9 25/21 27/25 31/20 31/21 35/17 36/14 48/13 56/7 59/7 63/16 70/6 93/24 94/1 95/9 95/11 95/24 96/12 98/20 126/11 126/18 126/20 127/2 127/5 127/9 128/3 128/8 141/17 149/13 150/2 157/2 180/17 188/23
medication [2] 40/11 40/12
meet [4] 94/23 165/13 165/24 188/11
meeting [36] 11/23 28/24 45/11 63/3 63/5 64/7 88/6 88/15 88/18 88/20 88/24 89/23 109/5 116/22 119/23 119/25 120/1 121/3 121/9 121/15 121/17 122/9 122/15 140/8 141/8 141/11 150/18 150/20 155/24 156/2 156/10 162/17 168/6 174/25 179/14 189/25
meetings [37] 1/12 1/13 1/14 1/16 1/21 2/2 2/4 10/11 10/16 39/12 45/7 83/22 84/2 84/17 84/18 97/6 107/4 109/4 109/7 109/25 119/5 119/5 119/5 121/11 132/9 140/3 141/3 141/3 141/6 141/12 141/13 141/18 155/22 156/5 162/5 179/14 180/15
members [7] 99/24 120/11 120/17 121/23 127/3 142/4 180/8
memory [1] 158/13
men [1] 139/1
mental [1] 138/13
mention [4] 68/14 71/15 73/12 78/4
merit [1] 160/25
merits [1] 36/8
Mersey [4] 44/22 45/4 45/12 107/4
Merseyside [1] 33/22
mess [1] 76/23
met [3] 32/18 93/13 159/7
methods [1] 20/9
microbiologist [2] 87/25 88/17
microbiology [1] 192/20
mid [10] 9/8 11/19 12/1 17/13 42/10 43/13 44/9 46/10 76/5 82/3
mid-1970s [1] 42/10
mid-1983 [2] 76/5 82/3
mid-1984 [1] 12/1
mid-1985 [1] 17/13
mid-1987 [1] 11/19
mid-eighties [1] 9/8
mid-January [1] 46/10
mid-teens [1] 44/9
middle [1] 8/4
Middlesex [3] 18/6 18/8 23/11
Middlesex Hospital [1] 23/11
might [22] 26/6 33/11 33/14 50/12 55/22 74/5 81/13 94/7 109/1 116/23 117/5 142/17 146/16 147/5 160/25 170/10 175/6 189/22 191/11 191/22 191/23 194/11
mil [1] 53/7
mild [16] 5/10 8/15 79/13 80/16 81/1 81/3 81/14 81/18 82/23 105/1 136/18 139/14 155/18 166/18 174/13 185/15
mild/moderate [1] 79/13
mild/moderately [1] 166/18
mildly [1] 165/14
miles [1] 102/24
Milne [1] 174/24
mind [2] 39/9 94/20
minimal [3] 62/24 122/5 133/14
minimise [1] 123/9
minimum [1] 3/12
minor [3] 11/6 47/23 167/23
minority [1] 86/22
minute [3] 47/6 60/25 121/15
minuted [1] 109/24
minutes [19] 1/10 2/1 2/3 45/10 63/2 63/11 84/2 91/4 141/3 141/8 143/2 146/18 146/20 156/5 156/16 162/6 162/15 179/17 180/16
mirrored [1] 104/13
misfortune [1] 5/9
misleading [1] 123/4
misread [1] 170/16
missed [1] 175/21

M

missing [3] 4/21 48/6 82/19
MMWR [6] 14/8 22/23 22/24 120/13 120/16 181/1
moderate [7] 79/13 105/1 136/18 143/17 174/13 185/6 185/16
moderately [1] 166/18
modern [2] 148/21 160/16
modest [1] 53/24
modified [1] 63/10
moment [9] 50/13 93/9 94/13 95/15 130/5 177/20 178/21 188/11 189/9
Monday [5] 193/17 193/23 194/5 194/17 194/22
money [2] 100/20 142/24
monitor [1] 47/10
monitoring [6] 47/2 47/4 47/18 91/14 190/7 192/18
month [7] 5/13 70/16 73/7 121/10 167/17 168/13 168/25
monthly [1] 167/25
months [12] 5/1 33/20 34/16 57/1 70/14 72/17 85/19 117/22 181/5 183/9 183/25 189/14
morbidity [1] 61/1
more [46] 17/15 17/16 17/20 20/3 24/16 25/3 31/18 36/24 43/7 48/15 51/20 54/14 65/23 68/25 71/24 73/8 76/13 98/8 103/23 105/14 105/17 110/20 117/11 117/12 117/19 119/19 124/12 131/16 144/10 148/21 151/2 152/22 153/10 160/15 163/9 168/12 168/16 169/6 169/15 170/25 171/4 171/5 172/13 181/10 193/7 194/12
morning [6] 1/5 23/22 93/24 102/6 102/14 167/2
mortem [1] 181/18
most [20] 24/2 24/4 24/6 24/7 30/24 37/24 39/15 57/1 67/12 68/6 86/20 96/7 101/3 102/1 103/3 123/6 124/8 139/1 139/10 146/10
mostly [2] 108/7 131/23
mother [8] 75/7 83/2 85/15 85/17 88/8 89/5 91/4 93/7
move [6] 8/19 12/25 42/6 52/21 109/17 160/20
moved [1] 93/23
moving [1] 8/5
Mr [9] 5/9 22/22 98/17 101/17 125/18 126/7 174/16 174/24 190/25
Mr Booker's [1] 22/22
Mr Butler [1] 98/17
Mr Milne [1] 174/24
Mr Ross [1] 101/17
Mr Watters [2] 125/18 126/7
Mrs [2] 174/17 191/1
Mrs Turton [2] 174/17 191/1
Ms [8] 4/15 50/6 50/8 99/10 100/5 102/18 113/13 114/17
Ms Saunders [4] 50/6 99/10 100/5 102/18
Ms Saunders' [1] 50/8
Ms Spooner [3] 4/15 113/13 114/17
much [19] 7/4 33/13 36/7 49/10 58/2 100/3 111/18 130/15 135/17 138/11 139/6 140/21 148/21 153/17 156/25 165/15 170/22 178/8 178/13
muddled [1] 78/2
multiple [3] 13/7 13/24 14/18
Murray [1] 110/3
must [10] 4/4 4/8 17/19 20/25 72/2 74/8 101/5 111/10 127/24 184/3
muster [1] 96/19
my [58] 5/12 6/9 7/19 9/4 25/20 25/24 26/25 28/6 28/19 28/21 28/25 29/5 29/17 29/19 34/16 34/17 34/21 34/22 34/23 34/24 35/2 35/3 35/6 35/7 39/11 39/17 39/22 46/11 46/18 46/22 48/4 58/1 83/12 88/12 89/15 89/15 89/19 93/22 94/19 94/22 95/19 96/9 97/23 111/12 117/6 118/11 138/12 142/23 161/10 163/24 164/4 164/19 170/16 171/23 175/24 181/16 181/19 193/21
myeloma [1] 13/7
myself [2] 94/1 175/24

N

naive [1] 8/23
name [3] 32/3 39/20 158/8
named [3] 19/21 19/23 63/25
namely [1] 167/21
names [1] 193/21
National [5] 90/16 120/2 129/15 132/5 150/24
nationwide [1] 95/25
nature [2] 34/22 97/8
NB [1] 53/3
nearly [2] 176/13 176/16
NEBTS [1] 133/5
necessarily [5] 18/17 26/11 71/24 125/23 190/21
necessary [4] 28/12 40/9 61/6 66/25
necessitating [1] 57/2
necessity [2] 93/16 166/8
need [12] 24/10 48/11 50/1 80/8 85/8 95/6 98/4 116/9 116/23 124/6 144/9 192/3
needed [2] 89/10 116/8
needlessly [1] 33/24
needs [7] 76/10 80/7 164/14 164/25 165/13 165/24 188/11
negative [6] 33/8 58/11 58/23 75/21 126/3 164/19
negligence [5] 59/1 70/6 72/14 74/13 76/11
negligent [7] 62/10 62/22 64/23 72/3 73/23 74/9 76/2
neither [3] 23/25 27/3 30/7
neurotic [1] 28/23
never [13] 28/4 28/8 35/12 36/4 36/4 39/17 39/22 86/22 89/11 94/5 100/20 127/18 163/23
Nevertheless [1] 164/13
new [8] 3/11 12/8 96/3 116/6 116/13 122/2 124/5 166/1
newly [1] 48/12
newly-appointed [1] 48/12
news [2] 28/17 32/19
next [26] 8/6 9/12 10/1 15/22 20/17 26/16 27/14 32/16 42/20 48/10 51/19 63/14 67/15 73/11 80/1 81/15 93/1 98/10 101/1 112/6 113/23 160/20 166/5 168/10 193/19 194/17
NHBT0085908 [1] 22/22
NHS [97] 6/24 16/11 51/2 51/25 52/11 52/18 53/1 53/16 53/21 53/25 54/10 54/15 54/21 55/12 56/21 56/24 57/6 57/9 57/19 57/20 58/20 59/23 60/7 62/14 62/25 64/14 64/17 67/6 67/12 70/22 72/11 72/12 72/25 73/7 75/18 75/20 76/4 77/20 77/21 77/23 78/9 78/11 79/15 79/21 81/18 96/17 100/19 108/4 108/8 108/17 111/17 115/2 115/7 115/13 134/9 135/1 135/9 135/14 136/1 136/13 152/3 154/1 154/22 164/2 164/5 164/16 165/6 165/9 165/11 165/14 165/16 165/18 166/1 166/6 170/9 170/22 172/6 173/6 173/21 174/4 174/18 175/14 176/11 176/15 176/21 176/23 177/13 178/6 178/8 178/9 178/10 178/13 178/15 185/8 185/19 188/10 188/13
NHS concentrate [3] 54/10 174/4 177/13
NHS concentrates [1] 57/9
NHS factor [1] 53/21
NHS-managed [1] 164/2
nine [7] 107/22 131/6 134/2 135/23 153/3 160/6 176/9
Ninewells [7] 147/17 147/21 149/25 150/25 154/16 158/6 160/4
no [135] 2/21 11/8 11/21 12/1 13/21 14/7 23/13 25/3 27/4 35/7 45/16 45/17 46/24 47/2 47/8 47/10 47/16 47/16 47/17 47/18 48/1 48/8 48/22 48/22 52/3 52/8 52/15 52/22 53/12 54/9 54/20 55/24 55/25 56/19 58/11 59/18 61/16 65/3 67/16 68/14 68/20 69/13 69/16 69/19 70/18 71/10 72/5 72/23 73/16 74/16 75/8 75/21 76/11 76/17 77/9 77/18 78/4 79/16 81/17 82/15 83/9 84/1 84/13 84/25 87/8 88/19 88/21 90/6 94/1 94/14 94/17 96/17 97/11 97/15 97/16 99/6 101/25 104/5 104/14 104/20 104/24 104/25 105/2 106/13 106/20 106/21 107/17 108/19 109/8 110/22 111/23 112/13 114/4 115/2 117/1 117/6 118/16 118/23 119/11 120/7 121/12 122/16 122/24 129/4 136/18 136/22 138/5 138/15 139/2 139/12 141/14 141/15 142/1 142/16 148/11 149/2 149/6 149/15 150/25 151/6 152/8 154/7 155/15 155/19 157/11 157/14 166/8 166/19 171/3 171/6 176/4 177/1 180/4 193/15 194/16
nobody [1] 48/23
non [44] 3/21 8/17 8/17 9/6 9/6 10/20 10/20 10/22 10/22 10/23 10/23 11/4 11/4 16/12 49/11 49/22 60/16 60/17 61/2 61/2 103/18 103/18 119/3 119/3 139/23 139/23 140/16 140/16 140/19 140/19 165/16 165/19 165/22 165/23 166/10 166/12 182/18 182/18 183/15 183/15 186/20 186/20 192/16 192/16
non-A [12] 10/20 10/22 11/4 60/16 119/3 139/23 140/16 140/19 182/18 183/15 186/20 192/16
non-A non-B [1] 61/2
non-A, non-B [4] 8/17 9/6 10/23 103/18
non-B [12] 10/20 10/22 11/4 60/17 119/3 139/23 140/16 140/19 182/18 183/15 186/20 192/16
non-heat-treated [1] 16/12
non-malignant [2] 49/11 49/22
non-toxic [1] 3/21
none [4] 114/8 140/22 153/22 186/17
nonetheless [2] 46/13 65/24
nor [2] 100/11 165/20
Norfolk [2] 146/25 161/4
norm [1] 89/12
normal [1] 38/3
Norman [1] 10/6
Norman Berry [1] 10/6
north [12] 44/11 45/4 45/12 75/14 107/4 110/16 131/10 132/21 132/23 133/7 133/11 183/11
North-East [3] 132/21 133/7 133/11
Norwich [2] 146/25 161/5
not [208]
notable [2] 59/16 83/21
note [15] 38/6 38/20 49/1 56/12 71/11 73/14 76/22 79/10 101/21 110/19 119/14 142/10 151/4 173/20 189/23
notes [22] 2/10 5/13 24/1 25/24 48/5 68/14 71/10 71/13 71/16 73/12 75/16 76/10 76/21 77/4 78/4 79/14 82/17 123/5 133/21 161/12 174/23 191/10
nothing [2] 40/8 156/6
notified [1] 5/22
November [7] 45/13 70/23 72/17 107/7 113/17 140/9 159/20
November 1974 [1] 140/9
November 1982 [1]

N

November 1982... [1] 72/17
November 1983 [1] 45/13
November 1985 [1] 107/7
November 1986 [1] 70/23
November 1992 [1] 159/20
now [34] 9/8 16/25 20/6 32/13 32/16 32/22 33/20 38/2 41/23 42/13 49/1 86/12 94/20 100/3 101/12 101/22 106/4 114/25 118/7 121/24 124/5 124/25 125/7 128/14 146/17 153/6 153/18 169/19 170/21 171/3 175/22 176/12 193/14 193/17
now' [1] 39/19
number [38] 15/3 15/19 26/9 35/15 37/3 38/16 38/20 57/12 57/24 65/24 69/2 77/19 81/13 92/12 96/23 97/6 106/7 106/7 107/22 107/24 112/5 114/12 116/4 119/4 137/13 137/19 140/3 153/14 154/9 155/14 155/22 167/6 170/7 173/14 179/14 188/6 189/22 194/4
number 66 [1] 106/7
numbers [21] 21/8 36/18 71/2 72/24 90/9 90/11 106/9 107/9 110/24 129/1 133/13 139/11 143/10 149/23 151/19 154/14 160/2 173/2 177/8 189/20 192/1
numerous [2] 28/22 40/4
nurse [7] 34/18 47/17 48/19 48/22 131/1 139/7 139/10
nursed [1] 93/12
nurses [4] 40/7 41/7 94/16 163/7
nursing [6] 3/5 94/1 94/4 94/6 97/12 97/22

O

o'clock [2] 105/20 194/17
object [2] 102/19 127/11
observation [1] 82/13
observations [4] 46/7 65/24 95/15 142/22
observed [1] 189/10
Observer [2] 120/12 156/12
observes [2] 82/21 89/18
obtain [4] 21/24 22/5 116/7 169/19
obtained [9] 6/22 21/23 58/12 60/5 66/9 133/12 149/11 157/7 167/16
obtaining [1] 107/7
obvious [1] 171/7
obviously [10] 7/3 19/12 69/11 71/22 116/9 121/7 123/11 124/13 148/20 151/16
occasion [4] 19/21 57/13 102/10 185/18
occasional [1] 75/18
occasionally [1] 61/19
occasions [9] 3/14 41/8 56/23 56/24 57/16 57/17 57/19 57/20 58/8
occurred [1] 2/21
occurring [1] 112/7
occurs [1] 73/13
October [18] 19/25 27/23 29/7 35/15 64/2 117/17 126/15 142/14 150/19 155/25 166/1 166/9 182/21 184/23 187/11 187/12 189/24 189/24
October '81 [1] 155/25
October '83 [1] 150/19
October 1975 [1] 117/17
October 1982 [1] 182/21
October 1983 [3] 184/23 187/11 189/24
October 1984 [1] 64/2
October 1985 [5] 27/23 29/7 142/14 166/1 166/9
October 1988 [1] 126/15
odd [5] 18/12 108/12 108/13 135/11 153/18
off [6] 47/7 131/6 132/25 138/8 178/9 178/15
off-shore [1] 132/25
offer [4] 4/24 27/25 96/17 167/4
offered [6] 39/22 46/21 99/6 118/9 128/1 142/4
offering [1] 145/7
offers [1] 50/9
officers [1] 163/6
officially [1] 130/19
often [5] 61/24 97/13 100/19 123/3 132/24
Oh [3] 14/7 19/5 42/3
oil [1] 132/23
old [5] 64/20 65/21 70/16 93/6 93/22
once [5] 38/11 76/10 85/23 91/22 139/10
oncologist [3] 42/16 46/1 83/24
oncology [5] 45/21 47/24 49/13 49/25 100/2
one [90] 2/24 8/23 13/1 14/23 15/7 15/20 17/1 26/15 27/19 28/24 30/15 30/17 36/1 37/12 39/14 42/23 44/9 45/11 49/7 53/20 58/4 77/10 79/5 81/11 85/15 85/17 86/9 87/20 88/7 88/21 90/24 93/4 93/4 94/7 104/1 107/12 107/14 107/18 108/22 111/21 112/14 112/23 113/5 113/8 114/8 115/1 115/12 116/7 117/3 132/24 134/12 135/6 136/12 137/6 141/24 143/16 144/3 144/4 144/5 144/5 144/15 144/19 145/20 146/6 151/25 154/21 156/16 157/2 157/24 162/7 163/5 163/5 168/24 170/25 171/4 171/5 171/8 172/14 172/14 172/17 175/21 177/20 180/5 180/20 181/4 185/17 187/16 191/12 192/10 194/6
ones [2] 81/12 95/20
ongoing [1] 97/5
only [44] 3/13 5/14 16/9 16/23 28/15 35/15 51/9 52/16 57/13 59/25 61/7 73/6 75/24 76/7 88/4 93/15 95/24 98/17 102/24 104/1 108/18 109/5 113/5 113/9 115/11 115/13 116/5 118/18 124/11 124/14 133/14 135/12 135/20 140/10 145/24 154/2 154/5 154/7 154/15 161/6 168/5 185/17 185/18 188/16
onsite [1] 47/2
onto [1] 139/9
onwards [12] 17/13 27/8 42/10 50/12 70/14 72/18 75/7 77/15 78/7 107/10 109/25 118/19
OPD [1] 24/9
open [1] 85/19
openly [1] 94/4
operated [1] 66/25
operation [1] 80/3
operative [1] 47/4
opinion [4] 58/16 66/3 77/12 188/18
opinions [1] 29/19
opportunistic [2] 92/15 182/23
opposed [4] 59/15 94/7 155/18 189/21
optimism [1] 191/24
optimistic [2] 190/21 191/22
option [1] 139/6
options [1] 29/6
or [181] 1/8 5/7 6/4 6/4 9/3 10/8 12/5 12/23 13/20 14/10 14/12 16/20 18/19 19/3 19/4 20/2 20/20 20/21 21/9 21/22 23/8 24/9 25/4 25/7 25/12 27/2 27/4 27/15 27/18 28/22 29/18 30/8 30/19 31/8 31/23 33/10 36/5 37/3 39/8 39/23 42/16 42/18 44/2 45/5 46/12 46/25 47/17 47/18 48/9 51/23 52/16 53/8 56/21 58/13 58/15 60/23 61/22 62/14 62/25 66/1 68/14 68/16 68/19 68/22 71/18 72/11 72/23 73/3 76/1 77/18 79/21 80/4 83/20 83/23 83/25 84/24 84/25 87/5 87/9 87/17 88/4 88/21 90/7 91/11 91/15 91/25 94/1 94/15 94/18 96/18 96/18 98/7 99/7 99/22 100/23 102/2 102/4 102/10 102/18 104/9 104/20 104/23 105/7 107/1 107/1 107/23 108/25 109/1 110/25 114/19 116/8 116/13 118/24 119/3 122/14 123/14 123/21 124/10 124/12 125/2 126/6 127/19 127/25 128/15 132/13 133/4 135/1 136/18 136/22 136/25 138/2 140/12 141/3 141/13 143/9 144/4 144/18 145/4 145/4 145/17 146/4 146/25 147/3 147/12 147/20 149/2 149/4 149/6 149/7 149/9 149/10 149/13 149/24 153/18 153/22 155/16 155/21 155/23 156/7 157/12 158/9 159/11 160/8 160/23 162/7 166/18 168/16 171/5 171/5 171/12 173/21 176/21 180/5 180/8 180/16 187/14 187/21 188/23 190/19 193/10 193/14
oral [5] 7/8 38/13 41/14 194/1 194/4
orally [2] 11/17 41/19
order [3] 17/5 40/22 133/20
ordered [3] 8/11 43/22 47/25
ordering [1] 136/23
orders [1] 61/17
ordinary [1] 68/7
organisation [1] 100/15
organise [1] 44/1
organised [1] 149/6
origin [5] 10/7 66/8 181/7 182/12 183/11
original [1] 21/24
originated [1] 31/6
Ormond [3] 46/19 92/11 96/5
orthodox [3] 59/5 59/12 63/1
other [47] 13/1 16/20 19/3 23/3 30/20 31/22 38/14 44/2 44/9 47/3 51/15 54/23 55/14 58/2 69/22 77/9 86/3 87/16 91/8 91/14 96/19 103/21 105/6 105/6 111/23 115/3 127/13 127/16 130/17 133/2 135/2 139/24 140/1 145/16 152/8 153/22 154/2 155/15 157/8 162/7 164/21 167/2 171/23 181/13 186/9 186/15 188/23
others [11] 15/13 19/24 33/2 73/19 90/8 115/24 121/5 146/11 151/8 157/7 167/6
otherwise [1] 84/25
ought [2] 125/5 171/22
our [37] 4/20 5/3 28/10 38/20 100/22 110/18 112/5 113/19 114/9 117/24 119/14 123/17 124/7 127/7 128/4 128/11 133/4 164/12 164/14 164/25 165/12 165/13 165/24 165/24 166/3 167/1 167/4 167/15 168/6 181/5 181/24 183/8 184/14 186/21 188/11 191/10 194/17
ourselves [1] 114/20
out [52] 3/9 5/10 7/23 8/4 8/7 9/11 11/5 12/14 12/21 19/1 20/7 22/6 25/19 31/9 32/2 34/20 35/18 37/13 46/6 47/1 48/18 58/23 60/9 66/23 67/4 67/11 74/23 88/7 113/19 114/20 120/21 120/22 122/6 122/13 133/22 137/5 138/12 138/23 144/3 144/11 145/14 145/21 154/18 155/3 163/17 170/13 174/2 178/1 186/8 188/19 191/10 194/1
out-patient [1] 67/11
out-stations [1] 113/19
outbreak [1] 140/12
outcome [5] 17/15 38/19 85/13 85/16 105/9
outpatient [2] 46/14 47/18
outpatients [1] 45/22
outreach [1] 44/18
outside [2] 21/17 41/9
over [62] 2/23 5/17 13/9 16/18 19/14 24/5 32/12 33/5 33/12 38/14 40/12 41/12 42/13 42/20 43/2 43/8 47/12 48/15 51/25 53/20 59/14 59/23 61/4 62/3 65/16 65/19 65/22 68/1 72/15 80/14 88/16 89/16 90/11 91/2 100/5 103/23 106/16 110/5

O

over... [24] 111/25 117/22 123/14 128/8 146/20 148/5 148/14 148/17 152/19 153/23 155/11 163/16 167/3 167/14 175/15 181/3 183/11 185/1 185/3 186/8 188/6 189/13 191/22 191/24
over-optimistic [1] 191/22
overall [2] 105/18 162/23
overseeing [1] 28/5
overspeaking [1] 138/9
overview [1] 46/12
overwhelming [1] 62/13
own [10] 6/5 10/6 26/18 41/11 71/16 84/12 144/18 158/19 164/4 175/24
Oxford [6] 4/15 5/25 113/13 139/25 162/14 179/21

P

PA [1] 106/10
packs [9] 51/2 52/16 52/17 52/23 52/25 53/13 53/15 53/24 169/8
paediatric [20] 42/16 42/25 44/17 49/9 49/21 64/11 83/24 92/22 93/23 94/16 95/2 98/18 99/23 103/14 130/13 130/23 136/14 146/6 147/19 147/21
paediatrician [1] 42/16
paediatricians [2] 44/18 60/3
page [111] 2/13 2/14 4/14 5/8 5/17 7/10 8/6 8/7 8/12 10/1 13/5 13/9 13/15 14/5 14/6 14/8 15/10 20/8 20/17 23/5 23/24 24/12 25/21 26/23 27/14 28/14 31/12 33/16 34/12 34/13 35/14 39/6 39/10 40/2 41/3 46/9 47/12 48/10 49/6 53/20 55/10 56/10 58/6 58/16 59/14 60/12 63/14 65/10 65/18 65/19 65/22 70/9 72/15 75/2 77/7 79/8 79/11 80/1 80/10 80/14 80/14 81/7 81/15 81/25 87/6 92/10 92/10 92/17 92/18 93/1 95/5 95/7 98/10 99/15 100/5 100/5 111/25 114/15 114/24 115/17 116/19 120/7 120/8 120/9 121/19 128/8 129/11 135/15 143/23 157/18 163/17 166/5 167/8 167/14 170/18 171/2 172/10 175/1 180/24 182/24 182/25 183/6 184/19 185/1 185/3 185/24 186/2 186/7 186/8 186/13 192/3
page 10 [1] 70/9
page 12 [1] 34/12
page 13 [2] 46/9 92/10
page 16 [1] 92/17
page 18 [1] 23/5
page 19 [1] 75/2
page 2 [2] 171/2 192/3
page 21 [1] 95/5
page 24 [1] 77/7
page 29 [1] 95/7
page 32 [1] 180/24
page 4 [4] 2/13 39/6 80/14 114/24
page 5 [2] 41/3 81/25
page 6 [3] 170/18 186/2 186/7
page 7 [5] 40/2 65/18 172/10 186/8 186/13
page 8 [1] 7/10
page 9 [1] 65/22
paid [1] 10/7
paint [1] 39/1
Palmer [1] 184/10
paper [2] 120/14 127/23
paragraph [41] 4/17 15/22 16/15 20/9 23/9 26/23 29/16 29/22 35/5 40/2 41/3 47/15 49/6 56/14 67/15 73/11 80/18 81/16 87/21 96/24 98/10 98/15 99/15 100/18 101/1 101/2 113/23 114/18 116/20 121/22 132/16 133/9 168/10 171/14 182/9 182/15 182/19 183/7 186/14 186/25 191/18
paragraph 1 [1] 132/16
paragraph 11 [1] 99/15
paragraph 15 [1] 100/18
paragraph 18 [1] 101/2
paragraph 2 [1] 133/9
paragraph 21 [1] 29/16
paragraph 23 [1] 29/22
Paragraph 27 [1] 41/3
paragraph 31 [1] 40/2
paragraph 54 [1] 35/5
paragraph 9 [2] 26/23 49/6
paragraph 92 [1] 23/9
parameters [1] 47/11
parent [1] 93/7
parental [1] 105/10
parents [34] 23/20 24/14 68/19 68/22 80/5 85/12 85/14 85/24 86/1 91/8 91/25 93/9 93/14 94/19 94/21 94/24 95/14 96/23 96/25 97/7 97/16 98/4 98/23 99/2 99/8 101/12 104/5 104/9 125/9 125/12 126/1 157/11 191/16 191/20
parents' [1] 98/11
Park [1] 96/22
part [18] 5/1 10/8 36/7 45/2 45/5 46/8 86/13 87/1 96/10 103/10 104/21 107/23 119/9 150/4 150/5 159/16 192/18 194/14
Participants [1] 161/14
participate [1] 116/12
participated [1] 45/6
participating [2] 140/2 179/20
particular [26] 13/16 13/18 14/23 22/19 37/22 40/18 61/17 63/6 71/23 81/2 87/8 102/20 103/17 104/5 104/15 105/7 118/23 141/14 147/6 155/15 155/16 161/3 172/9 180/4 180/18 185/22
particularly [7] 62/15 62/22 74/1 98/22 164/6 174/6 175/5
partly [1] 50/1
partners [2] 21/3 159/8
parts [6] 99/14 101/19 139/17 147/23 164/22 178/10
Party [1] 10/13
pass [1] 171/22
passage [2] 30/23 136/22
passages [2] 34/7 83/1
passed [4] 25/2 33/20 91/25 97/13
past [4] 16/19 97/11 97/16 146/20
Paterson [1] 128/13
patient [99] 2/24 5/17 8/8 9/5 13/7 13/17 13/18 13/22 19/5 22/16 23/17 24/20 25/8 25/11 25/15 26/3 26/5 30/1 34/5 34/8 35/20 37/11 37/13 37/22 37/23 38/7 38/16 39/5 46/12 53/20 56/4 56/9 56/11 57/25 58/22 59/21 63/25 64/15 64/19 65/1 65/6 65/7 65/11 65/19 66/4 67/8 67/11 68/5 84/8 97/9 99/4 107/17 107/18 107/20 111/21 112/14 112/23 113/8 115/13 119/1 124/21 124/22 124/24 125/7 127/15 127/15 127/18 128/19 128/24 131/25 136/12 141/24 143/6 143/9 145/25 146/7 155/1 157/2 157/24 157/24 167/10 167/13 168/5 172/15 177/25 180/21 181/11 182/4 183/8 183/21 184/1 184/14 185/10 185/11 185/22 186/21 187/11 189/3 193/21
patient's [4] 65/15 182/14 183/3 183/4
patients [267]
patients' [3] 150/1 158/21 159/8
Patricia [1] 106/10
pattern [10] 53/19 53/23 111/18 112/10 113/2 113/22 115/9 135/19 152/19 153/23
paucity [2] 47/21 78/25
Paula [1] 43/5
pausing [1] 186/3
Pennines [1] 102/25
Penrose [23] 7/4 7/9 10/9 118/14 129/3 129/6 129/24 132/14 133/23 138/19 143/15 143/17 144/11 144/13 144/18 144/21 151/11 154/15 154/20 155/2 156/19 157/13 160/5
Penrose Inquiry [1] 7/4
people [10] 6/10 19/6 86/20 88/13 88/17 88/22 88/23 116/6 122/25 123/11
per [10] 48/3 90/24 91/2 103/23 103/24 167/17 169/8 185/10 185/10 185/13
perceived [1] 61/25
perception [2] 189/16 189/20
perfection [1] 76/7
performed [5] 21/25 37/9 86/13 142/15 184/16
perhaps [10] 25/18 49/5 65/23 68/25 83/23 99/5 104/14 156/16 171/22 173/17
period [25] 1/17 1/19 2/20 6/8 7/5 11/15 31/25 32/11 33/8 33/13 40/19 41/17 42/21 43/6 43/7 59/25 65/16 91/17 91/17 91/18 101/14 112/7 130/20 138/2 183/12
periods [1] 2/23
permission [1] 21/24
person [8] 22/17 25/5 26/4 33/1 36/6 73/20 130/18 190/16
personal [2] 84/12 99/7
personalities [1] 105/7
perspective [4] 4/1 71/23 78/16 139/4
pertinent [1] 62/2
Peter [1] 156/19
Pettigrew [4] 124/19 124/20 124/23 125/4
PFC [5] 115/23 116/14 136/25 137/1 156/20
pharmacy [1] 169/24
phase [1] 67/4
phased [1] 66/23
phasing [1] 122/7
Philip [1] 148/4
phone [2] 91/7 193/21
phoned [1] 33/7
physicians [1] 165/8
pick [17] 1/5 23/9 26/23 34/13 40/2 50/11 98/14 99/14 132/14 133/25 135/3 151/16 151/21 170/5 180/23 185/2 192/24
picking [1] 171/14
picture [18] 39/1 78/2 105/2 105/18 108/21 134/18 134/20 135/21 136/9 146/14 149/1 154/21 170/6 170/14 176/19 177/4 180/3 180/7
piece [1] 50/17
pieces [1] 115/21
pillar [1] 97/14
Pinching [5] 29/9 29/12 29/17 31/13 40/22
place [18] 1/25 21/20 24/9 26/13 33/12 34/19 35/23 36/23 71/18 77/16 88/4 88/10 98/6 121/9 136/23 158/23 179/18 189/25
placed [3] 61/17 63/6 97/9
places [2] 17/15 104/7
plainly [3] 36/2 103/18 184/1
plaintiff [11] 70/13 71/3 71/25 73/13 74/6 74/9 75/10 78/6 78/21 79/24 80/20
Plaintiff's [2] 71/13 71/16
plan [3] 99/23 117/6 120/21
planning [1] 169/7
plasma [19] 9/14 9/18 10/3 60/23 62/19 62/21 63/7 107/8 108/9 136/13 163/25 164/9 164/12 166/17 168/15 168/16 169/8 169/13 169/15
plasma-derived [1] 163/25
play [1] 117/25
played [3] 45/5 104/20 132/3
pleadings [1] 98/25
please [18] 2/7 4/12 7/10 13/9 23/5 26/20 33/15 37/20 80/14 92/8 111/8 111/25 120/8 124/8 137/18 166/23 169/19 188/22
plus [3] 173/9 174/8 175/13
pm [6] 105/22 105/24 106/1 147/8 147/10

P

pm... [1] 194/21
pneumocystis [1] 30/6
pneumonia [2] 93/5 93/23
point [7] 18/22 64/20 69/16 75/25 76/21 178/13 186/11
pointed [1] 122/6
points [1] 123/8
policies [3] 118/24 131/15 163/10
policy [14] 59/3 62/20 66/12 66/25 67/5 67/21 77/13 122/2 125/14 126/8 145/6 163/25 165/13 171/8
pool [4] 56/21 59/19 60/24 63/18
pools [1] 60/21
poor [4] 22/4 40/6 40/24 62/11
Popov [2] 17/25 19/22
porcine [1] 135/16
position [22] 12/14 23/8 43/1 44/12 46/7 47/13 86/7 91/19 98/19 104/19 109/14 118/15 118/22 120/20 120/24 130/3 134/6 148/21 159/18 160/11 160/17 162/2
positions [1] 95/19
positive [40] 2/24 2/25 12/22 18/8 18/24 20/2 20/22 22/14 24/25 25/10 26/4 32/14 32/17 38/24 41/15 66/5 71/9 71/15 73/13 75/21 77/25 78/5 85/16 86/21 90/18 90/22 91/1 93/8 125/4 127/20 127/24 129/16 142/14 143/20 158/14 159/20 182/1 191/4 191/17 191/25
positively [1] 128/23
positivity [1] 71/16
possibility [4] 18/19 27/21 68/16 71/20
possible [18] 10/2 13/19 40/23 58/12 59/1 79/20 90/7 91/25 100/21 103/7 116/5 117/4 128/12 139/9 168/21 175/6 188/8 194/11
possibly [6] 14/12 26/6 87/10 125/10 147/1 186/24
post [10] 2/10 22/14 23/20 23/25 24/24 32/25 46/5 162/4 163/22 181/18
post' [1] 97/14
post-transfusion [1] 2/10
potential [3] 11/10 63/17 151/18
potentially [3] 30/8 56/4 127/16
pounds [2] 167/25 168/2
powerful [1] 83/15
practical [1] 12/20
practice [8] 3/18 59/5 60/14 69/6 69/14 128/1 162/6 169/21
practising [1] 64/11
pre [5] 15/17 24/1 47/4 190/6 190/11
Pre-operative [1] 47/4
pre-test [3] 24/1 190/6 190/11
precautions [1] 32/17
precedence [1] 100/2
precipitated [1] 50/1
precise [2] 30/13 155/14
precisely [3] 19/12 121/14 155/9
predominantly [4] 66/7 108/12 108/22 155/6
prefer [1] 79/17
preferable [2] 165/6 165/10
preference [5] 59/22 62/14 154/22 164/3 166/17
preferential [1] 62/21
preferred [2] 76/5 121/25
preferring [1] 72/6
prejudicial [1] 97/18
Preliminary [1] 113/24
preparations [2] 51/15 60/19
prepare [1] 47/9
prepared [1] 23/7
presence [2] 86/16 114/7
present [12] 41/9 63/20 84/17 88/1 99/5 120/5 121/5 122/1 122/9 123/7 123/17 163/22
presentation [24] 1/4 2/16 42/2 102/21 105/15 106/3 109/16 126/24 130/7 147/11 160/19 160/25 161/12 190/2 193/24 193/25 194/9 195/3 195/5 195/6 195/7 195/8 195/10 195/11
presentations [4] 10/11 155/23 156/1 156/20
presented [2] 140/16 145/12
presenting [1] 13/18
press [3] 63/16 123/3 141/17
Preston [1] 104/15
presumably [20] 2/1 2/2 17/4 18/6 36/5 53/4 54/22 58/24 67/18 73/9 75/19 77/11 78/16 111/20 122/22 124/24 135/10 136/2 142/25 179/16
pretty [6] 90/20 111/18 128/21 138/10 178/3 178/7
preventative [1] 3/6
previous [11] 19/15 58/11 58/23 75/21 79/10 81/7 95/20 155/11 166/19 173/18 185/3
previously [7] 43/6 46/19 54/6 99/14 164/17 165/16 168/19
prides [1] 100/15
principal [1] 42/8
prior [7] 32/23 37/7 47/9 48/3 57/1 66/6 100/8
priorities [1] 100/22
prioritising [1] 96/13
priority [3] 81/17 97/15 164/16
prisons [2] 151/9 151/12
private [1] 190/16
proactive [2] 104/8 145/13
probable [1] 183/13
probably [16] 14/9 23/7 24/10 42/10 73/3 78/9 78/18 78/22 92/6 104/1 107/19 114/11 114/12 133/5 193/13 194/12
problem [3] 61/17 120/13 157/5
problems [5] 7/21 45/21 112/7 124/4 188/22
Proceedings [1] 105/25
process [17] 21/16 31/22 33/10 37/5 38/10 78/3 83/17 85/11 99/21 141/19 141/20 156/24 158/4 159/11 159/11 160/12 190/4
processes [2] 12/11 136/23
processing [1] 168/15
procured [1] 10/3
produce [2] 122/6 168/15
produced [3] 6/24 123/23 188/10
producing [1] 124/5
product [40] 16/14 52/2 54/22 55/12 57/23 58/4 60/6 79/15 79/17 79/18 81/19 112/16 115/18 116/6 116/14 117/17 134/15 137/2 149/13 151/17 154/2 163/12 165/17 165/17 165/18 165/20 165/22 165/23 165/25 166/2 166/3 166/9 166/14 170/23 171/9 171/13 176/15 177/12 177/15 183/13
production [3] 62/18 121/24 188/13
products [68] 6/18 6/22 6/23 9/2 12/2 12/4 43/21 43/21 44/2 51/18 53/9 55/17 58/25 59/2 59/6 59/23 60/1 63/24 66/3 67/13 67/25 68/17 106/24 107/1 111/4 118/19 118/20 118/22 131/24 132/7 133/7 134/3 135/1 136/13 136/25 137/11 140/13 151/17 153/15 154/16 154/22 163/25 164/2 164/3 164/4 164/5 164/7 164/8 164/15 164/16 164/23 164/25 165/6 166/18 166/22 167/22 169/25 170/11 172/23 173/17 176/11 177/6 179/9 180/11 183/17 187/21 188/2
profession [4] 36/14 127/3 127/10 128/4
professionals [2] 27/25 94/8
Professor [44] 1/22 11/16 11/25 12/12 15/2 22/2 22/11 22/12 22/21 23/6 23/16 24/11 29/9 29/12 29/17 33/5 38/12 40/22 41/13 44/6 58/16 60/13 63/9 63/21 64/9 65/3 67/17 67/24 68/25 69/6 69/7 75/10 75/24 77/1 77/2 77/11 80/12 84/22 86/6 104/15 121/21 122/13 123/22 142/11
Professor Bloom [4] 11/25 12/12 67/17 67/24
Professor Cash [1] 142/11
Professor Hardisty [3] 75/10 75/24 77/11
Professor Hay [10] 1/22 22/2 22/11 22/12 24/11 38/12 41/13 44/6 77/1 77/2
Professor Hay's [6] 11/16 22/21 23/6 23/16 33/5 86/6
Professor Ludlam [3] 69/7 121/21 122/13
Professor Ludlam's [1] 123/22
Professor Pinching [3] 29/9 29/17 40/22
Professor Preston [1] 104/15
Professor Savidge [7] 60/13 63/9 63/21 64/9 65/3 69/6 80/12
Professor Savidge's [2] 58/16 68/25
professorial [1] 163/2
Professors [1] 74/14
Profilate [7] 170/12 172/7 172/16 173/9 173/23 174/9 177/13
prognosis [1] 190/20
programme [5] 7/20 7/25 8/4 21/4 86/14
programmes [4] 7/13 7/14 47/22 167/23
progressive [1] 140/22
prolonged [1] 33/13
promising [1] 96/15
proof [1] 165/5
proper [3] 69/25 114/21 193/5
properly [2] 40/10 40/10
prophylactic [1] 16/5
proportion [14] 16/19 19/2 48/4 52/20 82/17 90/23 90/25 92/20 155/5 178/4 178/5 178/6 178/9 178/20
proportions [2] 54/14 178/16
proposed [1] 59/8
proposing [4] 41/20 44/4 102/2 117/15
prospective [1] 149/7
protect [1] 3/19
protected [1] 74/6
protection [1] 98/3
protective [2] 27/13 47/8
protocol [1] 69/16
protocols [1] 48/8
prove [1] 127/20
proved [2] 56/25 71/5
proven [2] 12/1 187/23
provide [9] 48/17 100/17 100/20 117/11 142/22 164/25 169/14 178/25 190/11
provided [34] 5/24 6/6 31/10 36/19 43/9 44/21 46/12 49/13 51/8 88/20 90/5 94/8 99/20 106/25 111/3 130/10 130/21 131/4 139/25 142/2 143/9 143/13 145/19 148/19 151/10 157/17 157/20 158/3 158/7 160/11 167/18 182/21 189/2 193/6
provides [3] 55/20 79/6 183/16
providing [2] 61/8 150/7
provision [12] 44/1 46/20 47/17 48/17 88/3 95/1 104/4 110/14 147/13 147/19 149/17 180/6
provisional [2] 90/15 129/8
provisionally [1] 192/6
PRSE0001556 [1] 121/18
PRSE0001758 [1] 15/8
PRSE0004509 [1] 182/4
PRSE0006024 [1] 7/8
PRSE001736 [1] 120/1
psychological [1] 39/23
psychosocial [1] 95/24
public [1] 192/19
publication [10] 15/6 15/7 17/2 19/19 19/25 60/8 126/22 184/6

P

publication... [2] 184/9 184/11
publications [1] 182/2
published [5] 13/4 17/5 23/14 64/1 181/20
pulling [1] 65/3
punches [1] 65/4
pupils [3] 193/22 194/6 194/7
purchase [5] 137/7 137/10 154/17 166/8 168/9
purchased [7] 67/7 153/22 154/3 164/15 169/23 170/13 171/21
purchasing [1] 167/19
purely [1] 94/11
purity [1] 166/2
purpose [3] 21/22 76/12 135/15
purposes [2] 66/17 73/20
pushed [1] 88/22
put [15] 5/15 32/1 32/6 33/24 36/25 44/4 82/25 85/8 87/18 87/20 89/3 92/8 110/18 129/11 145/23
puts [1] 118/1

Q

quality [2] 36/12 96/17
quantities [3] 170/13 172/9 174/21
quantity [3] 135/17 136/8 178/11
quarter [2] 169/9 193/13
queries [1] 123/13
question [11] 9/12 9/20 14/24 17/17 29/18 38/22 85/21 88/2 151/17 168/9 189/4
questioned [1] 36/3
questionnaire [1] 120/18
questions [6] 65/25 68/24 87/24 88/18 123/6 123/11
quibble [1] 116/21
quick [1] 138/13
quickly [2] 178/4 185/3
quite [11] 4/20 7/21 7/22 9/8 9/9 9/23 10/2 78/24 105/17 138/16 139/17
quota [1] 165/12
quote [1] 63/8

R

Raigmore [2] 109/21 125/22
Raigmore Hospital [2] 109/21 125/22
raise [1] 17/17
raised [4] 28/19 88/24 99/11 118/2
raises [1] 65/24
raising [4] 18/22 68/23 107/6 151/8
rampant [1] 96/1
range [8] 19/23 37/12 122/14 170/10 172/6 172/13 173/8 173/16
ranges [3] 21/12 90/12 154/9
Raper [1] 162/1
rapid [1] 27/7
rapidly [3] 27/11 68/9 123/17
rare [1] 188/24
rarely [1] 137/4
rashes [1] 61/20
rate [2] 16/6 18/24
rather [20] 8/20 17/8 33/13 34/21 42/17 43/14 52/16 67/7 71/23 72/4 83/24 102/10 107/20 107/24 145/13 152/9 153/10 153/19 162/8 190/25
ratios [2] 20/14 186/1
RCH [1] 192/20
RCH-T [1] 192/20
RE [14] 1/4 42/2 106/3 109/16 130/7 147/11 160/19 195/3 195/5 195/6 195/7 195/8 195/10 195/11
reaching [1] 145/14
reaction [5] 3/22 9/4 75/9 89/16 127/17
reactions [2] 8/23 76/17
read [12] 12/7 25/2 28/16 32/2 34/6 53/24 82/25 83/16 88/6 89/4 99/13 153/2
reading [3] 19/4 25/19 36/8
real [3] 12/3 142/1 146/12
realise [1] 10/19
realistic [1] 194/12
really [8] 24/18 33/12 76/13 112/10 113/2 116/23 134/6 189/5
rearrange [1] 130/5
reason [13] 19/16 30/20 61/3 69/13 72/5 84/1 115/3 121/12 123/4 141/15 152/8 153/4 187/21
reasonable [3] 113/22 156/13 160/21
reasonably [3] 1/24 12/3 174/5
reasoning [1] 96/18
reasons [2] 105/6 186/21
reassured [2] 28/11 93/14
recall [22] 11/8 12/18 15/1 21/14 21/16 21/17 21/19 22/2 22/10 22/14 28/9 37/8 37/14 39/11 39/14 39/20 91/13 136/22 143/5 174/16 190/23 191/13
recalled [1] 7/11
recalling [1] 84/21
recalls [10] 25/3 33/6 38/24 41/3 85/15 139/7 142/1 146/9 166/16 170/2
recap [1] 102/13
receipt [4] 14/18 84/25 180/16 185/8
receive [5] 8/15 67/6 70/24 80/21 96/16
received [62] 2/1 2/3 13/24 16/4 16/11 17/7 19/24 22/19 24/18 24/24 29/3 30/24 30/25 34/1 36/24 37/1 40/6 43/23 47/20 49/14 66/6 67/18 70/19 72/24 77/19 77/21 79/18 83/9 83/12 85/13 86/12 87/17 89/14 109/11 125/1 126/10 127/1 128/15 129/9 129/12 129/20 131/21 142/12 143/18 144/13 145/17 156/5 156/14 156/17 164/17 165/1 165/15 179/6 179/17 182/11 184/12 184/25 185/17 186/15 190/9 193/3 193/8
receiving [14] 22/10 25/16 40/11 41/5 67/10 67/16 84/21 120/23 155/13 157/12 171/4 171/5 172/13 183/10
recent [4] 42/19 120/11 124/4 156/11
recently [6] 36/24 48/16 125/21 125/25 160/15 187/17
recipient [1] 6/19
recipients [1] 187/13
reclassified [1] 80/9
recognised [2] 74/4 106/6
recognising [1] 14/18
recognition [1] 49/20
recollection [26] 8/7 11/5 12/24 23/16 45/14 67/16 82/10 90/21 90/23 91/11 91/22 125/8 133/22 136/24 139/14 143/11 144/15 144/16 144/19 157/11 163/11 163/17 169/22 174/11 179/4 190/5
recommendation [1] 60/9
recommendations [7] 12/13 59/7 62/7 63/11 64/1 74/3 74/7
recommending [1] 67/24
reconsideration [1] 76/10
reconsiders [1] 128/3
reconstitution [1] 61/11
record [6] 23/13 70/18 71/10 72/23 77/23 164/12
recorded [25] 15/18 54/9 69/13 83/22 106/21 108/11 109/6 111/23 113/6 113/10 115/11 115/14 134/23 134/24 135/2 136/13 137/12 137/16 138/8 139/16 139/25 146/11 150/1 160/6 190/12
recording [3] 84/8 115/16 115/17
records [42] 4/20 17/6 17/9 19/25 22/4 23/17 25/21 29/23 31/20 31/21 35/18 35/19 55/16 63/23 77/18 78/14 79/2 82/15 83/6 113/14 113/20 114/19 115/12 126/11 129/14 132/3 133/10 133/13 133/15 133/17 133/18 142/15 144/2 149/22 150/2 153/14 157/2 159/13 159/20 176/12 182/22 190/13
recounts [2] 35/17 93/20
recovered [1] 38/2
recurrent [1] 68/6
red [1] 145/23
redacted [2] 32/3 32/4
redactions [1] 32/7
reduce [3] 3/7 48/2 118/9
reduced [5] 52/24 60/19 69/8 121/24 167/12
reducing [2] 3/8 152/22
Reduction [2] 3/12 3/17
refer [10] 2/6 26/16 27/16 43/4 56/2 101/11 101/20 141/15 157/2 177/22
reference [41] 4/6 4/17 14/3 14/4 14/8 14/14 15/19 20/18 38/4 39/3 51/1 51/13 52/1 54/23 55/10 57/23 60/25 63/21 64/6 65/10 70/9 73/11 74/2 76/20 79/24 84/25 89/22 92/24 99/9 99/17 107/6 121/10 122/7 136/3 136/7 152/6 152/22 174/10 176/2 182/17 186/19
references [1] 156/19
referral [1] 142/7
referred [12] 22/23 38/20 42/18 44/10 44/14 49/2 75/3 91/3 143/7 146/8 161/21 177/15
referring [9] 14/15 49/19 76/12 99/15 128/14 142/11 143/6 169/2 180/1
refers [23] 5/17 7/15 11/25 15/22 20/15 27/9 29/22 31/10 31/12 35/8 40/19 60/8 64/1 66/15 68/9 86/1 98/10 113/21 126/21 142/21 168/18 184/13 191/15
reflect [2] 55/5 100/16
reflection [3] 7/19 53/9 63/1
reflections [3] 95/18 105/14 105/16
reflective [1] 83/23
reflects [2] 43/15 157/16
refused [1] 94/10
refusing [1] 188/16
regard [6] 37/19 38/21 45/10 65/14 67/3 133/10
regarding [4] 27/21 62/9 62/20 97/1
region [6] 45/3 45/8 103/20 162/15 162/16 167/24
regional [24] 7/1 44/21 44/22 45/2 45/3 45/11 48/16 106/25 107/4 110/15 131/14 132/6 150/6 150/8 150/24 164/9 164/11 167/18 168/5 168/11 169/1 169/20 169/25 171/11
registered [6] 90/24 107/20 107/23 110/24 158/10 167/5
registrar [7] 45/15 82/8 84/7 126/18 162/9 163/6 191/14
registrars [2] 46/2 163/5
regret [3] 99/7 100/3 114/19
regrettable [1] 5/3
regular [14] 1/11 1/14 1/16 1/22 10/14 16/4 16/18 112/20 117/3 117/11 149/13 168/21 172/22 179/13
regularly [3] 37/9 62/18 82/2
rejected [1] 181/21
related [12] 16/21 19/3 37/24 60/16 86/15 101/16 101/17 132/23 133/16 181/14 183/15 189/1
relates [2] 34/3 138/1
relating [9] 27/1 27/5 29/25 59/1 65/13 101/20 119/24 147/13 182/3
relation [66] 2/6 4/1 5/5 6/7 7/24 11/3 11/14 14/24 17/4 21/19 26/9 38/10 44/12 50/9 51/2 52/6 55/6 56/3 63/22 65/5 78/2 80/6 82/12 85/21 91/10 92/2 92/3 102/5 104/6 109/10 109/11 109/14 110/21 112/1 112/18 113/11 116/13 118/15 118/22 119/14 129/18 129/25 130/3 131/2 136/9 142/19 145/16 146/14 153/21 154/21 154/25 155/17

R

relation... [14] 156/10 156/17 160/17 173/13 176/19 179/2 179/8 180/18 186/9 190/24 191/2 192/13 192/14 193/12
relations [1] 99/4
relationship [7] 44/11 104/11 131/8 131/19 132/1 150/23 170/3
relationships [1] 151/5
relative [2] 61/22 152/21
relatively [6] 43/7 96/4 141/20 146/17 155/5 172/8
relatives [2] 2/20 117/9
relevant [6] 4/10 34/6 150/1 151/16 162/13 189/23
relies [1] 79/1
reluctance [2] 177/22 187/5
rely [1] 118/3
remain [3] 2/23 86/21 163/22
remainder [1] 128/16
remained [3] 2/24 2/25 183/8
remaining [2] 101/22 154/4
remarkable [2] 27/19 62/15
remember [12] 4/25 8/1 8/2 9/7 24/25 81/13 86/25 88/25 103/12 132/24 178/22 190/12
remembered [1] 7/17
remind [2] 38/14 64/19
removing [1] 71/20
renal [1] 2/22
rendering [1] 58/12
repeat [3] 11/16 32/15 159/5
repeatedly [1] 27/24
replaced [2] 40/14 165/22
report [16] 56/7 64/12 65/6 65/15 65/25 70/5 79/4 79/5 85/1 87/2 140/5 144/11 156/19 181/19 182/10 191/16
reported [9] 2/19 18/2 18/5 58/11 75/23 98/17 137/11 180/17 182/8
reporting [3] 74/15 85/2 179/21
reports [12] 10/12 15/17 56/3 63/16 63/22 80/13 123/2 141/17 175/1 180/1 181/1 188/7
representatives [1] 161/14
represented [1] 156/3
representing [6] 95/14 96/22 142/12 150/17 175/3 176/8
represents [1] 114/13
request [3] 98/11 142/5 169/11
requested [3] 113/15 159/5 175/6
required [11] 46/3 46/13 57/1 61/15 61/23 66/11 95/23 116/7 122/5 139/13 149/12
requirement [1] 62/23
requirements [3] 16/13 96/1 127/9
requires [2] 128/5 142/22
requiring [1] 97/9
research [3] 116/6 123/16 192/22
reservation [2] 48/1 82/15
reserved [1] 97/16
reserves [1] 62/24
respect [4] 59/17 102/21 114/21 122/15
respect of [1] 102/21
respectfully [1] 128/2
respiratory [1] 68/7
respond [1] 48/25
responded [2] 49/4 50/6
responding [1] 99/11
response [16] 1/8 1/9 12/11 12/19 12/23 26/17 42/19 50/8 99/10 101/8 115/25 119/22 142/20 155/21 168/23 179/6
responses [1] 26/10
responsibilities [1] 130/12
responsibility [4] 24/14 43/13 43/19 46/15
responsible [3] 6/10 99/2 163/12
rest [4] 59/2 102/2 113/3 146/22
restore [1] 117/25
restrict [2] 117/24 169/3
restricting [1] 171/8
result [20] 5/18 8/16 24/3 32/25 33/7 33/20 58/10 58/23 77/25 90/3 92/14 93/6 100/25 103/22 129/6 144/4 157/15 160/23 169/6 191/25
resulted [6] 60/19 67/21 93/3 105/8 169/11 169/12
resulting [1] 183/4
results [24] 16/16 17/23 22/5 23/14 23/23 31/24 32/13 33/3 37/15 37/17 38/19 58/11 71/10 73/16 75/22 86/4 86/12 88/3 91/24 124/18 157/12 181/23 190/9 190/15
retention [1] 76/22
retired [1] 147/25
retrospective [2] 21/1 192/9
retrospectively [1] 20/13
return [29] 3/2 4/13 12/22 46/17 50/15 53/22 54/17 83/16 108/6 111/13 111/19 112/21 117/19 117/23 134/7 134/10 135/18 136/10 137/14 151/22 152/10 153/20 165/19 165/21 166/12 170/15 170/19 173/1 192/25
returned [2] 58/3 165/23
Returning [1] 4/3
returns [22] 4/16 50/12 50/24 51/20 53/8 90/10 106/20 108/1 111/2 111/6 113/3 118/18 133/24 134/17 137/5 138/23 139/16 151/20 154/4 154/19 155/3 170/5
reveal [1] 108/24
reveals [1] 21/1
revelatory [1] 102/4
reverse [1] 94/22
reversion [2] 12/18 150/21
review [6] 37/11 37/13 80/8 149/7 149/14 159/1
reviewed [1] 167/10
ribavirin [1] 160/13
rider [1] 32/15
rig [1] 132/25
right [17] 7/20 13/16 13/20 27/15 27/15 27/18 45/9 49/1 65/22 69/6 74/18 88/7 102/1 102/14 103/11 142/9 161/6
right-hand [2] 13/16 13/20
rise [1] 69/2
rising [1] 68/9
risk [50] 1/8 1/8 1/9 3/5 3/7 6/18 6/20 6/23 6/25 11/3 11/20 12/3 12/16 12/19 12/24 28/8 29/24 30/2 33/24 69/12 71/19 74/4 74/19 80/4 80/5 86/23 90/7 93/10 104/25 119/21 119/22 123/9 132/7 139/19 141/5 151/18 155/19 155/21 156/8 156/18 164/5 179/13 180/12 181/8 188/3 189/2 189/10 189/16 189/21 191/23
risks [24] 1/13 6/6 10/18 10/22 27/1 27/2 66/21 68/21 71/20 73/25 78/19 83/6 83/19 84/13 87/9 103/17 104/5 104/9 104/16 109/1 119/7 180/6 180/10 180/19
Rizza [7] 12/12 67/18 67/24 84/23 125/19 126/7 143/4
RLIT0000127 [1] 19/19
RLIT0000567 [1] 13/3
Rob [4] 106/10 108/25 109/3 109/5
role [7] 1/19 119/8 119/20 130/22 130/23 131/15 132/3
Ron [1] 148/17
room [10] 24/9 34/18 34/20 35/1 41/8 41/10 88/12 110/11 142/1 145/22
Ross [2] 96/22 101/17
rotating [2] 46/1 163/6
rough [3] 20/21 178/2 178/16
roughly [3] 17/13 77/16 178/13
round [1] 42/6
routes [1] 90/7
routine [8] 25/9 25/17 47/20 129/22 142/4 145/12 149/7 159/24
Royal [62] 1/6 5/15 12/10 13/14 14/17 20/19 26/22 27/9 27/22 30/24 34/2 34/11 34/15 36/20 36/23 37/2 39/2 39/12 40/5 40/24 41/5 41/16 41/21 41/22 43/14 43/25 44/8 44/25 46/3 47/5 47/25 51/4 51/16 53/6 54/7 54/12 55/9 66/24 67/1 67/19 85/5 102/16 124/22 125/23 126/4 130/9 130/22 131/1 131/6 131/12 137/12 161/20 161/24 161/25 162/10 162/20 163/12 163/20 169/5 169/23 170/3 176/8
rude [1] 8/20
run [2] 86/23 194/12
running [3] 49/12 105/8 167/15
rush [4] 101/23 102/10 161/8 194/14

S

sadly [2] 49/13 96/1
safe [2] 3/13 61/8
safety [4] 60/15 61/13 62/4 93/15
said [47] 6/7 11/8 11/25 12/15 19/11 21/7 25/22 25/25 26/1 33/25 35/2 35/13 37/14 42/23 51/3 54/11 68/15 72/16 89/14 89/24 91/5 98/13 108/19 112/4 119/16 121/25 125/13 136/21 137/8 138/25 140/18 141/5 142/4 142/6 144/17 145/6 145/22 146/1 148/5 158/5 178/24 187/24 189/5 191/22 191/24 192/15 193/12
Saint [1] 29/8
Salmonella [2] 27/12 28/9
same [32] 21/7 28/11 31/3 31/8 31/15 32/7 38/4 38/7 65/6 67/18 68/24 69/15 74/14 77/3 87/3 89/23 103/24 113/7 115/9 121/10 121/17 123/21 124/2 127/14 127/22 128/14 135/15 138/10 157/7 168/25 184/1 186/16
sample [9] 17/9 25/10 29/23 31/20 55/5 66/5 75/22 151/20 159/6
samples [15] 19/14 21/21 21/24 22/8 23/10 47/9 125/2 144/3 157/6 158/16 158/16 158/20 158/23 192/8 192/15
sampling [1] 58/9
San [1] 23/2
San Francisco [1] 23/2
sarcoma [3] 13/6 13/19 13/22
sat [1] 162/14
satisfaction [1] 105/11
Saunders [5] 49/3 50/6 99/10 100/5 102/18
Saunders' [1] 50/8
save [1] 77/9
Savidge [9] 56/8 60/13 63/9 63/21 64/9 65/3 69/6 74/15 80/12
Savidge's [4] 58/15 58/16 59/9 68/25
saw [2] 89/15 101/17
say [41] 4/19 12/6 13/20 14/11 19/5 21/20 21/23 23/18 26/8 27/14 31/2 31/13 31/23 35/2 39/7 45/9 48/10 50/5 51/13 55/21 65/3 65/22 68/20 81/10 87/10 98/16 101/11 102/1 105/14 107/24 132/16 144/4 144/10 146/21 151/6 160/9 176/19 179/2 182/25 186/3 190/14
saying [17] 4/17 6/3 7/17 66/2 78/24 87/4 87/5 87/5 87/9 89/1 116/2 117/17 118/8 143/1 155/11 169/19 189/6
says [122] 4/18 4/23 5/8 5/19 6/8 6/21 7/12 7/24 8/3 8/10 9/18 9/22 10/18 10/22 11/1 11/7 11/21 12/2 12/10 12/13 12/20 13/23 15/13 22/7 22/9 22/15 23/9 23/9 23/24 24/23 25/4 25/12 26/24 29/10 35/23 37/10 37/15 38/1 39/10 39/23 40/2 44/6 45/19 45/23 46/9 47/13 49/6 49/18 51/7 58/17 59/14 64/2 64/9 68/3

S

says... [68] 68/10 72/1 73/21 75/7 77/3 80/2 82/16 83/7 83/17 85/8 85/9 88/9 89/9 90/4 91/19 92/10 95/3 95/17 96/5 96/24 99/19 100/5 101/2 102/18 106/13 113/22 114/18 116/21 117/20 118/10 125/4 130/11 130/15 132/1 132/4 132/8 132/15 132/18 133/9 137/1 141/22 144/23 144/25 145/25 149/4 149/15 150/3 150/22 153/21 158/24 159/3 162/24 163/18 167/9 167/14 168/3 169/2 171/15 172/24 175/2 180/25 184/20 185/11 187/15 190/8 190/18 191/18 192/17
SBTS0000223 [1] 137/9
SBTS0000233 [1] 137/8
SBTS0000309 [2] 115/25 116/15
SBTS0000635 [1] 142/20
SBTS0000652 [1] 142/10
SBTS000223 [1] 137/23
scattered [2] 112/8 116/7
scene [2] 11/18 82/14
scheduled [1] 88/1
scientific [1] 103/3
Scotland [15] 7/6 109/16 109/17 109/19 110/12 110/16 119/10 131/11 132/22 133/8 150/14 151/10 151/23 164/3 195/7
Scott [29] 162/2 162/5 162/18 163/4 163/11 163/15 163/17 166/15 166/22 166/24 169/3 169/18 171/10 175/3 177/20 177/21 179/9 179/13 179/20 179/23 180/1 180/13 183/19 184/10 187/10 189/18 189/19 189/25 190/25
Scott's [3] 166/13 169/10 191/21
Scottish [13] 111/17 119/6 120/2 132/5 141/6 141/12 146/15 147/12 150/24 151/17 154/5 154/7 177/15
screen [9] 44/4 56/14 82/25 85/9 87/18 89/4 92/8 134/19 176/1
screened [1] 91/24
screening [6] 3/11 47/3 47/19 86/14 119/10 119/15
screening' [1] 73/15
Scroll [1] 137/18
Sea [1] 132/23
second [23] 5/17 10/14 13/9 14/5 17/16 18/25 20/8 20/9 26/23 31/23 33/16 48/11 56/14 79/8 80/18 96/24 98/10 109/4 114/15 121/19 124/1 184/5 185/15
secondly [3] 36/2 59/21 127/21
secretary [1] 126/20
see [142] 2/14 4/14 7/13 13/6 13/11 15/22 17/12 19/19 19/22 19/24 20/7 20/17 30/9 31/7 31/12 32/9 32/16 32/20 32/24 34/4 34/10 34/14 45/7 45/8 45/10 51/1 51/19 51/21 52/7 52/9 52/14 52/19 53/11 53/20 54/4 54/11 54/19 54/20 54/23 55/2 55/9 55/11 55/16 56/11 59/9 65/9 65/10 65/18 72/15 73/10 75/13 76/20 79/8 79/11 79/24 80/10 81/9 87/6 87/21 102/8 104/10 105/9 106/8 111/13 111/15 111/18 111/19 111/25 112/4 112/15 112/22 112/24 113/12 114/8 114/24 115/15 115/21 116/15 116/19 120/1 120/5 120/8 121/16 122/21 128/8 132/12 133/25 134/11 134/24 135/1 135/4 135/8 135/15 135/20 135/22 137/12 139/16 139/24 143/23 147/2 150/17 152/2 152/10 152/14 152/21 153/2 153/4 153/13 153/20 153/24 154/1 157/18 163/14 163/17 166/21 168/24 170/6 170/8 170/18 171/2 172/2 172/5 172/6 172/11 172/15 173/4 173/16 174/2 174/10 175/11 176/7 176/23 177/10 182/8 182/20 182/24 183/2 184/5 184/11 185/24 186/10 192/4
see, [1] 173/14
see, number [1] 173/14
seeing [1] 7/11
seek [3] 39/16 128/19 128/24
seem [7] 3/22 5/18 18/12 21/13 79/23 80/22 116/22
seemed [4] 34/21 111/1 120/15 122/3
seemingly [1] 124/23
seems [7] 76/23 99/1 108/6 121/14 144/7 169/11 183/13
seen [17] 23/17 24/7 33/2 43/17 45/20 58/7 68/20 84/19 90/10 94/16 99/2 101/16 105/3 126/11 149/3 188/25 191/16
selection [2] 163/12 166/16
self [2] 47/22 188/14
self-administration [1] 47/22
self-sufficient [1] 188/14
seminar [5] 87/22 88/10 88/11 88/13 88/16
send [3] 120/21 169/8 169/15
sending [1] 4/16
senior [9] 45/14 46/2 82/8 93/12 93/25 162/9 163/5 163/6 191/14
sense [7] 6/14 97/15 99/7 104/4 104/13 106/7 183/25
sensible [1] 146/16
sensitivity [1] 63/22
sent [19] 23/11 29/23 30/4 31/3 31/4 34/20 55/17 67/23 84/2 85/18 120/18 120/22 122/13 122/23 136/3 156/15 157/6 187/10 187/13
sentence [4] 19/1 128/17 182/9 182/18
sentences [1] 25/4
separate [1] 112/1
separated [1] 102/24
separation [2] 49/24 99/25
September [13] 4/16 11/24 16/3 16/3 18/3 70/21 79/6 88/1 88/11 116/17 126/17 155/25 174/25
September '75 [1] 155/25
September 1982 [1] 174/25
September 1986 [1] 70/21
September 1991 [1] 79/6
sequence [1] 31/15
sera [7] 15/25 16/2 19/14 21/15 21/21 190/8 192/8
series [1] 18/5
serious [1] 10/20
seriously [2] 140/24 167/13
seroconversion [5] 15/11 20/20 20/21 68/9 71/18
seroconvert [1] 68/5
seroconverted [1] 16/8
seroconverting [1] 104/1
seropositive [6] 16/9 16/10 16/20 16/21 16/22 19/2
seropositivity [3] 16/17 58/10 190/21
serum [5] 158/12 158/23 179/24 180/2 192/19
service [37] 49/12 49/23 49/25 62/17 110/5 110/13 110/16 110/19 114/17 119/9 120/3 130/16 131/9 131/11 131/13 131/20 131/22 132/2 132/3 132/6 132/6 133/12 149/6 149/18 150/5 150/6 150/12 150/12 150/14 150/25 151/3 162/23 162/24 163/24 164/4 170/4 179/25
services [13] 7/6 46/20 48/19 95/21 110/21 119/13 119/20 130/17 149/16 150/7 150/9 151/2 163/8
serving [1] 164/11
set [14] 12/14 12/21 20/7 31/9 45/10 46/6 63/1 74/23 133/22 144/11 170/13 174/2 188/19 191/9
sets [5] 8/7 9/11 11/5 60/9 186/8
setting [2] 163/17 178/1
settlement [1] 80/24
seven [7] 143/19 143/25 144/6 144/8 144/14 154/12 170/7
seventh [1] 120/7
seventies [9] 10/19 107/2 109/4 109/20 109/23 110/25 140/20 145/9 151/13
several [8] 15/16 33/20 36/4 58/7 60/22 123/2 132/19 155/12
severe [27] 16/1 30/21 34/8 56/11 58/18 60/4 66/13 70/12 75/5 77/8 81/4 82/1 92/13 93/5 93/22 105/1 116/23 117/24 136/17 139/2 143/13 143/16 148/24 155/18 167/5 172/21 185/5
severely [6] 20/4 20/12 46/22 75/25 92/20 117/12
shall [3] 69/24 105/16 188/14
share [1] 117/21
shared [2] 130/11 163/1
she [120] 24/23 25/3 25/4 26/24 27/12 29/7 29/10 29/22 31/7 31/9 31/11 39/10 39/23 41/3 43/9 45/18 45/23 46/6 46/9 47/13 48/10 48/12 48/14 48/16 48/21 49/6 49/18 50/8 82/13 82/15 82/16 82/21 83/5 83/6 83/7 83/16 85/8 85/9 85/15 85/18 85/23 85/23 86/1 89/7 89/8 89/18 89/21 90/4 91/5 91/13 91/15 91/16 91/18 91/23 92/10 92/17 94/25 95/3 95/17 96/3 96/4 96/5 99/19 101/1 127/25 130/10 130/11 130/15 130/19 131/3 131/23 132/1 132/4 132/7 132/14 132/16 132/17 133/9 136/22 137/1 139/9 139/20 139/22 139/23 140/4 140/14 140/18 140/18 141/3 141/5 141/7 141/9 142/6 142/12 144/17 144/25 145/6 145/25 146/9 151/10 151/11 162/22 162/24 163/2 163/3 163/5 175/3 179/5 181/10 183/21 189/16 190/6 190/6 190/7 190/8 190/14 190/18 192/16 192/24 193/1
she'd [1] 132/17
she's [2] 49/19 99/15
sheets [1] 40/15
Sheffield [9] 23/10 102/22 103/3 103/10 103/16 104/2 104/6 104/10 104/13
shore [1] 132/25
short [11] 25/3 32/25 43/7 50/22 78/10 87/22 123/12 146/17 146/18 147/9 183/12
shortage [1] 97/14
shortcomings [1] 101/5
shortened [1] 98/1
shortfall [1] 117/18
shortly [4] 7/14 77/5 83/18 177/25
should [40] 3/9 25/5 26/8 27/14 31/2 32/3 32/15 32/16 33/14 48/10 60/7 67/5 67/14 67/22 68/20 72/12 74/4 76/4 76/8 81/10 83/20 84/14 99/9 101/11 102/7 127/12 127/25 132/16 142/23 144/4 146/4 146/21 160/9 161/7 176/19 179/2 183/23 185/2 186/3 189/7
shouldn't [1] 36/5
shout [1] 118/11
shouting [1] 88/17
show [12] 1/10 17/7 18/23 30/3 36/9 54/21 86/16 92/13 108/1 154/4 159/20 179/9
showed [2] 18/7 159/13
shower [1] 40/14
showing [2] 29/23 117/16
shown [2] 58/22 103/16
shows [2] 29/2 154/7
Sick [1] 124/22
side [5] 13/20 15/11 61/19 142/1 146/10
sideroblastic [1] 13/7
signed [1] 122/19
significance [3] 11/7 14/23 56/13

S

significant [17] 9/9 37/3 45/5 62/12 85/6 92/19 99/6 103/21 152/15 173/6 173/18 173/21 173/23 174/5 175/15 176/12 176/16
significantly [2] 45/6 171/1
signs [2] 92/13 97/23
similar [16] 23/21 28/17 31/8 53/23 54/5 81/22 87/17 112/10 123/21 134/6 134/18 134/20 134/21 135/21 136/9 188/1
similarities [1] 104/3
similarly [3] 47/7 146/2 166/16
simply [8] 28/5 36/11 69/25 102/4 123/7 178/21 187/13 189/1
since [7] 15/11 18/15 20/13 62/11 62/23 73/5 78/9
single [12] 46/17 56/21 59/19 60/5 60/18 61/7 70/21 73/7 107/17 166/17 167/17 192/6
sir [37] 1/5 34/8 36/8 38/14 40/18 41/21 50/7 50/15 50/24 66/15 70/5 83/16 84/13 90/9 91/10 101/19 105/19 106/4 109/14 130/3 146/14 146/21 147/12 151/22 160/17 161/1 161/12 166/23 172/5 174/16 176/6 178/18 179/2 184/9 186/3 191/13 193/11
sister [3] 35/9 35/11 93/12
site [2] 42/8 47/8
sitting [1] 160/23
situated [1] 150/7
situation [4] 93/2 97/18 99/5 150/4
six [8] 34/15 72/17 151/25 152/14 154/10 170/19 173/15 177/8
size [1] 3/17
sizes [1] 60/24
skate [1] 185/2
slight [1] 160/7
slightly [5] 7/18 63/10 82/9 107/22 178/9
small [23] 8/13 55/1 60/18 61/1 61/7 61/14 86/22 106/8 108/3 108/8 108/23 134/14 135/14 135/16 135/24 136/5 136/8 155/5 173/19 177/14 188/4 188/7 191/20
smaller [7] 52/1 53/1 61/11 107/25 118/1 121/13 174/7
smallest [1] 109/20
snapshot [1] 114/13
SNBTS [6] 116/14 118/18 131/23 149/12 150/6 154/16
so [211]
social [3] 47/17 48/19 127/19
Society [8] 31/5 31/5 44/5 125/16 143/4 165/4 174/24 188/19
soiled [1] 40/16
sole [1] 112/15
solely [1] 153/7
solicitor [2] 33/25 95/13
solicitor's [1] 101/18
solicitors [1] 96/22
solubility [1] 171/12
some [75] 1/21 4/20 5/1 5/3 8/15 10/2 11/13 17/3 17/3 17/6 17/11 19/16 22/18 23/19 26/11 26/15 27/25 29/24 30/1 30/12 30/20 32/23 38/25 39/13 44/20 44/24 45/7 48/17 55/4 56/4 57/3 65/12 65/25 70/2 70/7 79/6 82/2 95/14 95/17 96/10 98/5 102/15 103/24 104/3 105/16 107/1 107/3 108/7 113/18 115/6 115/6 116/13 117/12 119/14 123/5 123/11 123/19 124/17 126/7 126/10 126/15 142/17 144/2 144/24 155/13 170/14 172/11 175/17 177/14 179/3 179/8 181/8 188/12 191/7 193/22
somebody [1] 103/4
someone [7] 13/17 54/24 56/13 100/12 107/19 124/24 178/16
something [12] 10/23 11/2 51/7 54/5 66/16 83/10 85/22 87/10 114/11 158/18 189/7 189/13
sometime [1] 73/6
sometimes [2] 161/21 161/22
somewhat [1] 61/10
somewhere [4] 18/8 18/11 19/11 51/23
son [6] 40/4 86/13 86/19 88/8 93/8 174/17
son's [1] 39/25
sons' [1] 89/20
soon [1] 91/25
sore [1] 68/6
sorry [22] 6/13 14/7 30/23 32/1 32/18 36/25 48/10 50/16 65/10 86/10 87/19 95/5 100/23 101/7 115/17 148/11 171/17 175/21 175/23 176/25 185/4 189/19
sort [1] 39/13
sorted [1] 114/20
sought [3] 29/5 66/18 127/18
Soumik [16] 2/8 4/12 7/10 13/10 32/6 34/12 36/17 37/20 38/4 80/15 82/7 92/9 111/8 120/8 170/17 185/4
sounds [1] 116/12
source [8] 15/24 72/23 106/24 142/25 147/12 152/12 187/22 187/25
sourced [2] 136/25 137/1
sources [2] 167/21 177/12
South [1] 164/11
Southampton [4] 147/2 160/23 161/4 193/14
Southmead [1] 167/19
speak [1] 29/8
speaker's [1] 3/4
speaking [1] 31/12
special [4] 62/24 86/12 157/3 175/4
specialism [1] 100/13
specialist [4] 47/17 83/25 148/6 149/16
speciality [1] 49/21
specific [10] 27/4 45/17 59/7 80/4 81/17 138/17 149/2 155/20 156/6 182/4
specifically [6] 42/25 49/9 68/16 98/2 155/1 190/25
specified [2] 54/25 152/11
specimen [1] 119/17
specimens [1] 116/7
speedier [1] 160/24
spent [2] 43/6 130/15
Speywood [2] 154/3 154/18
Speywood's [1] 173/12
split [1] 131/6
spoke [4] 34/24 36/4 40/21 190/7
Spooner [3] 4/15 113/13 114/17
spouses [1] 24/7
spread [1] 192/7
spring [1] 179/10
St [2] 56/8 120/4
staff [20] 2/20 3/5 3/19 29/5 29/10 47/8 48/23 93/18 94/2 94/4 94/6 97/12 97/22 98/5 99/23 103/9 131/24 150/23 163/4 188/23
staffing [1] 96/8
stage [10] 4/25 26/12 47/14 50/9 82/11 103/18 117/7 118/6 171/7 192/25
stages [2] 43/4 177/7
Stan [1] 131/14
stand [1] 117/9
standard [5] 51/20 97/2 127/14 167/13 168/4
standards [1] 40/6
standing [2] 29/18 89/24
stands [1] 19/1
stark [1] 46/18
start [9] 2/7 15/6 39/18 92/9 101/22 117/1 193/23 193/24 194/17
started [3] 27/10 44/10 46/10
starting [4] 1/20 19/16 50/25 92/24
starts [2] 126/17 178/9
state [3] 87/12 93/17 123/17
stated [3] 64/13 66/20 175/4
statement [57] 6/6 10/18 10/25 11/21 21/14 26/21 30/18 31/9 36/7 39/5 39/25 40/20 42/19 42/21 43/4 43/9 44/16 46/6 46/8 49/1 71/8 77/4 79/16 82/16 82/24 83/2 83/15 85/15 85/20 86/6 89/5 91/3 91/5 91/16 92/7 95/17 98/13 99/12 99/14 99/17 130/11 130/21 130/25 131/18 136/15 136/21 138/25 141/5 145/6 148/16 148/19 151/11 157/22 158/24 159/17 180/24 183/21
statements [6] 87/16 101/12 105/10 145/17 160/12 162/12
states [6] 12/9 71/11 71/14 73/15 77/12 120/12
stating [1] 24/25
stations [1] 113/19
statistics [1] 114/22
status [9] 23/20 70/5 79/4 79/5 89/20 125/24 126/1 143/7 185/25
stay [2] 19/8 34/20
step [1] 169/7
steps [3] 17/20 98/3 123/9
steroids [1] 3/23
Stevenson [4] 106/11 107/3 107/6 109/6
Stevenson's [1] 108/25
STHB0000568 [1] 132/12
stigmatisation [2] 86/2 95/25
still [16] 9/7 21/3 26/14 74/5 102/3 102/7 108/11 152/15 165/24 173/5 173/18 174/5 177/11 182/16 187/18 190/20
stock [6] 55/4 55/9 55/14 118/8 165/20 168/19
stocks [1] 149/23
stop [1] 94/13
stopped [2] 25/25 140/24
storage [1] 21/22
stored [16] 19/15 21/15 21/22 22/8 25/10 25/12 125/2 142/16 158/11 158/16 158/16 158/23 190/8 192/8 192/15 192/19
story [1] 129/23
straddles [1] 161/18
strain [1] 97/24
strange [1] 144/7
Street [3] 46/19 92/11 96/5
stress [1] 127/21
stressed [1] 191/20
stretch [1] 172/12
strewn [1] 40/12
strict [1] 3/18
striking [1] 17/1
strongest [1] 128/11
struck [1] 8/17
studied [2] 20/13 184/23
studies [5] 15/19 15/24 21/18 113/24 186/5
study [10] 2/12 17/5 17/20 18/2 18/18 19/18 21/19 116/13 185/22 187/7
sub [1] 94/9
sub-group [1] 94/9
subject [3] 123/1 125/8 128/11
submission [1] 68/15
submissions [1] 105/5
submitted [1] 48/12
subsequent [3] 2/4 61/25 143/14
subsequently [8] 58/1 60/1 65/1 71/5 73/8 95/1 181/19 193/1
subset [2] 20/14 21/9
substantial [3] 170/8 174/21 176/17
substantially [1] 104/24
succeeded [2] 150/15 162/2
successful [1] 47/21
successor [1] 148/4
such [21] 6/11 7/1 22/10 28/24 42/18 48/9 56/12 60/16 61/6 61/9 61/10 61/15 62/16 72/12 86/9 94/6 101/6 105/8 106/15 106/18 141/3
suddenly [1] 125/25
suffer [1] 97/24
suffered [5] 30/19 83/13 100/25 101/6 140/24
suffering [4] 28/3 28/18 28/20 30/7
sufficient [7] 61/5 98/3 127/2 164/14 164/24 165/12 188/14
sufficiently [2] 39/20 97/23
suggest [15] 14/2 44/24 59/18 107/21 108/6 109/8 113/24 128/2 143/18 144/1 144/14 147/22 158/15

S

suggest... [2] 187/19 192/8
suggested [3] 20/20 80/7 143/16
suggesting [1] 118/5
suggestion [1] 121/23
suggests [9] 26/5 32/22 33/10 36/22 43/11 43/18 67/22 90/17 183/21
summaries [1] 46/12
summarised [2] 41/18 140/5
summary [6] 19/25 22/1 24/20 123/7 184/13 193/11
summer [2] 24/24 88/4
summoned [1] 24/6
supervision [1] 149/13
supplied [11] 43/22 47/25 51/4 51/15 53/6 54/12 90/15 118/20 143/21 144/20 144/21
supplier [1] 67/8
supplies [6] 54/6 61/18 76/6 98/7 107/7 149/11
supply [11] 55/11 62/11 69/10 78/10 118/2 164/24 166/7 166/22 167/3 168/21 175/5
supplying [3] 43/20 62/18 168/16
support [8] 39/23 49/22 95/24 97/12 103/9 103/19 128/12 179/4
support' [1] 39/16
supported [1] 98/12
supporting [1] 128/9
supportive [1] 96/1
supposed [1] 51/13
suppressed [1] 27/7
supra [4] 45/3 45/8 162/15 162/16
supra-region [4] 45/3 45/8 162/15 162/16
sure [10] 12/15 32/2 51/12 51/22 117/7 145/2 145/22 167/11 168/23 187/16
surgery [4] 27/9 30/20 79/25 167/24
surrounded [1] 93/18
surveillance [1] 184/9
survey [5] 5/2 84/5 140/2 140/11 179/20
suspected [7] 6/22 27/12 27/23 47/7 181/15 183/1 184/14
suspicious [1] 186/18
swinging [1] 29/1
switch [3] 74/5 78/11 78/20
switched [3] 70/23 76/16 174/18
swivel [1] 29/1
Sydney [1] 147/20
sympathy [1] 99/7
Symposium [1] 2/11
symptoms [13] 28/16 28/18 28/20 28/21 29/13 58/21 59/3 61/6 61/20 65/16 85/2 90/2 90/3
syndrome [3] 15/16 15/17 120/10
system [7] 5/15 27/7 76/22 82/15 114/21 133/18 149/6

T

T-cell [1] 186/9
T-lymphocyte [1] 13/8
T4 [2] 20/14 186/1
T4/T8 [1] 20/14
T4/T8 ratios [1] 186/1
T8 [2] 20/14 186/1
table [4] 36/24 36/25 129/11 183/2
tactics [1] 96/18
take [15] 5/1 14/22 32/17 34/19 36/16 46/13 50/13 82/7 89/1 92/6 98/3 101/21 102/14 146/16 146/19
taken [19] 1/18 17/21 19/14 21/25 28/7 42/13 48/15 65/5 71/12 73/15 75/22 76/14 77/24 89/13 110/5 116/9 125/6 127/17 157/6
takes [3] 32/12 74/18 189/25
taking [10] 1/25 19/4 33/12 35/23 40/11 76/22 88/3 121/9 123/10 179/18
talk [3] 34/17 35/10 123/13
talked [3] 118/3 160/14 161/22
talking [4] 18/9 26/12 34/25 171/23
talks [4] 89/21 96/3 96/4 131/18
targeted [1] 28/1
Taylor [14] 110/1 114/25 119/24 120/6 120/23 121/16 121/18 122/9 122/20 124/21 124/24 125/11 126/14 128/9
Taylor's [3] 119/3 124/25 128/22
Tayside [2] 148/15 148/22
TDs [1] 122/6
team [6] 7/16 36/25 96/12 99/25 103/15 130/12
technician [1] 149/11
Tedder [3] 18/7 19/22 23/11
teen [1] 43/13
teens [1] 44/9
telephone [5] 4/25 29/11 123/14 124/8 167/1
telephoning [1] 43/24
Television [1] 123/3
tell [7] 23/25 35/3 35/12 71/1 86/15 125/14 145/1
telling [5] 22/2 22/17 85/21 91/8 146/9
tells [3] 91/15 181/10 184/6
template [2] 122/19 124/1
ten [9] 51/21 90/12 115/12 152/12 154/11 167/9 185/16 188/6 194/17
ten o'clock [1] 194/17
tend [1] 192/8
tended [1] 2/23
tenure [3] 46/11 82/23 91/12
term [3] 38/8 38/9 118/13
terms [77] 1/10 6/5 10/17 11/18 11/20 24/17 31/24 36/18 37/5 43/20 51/22 52/23 53/17 54/14 59/4 68/23 79/17 81/21 83/19 85/3 89/7 90/9 99/3 103/12 104/4 107/9 108/1 110/7 110/24 111/15 114/12 118/14 119/21 120/24 122/11 123/25 129/1 129/18 131/5 134/3 134/13 135/19 136/14 136/15 138/19 138/24 139/19 141/1 141/19 141/21 142/6 143/10 144/22 146/7 147/19 149/8 152/2 152/21 155/8 155/19 156/24 160/2 160/10 161/25 163/10 168/23 169/15 173/15 174/2 180/5 180/12 189/4 190/3 190/14 191/22 192/1 193/2
terribly [1] 41/4
territory [1] 17/16
test [37] 15/25 17/21 21/25 22/22 24/1 24/2 24/23 24/23 27/25 28/9 32/15 33/17 37/8 37/12 38/11 38/19 58/23 71/9 71/10 85/16 86/4 86/13 88/3 124/7 124/15 124/18 127/20 142/15 144/3 157/12 158/13 159/7 190/6 190/11 191/5 191/25 192/16
tested [32] 3/16 21/15 23/15 25/10 25/12 26/14 28/7 28/10 30/3 30/6 31/11 38/18 88/14 90/18 122/12 124/1 124/16 125/2 125/3 126/12 126/13 143/20 144/24 145/13 158/12 158/14 158/17 159/4 159/14 160/1 191/3 193/9
testing [53] 4/7 14/25 15/4 17/3 17/3 17/7 18/25 21/1 21/2 21/4 21/16 21/17 21/18 22/8 23/12 26/12 29/23 31/18 31/22 32/23 33/9 33/10 37/5 38/11 73/16 77/24 78/3 85/3 85/11 85/13 88/2 89/8 91/10 91/21 91/23 119/16 128/20 128/25 129/16 141/19 142/3 144/22 144/24 145/7 157/6 158/4 159/6 159/20 186/11 190/3 190/10 192/9 192/14
tests [20] 17/13 17/15 17/23 18/6 21/25 22/6 30/4 33/18 35/12 37/7 37/9 37/12 38/3 89/11 89/12 142/18 144/2 156/24 181/23 190/10
text [1] 182/19
than [45] 6/23 17/8 25/3 33/13 38/14 42/17 43/14 47/3 52/16 60/18 67/7 69/23 71/23 72/4 73/17 77/9 82/9 83/12 83/24 91/14 98/1 102/5 102/10 105/6 107/20 115/3 137/13 141/18 145/13 152/9 152/9 155/15 160/25 161/10 162/8 164/6 164/21 168/12 170/25 171/4 172/13 178/11 178/21 188/17 190/25
thank [13] 14/22 22/22 30/22 36/16 50/14 82/7 105/13 105/21 121/4 128/10 176/6 182/5 194/20
that [610]
that I [8] 5/1 8/23 11/9 11/11 89/19 98/16 101/20 163/19
that is [8] 31/9 74/20 124/13 128/14 137/7 138/3 142/14 153/25
that' [1] 26/1
that's [59] 10/8 11/13 14/9 18/8 22/1 23/2 24/10 30/14 50/3 51/23 55/19 63/5 71/22 78/7 82/5 88/1 90/20 101/8 108/6 111/18 113/2 113/17 115/3 118/22 124/9 124/15 128/7 129/8 130/3 137/19 138/6 138/18 139/16 143/20 145/11 146/14 150/20 151/15 152/8 152/19 153/9 153/23 154/18 160/17 161/11 162/23 166/13 166/23 169/22 170/14 175/19 176/4 176/25 177/1 178/16 185/13 192/12 193/11 193/15
their [58] 9/14 10/6 15/1 16/13 21/2 21/21 23/19 24/7 33/3 33/7 33/25 44/9 49/17 58/4 62/3 63/19 74/3 80/13 85/4 85/22 92/5 93/11 97/17 97/25 98/3 98/8 99/3 99/24 101/5 101/15 101/17 117/8 122/12 124/18 125/2 125/9 125/24 126/6 126/11 131/15 140/24 141/21 145/18 149/8 149/14 158/23 159/5 159/13 159/22 160/11 165/22 166/12 174/17 180/8 185/21 188/19 191/9 193/10
them [30] 11/10 15/1 17/22 22/17 23/14 24/8 83/3 83/11 85/4 88/15 90/2 90/2 93/15 101/24 102/10 102/11 105/5 117/1 117/15 123/14 145/19 151/21 159/4 159/14 161/7 161/10 161/15 179/15 190/7 191/12
theme [2] 189/13 191/10
themselves [3] 85/22 85/25 161/13
then [263]
therapeutic [9] 47/4 59/2 59/3 59/17 60/6 61/13 62/7 62/20 64/21
therapy [13] 16/5 55/21 55/22 62/13 67/13 112/20 115/5 139/5 149/10 155/6 155/13 172/20 172/25
there [211]
there's [75] 2/14 4/17 6/1 13/6 15/19 31/2 31/19 33/6 34/5 42/5 44/3 44/4 52/1 52/3 54/23 55/10 63/8 64/6 70/2 70/9 75/2 79/4 79/5 79/8 84/1 84/6 87/25 88/2 92/24 95/13 104/5 108/10 108/24 112/14 113/7 118/5 118/23 119/2 119/17 122/7 122/16 124/1 126/14 129/20 131/8 134/18 134/20 136/3 138/5 142/16 145/20 147/22 151/5 152/4 152/6 155/10 155/19 156/6 156/25 160/7 170/21 171/6 173/18 174/3 177/14 177/16 179/5 179/8 180/4 180/18 184/24 186/2 186/7 186/19 187/10
thereafter [2] 77/22 169/21
therefore [11] 3/22 66/8 66/24 71/17 82/3 91/20 108/21 164/14 165/25 184/16 191/19
these [49] 10/15 16/4 16/8 16/11 16/16 26/9 26/11 34/24 37/16 63/10 64/3 64/21 64/24 67/13 69/23 71/20 74/25 77/12 78/3 79/22 80/6 93/12 94/19 96/9 96/10

T

these... [24] 96/14 98/19 98/22 100/4 100/16 101/4 102/6 114/1 116/6 117/8 128/15 132/9 133/17 158/11 158/14 164/8 174/23 185/7 185/23 186/4 186/5 186/17 187/13 187/24
they [63] 1/24 3/2 4/22 9/21 10/3 18/9 22/13 26/4 26/12 27/11 27/12 27/16 28/17 30/3 32/14 32/14 35/12 37/10 40/11 49/2 63/12 85/12 89/7 89/12 89/13 89/14 90/1 96/16 97/13 97/20 98/1 98/6 98/9 99/25 100/17 102/24 103/2 103/2 106/7 108/1 117/2 117/9 119/4 126/12 126/12 126/13 136/24 139/12 141/16 145/12 146/3 146/4 159/15 160/25 168/14 177/21 178/17 180/9 180/11 182/25 191/4 191/5 193/9
they'd [4] 22/13 125/13 159/25 187/14
they'll [1] 19/8
they're [6] 19/7 48/24 102/25 161/21 161/22 178/19
thing [2] 30/17 77/3
things [3] 7/23 17/1 59/10
think [78] 6/2 7/19 9/2 11/2 18/3 18/6 24/10 26/7 26/17 29/25 30/13 31/13 32/16 33/14 37/18 40/18 43/6 49/2 52/3 52/5 52/14 69/15 70/6 72/2 74/11 77/1 78/7 80/11 84/1 85/8 89/1 89/18 92/3 92/6 95/5 99/9 103/10 104/6 105/16 112/19 115/3 118/11 119/23 120/20 121/12 121/20 123/20 126/23 135/18 136/2 137/3 137/8 137/15 137/24 138/12 141/9 141/10 141/15 142/3 142/9 152/4 152/8 153/12 153/24 159/10 160/21 161/6 164/19 170/16 171/24 172/10 175/23 178/13 184/4 186/21 188/15 193/15 194/12
thinking [2] 50/17 85/16
thinks [3] 91/23 94/25 136/16
third [12] 4/14 18/7 47/15 49/6 79/11 83/4 99/15 146/15 147/12 175/1 182/15 185/24
thirds [1] 171/17
Thirteen [1] 186/15
thirty [1] 47/6
this [266]
this' [1] 26/2
Thomas' [1] 56/8
those [44] 1/13 2/1 2/2 7/14 17/23 38/19 39/16 43/12 45/6 46/21 55/6 81/3 81/4 84/2 88/13 96/8 100/24 100/25 101/9 101/19 102/9 104/21 105/7 105/14 110/23 120/24 144/12 147/6 151/4 158/16 160/8 160/9 160/24 161/3 161/9 163/7 169/16 178/17 181/25 185/15 187/7 187/8 191/10 194/5
though [6] 23/14 31/4 88/22 96/14 133/5 169/10
thought [15] 3/20 11/6 11/11 13/25 14/19 28/17 83/10 86/18 89/11 104/25 125/5 137/19 171/21 181/14 190/6
thousand [2] 167/20 168/2
thousands [2] 60/23 188/4
threatening [1] 95/23
three [24] 15/15 25/4 76/16 83/2 89/5 107/13 107/14 111/10 117/22 118/6 125/10 136/17 143/11 143/15 144/8 144/12 153/3 175/5 176/11 178/8 178/10 178/13 184/21 186/18
three years [1] 125/10
throats [1] 68/6
thrombocytopenia [1] 16/23
through [22] 10/10 12/4 25/20 25/24 26/17 33/9 34/2 35/17 41/18 41/20 58/24 69/23 70/24 102/20 109/23 112/11 113/3 117/15 134/19 146/22 180/15 180/16
throughout [5] 123/1 131/25 138/22 154/23 178/7
throw [1] 56/4
thrust [1] 27/19
Thursday [3] 1/1 194/7 194/11
tied [1] 177/24
time [99] 1/15 7/17 7/19 8/4 8/14 9/5 9/23 10/4 21/5 21/25 23/6 27/17 28/5 30/12 32/18 32/21 33/13 35/22 39/21 40/17 40/19 41/16 42/21 43/6 43/7 46/22 47/6 50/15 56/19 57/13 59/6 59/13 60/14 62/11 62/22 63/2 64/20 70/14 72/3 72/10 72/12 72/18 74/5 76/21 81/19 84/6 84/6 84/15 86/2 87/3 87/13 91/18 91/18 92/21 93/2 95/10 95/25 96/15 99/6 100/22 101/14 101/21 102/9 103/4 103/19 106/12 114/14 115/17 121/2 121/8 124/10 126/13 130/15 132/11 132/13 134/16 134/23 136/22 138/2 138/22 142/16 148/22 154/24 157/7 157/9 157/23 160/21 162/21 163/22 166/3 166/21 172/19 181/12 182/25 183/12 184/6 186/11 188/12 192/21
times [7] 36/4 40/12 64/22 97/14 98/8 178/8 178/13
timetabled [1] 194/10
timing [1] 120/15
timings [2] 103/12 142/18
tiny [3] 108/19 110/11 138/6
tissues [1] 145/23
title [1] 148/2
to [1161]
to 1982 [1] 144/4
today [6] 19/11 102/3 146/23 161/1 161/9 193/16
Todd [1] 156/3
toddler [1] 73/3
together [8] 37/1 93/11 97/10 110/10 123/8 128/16 129/12 138/5
told [44] 10/5 22/12 22/12 22/13 25/5 25/9 25/13 26/3 26/6 27/11 28/9 28/23 29/18 33/19 34/21 35/16 35/20 35/21 36/2 41/13 52/22 67/15 83/8 89/10 90/1 122/13 124/18 125/9 125/11 125/13 125/25 126/13 129/3 139/20 139/22 141/21 141/23 141/24 149/20 154/15 159/21 159/22 160/3 167/1
too [7] 40/14 78/22 111/9 117/7 169/22 185/3 188/15
took [18] 21/20 24/5 24/9 26/13 33/5 36/23 43/2 43/8 46/5 46/10 71/18 88/10 88/21 100/2 148/4 148/14 148/17 159/11
tooth [1] 80/22
top [12] 10/1 13/11 15/10 63/14 80/1 81/15 81/25 93/1 100/5 166/5 182/5 182/24
topic [3] 1/7 22/19 92/3
total [10] 2/19 57/9 73/1 114/2 132/25 143/25 144/6 153/9 155/5 187/3
totalling [1] 57/6
Tovey [3] 168/25 171/11 179/25
towards [9] 31/11 80/10 94/5 111/22 118/25 120/5 127/22 167/8 183/6
toxic [1] 3/21
traced [1] 168/24
track [1] 66/16
traditionally [1] 44/7
tragedy [1] 101/6
trained [2] 42/25 49/9
transcript [1] 7/8
transfer [1] 36/22
transferred [3] 75/13 99/24 106/19
transferring [1] 158/2
transfused [1] 169/4
transfusion [48] 2/10 3/12 5/21 6/17 7/1 23/4 44/21 44/22 51/14 60/15 62/17 106/25 109/13 110/13 110/16 110/19 114/17 119/9 120/3 131/9 131/11 131/20 131/22 132/2 132/2 132/5 132/6 133/12 137/11 150/8 150/9 150/12 150/14 150/24 162/17 163/24 164/4 164/10 167/18 168/6 168/11 169/1 169/14 169/20 170/1 170/4 171/12 179/25
transfusions [2] 13/24 14/19
transient [2] 132/24 133/3
transitory [1] 133/19
transmission [8] 6/25 58/13 58/24 59/6 66/21 68/17 90/7 151/18
transmit [1] 145/4
transmitted [7] 12/4 23/4 63/20 64/14 64/25 139/21 187/20
transmitting [1] 6/18
transport [1] 47/6
transported [1] 47/5
trauma [1] 101/6
travelling [1] 29/7
treat [7] 53/10 59/3 72/3 73/23 74/9 160/15 177/17
treated [129] 3/2 12/25 16/12 34/9 40/5 41/4 47/24 50/4 51/21 52/4 52/8 52/9 52/15 53/12 53/21 54/9 54/20 54/22 56/9 56/15 56/23 57/16 57/17 58/19 59/21 63/24 64/15 64/22 67/8 67/25 68/2 70/14 70/22 70/24 71/3 71/25 72/9 72/10 72/13 72/17 72/19 73/1 73/3 73/4 73/5 73/9 74/9 75/7 75/11 76/7 76/18 77/14 77/22 78/6 81/14 82/2 83/3 84/8 90/11 92/5 94/15 106/9 106/17 106/18 107/9 107/18 107/18 107/24 110/8 110/25 111/14 111/20 111/21 111/21 112/13 112/13 112/22 112/23 113/5 113/25 114/13 118/13 118/20 122/8 127/13 133/5 134/2 134/8 134/11 135/7 136/12 139/1 151/19 151/24 152/13 153/15 154/9 154/14 157/25 157/25 164/23 164/25 165/5 165/11 165/14 165/16 165/17 165/19 165/19 165/22 165/23 165/25 166/2 166/9 166/11 166/12 166/19 170/7 172/15 173/2 177/6 177/8 179/9 179/10 181/25 185/17 185/19 188/5 193/8
treating [8] 9/4 29/5 29/20 41/15 60/3 60/10 66/13 132/25
treatment [167] 3/23 5/19 16/6 16/13 24/21 27/4 28/1 29/3 29/6 34/1 38/22 38/24 40/24 41/6 42/8 42/8 43/18 47/16 47/21 48/6 49/16 53/5 53/6 53/17 53/19 54/2 54/6 54/11 54/13 54/15 55/1 56/5 56/20 57/10 60/17 61/24 62/8 65/4 65/16 66/12 66/23 67/10 67/21 69/3 69/16 71/4 71/21 72/6 74/4 75/14 75/15 75/17 75/25 76/3 76/14 77/9 77/10 78/22 79/15 79/22 80/22 81/3 81/4 81/18 82/6 82/19 83/12 92/25 97/17 103/2 103/6 103/7 104/18 104/21 107/9 108/2 108/3 108/5 111/3 111/17 112/1 112/3 112/6 114/2 115/5 115/6 115/7 115/12 116/18 117/11 118/7 118/25 122/1 129/6 132/4 133/11 134/8 134/13 135/8 135/9 135/13 135/25 136/1 138/24 139/9 139/11 140/21 140/25 142/6 145/8 146/8 149/10 149/14 149/24 153/5 153/7 153/11 153/20 155/4 155/8 155/9 155/13 155/16 157/16 160/12 160/13 163/10 164/18 165/7 165/15 166/3 167/3 167/7 167/10 167/23 169/15 171/19 173/7 173/9

T

treatment... [28] 173/20 173/22 173/24 173/25 174/5 174/13 174/14 174/17 175/12 175/13 175/14 175/17 176/13 176/15 176/18 177/11 177/12 181/6 182/11 183/10 183/15 183/21 184/25 185/9 185/13 186/15 187/4 188/16
treatments [11] 55/22 57/4 57/7 59/23 59/24 61/10 64/24 95/21 100/21 152/22 160/16
Treloars [6] 193/22 193/25 194/6 194/7 194/9 194/18
trial [2] 116/13 179/10
Tribunal [1] 163/16
tried [1] 132/9
triggered [1] 125/15
trolley [1] 41/9
tropical [1] 30/5
trouble [1] 113/15
true [2] 113/7 172/12
truly [1] 101/7
Truro [7] 147/1 160/22 161/3 162/13 192/25 193/1 193/14
Trust [3] 100/24 101/4 101/10
trusted [1] 93/19
try [9] 40/22 59/11 66/16 123/18 133/20 144/10 169/13 176/3 176/5
trying [3] 95/21 113/21 178/22
Tudhope [7] 147/16 147/23 147/25 150/18 151/24 156/14 157/4
Tudhope's [1] 155/21
Tuesday [1] 194/5
turn [7] 6/24 41/23 75/2 130/6 146/15 179/12 193/21
Turning [1] 4/10
Turton [2] 174/17 191/1
twelve [3] 117/5 135/6 154/12
Twenty [1] 50/20
Twenty-five [1] 50/20
twice [2] 28/7 116/24
two [57] 5/3 5/5 6/2 20/11 20/11 25/3 35/25 45/2 51/12 54/19 56/2 56/17 59/16 64/16 64/17 70/16 72/20 74/25 77/16 83/3 89/5 91/4 102/6 105/20 107/14 107/15 112/19 115/10 116/24 125/10 126/3 127/11 129/7 129/16 135/22 136/11 138/4 143/7 143/16 150/16 153/8 154/10 155/12 160/9 161/18 161/19 163/5 171/17 178/9 178/14 182/2 192/5 192/9 192/10 192/10 192/11 194/7
two o'clock [1] 105/20
two years [2] 6/2 155/12
two-thirds [1] 171/17
type [10] 51/18 54/25 70/18 71/4 77/18 133/16 170/25 171/4 171/9 172/14
types [2] 124/5 171/6

U

UK [12] 15/15 60/3 63/3 63/11 63/25 64/4 90/24 109/21 120/17 166/17 181/2 182/7
UKHCDO [42] 1/10 1/14 1/16 1/21 10/11 11/22 37/1 59/8 60/25 64/4 69/17 83/22 84/16 90/15 106/7 109/4 109/6 109/25 119/5 126/7 129/9 129/12 140/3 140/8 141/3 141/13 143/18 143/21 144/1 144/20 154/18 155/22 156/5 156/15 157/17 157/20 162/5 174/25 179/13 180/15 189/25 192/7
UKHCDO meetings [1] 10/11
UKHCDO's [1] 140/2
ultimately [1] 189/6
unable [5] 22/5 85/18 94/21 113/19 141/4
unanimous [1] 127/7
unavailable [2] 29/10 72/10
unaware [2] 159/25 191/5
uncertain [2] 6/20 190/20
uncertainties [1] 12/17
unchanged [1] 41/10
unclear [4] 78/25 108/17 128/15 155/14
under [20] 10/5 20/8 36/21 43/12 45/25 51/24 59/14 60/10 62/8 66/3 88/22 93/22 93/24 113/25 124/25 147/16 173/10 173/11 184/19 191/2
underdeveloped [1] 150/5
underestimate [1] 114/12
undergoing [1] 27/9
underlying [1] 105/6
undermine [1] 29/19
underpinned [1] 104/14
understand [9] 10/24 25/7 70/10 126/3 129/2 129/15 146/5 187/25 189/9
understand it [1] 129/15
understandable [1] 9/3
understanding [17] 6/5 9/11 9/15 10/17 23/6 33/4 33/5 43/21 43/24 45/23 84/12 86/4 86/7 91/11 156/8 160/2 168/7
understands [1] 144/17
understood [2] 21/22 94/5
undertake [2] 116/5 158/25
undertaken [19] 15/5 17/5 17/8 17/13 18/25 31/22 32/24 32/25 45/17 85/11 91/21 96/5 169/3 184/24 185/25 186/6 187/9 190/5 191/5
undertaking [4] 37/6 128/24 142/18 156/24
unethical [3] 3/4 128/18 128/23
unfair [1] 117/23
unfamiliar [1] 129/23
unfortunately [2] 32/14 175/9
unheat [4] 72/9 73/3 73/4 74/9
unheat-treated [4] 72/9 73/3 73/4 74/9
unheated [11] 57/13 57/18 57/19 57/23 57/24 58/2 58/20 59/25 64/16 64/17 72/11
uninformative [1] 22/5
uniquely [1] 162/24
unit [8] 3/1 46/15 95/2 100/2 142/8 149/4 163/1 163/2
United [6] 110/22 120/12 139/18 145/16 180/21 188/25
United Kingdom [5] 110/22 139/18 145/16 180/21 188/25
United States [1] 120/12
units [61] 2/15 3/17 5/20 16/7 51/23 51/24 51/25 52/11 52/12 52/17 53/14 53/15 53/16 53/18 54/1 54/3 54/24 57/4 57/7 57/10 108/13 108/13 111/16 111/24 112/2 112/17 113/1 134/3 134/4 134/13 134/14 135/11 135/11 135/17 137/13 137/14 137/19 138/12 152/2 152/3 152/16 152/17 152/18 153/19 154/3 167/16 167/20 168/12 170/9 170/21 170/23 170/24 172/5 173/11 174/7 174/8 175/13 175/13 175/16 176/14 185/13
University [2] 13/14 39/13
unknown [3] 11/6 96/4 187/19
unless [1] 193/21
unlike [3] 92/11 97/11 97/15
unnecessary [1] 94/20
unreasonable [1] 156/4
unsatisfactory [1] 172/1
unsuitable [1] 76/2
unsure [1] 37/16
unsurprisingly [4] 25/4 85/17 89/18 179/19
untenable [1] 62/11
untested [1] 24/6
until [26] 5/13 21/5 23/15 23/23 24/5 42/10 46/17 72/12 72/24 75/11 77/19 82/10 109/24 110/4 148/3 148/12 148/14 150/14 162/3 162/4 178/7 183/9 190/19 191/6 193/17 194/22
until 1991 [1] 148/12
untrained [1] 97/22
untreated [1] 64/21
unusual [2] 150/6 185/12
unwell [2] 182/16 183/8
unwilling [1] 96/13
up [45] 1/5 10/14 11/25 23/9 26/23 32/1 32/6 34/13 40/2 46/5 48/20 50/11 65/11 74/17 75/8 82/25 85/8 87/18 88/18 89/25 92/8 98/14 99/14 103/3 114/16 116/8 116/25 132/14 133/25 135/3 138/14 144/10 151/16 151/21 157/19 164/15 167/9 169/7 170/6 171/14 178/2 180/23 182/20 185/2 192/24
up-to-date [1] 103/3
update [3] 79/9 120/24 140/10
updated [1] 123/18
updates [1] 182/21
upon [16] 37/1 56/4 59/2 63/6 100/14 100/15 100/16 103/5 104/16 126/15 144/17 144/23 159/14 189/15 189/20 193/14
upset [1] 88/23
Urbaniak [2] 131/14 142/21
urged [1] 64/14
urgent [1] 17/20
us [31] 25/7 25/14 30/7 56/18 56/23 57/5 57/8 57/17 57/18 58/20 59/23 62/13 63/24 64/2 64/16 90/1 91/8 91/15 122/13 124/8 131/4 132/21 133/13 144/21 156/12 157/17 160/3 181/7 181/10 182/12 184/6
US origin [1] 181/7
USA [2] 164/7 181/2
usage [17] 48/3 54/9 55/5 111/15 111/23 167/11 167/15 170/8 170/20 172/3 173/5 173/18 174/2 175/17 176/14 176/17 179/7
use [47] 3/16 12/2 12/21 12/23 27/2 38/8 48/8 53/25 54/21 57/22 59/2 59/15 59/23 61/23 62/3 62/9 62/13 62/21 63/7 64/15 68/2 108/22 116/25 122/3 132/4 138/20 146/9 149/24 151/12 153/6 154/5 154/22 155/6 163/25 165/16 169/6 169/12 171/18 173/8 176/13 177/10 177/16 177/23 179/2 187/5 188/8 188/12
used [77] 3/14 34/14 39/17 51/18 52/2 52/13 52/20 53/10 54/10 55/2 57/4 57/14 58/1 60/7 62/12 67/14 71/4 72/12 76/8 82/10 82/23 111/5 114/3 114/5 115/7 115/18 118/17 118/19 118/23 128/5 131/25 133/11 134/3 134/16 134/22 135/12 135/12 135/14 135/25 136/5 136/7 137/3 139/15 152/5 152/15 153/9 153/15 153/18 153/22 154/16 165/25 166/6 167/22 169/13 170/11 172/7 173/7 173/22 173/24 173/25 174/4 174/7 174/9 174/12 175/11 175/12 175/13 175/16 176/11 176/18 176/24 177/11 177/15 178/5 178/20 179/5 187/4
useful [4] 66/12 67/20 68/18 191/11
users [1] 20/4
uses [1] 38/7
using [5] 3/13 62/1 117/23 172/23 188/2
usual [1] 69/14
usually [4] 61/14 61/21 162/7 190/17

V

vacation [1] 46/11
vaccination [1] 47/20
valid [1] 128/5
various [8] 42/20 43/4 112/19 117/14 141/12 163/6 177/6 182/23
verbal [1] 21/24
verified [1] 114/6
version [2] 32/6 63/10
very [47] 5/10 7/13 7/22 8/1 8/18 9/6 19/6 23/12 24/13 25/23 28/17 31/8 36/9 40/5 42/3 49/13 53/24 78/2 78/10 81/6 88/19 88/25 89/4 92/10 93/9

V
very... [22] 100/3 100/23 101/16 103/6 104/21 104/21 104/24 106/8 106/17 117/1 123/13 135/24 138/21 146/13 148/6 148/21 154/23 156/25 160/23 164/12 178/2 178/19
via [3] 43/22 51/15 169/25
victim [1] 133/17
view [12] 3/4 19/5 20/25 59/12 71/24 73/18 74/19 112/7 127/7 128/4 128/7 139/5
views [4] 73/19 105/7 128/12 128/22
VIII [89] 8/13 8/16 8/22 8/24 12/25 16/5 16/12 16/18 20/3 27/2 30/25 54/24 56/18 56/21 56/25 57/3 57/4 57/11 57/21 58/20 59/24 60/7 60/22 61/5 62/1 62/15 62/23 62/25 63/19 63/24 66/7 66/9 70/15 72/18 73/24 78/6 80/21 83/8 84/9 108/14 111/4 111/24 112/3 112/14 112/16 112/25 113/9 115/2 116/1 117/18 117/22 117/24 118/2 118/8 118/9 122/8 125/1 134/5 134/9 134/14 135/9 135/16 140/24 151/25 152/16 152/24 155/7 165/11 166/4 167/3 167/11 167/20 168/9 168/22 171/13 171/21 172/8 172/16 173/10 177/14 178/5 179/10 182/12 185/8 187/23 188/5 188/9 188/10 188/12
VIII:C [1] 16/1
VIIIY [1] 166/2
viral [6] 6/18 58/13 60/16 80/4 151/18 181/14
virus [11] 3/20 27/12 33/19 58/24 68/17 86/18 86/20 90/6 92/14 145/2 159/1
viruses [2] 28/22 68/8
visit [1] 40/9
visiting [1] 27/13
visitor [1] 107/19
visits [1] 57/2
vividly [1] 8/18
voicing [1] 166/22
volume [9] 51/18 52/24 52/25 53/1 54/2 175/16 176/17 183/10 186/23
volumes [3] 52/10 61/10 61/11
von [28] 52/4 52/15 52/22 53/13 54/19 55/2 107/12 115/1 115/8 134/8 135/7 135/13 135/23 136/6 136/11 136/19 153/3 154/11 173/3 173/15 174/15 176/10 176/20 177/9 177/18 184/17 185/6 185/16
von Willebrand's [27] 52/4 52/15 52/22 53/13 54/19 55/2 107/12 115/1 115/8 134/8 135/7 135/13 135/23 136/6 136/11 136/19 153/3 154/11 173/3 173/15 174/15 176/10 176/20 177/9 177/18 184/17 185/16

W
wait [3] 147/4 147/5 161/10
waiting [1] 161/9
Wales [6] 44/12 45/4 45/12 75/14 75/17 107/4
walked [1] 145/22
Walton [14] 41/25 42/3 106/3 106/5 106/14 106/18 106/22 107/2 107/10 107/20 107/23 109/9 109/15 195/6
want [14] 30/17 32/19 41/8 56/2 82/25 89/25 90/2 119/19 145/23 151/15 161/8 175/22 185/2 194/14
wanted [3] 4/22 34/20 101/20
ward [21] 45/21 47/24 49/13 88/10 93/11 93/17 93/24 93/25 94/15 94/16 97/10 99/24 131/5 131/7 131/7 133/15 139/12 147/17 147/21 149/4 163/1
wards [1] 93/5
warned [2] 30/7 80/6
warning [1] 104/9
warrant [1] 127/4
was [519]
washed [1] 40/10
wasn't [8] 8/3 28/11 87/2 106/14 139/6 141/7 147/14 148/5
wassermann [1] 127/17
Watson [1] 143/14
Watt [4] 115/22 116/2 116/16 155/11
Watters [3] 125/18 126/7 143/3
way [18] 15/4 23/21 25/23 55/15 55/25 94/6 99/17 101/13 101/15 111/6 124/10 129/19 159/19 171/17 178/21 180/5 181/8 190/3
we [512]
we'd [1] 140/24
we'll [19] 23/21 56/11 65/9 65/12 66/16 87/6 102/8 106/8 110/22 112/15 116/15 119/11 144/9 147/2 151/15 161/11 177/19 193/24 194/9
we're [13] 52/21 63/5 65/7 67/15 95/16 110/19 117/21 117/23 124/12 147/3 171/3 194/8 194/10
we've [49] 4/13 7/8 15/20 17/9 23/17 30/1 30/1 31/21 33/2 36/24 38/20 41/18 43/17 52/23 53/13 55/25 68/20 82/12 82/22 84/18 86/9 87/18 92/1 101/8 101/16 102/6 104/7 105/3 110/18 117/18 117/18 119/13 119/22 121/6 121/8 122/17 128/15 129/19 130/25 137/22 145/15 148/16 148/25 153/16 155/15 172/14 175/21 177/7 182/6
weak [1] 40/14
wear [1] 27/13
wearing [1] 39/18
Wednesday [1] 194/5
week [7] 89/22 193/19 193/19 193/20 194/2 194/13 194/18
week's [1] 116/22
weekly [1] 116/24
weeks [2] 126/24 183/9
welcomed [2] 98/9 99/25
welfare [1] 93/10
well [52] 3/15 4/18 8/1 9/7 13/19 16/22 17/24 19/7 19/8 24/12 38/15 46/15 55/13 55/17 62/20 69/5 69/24 69/24 73/25 77/2 79/1 83/14 85/7 86/8 86/21 89/7 91/2 101/15 103/16 105/4 105/13 116/23 116/25 117/21 134/25 138/4 138/10 142/13 143/5 146/19 156/15 162/25 163/4 166/1 169/14 174/14 175/17 176/14 178/1 178/7 189/8 193/17
Welsh [1] 164/1
went [2] 35/6 39/17
were [209]
weren't [2] 25/6 132/9
West [2] 58/4 164/11
what [96] 10/10 11/1 11/8 12/15 16/19 19/1 21/6 21/19 22/15 23/17 24/1 25/25 34/25 35/13 37/14 37/16 40/18 47/13 48/3 48/24 50/15 51/7 51/12 52/11 53/9 53/14 59/11 59/11 66/1 66/15 66/25 67/2 68/15 68/18 73/20 76/13 76/25 78/24 82/21 83/12 83/14 83/16 83/19 84/11 84/14 87/1 88/24 89/11 89/16 94/11 98/12 101/16 101/17 102/13 102/21 102/25 103/2 104/6 104/10 106/24 108/1 108/6 108/24 116/11 116/17 117/6 118/22 120/23 121/14 123/7 124/14 132/10 137/19 137/22 138/2 138/20 140/18 141/17 143/1 144/14 144/17 144/19 145/1 146/4 159/4 159/13 159/16 161/11 163/2 177/24 178/11 180/14 180/16 184/6 191/23 191/24
what's [5] 20/20 54/4 72/16 145/10 186/4
whatever [2] 27/18 69/25
whatsoever [1] 83/9
when [76] 4/21 8/9 8/24 10/15 12/15 15/2 17/10 20/21 22/3 27/13 28/19 28/24 32/15 33/5 34/14 35/1 35/16 40/14 40/25 41/8 44/10 46/5 50/9 55/20 59/21 59/25 62/3 63/6 64/22 65/18 68/1 68/5 71/24 72/24 73/24 74/2 74/19 77/19 82/13 85/24 86/5 91/20 95/25 97/8 98/23 103/13 113/7 114/20 115/15 119/12 119/20 125/12 125/25 127/22 133/7 137/2 140/9 140/15 140/18 145/12 145/21 145/24 149/1 149/20 151/1 151/11 158/5 158/12 159/10 159/24 162/13 162/18 178/4 190/10 192/3 192/25
where [30] 9/14 9/24 11/2 23/9 30/6 40/5 46/19 58/6 83/9 97/21 98/6 98/9 103/7 104/19 105/17 117/9 119/24 126/4 132/14 133/18 140/4 140/14 141/13 143/8 147/2 151/8 152/11 156/11 191/4 191/21
whereby [2] 64/25 85/11
wherever [1] 19/12
whether [25] 10/21 14/11 21/21 27/15 32/3 37/2 51/23 71/2 79/14 79/21 98/7 117/4 124/9 124/11 124/12 128/14 138/1 145/3 147/3 158/22 165/5 168/20 187/12 187/14 189/5
which [142] 3/8 4/9 4/10 5/15 5/20 6/24 8/14 8/16 10/13 11/10 11/17 11/23 11/23 14/14 14/23 15/4 15/20 17/9 18/5 19/3 19/18 20/25 22/6 25/21 26/8 26/13 27/10 29/12 30/2 30/17 31/21 32/17 36/8 36/12 37/24 39/1 42/20 43/17 44/6 48/12 50/5 50/6 53/4 53/25 54/25 55/4 56/3 56/4 57/25 64/10 64/13 65/1 67/5 67/6 67/21 68/6 68/12 69/14 69/17 70/10 76/17 78/12 79/6 79/17 79/19 84/18 85/1 86/3 87/2 88/6 89/14 92/21 95/15 97/3 97/16 98/12 99/17 99/24 101/13 101/15 103/8 103/16 104/16 105/3 105/8 106/8 108/10 113/19 114/23 115/15 116/24 119/6 122/20 123/5 123/12 125/16 126/8 126/15 126/23 129/22 130/11 133/10 133/18 137/6 137/15 139/25 142/15 144/15 150/20 151/6 155/6 155/20 155/23 156/1 157/17 159/15 163/5 164/1 164/9 167/25 170/14 171/21 173/1 173/13 177/25 178/6 178/6 178/11 178/20 178/20 181/18 185/1 185/7 186/4 186/11 187/20 188/19 189/4 189/11 189/25 193/4 193/5
whichever [1] 35/10
while [5] 26/14 127/7 130/5 133/14 141/14
whilst [7] 5/10 11/8 27/4 29/2 41/4 67/10 97/19
who [90] 1/18 13/11 16/21 16/22 19/22 26/21 28/4 28/12 33/2 33/6 33/11 33/18 33/22 33/25 34/3 34/8 34/18 36/6 40/21 42/23 43/5 43/25 44/14 48/13 48/15 48/23 58/3 58/19 77/11 86/20 87/8 87/17 88/14 88/16 90/22 91/4 93/9 93/12 94/8 94/10 94/16 95/8 98/18 100/24 101/6 105/7 107/19 124/21 124/24 125/8 127/24 130/12 130/13 130/25 133/3 136/18 141/24 142/13 143/19 145/7 145/20 147/6 148/1 148/4 148/4 148/17 155/1 157/9 158/9 159/3 160/6 161/9 162/2 162/7 163/15 164/17 165/15 166/14 167/6 168/8 175/5 180/8 180/21 181/16 181/17 181/25 182/11 185/11 185/19 194/5
who'd [3] 142/13

W
who'd... [2] 145/8 157/25
whole [2] 5/15 46/14
wholly [1] 78/25
whom [4] 24/16 36/21 89/5 143/12
whose [11] 3/14 79/10 83/2 88/8 98/19 106/12 125/8 132/19 158/11 159/19 162/12
why [10] 17/17 28/10 67/4 67/6 88/2 88/20 94/5 100/12 125/13 186/21
widely [2] 71/24 76/14
wider [1] 187/14
widow [7] 24/20 25/8 25/15 26/21 31/4 39/5 40/21
wife [3] 33/17 33/21 187/11
wife's [1] 33/23
will [37] 4/25 16/20 19/2 24/16 30/9 31/7 32/20 65/18 80/8 88/6 97/5 97/25 98/9 100/16 102/9 114/22 116/9 117/7 123/11 123/18 127/8 131/16 142/21 146/19 147/4 151/1 151/4 151/6 160/23 162/12 171/19 178/18 179/1 188/11 192/24 194/4 194/12
Willebrand's [28] 52/4 52/15 52/22 53/13 54/19 55/2 107/12 115/1 115/8 134/8 135/7 135/13 135/23 136/6 136/11 136/19 153/3 154/11 173/3 173/15 174/15 176/10 176/20 177/9 177/18 184/17 185/6 185/16
William [1] 110/3
Wilson [2] 147/20 147/22
wise [1] 160/25
wish [2] 50/15 100/21
with [333]
withdrawn [2] 166/4 166/11
within [5] 84/20 119/8 158/20 162/14 163/2
without [11] 3/15 14/11 29/4 93/21 99/21 105/15 146/23 149/13 158/21 168/9 193/9
WITN0375001 [1] 34/12
WITN1147001 [1] 39/24
WITN1403001 [2] 26/20 41/2
WITN1575010 [1] 191/13
WITN2783001 [1] 39/4
WITN3381002 [1] 32/1
WITN4194006 [2] 49/5 99/13
WITN4685001 [1] 180/24
WITN4685002 [1] 163/14
WITN4739001 [2] 46/8 92/9
witness [20] 17/6 24/17 30/18 31/9 33/6 33/8 39/25 40/2 82/24 88/5 100/13 105/10 110/8 145/20 151/10 157/9 159/19 162/11 180/23 183/20
witness's [3] 35/18 125/12 157/10
witnesses [6] 39/1 87/16 126/10 146/3 180/8 194/5
wives [1] 20/15
won't [7] 42/12 87/18 113/3 134/7 134/18 146/18 151/20
wonder [1] 101/21
words [4] 25/22 25/23 26/2 39/17
work [5] 7/23 20/25 33/7 96/4 104/14
worked [2] 12/9 46/19
worker [2] 47/17 48/19
working [10] 7/16 8/9 10/12 18/23 131/1 132/25 133/4 150/23 151/5 151/13
World [4] 7/11 7/16 7/20 7/24
worlds [1] 102/25
worried [1] 188/1
worry [3] 19/6 25/13 189/7
worth [2] 25/18 26/7
would [112] 1/24 2/1 2/2 5/18 7/23 9/8 9/9 10/4 11/9 12/7 12/15 14/2 18/12 18/16 19/3 21/23 22/15 25/12 25/14 26/18 29/14 34/10 34/16 34/17 34/18 34/19 35/2 35/3 35/4 35/10 35/11 35/12 36/6 37/12 39/7 40/13 40/14 40/25 44/1 45/20 45/24 59/12 66/12 66/17 67/12 67/20 68/17 72/7 75/13 76/15 77/16 78/20 78/22 79/18 79/18 79/20 80/20 80/22 81/21 85/23 85/25 91/7 91/24 91/24 94/15 96/16 100/21 101/3 103/22 106/24 108/4 114/11 116/24 117/3 123/13 127/13 127/14 128/2 128/11 128/21 132/15 133/6 133/17 137/3 139/15 140/23 141/2 141/16 141/22 142/5 142/7 142/24 144/1 144/2 145/3 156/4 156/14 156/16 158/15 161/8 161/10 162/7 167/13 169/23 169/25 179/16 179/17 180/13 185/21 188/3 190/21 192/8
wouldn't [6] 18/18 38/13 84/2 121/12 136/10 143/4
woven [1] 194/1
write [2] 97/2 127/7
writes [2] 42/13 116/2
writing [1] 87/3
written [8] 38/13 38/20 41/14 53/14 54/4 54/25 110/19 189/1
wrong [4] 18/16 89/17 100/23 137/8
wrote [8] 48/11 117/17 132/13 132/13 169/1 169/18 171/11 179/5

Y
Y 88908 [1] 57/24
Y88908 [1] 73/2
year [42] 5/11 11/17 51/19 51/21 52/5 52/8 52/13 53/16 53/21 56/25 57/10 74/1 74/16 93/22 108/10 108/22 110/21 111/15 112/6 112/13 112/18 112/23 117/20 119/13 131/25 134/2 134/12 136/12 137/14 151/1 151/7 151/25 152/12 168/2 172/3 172/18 173/18 176/11 177/7 177/17 185/10 185/13
years [28] 2/24 6/2 16/19 19/15 35/16 43/3 62/8 64/20 65/16 65/21 67/10 78/8 90/11 93/6 94/8 100/12 100/17 112/11 125/10 150/11 152/20 153/23 155/12 160/14 176/21 181/3 188/6 192/8
yes [72] 1/3 4/5 4/8 4/8 6/13 6/16 9/13 9/17 9/19 14/21 18/21 19/9 19/16 19/18 21/6 21/9 21/11 23/3 24/10 24/13 30/23 32/6 32/6 35/24 36/7 36/13 36/16 48/25 50/14 50/14 50/16 51/10 69/9 69/21 74/21 74/24 75/1 76/24 79/3 81/20 86/10 87/11 87/14 87/15 88/7 91/3 95/7 95/12 102/12 104/3 105/12 105/13 105/19 106/2 137/19 137/21 137/24 137/25 138/1 138/18 144/9 146/19 146/21 161/16 178/23 184/2 184/4 189/11 189/19 189/23 194/3 194/19
yesterday [7] 44/10 44/14 55/6 70/8 81/12 81/13 102/22
yet [8] 8/3 13/21 21/3 26/9 26/10 26/16 114/6 138/16
you [80] 4/24 4/25 14/22 14/22 15/1 22/22 23/25 26/2 30/9 30/22 31/7 32/16 32/16 32/17 32/19 32/20 33/14 36/16 37/23 38/14 39/18 42/1 50/14 50/15 56/12 64/19 65/18 65/18 76/20 82/7 86/15 87/10 87/24 89/1 89/1 89/1 89/18 89/25 102/17 102/20 102/22 102/25 103/9 103/22 105/13 105/21 111/9 117/7 121/4 122/24 123/13 123/14 123/18 124/7 124/10 125/5 125/6 127/7 127/23 128/10 141/15 145/23 145/24 146/10 148/10 156/22 167/1 169/8 169/19 171/22 171/22 176/6 182/5 183/20 187/16 187/25 188/1 188/21 191/13 194/20
you too [1] 111/9
you'd [1] 112/25
you'll [17] 19/19 22/2 32/24 34/3 54/11 59/9 65/10 79/8 80/10 84/13 87/21 90/10 143/5 173/20 174/16 190/23 192/4
you're [4] 18/22 38/15 41/25 178/25
you've [5] 102/14 105/14 178/1 178/12 178/24
young [9] 3/5 7/22 33/23 36/9 56/15 58/18 76/1 79/23 104/22
younger [2] 43/12 70/12
your [10] 32/13 38/8 86/13 86/19 87/1 97/5 102/21 127/21 168/17 188/21

Z
zero [1] 157/21
zeroes [2] 111/9 111/10
zoom [2] 33/16 173/4