

1 Tuesday, 17 November 2020

2 (10.00 am)

3 **SIR BRIAN LANGSTAFF:** Good morning, Dr Al-Ismail. Can you

4 see me?

5 **THE WITNESS:** Good morning to you, sir, yes, I can see

6 you.

7 **SIR BRIAN LANGSTAFF:** Let me start by saying a few words

8 before I am going to ask you to take the affirmation.

9 It would have been far better, as I think everyone who

10 is watching, and you yourself may well agree, if you

11 had been able to come in person. Plainly you can't

12 because of the Covid restrictions which we have. But

13 it has had this effect, that there are very few people

14 in the hearing room. And I'll describe that to you in

15 a moment or two, just as I will describe to those who

16 are watching remotely who might have wanted to be here

17 to see you in person, what the position is so they can

18 visualise it and they know where you are.

19 You are, I think, in a hotel, and there is

20 a member of the Inquiry staff -- and nobody else -- in

21 close proximity but not so close that it's dangerous.

22 They are keeping proper social distance. Is that

23 right?

24 **THE WITNESS:** That's correct.

25 **SIR BRIAN LANGSTAFF:** So in this hearing room you can't

1 see, but you will in a moment, counsel to the Inquiry,

2 Ms Richards, who will be asking you the questions.

3 Behind and beside her there are two members of the

4 Inquiry legal team, again at safe distance. We have

5 three members of the Inquiry staff watching and

6 a technician. And we have Mary, who will give you --

7 who will ask you to swear the oath.

8 The reason I'm mentioning this is because you

9 need to know who you are talking to immediately, but

10 you're not just talking to us. This is a public

11 inquiry, and I said right at the start of the Inquiry

12 that we would be putting people at its heart. And for

13 that reason you might normally have been expected to

14 sit at the desks in the Inquiry room in the centre of

15 the room talking directly to a number of people in

16 front of you. They are not there in person but they

17 are there virtually because a lot of them will be

18 watching. It will be about somewhere between

19 150/200 people, thereabouts, who will watch during the

20 day, and there may be more who will pick up what you

21 have to say remotely. So you are talking to a lot of

22 people even though there are very few people here.

23 I want you to understand that and I want those

24 people who are listening to understand too who is

25 here, what your position is and that it would have

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1 been my wish that they could have attended in person

2 had they wanted to. This is, however -- it is

3 important, as I said again at the start of the

4 Inquiry, not just to put people first but also to be

5 as fast, as reasonable thoroughness permitted, in

6 coming to a conclusion, because people have waited too

7 long to know what an inquiry like this would have to

8 say.

9 That's why we are continuing our work during the

10 pandemic and that's why I'm giving you a description,

11 so that they understand what's happening here, you

12 understand what's happening here, we have to be here

13 because this is our place of work, and that's where we

14 start today and where we will go on throughout the

15 week.

16 **THE WITNESS:** Thank you for explaining that. Thanks very

17 much for explaining that. And I would have wished to

18 have been there but, as you already explained, there

19 are circumstances which are beyond our control.

20 **SIR BRIAN LANGSTAFF:** I'm going to ask Mary to administer

21 the oath to you. I understand you want to affirm so,

22 Mary, would you, please.

23 **DR SAAD AL-ISMAIL, affirmed**

24 **Questioned by MS RICHARDS**

25 **MS RICHARDS:** Good morning, Dr Al-Ismail. Can you see and

3

1 hear me?

2 **A.** I can see and hear you. Good morning to you.

3 **Q.** I'm going to start by asking you to give us an

4 overview of your career. You took up your post as

5 a consultant haematologist with West Glamorgan Health

6 Authority in June of 1982?

7 **A.** That's correct.

8 **Q.** Where had you worked prior to Swansea?

9 **A.** Okay. So I qualified in Baghdad, Iraq, in 1970.

10 I did one year of what we call internship, where you

11 would rotate between different specialities, and the

12 idea really is to give the junior doctor the

13 opportunity to have a taste of what medicine, obs and

14 gynae, surgery -- and I also chose paediatric as

15 a fourth three-month rotation. Then I chose to go

16 into medicine. General medicine, that is. I did

17 nearly four years of general medicine and then I came,

18 toward the end of the fifth year, to the UK to do some

19 postgraduate qualification, that's the membership of

20 the Royal College of Physicians, and have a taste of

21 what -- the UK system. So I took a few locums and had

22 a taste of what general medicine and I also did

23 a locum in paediatrics.

24 And then I passed my membership, the Royal

25 College of Physicians, both Ireland and the UK, and

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1 then I decided to go into haematology. And the reason  
 2 for that is partly because I've already tasted  
 3 haematology when I was working in the teaching  
 4 hospital in Baghdad and I liked what I saw there. So  
 5 I applied for a haematology job which came up in  
 6 Cardiff, as a Senior House Officer in haematology. So  
 7 I took that job, and I think it was 1 June 1976. That  
 8 job was actually entirely based on what used to be  
 9 called ward A7. That is the haematology ward.

10 So my tasks were really to work with the  
 11 registrar and the senior registrar to look after the  
 12 in-patients. And the vast majority of them were  
 13 patients with haematological malignancies, but we  
 14 would see the occasional patient with bleeding  
 15 disorder. At that time I was taught how to prepare  
 16 and administer cryoprecipitate. Also we used to take  
 17 blood samples from the patient.

18 I finished that one year, and then Professor  
 19 Allan Jacob and Dr Jack Whittaker -- or  
 20 Professor Allan Jacob, who was the, if you like, head  
 21 of the department, asked me if I could stay for  
 22 another year, and they found me what's called at the  
 23 time a leukaemia fellow -- they had some money from  
 24 the MRC -- and I worked as a leukaemia fellow for one  
 25 year.

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1 After that they've asked me to apply for the --  
 2 they had a vacancy of a registrar in haematology, so  
 3 I applied for that and I got it, and then there was  
 4 a vacancy which came up after -- I think 18 months  
 5 after that, as a senior registrar, and Professor Allan  
 6 Jacob persuaded me not to leave, and stay and finish  
 7 my training in haematology and apply for the  
 8 membership of the Royal College of Physicians, whereby  
 9 you'd be accredited as a fully trained haematologist.

10 So I did that. And I think just before I sat my  
 11 exam in 1980 I was appointed as a lecturer in  
 12 haematology, and I sat my exam in 1980.

13 Then I was in two minds whether to go for an  
 14 academic degree, an MD or PhD, and then the  
 15 opportunity came in and I -- I don't know how I was  
 16 persuaded but I was persuaded to go to Swansea to  
 17 apply for a consultant haematologist. And I joined my  
 18 colleague then, Dr Khurshid, Mohamed Khurshid, who was  
 19 appointed in 1975.

20 As I said in my statement, prior to that Swansea  
 21 did not have a haematologist as we know it. All the  
 22 haematology work was supervised by pathologists,  
 23 whether from the general pathology or from the  
 24 histopathology, and patients with bleeding disorders  
 25 were very much under the direction of Cardiff and --

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1 as what to give. But when Dr Khurshid came to  
 2 Swansea, he was persuaded by Professor Bloom to take  
 3 more active role, and I think the rest of it follows  
 4 from there.

5 But perhaps I'll stop here until you want me to  
 6 continue on the same theme.

7 **MS RICHARDS:** I'll ask you a little more about that in a  
 8 moment, but just sticking with your own training, in  
 9 those years in where you were working in Cardiff,  
 10 prior to taking up the post in Swansea in 1982, to  
 11 what extent did your work involve the care and  
 12 treatment of those with bleeding disorders in Cardiff?

13 **A.** Okay. So, as I said, in the first year the only  
 14 encounter would be for the in-patients who would come  
 15 under Professor Bloom, would need to be treated for  
 16 haemophilia and other bleeding conditions. But when  
 17 I became a registrar, it was as a registrar then you  
 18 rotate between different specialties of the  
 19 haematology. Until that time, my work was mostly to  
 20 do with haematological malignancies, but when you  
 21 became registrar then you would do three months of  
 22 coagulation and haemophilia and then three months of  
 23 day unit, three months of laboratory, and so on and so  
 24 forth.

25 So when I did my three months with

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1 Professor Bloom, both as registrar and senior  
 2 registrar, my task would be to actually go and see all  
 3 the in-patients with haemophilia and allied disorders,  
 4 go down -- what I used to do, if I was not on call  
 5 I would go and ask the registrar on call whether he  
 6 had any admission during the night, and if so I'll go  
 7 and see the patients and then go and brief  
 8 Professor Bloom. And Professor Bloom always would  
 9 then come and see them and, you know, sort of give me  
 10 the instruction to -- what to do in terms of  
 11 management plan and whatever.

12 But he -- even though the number of patients  
 13 were, you know, in single figures really, never more  
 14 than four or five at any one time, and sometimes none,  
 15 he used to spend quite a good time, actually, to go  
 16 around and speak to them. His habit was to see the  
 17 patient -- you know, examine them, and then usually  
 18 sit by their bedside and talk to them.

19 Then I would go down to the laboratory after  
 20 I've done my task in terms of preparing whatever  
 21 needed to be prepared, and then start to learn about  
 22 the laboratory side of coagulation. I was introduced  
 23 to the different laboratory tests. And once I've, you  
 24 know, sort of been shown how to do them, then I was  
 25 given, you know, stuff as a tool, a rack and whatever,

1 and I was given, you know, sort of different reagents  
 2 and asked to do the tests.  
 3 So that's how you become to know what these  
 4 tests mean and how to interpret them. I would be  
 5 called by the haemophilia nurse to see a patient who  
 6 is attending as a day case. And initially I used to  
 7 go to Professor Bloom almost with every single case,  
 8 ask him what are the plans. He was a superb mentor,  
 9 really, because he would explain and -- he would  
 10 explain how to examine a joint in a haemophiliac and  
 11 explain the principle of management. So he used to  
 12 spend quite a lot of time teaching the junior staff  
 13 how to deal with haemophilia.  
 14 You know, when you are on call you may be called  
 15 during the night to administer, because the on-call in  
 16 Cardiff was also responsible to administer the  
 17 coagulation factor concentrate or the cryoprecipitate  
 18 and there were many nights where I would be called to  
 19 administer.  
 20 I remember one particular night -- the reason  
 21 why I remember it is because it was quite late in the  
 22 morning about three or four o'clock when I was called  
 23 to come and see a patient who -- and the management  
 24 plan was to give cryoprecipitate -- I don't remember  
 25 the detail of the patient. But I remember the day

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1 because I was flagged down by a police car and when  
 2 I asked them why they flagged me down in my little  
 3 Datsun they said, "You were driving too slow". So  
 4 I learned that probably when you drive at night in  
 5 Cardiff you have to go a bit faster.  
 6 But anyway so I remember that. The one thing  
 7 I remember about preparing the concentrate, the  
 8 cryoprecipitate, is that this is the one thing which  
 9 probably will take the longest time for a registrar to  
 10 do because I timed it at one time and it took me about  
 11 just under two hours from the time I reached the  
 12 hospital to thaw the cryoprecipitate, draw it up, and  
 13 record the units which have drawn up in the patient  
 14 notes.  
 15 Professor Bloom was very -- he was gentle but he  
 16 was very strict in making sure that whatever we do in  
 17 terms of units and batches and whatever has to be  
 18 recorded in the patient notes. So you cannot leave it  
 19 until the next day. But the cryoprecipitate used to  
 20 take the longest time to prepare and give to the  
 21 patient.  
 22 Q. I'll come back and ask you about Cardiff's policies,  
 23 Professor Bloom's policies and Swansea's in a few  
 24 minutes. Just picking up on your career you worked  
 25 with Dr Khurshid at Swansea 1982 to 1985 and then when

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1 Dr Khurshid left in 1985 you became the director of  
 2 the haemophilia services.  
 3 A. Yes, that is not something you apply for. It's  
 4 something which you take on because I was left, if you  
 5 like, single-handed for about two or three months  
 6 until Dr Beddall came. When I started in 1982,  
 7 Dr Khurshid was a director. In fact, I could not  
 8 remember so much of that so I had to give him a call  
 9 when the Infected Blood Inquiry asked me under rule 9  
 10 to give the history. So I've asked him what was the  
 11 history and he told me that when he first started,  
 12 Professor Bloom -- he then was Dr Bloom, and persuaded  
 13 him that he need his assistance to provide a better  
 14 care for the haemophiliac living in the vicinity, even  
 15 though he told him that he will be guiding him all the  
 16 way in terms of things beyond what Dr Khurshid was  
 17 familiar with.  
 18 He initially told him, "Look, we will make you  
 19 a subcentre" but, in fact, there wasn't anything like  
 20 called subcentre, but that's what Dr Khurshid told me  
 21 that's how Arthur persuaded him to actually take it  
 22 on. But then Swansea was given the full title of  
 23 haemophilia centre and I think the number 151.  
 24 So when I took over in 1982, prior -- 1985,  
 25 sorry. Prior to taking over, Dr Khurshid would

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1 receive any communication from UKHCDO and he would --  
 2 after we finished ward rounds, whatever -- he would  
 3 say, "Saad, look, we've received such and such  
 4 communication and whatever", he would show me what he  
 5 received. So, if you like, we tried to brief each  
 6 other. So I would have briefed him about any leukemic  
 7 or any patient with a haematologic malignancy.  
 8 Similarly, he would brief me about any haemophiliacs  
 9 and that was essential because you could be called at  
 10 any time. I mean, the way it worked before I reached  
 11 there, Dr Khurshid was literally on-call every day.  
 12 So when I got there -- so we agreed to share the  
 13 on-call and so you could be called at any time about  
 14 a patient. So you really have to be very familiar  
 15 with the patients in terms of there would be a known  
 16 management plan of what the patient should have.  
 17 Prior to coming to Swansea, I think we were  
 18 taught by Arthur that for children we try to give NHS  
 19 concentrate because it was felt that they may be --  
 20 you know, sort of home-made concentrate, they are  
 21 safer. To be honest, I did not question that until  
 22 many years later. I thought must be something known  
 23 about the imported concentrate. But, anyway, so we  
 24 were told that children, try to give them NHS  
 25 concentrate. If they need concentrate, that is

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1 a severe haemophiliac, try to use cryoprecipitate.  
 2 When DDAVP became available initially we didn't take  
 3 DDAVP very quickly, I think, in the 80s. We started  
 4 DDAVP in Swansea, I can't remember exactly when.  
 5 **Q.** I'll come on to the returns and we can see that.  
 6 **A.** Yes.  
 7 **Q.** You remained director until September 2015 when  
 8 Dr Percy joined and then you took over the role of  
 9 director, again I think, at the end of 2016 when  
 10 Dr Percy moved to a different job and then you retired  
 11 from the NHS as a consultant and as director of the  
 12 Swansea service in February 2018.  
 13 **A.** Quite, that's true.  
 14 **Q.** Your statement says that the treatment of patients  
 15 with bleeding disorders was only one part of your  
 16 overall work. Your main specialism during your career  
 17 was blood malignancies, haemato-oncology?  
 18 **A.** That's true.  
 19 **Q.** Very roughly, if we're thinking about the 1980s, what  
 20 kind of proportion of your time was spent dealing with  
 21 patients with bleeding disorder as opposed to patients  
 22 with haematological cancers or general haematology?  
 23 **A.** I think I put in my statement 5 per cent but that is  
 24 probably quite an optimistic estimate actually. Would  
 25 it be helpful if I give you when I first started, very

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1 briefly, my weekly schedule?  
 2 **Q.** Yes.  
 3 **A.** Then you could probably be -- you know, sort of have  
 4 a clearer picture. So on Monday I would go to Neath  
 5 General Hospital for the haematology out-patient  
 6 clinic and we used to do that together with both  
 7 myself and Dr Khurshid. We continued to do that  
 8 until -- I'll come back to it later on -- when  
 9 I thought we need to divide the work more when  
 10 Dr Khurshid left. So I'll do a haematology  
 11 out-patient clinic on Monday in Neath and then I would  
 12 go and see with Dr Khurshid the in-patient in Neath  
 13 because, unfortunately, initially we admitted patients  
 14 with whatever haematologic condition in any of the  
 15 three sites and then I would jump in the car and then  
 16 go to Morriston. In Morriston, I would go and see the  
 17 patient who may have been admitted over the weekend,  
 18 see the in-patients, look at the blood films and  
 19 whatever.  
 20 Then on Tuesday we will start again in Neath  
 21 because until the reorganisation of the cancer  
 22 services we also were dealing with haematological  
 23 malignancies in children. So we would go to Neath to  
 24 do the leukaemia and we used to divide that. So one  
 25 week would be myself, the other week would be

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1 Dr Khurshid. The other person would go to the other  
 2 hospital, so I would go there and see the patient with  
 3 leukaemia. The one thing about acute leukaemia in  
 4 children they would have treatment every week for most  
 5 of the time, so you would need to be there. You need  
 6 to be there to administer the treatment because at  
 7 that time we didn't have any junior staff, it was just  
 8 the two consultants. We didn't have any specialist  
 9 nurses but there was a consultant paediatrician,  
 10 Ryan Griffiths, in Neath who was very keen that we  
 11 help him manage the patients with acute leukaemia. So  
 12 we used to use what used to be called the MRC trials  
 13 so we go on the same schedule.  
 14 Then, once I would finish that, then I would go  
 15 and look at whatever blood films left over from the  
 16 clinic on Monday in Neath before going to Singleton  
 17 to do a very large clinic, which was a Tuesday  
 18 out-patient clinic.  
 19 On Wednesday, I would start in Singleton, see  
 20 the in-patients, and then see the blood films of the  
 21 clinic the day before and then travel to Morriston to  
 22 see the in-patients in Morriston. We used to do the  
 23 ward round in Morriston on Wednesday afternoon both  
 24 myself and Dr Khurshid.  
 25 On Thursday, it would be the morning in new

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1 out-patient clinic in Singleton and then in the  
 2 afternoon it would be Morriston, and on Friday is the  
 3 out-patient clinic in Morriston, and in the afternoon  
 4 it's seeing blood films and whatever, seeing all the  
 5 refills.  
 6 The one thing which probably would horrify any  
 7 haematologist now is that the out-patient clinic we  
 8 also used to give all the day case chemotherapy, do  
 9 all the blood letting, what we call venesection for  
 10 patient who need it. So the out-patient clinic would  
 11 double as a day unit because we didn't have any day  
 12 unit.  
 13 I've looked at the figures and I estimated that  
 14 in one year I would have seen anything between 3,500  
 15 to 4,000 episodes. Now, I thought if I see two  
 16 patients with haemophilia, which was very, very  
 17 unlikely, a week then I would see about 100 patients  
 18 a year. As I said, the estimate of 5 per cent was  
 19 maybe an optimistic estimate.  
 20 So the haemophilia work was not really a big  
 21 part of my duties. The unfortunate thing when I first  
 22 started is that the only place to give treatment to  
 23 haemophiliac would be either as an in-patient or, if  
 24 we needed to give the patient as a day case, the  
 25 patient has to come to the adult ward -- the adult

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1 cases or the paediatric ward and then we go and  
 2 prescribe the treatment.  
 3 In the paediatric side, the paediatric team  
 4 would agree to do it. In the adult side, it depends.  
 5 If there's no junior staff, then we would have to put  
 6 the Venflon in and give the treatment.  
 7 That continued really until after Dr Khurshid  
 8 left and it was clear that we could not continue when  
 9 Dr Beddall came in. We sat and had, you know, a long  
 10 chat and we agreed that we divide the work a bit more  
 11 and then I spoke to Professor Bloom and he said,  
 12 "Saad, you really need to get a haemophilia nurse".  
 13 Then it took me two years and we got the haemophilia  
 14 nurse in 1987 and that is when things start to change.  
 15 So this is a very long answer to your question  
 16 but really, just to put it in some sort of  
 17 perspective, as when I first started as  
 18 a haematologist in Swansea what were my duties.  
 19 **Q.** Your statement has told us that most of the  
 20 haemophilia care that was provided was at Morriston?  
 21 **A.** That's true.  
 22 **Q.** As you describe, patients were treated on the ward  
 23 because there weren't any designated rooms or  
 24 facilities for the care of patients with bleeding  
 25 disorders?

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1 **A.** That's true.  
 2 **Q.** As I understand it, there were not dedicated bleeding  
 3 disorder out-patient clinics in the 1980s?  
 4 **A.** No.  
 5 **Q.** They were general haematology clinics?  
 6 **A.** Absolutely. They really -- a patient would be seen in  
 7 a general haematology clinic and, even though the  
 8 haemophiliac would take a longer time than an average  
 9 patient, because most of the average patients is  
 10 either repeat prescription or just telling them what  
 11 their blood look like, but for the haemophiliac you  
 12 really have to ask about whether they had any bleeds  
 13 since the last time you saw them, and whatever else,  
 14 really. But they were seen in the general haematology  
 15 out-patient clinic. We did not start to see patients  
 16 in a dedicated haemophilia clinic until 1991, when we  
 17 managed to get the current accommodation for the  
 18 haemophilia centre.  
 19 **Q.** Your statement describes that the main coagulation  
 20 laboratory was at the Morriston and you talked about  
 21 the role of the medical laboratory scientific  
 22 officers, MLSOs, at Morriston Hospital.  
 23 **A.** Yes.  
 24 **Q.** They kept a record of products used per patient; is  
 25 that correct?

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1 **A.** Absolutely. Actually, you know, sort of -- they are,  
 2 in a way, the forgotten, you know, sort of people  
 3 really, because they were instrumental in keeping  
 4 record of treatment, making orders for the treatment,  
 5 and there was -- one particular one of them who  
 6 actually got interested in coagulation and he  
 7 developed the different assays. So we really had very  
 8 much the similar type of assays, laboratory assays, as  
 9 Cardiff would have had, simply because of the interest  
 10 of this one particular person.  
 11 And then he did his PhD in coagulation, with the  
 12 help of Professor Bloom. And so when the haemophilia  
 13 services moved, if you like, to be delivered mostly in  
 14 Singleton, we thought it will be unwise to remove the  
 15 expertise and the knowledge from Morriston, whereby  
 16 all the assays had been done. And Morriston was  
 17 instrumental because it was the largest hospital. It  
 18 was the hospital with the largest casualty department.  
 19 It was the hospital where the cardiac services was  
 20 started. So you do need a 24-hour coagulation lab, if  
 21 you like, to be able to cope with all the demands that  
 22 these services would impose on coagulation and, you  
 23 know, sort of blood testing and whatever.  
 24 So we kept the specialised coagulation test in  
 25 Morriston. And to this date it is still there.

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1 **Q.** It was in 1991/1992 that designated space for  
 2 a haemophilia clinic was finally made available at the  
 3 Singleton Hospital, and that's the point at which you  
 4 started having dedicated monthly haemophilia  
 5 out-patient clinics?  
 6 **A.** That's true. And probably prior to that there was  
 7 another milestone, and that was 1987, because in 1987  
 8 I managed to get the -- a haemophilia nurse,  
 9 a dedicated haemophilia nurse.  
 10 So the haemophilia nurse, when she joined in  
 11 1987, I don't think she really had an office, but she  
 12 was instrumental in actually shaping the way we looked  
 13 after the haemophiliacs. So when she first joined in,  
 14 she contacted every -- she started with the severe  
 15 haemophiliac. She contacted every one of them, told  
 16 them that she's there, and asked them to come and meet  
 17 her. And I think they used to meet either in the  
 18 laboratory or one of the -- I think Dr Khurshid's room  
 19 when he's not there. I can't remember the details.  
 20 But she actually started to see a change in terms of  
 21 the approach of the way we manage haemophiliacs. And  
 22 she took over from the -- what used to be called the  
 23 medical laboratory scientific officer, and then  
 24 changed to the biomedical scientist after that, that  
 25 role.

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1 And I'm still to this date so grateful to the  
 2 MLSOs at the time. But then she took the -- from them  
 3 the, you know, keeping count of the concentrate we  
 4 used and preparing the returns to the UKHCDO.  
 5 **Q.** You've told us in your statement that when you arrived  
 6 in Swansea across these three hospitals in 1982,  
 7 a home treatment programme was already established?  
 8 **A.** That's true.  
 9 **Q.** Did that include adults and children?  
 10 **A.** Yes.  
 11 **Q.** In terms of patients with haemophilia A, was home  
 12 treatment only made available for patients who had  
 13 severe haemophilia A?  
 14 **A.** Yes, the home treatment is only for severe  
 15 haemophilia.  
 16 **Q.** We'll see -- sorry, carry on.  
 17 **A.** But we will come to that, and I'm sure -- there was  
 18 one exception to that, and that is von Willebrand's  
 19 disease, and we'll come to that in a minute I'm sure.  
 20 So the home treatment was for the severe  
 21 haemophilia. And you could see from the returns, the  
 22 way the returns are made, really, to say how much  
 23 Factor VIII you use for in-patients and for home  
 24 treatment and how much cryoprecipitate you use for  
 25 in-patient in home treatment and whatever, both in

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1 haemophilia and von Willebrand disease. But the home  
 2 treatment was dedicated for the severe haemophilia.  
 3 The reason for that really is very simple: to be  
 4 able to deliver home treatment, whether for an adult  
 5 or whether for a child, usually a parent or guardian  
 6 until the child learnt to inject themselves, you  
 7 really need to have regular, if you like,  
 8 administration, otherwise you will lose the skill. So  
 9 home treatment is not suitable for mild haemophiliac.  
 10 And even the moderate haemophiliac, who would only  
 11 need occasional treatment, it's not suitable. It's  
 12 only for the severe haemophiliac.  
 13 **Q.** But you also had a home treatment programme  
 14 established with patients with von Willebrand's  
 15 disease, as you mentioned?  
 16 **A.** That's true, yes.  
 17 **Q.** We'll look at the returns in a moment in relation to  
 18 that. Treatment was not, as I understand your  
 19 statement, on a prophylactic basis until possibly  
 20 the 1990s?  
 21 **A.** Yes. I tried really to figure out exactly when, but  
 22 I think if you do have a statement from Cardiff which  
 23 will tell you when they started prophylactic  
 24 treatment, we would have started prophylactic  
 25 treatment either the same year or the year after.

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1 Professor Bloom was -- and his, you know, successors  
 2 as well -- actually kept us informed of any new  
 3 development and any practice. And because we  
 4 shared -- well, our patients were all, if you like,  
 5 those who need to be seen regularly, were seen by  
 6 Cardiff. So they would have visited Cardiff, they  
 7 would have seen the haemophilia nurse there.  
 8 Our haemophilia nurse would have -- when we  
 9 first appointed the haemophilia nurse, she had to go  
 10 and spend some time in Cardiff to learn from the  
 11 haemophilia nurse there, you know, what are the roles  
 12 and responsibilities. A job description is one thing  
 13 but to see it in real life is different.  
 14 So they kept in touch with each other and the  
 15 haemophilia nurse would also attend the  
 16 haemophilia nurses, you know, sort of meetings and  
 17 whatever. So when Cardiff started, I would suspect  
 18 that we started very shortly after.  
 19 **Q.** We're going to look at the annual returns for 1980  
 20 through to 1985, doctor.  
 21 Could we have WITN3761008, please.  
 22 If we could go to the second page, please. If  
 23 we could zoom in on that top part. Thank you.  
 24 So we can see here, doctor, these are the annual  
 25 returns for 1980. The centre is, in fact, identified

23

1 as Morrision Hospital. And you've correctly  
 2 identified the centre number as 151. Director,  
 3 Dr Khurshid.  
 4 We can get a sense of the number of patients  
 5 treated. So, haemophilia A patients treated during  
 6 the year, 19; von Willebrand's patients treated during  
 7 the year, 4. And this obviously is prior to your  
 8 arrival but when you are working in Cardiff.  
 9 Then we can see the figures there.  
 10 Cryoprecipitate used in hospital, to a fairly  
 11 substantial amount, 130,970 units. Not -- sorry?  
 12 **A.** Can I stop you there?  
 13 **Q.** Yes.  
 14 **A.** So these are assumed units. So the 130,970, if you  
 15 divide that by a denominator of 70, because that was  
 16 the assumption made, that each unit have got 70 --  
 17 each pack of cryoprecipitate would have 70 units of  
 18 Factor VIII. Now, let's not go there because, you  
 19 know, sort of we had quite an interesting discussion  
 20 about this when I first arrived, but that was the  
 21 assumption. So the 130,970, if you divide it by 70,  
 22 it would be I think 1,000 --  
 23 **SIR BRIAN LANGSTAFF:** 1724, roughly.  
 24 **A.** Yes. So I think that's an important issue because if  
 25 we had used 130,000, I don't think BPL could have made

24

1 any NHS concentrate. The similar thing when you would  
2 come to -- so that was used for the haemophilia A  
3 patients. And similarly when you come to the  
4 von Willebrand disease. I'm sorry to stop you there.

5 **Q.** That's quite all right.

6 **A.** I wanted to clarify that.

7 **Q.** So that's the usage of cryoprecipitate. We can see  
8 none used for home treatment for haemophilia A  
9 patients. And then we can see the figures for  
10 NHS Factor VIII: 8,167 in hospital, 46,629 for home  
11 treatment. And then we can see Armour Factor VIII,  
12 not used in the hospital at all, but 150,978 units for  
13 home treatment.

14 So the bulk of the home treatment in 1980 for  
15 haemophilia A patients was with Armour Factor VIII  
16 concentrate.

17 **A.** That's correct.

18 **Q.** And in terms of hospital treatment, the bulk of the  
19 treatment was with cryoprecipitate and some  
20 NHS Factor VIII treatment?

21 **A.** Yes, that's true.

22 **Q.** Then, as you've already observed, doctor,  
23 von Willebrand's disease patients were treated with  
24 cryoprecipitate at home and in hospital, and we can  
25 see the figures there: 77,000-odd in hospital and

25

1 70,000, in the way in which you have explained, those  
2 were worked out for home treatment.

3 **A.** Can I clarify one point here?

4 **Q.** Yes.

5 **A.** That the cryoprecipitate for home treatment is for the  
6 one patient. And let me explain a bit more.

7 We had very pleasant patient. I met her when  
8 she was 16, when I came to Swansea. And she had what  
9 we now call type 3 von Willebrand's disease. Now that  
10 is, if you like, a rare type of von Willebrand  
11 disease, inherited as a recessive character. And so  
12 she did not make any von Willebrand factor,  
13 von Willebrand antigen.

14 And consequently she would not have circulating  
15 any amount of Factor VIII. Because you need the  
16 von Willebrand antigen factor to carry the Factor VIII  
17 to maintain its half-life. So this is a patient who  
18 really had the most horrendous, you know, sort of  
19 experience in terms of bleeding because unfortunately  
20 she experienced both the symptoms of severe  
21 von Willebrand's disease as well as the symptoms of  
22 severe haemophilia. So she would have bleeding in the  
23 joints, bleeding in muscles but also nose bleeds,  
24 horrendous menstrual blood loss, and so on and so  
25 forth.

26

1 I've asked, you know, sort of -- because in  
2 von Willebrand disease, some of them -- well,  
3 afterwards, we used to treat them with concentrate,  
4 which caught a lot of von Willebrand factor, but  
5 unfortunately at that time the concentrate did not  
6 have substantial amount of factor.

7 Dr Khurshid explained to me that they have tried  
8 everything. Even though she was given mainly  
9 cryoprecipitate to be given at home, sometimes they  
10 had to supplement it with Factor VIII concentrate.

11 As I said, I met her when I first came to  
12 Swansea and she was 16. And she was the most pleasant  
13 patient you could have; even with all her predicaments  
14 she used to bring a smile whenever she used to visit  
15 the lab to collect her whatever. She was very  
16 popular. And she used to tell me that her life goes  
17 around cryoprecipitate, and I asked her what did she  
18 mean, and she said, "Look, I really can't leave home  
19 because of worry about a bleed. I have to give  
20 myself" -- and I looked at some of her returns  
21 for 1987, and actually she was having cryoprecipitate  
22 almost every day.

23 The reason I'm mentioning all this because, you  
24 know, unfortunately her life was cut short because of  
25 a bleed. And that was, if you would like to say, such

27

1 a simple bleed. She was in the city centre, she said  
2 that her legs gave way under her and she fell and she  
3 bled. By the time she got the cryoprecipitate, she  
4 had what we call a compartment syndrome. She had  
5 severe necrosis of the muscles. She was in renal  
6 failure when she was admitted to Morriston Hospital.  
7 I was there and consulted with the renal physician.  
8 I phoned Professor Bloom at the time and said that we  
9 have a serious issue here. So he asked me to keep him  
10 informed. To cut a long story short, the surgeon, the  
11 vascular surgeon and the surgeon came to see her, and  
12 they said, look, she's going to lose that leg unless  
13 we operate.

14 I really could not give that authority so I had  
15 a long chat with her and her family and she decided to  
16 go for surgery.

17 **Q.** If we turn on to the returns for the following year,  
18 doctor, 1981 -- it's page 6, please, of the same set  
19 of documents -- again, we can get a sense of the  
20 number of patients treated during the year,  
21 Dr Al-Ismael: 17 haemophilia A, six von Willebrand's.  
22 We can see, again, the figures for cryoprecipitate:  
23 219,240 hospital, none used for home treatment for  
24 haemophilia A patients. And then we can see NHS  
25 factor concentrates being used for both hospital and

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1 home, 34,200 and 27,720. But the predominant  
 2 treatment again for home treatment is the Armour  
 3 Factor VIII, 100,534 units there, and some used in  
 4 hospital.  
 5 **A.** Yes.  
 6 **Q.** If we read across to the von Willebrand's. Again, we  
 7 can see the figures there. The total used for home  
 8 treatment is given as 110,600. Is that also for one  
 9 patient, the same one patient?  
 10 **A.** The only person who had home treatment with the  
 11 cryoprecipitate was that particular patient. And  
 12 I asked the question: how did you manage to do that?  
 13 And I think they managed to get her a deep freeze.  
 14 I'm not sure whether the deep freeze was with  
 15 a monitor and whatever. So she had a deep freeze at  
 16 home and she used to give herself the cryoprecipitate.  
 17 But as I said, her life revolved around  
 18 cryoprecipitate.  
 19 **Q.** Then if we go to the 1982 returns, so this is the year  
 20 you joined part way through the year.  
 21 It's page 13 of the document, please, Soumik.  
 22 We can see here the figures. And it would  
 23 appear that the amount of cryoprecipitate used in  
 24 hospital for haemophilia A patients substantially  
 25 decreased this year, in 1982, and the treatment

29

1 predominantly used in hospital was NHS factor  
 2 concentrates and Armour Factor VIII. Does that accord  
 3 with your recollection?  
 4 **A.** Well, to be honest with you, my recollection of  
 5 whatever 38 years ago is not -- so the figures are as  
 6 what you would see it there.  
 7 We had quite a number of patients with  
 8 von Willebrand's disease. None of them of the severe  
 9 type. I would tell you that, even for the  
 10 in-patients, I wouldn't be surprised that so much of  
 11 that was used by this one particular patient but I'm  
 12 sure the other also would have had some of it.  
 13 That year we had quite a good supply of the NHS.  
 14 Just to say here, I mean, the motto was that get as  
 15 much NHS as you could put your hand on. So the NHS  
 16 supply was very much not in our hands. So if we were  
 17 told that we've got having more NHS supply, that was  
 18 very welcomed. But there were, you know, some fallow  
 19 years where we had very -- we had much less than this.  
 20 But, yes, these are the figures. And I think there  
 21 must have been one patient who had some  
 22 Cutter Factor VIII concentrate because the amount is  
 23 only small.  
 24 **Q.** We can see under "Other Materials", references to  
 25 FEIBA, 38,500. That would have been for a patient

30

1 with an inhibitor?  
 2 **A.** Absolutely. We had a child with inhibitor, and in  
 3 fact most of the time he was treated with Factor VIII  
 4 because you could swarm the inhibitor with  
 5 Factor VIII. He was a normal child and, you know,  
 6 sort of he wanted to play rugby, even though he was  
 7 advised not to do that, and he had some severe bleeds.  
 8 And I can't you exactly what was -- the FEIBA is, but  
 9 knowing the particular patient, I wouldn't be  
 10 surprised if it was not for severe bleed which they  
 11 couldn't control with the Factor VIII. But I can't  
 12 remember the full details.  
 13 **Q.** Do you know why, in 1982, and we see the pattern  
 14 repeated later, cryoprecipitate was being used very  
 15 little in hospital for haemophilia A patients as  
 16 opposed to the previous years where it was still being  
 17 used to a reasonably substantial extent?  
 18 **A.** No. I suppose it all depends on the patients. I'm  
 19 speculating here. It all depends on the patient who  
 20 needed it. Because we had a large family, a very --  
 21 quite an extended family with mild haemophiliacs. And  
 22 even though they were mild haemophiliac, some of them  
 23 actually develop inhibitor. And I suspect that -- but  
 24 they were not high responder inhibitors, so you could  
 25 actually swarm the inhibitor with -- sometimes even

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1 with the cryoprecipitate. But like I said, without  
 2 having the notes in front of me, I cannot give you  
 3 exactly the reasons. But one possibility is that the  
 4 milder patient had required more of the treatment,  
 5 whether they were the milder patient with an inhibitor  
 6 or not.  
 7 We had many more milder patients with  
 8 haemophilia than severe patients. We only had a few  
 9 severe patients.  
 10 **Q.** We can see that the treatment most given to patients  
 11 with haemophilia A there is the Armour Factor VIII.  
 12 **A.** Yes.  
 13 **Q.** If we then come on to 1983.  
 14 Soumik, it's page 18, please.  
 15 We can see here, again, we get a sense of the  
 16 number of patients treated. So 15 haemophilia A  
 17 patients, two von Willebrand's patients. Again,  
 18 a very small amount of cryoprecipitate used in  
 19 hospital. But in this particular year there is more  
 20 NHS concentrate used, so --  
 21 **A.** Yes, we had a good year.  
 22 **Q.** -- 209,995 for home treatment, 68,000-odd in hospital,  
 23 and a smaller amount of Armour Factor VIII together  
 24 with a small amount of the Alpha Profilate.  
 25 **A.** Yes.

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1 **Q.** Would that change reflect simply what was available in  
 2 terms of supplies or would there have been some other  
 3 reason?  
 4 **A.** Yes. Yes, yes, that's really -- so that year we had  
 5 307,179 NHS and only 45,304 commercial. Yeah, I think  
 6 that all depends of what we could get our hand on.  
 7 And unfortunately I cannot tell you why should there  
 8 be such huge fluctuation from one year to another.  
 9 There was one letter which I remember which came from  
 10 Tony Napier, but I can't remember the year, when he  
 11 told us that because we used -- and when I said he  
 12 told us -- not just in Swansea, he told us in Swansea  
 13 and Cardiff -- that because we've used so much  
 14 cryoprecipitate that our supply of the NHS concentrate  
 15 was still reduced accordingly.  
 16 But even though we were using quite a lot of  
 17 cryoprecipitate there in the home treatment, we had  
 18 a fantastic year with NHS supply.  
 19 **Q.** Dr Napier was the director of the Regional Transfusion  
 20 Centre in Cardiff?  
 21 **A.** Yes. So he was -- I mean, that was one of the  
 22 advantages of actually working in South Wales, because  
 23 Tony Napier was actually a senior registrar when I was  
 24 an SHO in Cardiff and so, you know, having a personal  
 25 relationship -- and later he actually asked me if

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1 I could be on the advisory panel for the Blood  
 2 Transfusion Service, and I think in the last year he  
 3 was there.  
 4 But it was useful because you could pick up the  
 5 phone and ask if you could have some more and you  
 6 would get a polite no, if he hasn't got them.  
 7 **Q.** Then if we go to 1984, this is the first return that  
 8 you complete --  
 9 **A.** No -- well --  
 10 **Q.** Page 23.  
 11 **A.** I have a correction here. 1984 it was still under  
 12 Dr Khurshid but because these forms are completed,  
 13 I think, in January of the next year, by then, then  
 14 Dr Khurshid, I think, either have left or about to  
 15 leave. So they put my name on it. So 1984 most of it  
 16 was Dr Khurshid was the director.  
 17 But that year I've asked if we could change to  
 18 packs rather than units. By the way, I think in 1983  
 19 your denominator for the cryoprecipitate became 80.  
 20 So if you want to know the number of packs in 1983 you  
 21 have to divide by 80, previously you have to divide by  
 22 70.  
 23 So this year we started using -- we started  
 24 recording the packs and, as you can see, the home  
 25 treatment, this is the one patient and also you could

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1 see that she also had some NHS Factor VIII  
 2 concentrate.  
 3 **Q.** We can see in relation to the treatment of patients  
 4 with haemophilia A the primary treatment in that year  
 5 appears to have been NHS Factor VIII concentrates,  
 6 157,540 in hospital, 240,620 for home treatment, and  
 7 a smaller amount -- although still a reasonably  
 8 significant amount -- of Armour Factor VIII for both  
 9 hospital and home treatment?  
 10 **A.** Correct.  
 11 **Q.** So another year in which you had more supplies of NHS  
 12 concentrate than you had previously; is that a fair  
 13 inference?  
 14 **A.** Correct.  
 15 **Q.** Then finally, for present purposes, 1985 -- that's  
 16 page 28, please, Soumik -- and we can see here  
 17 11 patients with haemophilia A treated, I think for  
 18 the first year we see a carrier treated, and looks  
 19 like is that three patients with von Willebrand's at  
 20 the top of the page?  
 21 **A.** Yes, three patients.  
 22 **Q.** Then we can see for 1985 there is no cryoprecipitate  
 23 being used for the treatment of patients with  
 24 haemophilia A.  
 25 **A.** Yes.

35

1 **Q.** NHS Factor VIII is now reduced back down again, 50,390  
 2 in hospital, 75,000 for home treatment, and the main  
 3 product, again, is Armour Factor VIII, 64,000-odd  
 4 hospital, 223,440 units for home treatment, and some  
 5 Cutters Factor VIII Koate. We'll come on to look at  
 6 the introduction of heat-treated products in a little  
 7 while, Dr Al-Ismael, but to what extent in 1985, as  
 8 far as you can recall, would the commercial  
 9 concentrates there being used have been heat-treated  
 10 concentrates?  
 11 **A.** Well, I think when the heat-treated became available,  
 12 we switched very quickly to heat treatment and I must  
 13 say that was very much with the direction of  
 14 Professor Bloom. So as soon as the heat treatment  
 15 became available, we switched to heat treatment. So  
 16 the thing is about Swansea, unlike Cardiff, because we  
 17 were a small centre we did not hold big stocks so, if  
 18 you like, our stock would be used within a month. So  
 19 when heat treatment became available, we immediately  
 20 switched to heat treatment and -- you know, I was  
 21 asked to say how did we do with the finance, and the  
 22 problem is that I can't remember any problem with the  
 23 finance. In fact, I can't remember signing any  
 24 invoice. I contacted the people who were, you know,  
 25 in the blood bank and whatever and asked them if they

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1 remember signing any invoice and we were not.  
 2 I don't know. I think it's probably because we  
 3 were a small centre, whether whatever allocation was  
 4 given to the West Glamorgan Health Authority was  
 5 accepted -- you know, whatever we ordered was  
 6 acceptable with that requirement. But, as soon as the  
 7 heat treatment became available, we introduced it.  
 8 **Q.** We can see towards the bottom of this return for the  
 9 first time an entry for DDAVP and tranexamic acid. Is  
 10 it fair to infer that this was the first year it was  
 11 used, because there's no earlier reference in the  
 12 returns?  
 13 **A.** You know, I honestly cannot -- I questioned that  
 14 myself, how come that's so late in the day that we  
 15 used DDAVP and tranexamic acid. It really all depends  
 16 as to the person who's preparing this was made aware  
 17 that DDAVP may be -- DDAVP was ordered, you see, to  
 18 pharmacy. It did not come through the blood bank and  
 19 so whether it was, and I suspect it is, that we did  
 20 not convey that to the person who was putting these  
 21 returns together, because I think we must have used  
 22 DDAVP before then, because we simply had quite a large  
 23 group of mild haemophiliacs.  
 24 But because this is the only thing could find on  
 25 paper, then I cannot be certain about anything else.

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1 **Q.** In terms of the mechanics of obtaining the various  
 2 different products, you've told us just now DDAVP was  
 3 obtained through the pharmacy, cryoprecipitate was  
 4 that obtained directly from the Regional Transfusion  
 5 Centre in Cardiff?  
 6 **A.** Correct.  
 7 **Q.** Do you recall whether there were difficulties in  
 8 obtaining sufficient supplies or whether you usually  
 9 had sufficient supplies of cryoprecipitate?  
 10 **A.** That I cannot recall. If you ask me have we asked for  
 11 more and we were told we cannot have any more,  
 12 I cannot remember any whether we did or we did not.  
 13 Because I've got a feeling I could sense what your  
 14 next question is going to be, is why didn't you switch  
 15 more of your patients to cryoprecipitate and we could  
 16 discuss that if you do ask it.  
 17 But I can't remember. As I said, we had such  
 18 a superb relationship with the director of the Blood  
 19 Transfusion Service and he was such a courteous and --  
 20 you know, the old ways, if you like, stood for  
 21 Swansea, even though Cardiff was the main user.  
 22 So I always argued with him, you know, jokingly,  
 23 that you only look after Arthur and, sort of, he would  
 24 always dismiss that and he said, "I look after you  
 25 more than I've looked after Cardiff".

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1 So he is -- the quick answer to your question is  
 2 I don't know.  
 3 **Q.** NHS concentrates you also obtained, as I understand  
 4 your evidence, from the Regional Transfusion Centre?  
 5 **A.** Yes.  
 6 **Q.** You have told us effectively that -- is this right,  
 7 please correct me if it's wrong -- that you would have  
 8 wanted more and you took what you could get; is that  
 9 correct?  
 10 **A.** Absolutely right.  
 11 **Q.** Were representations made by you or by Professor Bloom  
 12 or Dr Khurshid or anyone else, to Dr Napier to try to  
 13 get more NHS concentrates?  
 14 **A.** Well, I must say here the flag bearer was  
 15 Professor Bloom because, really, he was very gentle  
 16 but he was always fighting the corner for us to get  
 17 more of the NHS concentrate. So I think if --  
 18 Tony Napier would tell us how much he gave us and how  
 19 much he gave Cardiff, and if I felt Cardiff had too  
 20 much more -- I know that they have much more patients  
 21 so I cannot argue with that, but I used to say to  
 22 Tony, you know, "Why don't we -- can't have more?"  
 23 But I'm sure if there were any noises made to  
 24 higher authorities, it would have been Arthur.  
 25 **Q.** Now, in terms of obtaining commercial products, your

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1 statement suggests that initially -- this is  
 2 paragraph 64 of your statement --  
 3 **A.** Okay.  
 4 **Q.** We'll just put it on screen, in fact. WITN3761005,  
 5 please, Soumik. Do you have some water available to  
 6 you there, doctor?  
 7 **A.** I've got it, don't worry. Thank you.  
 8 **Q.** So we can --  
 9 **A.** I'm looked after well here.  
 10 **Q.** If we can go to I think it's page 20 please,  
 11 paragraph 64. So paragraph 64, I just want to ask you  
 12 about the actual arrangements, the mechanics whereby  
 13 you obtained commercial products.  
 14 **A.** Yes.  
 15 **Q.** This suggests that the haemophilia centre in Swansea  
 16 received blood products acquired on its behalf by  
 17 Cardiff, initially, and then later on products were  
 18 acquired via the West Glamorgan Health Authority, then  
 19 latterly the Blood Transfusion Service.  
 20 Can you just explain a little more what you  
 21 recall about the processes for obtaining commercial  
 22 concentrates?  
 23 **A.** Well, I remember that, you know, Dr Khurshid told me  
 24 that and the MLSOs told me that before Khurshid came  
 25 in all the treatment was directed from Cardiff and

40

1 I think Cardiff used to send the product to Swansea,  
2 and then when Dr Khurshid came in, he ordered the  
3 products. I can't -- I wouldn't know whether it's via  
4 Cardiff or directly but the person who was making the  
5 orders from the blood bank, he told me that he  
6 distinctly remembers putting orders via West Glamorgan  
7 Health Authority for concentrates.

8 Then there came a time that we all agreed that  
9 whatever we need could be ordered by the Blood  
10 Transfusion Service and then the Blood Transfusion  
11 Service would supply whatever Swansea needed and  
12 whatever Cardiff needed, and then charge us  
13 accordingly. We found that as the very useful way for  
14 two reasons. One is that we would not come to any  
15 product which would expire. I remember during my time  
16 that very often the UKHCDO would send us a note  
17 saying, "Such and such a centre have product which is  
18 about to expire, can you use it?" We never faced that  
19 and the reason we never faced it simply because there  
20 was stock of supply held on our behalf by the Blood  
21 Transfusion Service.

22 For a certain time that arrangement were  
23 devolved to West Glamorgan Health Authority but then  
24 was taken by the Blood Transfusion Service and was  
25 taken by the Blood Transfusion Service until, to this

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1 day, except for home treatment of recombinant, but we  
2 can talk about that later.

3 But if you ask me when every stage happened,  
4 I could not tell you and I tried to find out,  
5 unfortunately, all the records of the blood  
6 transfusions prior to 1984. We could not access them  
7 and we could talk about that maybe in additional  
8 questions you may have for me at the end. So I cannot  
9 tell you when the Blood Transfusion Service took the  
10 responsibility of stocking on behalf of Cardiff,  
11 Swansea, Newport and any other -- and Carmarthen in  
12 South Wales. We found that as the most useful  
13 arrangement, really, because we did not have to worry  
14 and if in the middle of the night you have a patient  
15 who requires a different concentrate and/or a patient  
16 who may be visiting Swansea for a holiday and you did  
17 not have any particular Factor IX or whatever, then  
18 you could pick up the phone and get in touch with the  
19 Blood Transfusion Service on call and get the  
20 concentrate. So that was most useful.

21 But I cannot dissect as when each stage  
22 happened.

23 **Q.** Between 1982 and 1985 when you took over as director,  
24 did you have any direct dealings, as far as you can  
25 recall, with the commercial pharmaceutical companies

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1 to discuss products with them?

2 **A.** I think you reminded me about one of the reps, I think  
3 from Cutter, who came to see me -- I could not  
4 remember that -- and, of course, the rep from Armour.  
5 I did not have any contact with them prior to 1985  
6 because Dr Khurshid was responsible for that. But in  
7 1985 they clearly came to visit me. Whether that for  
8 me to put an order directly to them or via the Blood  
9 Transfusion Service, again, I cannot tell you.

10 As I said, I could not remember signing  
11 an invoice for Factor VIII. In latter years, when we  
12 had a recombinant, I signed all the invoices for the  
13 home treatment but not for the hospital treatment.  
14 But I could not remember signing the invoice. So,  
15 yes, I did see, but I think I only remembered when you  
16 reminded me in the letter.

17 **Q.** Just so that we see that, so there's no mystery about  
18 what we're referring to, we sent you some documents  
19 from Cutter, Dr Al-Ismail. BAYP0000007\_080.

20 We can see this is a letter from a Cutter rep  
21 dated August 1985. It refers to a meeting with you  
22 and discussing your possible requirements for Koate  
23 heat-treated Konyne heat-treated and Gamimune. Then  
24 if we just look down to the fourth paragraph:

25 "... should you wish us to reserve batches for

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1 you, we would be happy to do so. This policy is  
2 followed by eminent doctors such as Professor Bloom,  
3 the principle behind it is minimising patients'  
4 exposure to a large number of batches."

5 I'll come on to the general issue of reserving  
6 batches and reserving concentrates in a little while,  
7 doctor, but do you recall whether you did ask Cutter  
8 to reserve batches for you, or indeed Armour to  
9 reserve batches for you?

10 **A.** Well, I cannot recall but if Professor Bloom had asked  
11 for them I certainly would have done the same. If you  
12 ask me to recall, I cannot recall. I think what  
13 I recall after is that Arthur told me that he is  
14 falling out with Cutter because they could not reserve  
15 all what he wanted, but I think because we were  
16 a smaller centre he asked me whether we had a similar  
17 problem and I said no. So we must have reserved it  
18 but the mechanism of it I wouldn't be able to tell you  
19 now.

20 **Q.** Sir, I note the time and I am going to come on to ask  
21 the doctor in some detail about the treatment  
22 policies, so perhaps this is a good moment for  
23 a break?

24 **SIR BRIAN LANGSTAFF:** Yes, it is. What we do, doctor, is  
25 we take about a half hour break, 20 minutes to

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1 half-an-hour in the morning. It's to allow you to  
 2 have a break. You say you are being well looked after  
 3 there but it gives people a chance to look after you  
 4 again. You mustn't talk to anyone about the evidence  
 5 you have given or may yet be asked to give you think.  
 6 You can talk about anything else but not about your  
 7 evidence. That applies to any break that there is.

8 **A.** Okay.

9 **SIR BRIAN LANGSTAFF:** It is also important not only that  
 10 you have a break but that those in the hearing room  
 11 do. And the third and largest group of people to whom  
 12 this applies, those who are watching at home, would no  
 13 doubt benefit by having the half hour as well. So we  
 14 will take half-an-hour and come back at ten to 12.

15 **MS RICHARDS:** Thank you, sir.

16 **SIR BRIAN LANGSTAFF:** Ten to 12.

17 (11.21 am)

18 (A short break)

19 (11.51 am)

20 **MS RICHARDS:** Dr Al-Ismaïl, you told us in your statement  
 21 that your general policy was to adhere to one  
 22 concentrate per patient unless directed by Cardiff or  
 23 there were infected batches. What was the rationale  
 24 for the one concentrate per patient policy?

25 **A.** That was mainly to be able to identify if anything

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1 untoward happened to the patient. And to be truthful,  
 2 the main thing which were on our mind before the HIV  
 3 and, later, hepatitis C identified, was the  
 4 development of antibody. Because development of  
 5 antibody in a patient with severe haemophilia is  
 6 a real problem and a real difficulty. So adhering to  
 7 one batch would probably reduce the, if you like,  
 8 number of antigens -- or that was the thought behind  
 9 it -- a patient may be exposed to.

10 So that was perhaps the main reason until the  
 11 advent of the retroviral infection, in which case we  
 12 needed to know exactly what batch would probably have  
 13 contributed to the infection.

14 **Q.** Was that the policy when you began in 1982 in Swansea?

15 **A.** True, yes.

16 **Q.** Was that your understanding of Professor Bloom's  
 17 policy in Cardiff?

18 **A.** Yes. I think he very much taught us to try to adopt  
 19 that policy. The difficulty for me is to be able to  
 20 say exactly when I've learnt such and such a thing,  
 21 but I remember when I was a trainee there are certain  
 22 things he explained to us that we need to think about  
 23 when treating haemophiliac. One of them was to reduce  
 24 the exposure to different batches and different  
 25 products.

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1 **Q.** There's one document I'm going to ask you to look at,  
 2 Dr Al-Ismaïl.  
 3 Soumik, it's BYOP0000024\_214.  
 4 This is an internal Cutter memorandum dated  
 5 8 May 1985 between two Cutter employees. If we go to  
 6 the second page, please, the second paragraph, so  
 7 towards the top of the page, records this:

8 "It must also be remembered that it is the  
 9 policy of Professor Bloom to change suppliers once  
 10 a year. This change was due last September and Cutter  
 11 have held on very well to delay it until the end of  
 12 March, 1985."

13 So this would suggest that Professor Bloom's  
 14 policy was, as recorded there, changing suppliers on  
 15 an annual basis. Do you recall that being his  
 16 approach? Because it wouldn't be consistent with  
 17 a policy of sticking to one concentrate per patient?

18 **A.** No, I don't know. I simply do not believe that  
 19 whoever wrote that got it right. That was never, in  
 20 my mind, the policy of Professor Bloom. I can't  
 21 really comment as what was the reason behind the  
 22 person writing that, but that is certainly not what he  
 23 taught us and what he practised.

24 **Q.** You say in your statement, and this is  
 25 paragraph 56(ii).

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1 Soumik, it's WITN3761005, page 18, please.

2 At paragraph 56 you talk about certain general  
 3 principles applied for selecting products. The first  
 4 is all products were licensed products, and then  
 5 secondly you say this:

6 "Safety and efficacy of a selected product for  
 7 a patient would have to be a priority."

8 How was the safety of a product assessed from  
 9 your perspective?

10 **A.** Well, maybe in retrospect it was probably a misplaced  
 11 trust in the medicine licensing agency in the UK, in  
 12 that we never used a product which is not licensed.  
 13 We never used a product which has not proved to be  
 14 efficacious. This is what the statement is based on,  
 15 in that whatever we used were supposedly licensed, and  
 16 to be licensed you had to have a safe and efficacious  
 17 product. But, you know, that -- I mean, we could talk  
 18 about that later on if you want, but that is our trust  
 19 in the system in the UK, like you trust that system  
 20 for any medicine you use.

21 **Q.** I'll come on at a later stage to talk about the risks  
 22 of hepatitis with you, but paragraph 57 of your  
 23 statement then suggests in the second sentence:

24 "... having discussed the issues with colleagues  
 25 at the time, it would appear that perhaps financial

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1 pressures may have played a part."  
 2 Could you identify for us the colleagues with  
 3 whom you've discussed the issue and what the financial  
 4 pressures are that may have played a part?

5 **A.** I did not discuss anything with the colleagues but, if  
 6 you look at this statement, this is exactly the same  
 7 wording that appeared in the Chief Executive statement  
 8 in 1988 because I, you know, sort of helped in getting  
 9 the information for the Chief Executive. The truth of  
 10 the matter is that we went and asked whoever in  
 11 finance and whoever was -- worked in West Glamorgan  
 12 Health Authority whether they do remember if there  
 13 were any financial pressure applied in terms of the  
 14 haemophilia centres. They said they do not but they  
 15 think they could have been because financial pressure  
 16 were applied everywhere.

17 So I do not -- I haven't discussed with any  
 18 particular person but when I've asked to -- because  
 19 I've told them, look, I do not really know how we paid  
 20 for this product, whether there were any questions  
 21 mark raised by the finance director as worry -- nobody  
 22 has at any time during my time in Swansea come to me  
 23 and say, "You cannot order this", or "This is too  
 24 expensive for us."

25 As I said, that may be because the haemophilia

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1 them to supply you on regular basis with the same  
 2 products. When we wanted -- when I said, "Look, we  
 3 really need to have a haemophilia nurse, would you  
 4 help us", he was very helpful there. But we also --  
 5 I used to go to the meetings in Cardiff whenever I can  
 6 but, I would say, from day to day, week to week, it  
 7 used to be telephone contact. I knew that he -- when  
 8 Dr Khurshid was director he received communication  
 9 from him in terms of what policies they want us to  
 10 adopt. I can't remember, and I did say in my  
 11 statement I cannot remember or cannot get hold of  
 12 a written policy, but the fact that I could not get  
 13 hold of written policy did not mean that we did not  
 14 have a policy. We had a policy but I cannot show the  
 15 Inquiry a written copy.

16 But how did we speak to him? We could speak to  
 17 him at any time. He was very available to us. And if  
 18 there were any issues -- and whatever we've used he  
 19 would have known about, because when a patient --  
 20 he -- you know, we used to make sure that he sees the  
 21 severe patient at least once -- at least once a year.  
 22 And if the patient has got any issues with joint and  
 23 whatever, he could see them many more times. And if  
 24 the patient needed any, you know, sort of input from  
 25 their haemophilia nurse, before we had a haemophilia

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1 centre in Swansea was a small centre. Talking to  
 2 colleagues round the country, I think that was  
 3 a hurdle -- everyday hurdle for them, really, to  
 4 ensure that what they wanted they, you know, got for  
 5 their patient.

6 So I haven't discussed with anyone in  
 7 particular, but when I made the enquiries I said,  
 8 "Look, I cannot remember, can you go and ask?" And  
 9 I think contacts were made with whoever finance person  
 10 they could get hold of who may remember the era, and  
 11 they told them probably financial pressure were  
 12 applied but no further details.

13 **Q.** You have said throughout your statement that you  
 14 followed the advice of Professor Bloom in terms of the  
 15 approach to treatment.

16 **A.** True.

17 **Q.** Had that been Dr Khurshid's approach as well?

18 **A.** Yes.

19 **Q.** How was the advice of Professor Bloom communicated to  
 20 you? Were there regular meetings? Was it in writing?

21 **A.** Well, I think Professor Bloom really -- we were in  
 22 regular contacts with him. You know, whenever we want  
 23 to make any decision really. I'll give you an  
 24 example, is that when we went to Cutter and I passed  
 25 by him and he said yes, they okay if you could get

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1 nurse we could see the patient. He would know what  
 2 the patient would be receiving, he would know what the  
 3 patient had been treated, how much the patient is  
 4 likely to use.

5 So the channel of communications were many,  
 6 including, you know, sort of written letters and  
 7 whatever. And you would find some letters from me and  
 8 from Dr Khurshid asking him to see a patient because  
 9 we are concerned about a joint or whatever. So the  
 10 routes of communication were many. He did not have  
 11 any hesitation in picking the phone and phoning any of  
 12 us if he thinks that there are certain issues he wants  
 13 to direct us to.

14 We used to invite him every now and then -- and  
 15 I must say, it was before I started, the Swansea  
 16 haematology department used to have a monthly  
 17 symposium where actually we used to invite all the  
 18 biomedical -- the MLSOs at the time, all the junior  
 19 staff, colleagues from other departments, and we would  
 20 have, you know, sort of buffet dinner and we used to  
 21 invite a speaker, and Arthur was, you know, sort of  
 22 a regular speaker. Mind you, he wasn't just a regular  
 23 speaker for us, he would -- you know, he was regular  
 24 speaker in other hospitals, really to advise them  
 25 about haemophilia and whatever.

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1 So many, many, you know, sort of forms of  
 2 communication with him. But he was always available.  
 3 **Q.** So is this correct, Dr Al-Ismael: the general policies  
 4 followed at Swansea were the policies of  
 5 Professor Bloom, in terms of, "This is the kind of  
 6 treatment you should give to a patient with mild and  
 7 moderate haemophilia", et cetera; is that correct?  
 8 **A.** True. That's correct.  
 9 **Q.** In terms of the decisions as to which pharmaceutical  
 10 companies to purchase commercial concentrates from, to  
 11 what extent was that determined by Professor Bloom or  
 12 taken by you or Dr Khurshid autonomously?  
 13 **A.** Well, that is the difficulty I had in actually pinning  
 14 down exactly what happened. When you showed me the  
 15 Cutter reps, so surely we must have ordered something  
 16 from Cutter directly. But for most of the time the  
 17 products we ordered were, you know, stocked in the  
 18 Blood Transfusion Service and it would be a product  
 19 that we used and Cardiff may have used. But, you  
 20 know, if you ask me did he pick a phone and say,  
 21 "Look, Saad, you really have to get in touch with this  
 22 company and order", he never did. But, I mean,  
 23 I cannot really be certain as, you know, sort of what  
 24 were -- apart from what -- the letters you've kindly  
 25 shared with me, I could not be certain as Armour, you

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1 know, sort of clearly came and saw me at the time, but  
 2 I cannot remember exactly. Profilate, we used some  
 3 Profilate in 1987, if you look at the returns of 1987.  
 4 And that was very much influenced by him, when he told  
 5 me that Profilate, he felt, even though they were more  
 6 expensive, they have got certain advantages. But  
 7 then, you know, we found that after a while he stopped  
 8 using Profilate because for one reason -- I think it  
 9 was to do with the hepatitis C.  
 10 But he never dictated to us that we can only use  
 11 that product. You have to remember that he really --  
 12 he really led, in terms of directing us, by his  
 13 knowledge, and we respected, you know, sort of his  
 14 authority so much. And that's not just us, mind you.  
 15 I mean, you go to any international or national  
 16 meeting and you could see how much he was respected  
 17 and, you know, sort of listened to in terms of the  
 18 knowledge he had.  
 19 **Q.** As well as following Cardiff's -- what you understood  
 20 Professor Bloom's general treatment policies to be,  
 21 you've referred to his role in relation to individual  
 22 patients.  
 23 **A.** Yes.  
 24 **Q.** Was that predominantly patients with severe  
 25 haemophilia A that he would become involved with or

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1 was it patients of any category?  
 2 **A.** Well, patients of any category if they needed his  
 3 input. I'll give you several examples. Before the  
 4 advent of the HIV, if a patient with mild haemophilia  
 5 in a sort of -- as I said, we had a group of mild  
 6 haemophiliacs who unfortunately, even though they were  
 7 mild, they would develop inhibitors. So we would  
 8 have, you know, sort of shared that information with  
 9 him, asked him for input. Patients who -- we didn't  
 10 have any social worker dedicated to the haemophilia.  
 11 The social worker who helped us, very kindly,  
 12 was a social worker who was assigned to look after the  
 13 haematology in-patients, and the vast majority of  
 14 these were patients with haematological malignancies.  
 15 But she did actually get herself involved when we've  
 16 asked her to look after the social aspect of  
 17 haemophiliac when they are admitted, and she continued  
 18 to follow them up. But most of the social worker  
 19 input was from Cardiff. So if there were any issues,  
 20 then I would pick up the phone or write a letter to  
 21 Professor Bloom and ask for help or ask -- for  
 22 example, training the parents, very often we would ask  
 23 for the help of Cardiff in training the parents or  
 24 training the child. There were certain children with  
 25 needle phobia and they did have a programme -- which

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1 was improved later on, you know, sort of the role play  
 2 or whatever they called it.  
 3 So we did ask him for so many issues. But  
 4 certainly in terms of any issues that we felt that we  
 5 need his input and you would find letters from  
 6 Dr Khurshid or myself asking him for an input in any  
 7 particular patient. In other words, he was there.  
 8 Whenever we needed any help, he was there.  
 9 **Q.** Did you always follow his advice or were there  
 10 occasions when you disagreed and took a different  
 11 course?  
 12 **A.** No, I think to have, if you like, ability to make your  
 13 own decision, you really have to be very well  
 14 informed. I think that is not just my motto, I think  
 15 that's the motto of most of my colleagues. So I will  
 16 be able to make a decision about a particular patient  
 17 with haematological malignancy, who there are more  
 18 than one option of treatment, if I felt that I really  
 19 have all the information which I then could cascade to  
 20 the patients and their carers and say, look, these are  
 21 the options.  
 22 In terms of haemophilia, I think I know I could  
 23 make a decision as when to treat a patient, when to do  
 24 the levels, when to look for inhibitors, when to have  
 25 a second thought that this patient joint is going to

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1 be a problem, but I was not that informed as  
 2 Professor Bloom or UKHCDO's working parties, so  
 3 I would not think that it was right for me to take  
 4 that decision. It really depends how confident you  
 5 are with the information you possess, and it would be  
 6 very wrong for me to say, look, I think I would take  
 7 a different path from what Professor Bloom would  
 8 advise.

9 **Q.** In terms of the actual treatment policies, your  
 10 statement tells us that, and as we've seen from the  
 11 returns Von Willebrand's patients were, generally at  
 12 least, treated with cryoprecipitate and then, for  
 13 haemophilia A, patients who were mild or moderate,  
 14 your statement says that the policy would have been --  
 15 was to treat them with cryoprecipitate or DDAVP; is  
 16 that correct?

17 **A.** That's true. Sorry, let me just explain a bit more.  
 18 There are issues with DDAVP. DDAVP is effective in  
 19 some patients and we actually did produce response for  
 20 every single patient under our care but that only  
 21 occurred not in the '80s but maybe in the '90s and  
 22 2000s.

23 DDAVP is effective in some of the mild patients  
 24 depending on their base level. It could increase it  
 25 to maybe 20 or 30 units, enable you to maybe have

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1 a tooth extraction, but it would not be adequate if  
 2 you are going to operate on a patient. The other  
 3 problem with DDAVP is that, because of what we call  
 4 tachyphylaxis, you lose the effect of DDAVP after  
 5 a couple of days, and there are other issues about  
 6 fluid retention and whatever.

7 So DDAVP is useful for the mild and probably  
 8 less useful for the moderate but in some of them you  
 9 do get a reasonable response, but only for a limited  
 10 period of time.

11 **Q.** For patients who for whatever reason you didn't use  
 12 DDAVP, either because, as the return suggested, it  
 13 wasn't used until 1985 or for reasons that you've  
 14 given that it was not appropriate in an individual  
 15 case, would those patients then have been treated with  
 16 cryoprecipitate as the first line of treatment?

17 **A.** Yes.

18 **Q.** Were there circumstances when you were at Swansea when  
 19 mild or moderate patients were treated with  
 20 concentrates?

21 **A.** Yes.

22 **Q.** In what kind of circumstances would that arise?

23 **A.** That would have been a surgical operation or surgical  
 24 intervention and in one patient which I included in my  
 25 statement he was a mild haemophiliac, in 1980,

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1 I think, where he needed several teeth extraction  
 2 under GA, and my colleague -- my ex-colleague  
 3 Dr Khurshid -- gave him concentrate. In other words,  
 4 when you felt that you really need to achieve  
 5 a certain level and sustain that level for maybe a few  
 6 days, the DDAVP would not be adequate.

7 With cryoprecipitate you could try but, if you  
 8 have a patient undergoing surgery, you cannot really  
 9 afford but to get them to about 100 per cent or what  
 10 we call 100 units or whatever because of the fear of  
 11 bleeding. So there were patients -- I remember one  
 12 patient with mild haemophilia who insisted on having  
 13 one of his -- I think the big toe was causing him so  
 14 much problem he was seeing the orthopaedic surgeon and  
 15 the orthopaedic surgeon said, "Look, we could correct  
 16 that but it means an operation", and we chatted about  
 17 the operation and I said, "In which case, we have to  
 18 use concentrate, you have -- you know, it may expose  
 19 you to other risk". At that time, to be honest, I was  
 20 thinking more of Factor VIII inhibitor.

21 As it happened, he actually did develop  
 22 Factor VIII inhibitor with the concentrate and I was  
 23 so concerned about him at one time because he  
 24 continued on bleeding and with the input of Cardiff we  
 25 actually -- there was a programme which he used which

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1 you take the plasma of the patient and exchange it.  
 2 We had what we call a self-separator in Swansea, and  
 3 it was a horrendous time. I'm glad to say that he's  
 4 still with us and we often joked about his other foot,  
 5 which again had the same problem and he said he may be  
 6 thinking of having that done and, as I said, we joked  
 7 about it saying "Do you remember what happened then?"

8 So the short answer to your question, did we use  
 9 some concentrate for some mild haemophiliac: yes, if  
 10 we had to undertake surgery where we think the  
 11 cryoprecipitate cannot be relied on for certain to  
 12 achieve the desired level.

13 **Q.** What was the treatment policy in relation to children,  
 14 your statement suggests you think it was NHS  
 15 concentrates if possible?

16 **A.** Yes. So NHS concentrate -- we talk about the severe  
 17 haemophiliacs here because children with mild  
 18 haemophilia could manage them with cryoprecipitate or  
 19 even DDAVP after the age of two or whatever. But for  
 20 the severe haemophiliacs we -- as I said, it was  
 21 ingrained in us that NHS probably safer than the  
 22 commercial concentrate. It turned out later on that,  
 23 in terms of what used to be called non-A, non-B  
 24 hepatitis, there isn't really much difference at all  
 25 but, in terms of the HIV, there was a difference. But

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1 that was all before the HIV and if you like the real  
 2 and serious thinking about hepatitis C, and I'm sure  
 3 you would ask me: what do you mean by "serious  
 4 thinking"?

5 **Q.** I'll come back to that Dr Al-Ismael. Just sticking  
 6 with the treatment policies, you said NHS concentrates  
 7 because it was believed to be safer or that was the  
 8 ingrained thinking. What was it at the time about NHS  
 9 concentrates that led you to understand them to be  
 10 safer?

11 **A.** You know, I mean -- to be truthful, I cannot remember  
 12 exactly. You know, something which you have come to  
 13 know but if you tell me which article or which  
 14 information -- whether, you know, sort of that is what  
 15 Professor Bloom have taught us when we were in  
 16 training, maybe. It may be because we came across  
 17 certain articles which I cannot remember now, could  
 18 be, but it was something in our mind that if you could  
 19 use NHS concentrate, use NHS concentrate. Mind you,  
 20 some of them are so difficult to dissolve but we still  
 21 preferred them to commercial.

22 **Q.** Your statement says you'd use the NHS concentrates for  
 23 children, I think, if possible. Does that mean that  
 24 if there were insufficient supplies of NHS  
 25 concentrates you would have to use commercial

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1 concentrates to treat children?

2 **A.** That's true.

3 **Q.** Then, in relation to previously untreated or rarely  
 4 treated patients, your statement suggests that  
 5 patients falling within that category would be jointly  
 6 managed by Swansea and Cardiff and you'd consult  
 7 Cardiff?

8 **A.** Yes.

9 **Q.** Could you just elaborate upon that please?

10 **A.** Yes, by all means. Fortunately for me, I did not have  
 11 any new patient with severe haemophilia until the '90s  
 12 but I'll use, you know, that incident to tell you what  
 13 would happen. So this is a patient who was admitted  
 14 and I was called by the paediatrician because there  
 15 was an issue about whether it could be the patient was  
 16 abused or whatever. Cut a long story short the first  
 17 thing we do is coagulation profile and we find that he  
 18 has clearly abnormal coagulation profile, do  
 19 Factor VIII on the same day and Factor IX and his  
 20 Factor VIII was less than 1 per cent.

21 Immediately pick up the phone and speak to  
 22 colleagues in Cardiff to say, "Look, we've got a new  
 23 severe haemophiliac, I'm going to see mother and  
 24 father, and whatever, would you advise any particular  
 25 concentrate, any particular product?" It depends as

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1 what -- I think the patient I'm talking about was with  
 2 the advent of the -- I can't remember when we were in  
 3 the recombinant era or just before the recombinant,  
 4 but with the safer concentrate. So I would call the  
 5 family with the haemophilia nurse and whatever, and  
 6 you actually have to take it in stages.

7 First of all, the state of shock because that  
 8 family did not have anybody with haemophilia. They  
 9 didn't know what haemophilia means. So you explain  
 10 what haemophilia is, you explain it in simple terms,  
 11 and you -- you know, draw a chart or whatever. And  
 12 then you will talk about the need for treatment,  
 13 treatment would be needed at some stage. They will  
 14 ask you what to look for, "How do we know that our  
 15 child would have a bleed?" And you explain all that.

16 And even at that time, you -- at that time where  
 17 all the product were sort of HIV-clear, then I would  
 18 say, "Look, we have different products, and I would be  
 19 asking colleagues in Cardiff, which is the  
 20 comprehensive care centre, would advise you very much  
 21 to go and see them as well over there", and they  
 22 always usually take that offer and they would make an  
 23 appointment and see in Cardiff.

24 Cardiff was very good, really, in that they  
 25 would see them the next day if need be.

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1 So it would be jointly to do that. When we --  
 2 when Professor Bloom was there, and I gave you the  
 3 example of the mild haemophiliac who developed  
 4 inhibitor, I would immediately be on the phone to him  
 5 and say, you know, sort of, "What would your advice  
 6 be?" But for any previously untreated patient,  
 7 I've -- it's not just me, myself and my colleagues  
 8 felt that it is essential to explain to the family the  
 9 availability of the comprehensive care centre.

10 Mind you, that's not just haemophilia. I'll  
 11 give you another example. We used to see many more  
 12 cases of leukaemia, and even though we are fully  
 13 accredited in terms of treating leukaemia with  
 14 intention to cure in adults, I still would say to the  
 15 family, "There is a larger centre down the road from  
 16 us and you are more than welcome to go and speak to  
 17 them and see them and, if you want, the treatment to  
 18 be there."

19 That was particularly true for the children,  
 20 because Cardiff had a superb childhood leukaemia  
 21 centre, and so many of them would have taken that on.  
 22 Some of them, when they knew that it meant a weekly  
 23 visit, felt that: look, we'll have the treatment here,  
 24 but we want the help, the direction of Cardiff.

25 Sorry to enlarge on the leukaemia but it is, you

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1 know, always essential to explain to the patient and  
 2 their family what is available in Swansea and what's  
 3 available in Cardiff.  
 4 **Q.** But as I understand your evidence, doctor, you  
 5 didn't -- in the period 1982 to, let's say, 1985/86,  
 6 when heat treated products were more widely available,  
 7 you didn't have any previously untreated patients  
 8 during that period?  
 9 **A.** No, I can't remember any patient. And I certainly did  
 10 not -- I can't remember, even of the mild  
 11 haemophiliacs, I didn't have any previously untreated  
 12 patients.  
 13 **Q.** I'm going to ask you to look at a document, doctor.  
 14 Soumik, it's CVHB0000002\_006.  
 15 You will see this is a document entitled  
 16 "Haemophilia Treatment Policy Guidelines - May 1983".  
 17 There's a date on the second page which is  
 18 18 May 1983.  
 19 This has been produced to the Inquiry by  
 20 Cardiff, so it would appear to be a written treatment  
 21 policy from 1983 governing Cardiff.  
 22 Do you recall whether you ever saw this at the  
 23 time?  
 24 **A.** No, I -- you kindly shared that with me and, no,  
 25 I can't recall seeing it. But this would probably

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1 have -- if it was shared with Swansea, it would have  
 2 been sent to Dr Khurshid. And I'm sure if Dr Khurshid  
 3 had received it that he would have discussed it with  
 4 me, showed me, because, as I said, I may be called in  
 5 any time to treat a patient. So we were -- really  
 6 wanted to speak in unison, me and him, as to what to  
 7 do. But I cannot remember seeing that one. But if  
 8 you ask me any of this information is new to me, no.  
 9 **Q.** Can we just look at a couple of the paragraphs  
 10 a little more closely. In relation to mild  
 11 haemophiliacs, it says DDAVP or cryoprecipitate or  
 12 NHS Factor VIII concentrates. And you've already  
 13 explained your approach towards mild haemophiliacs.  
 14 Here, children with severe haemophilia,  
 15 cryoprecipitate is put as the first order of treatment  
 16 or NHS Factor VIII.  
 17 Your evidence to us has been that the treatment  
 18 process was NHS Factor VIII and not cryoprecipitate  
 19 for children with severe haemophilia.  
 20 **A.** No, I think if you look at the returns you'll find  
 21 that some of the cryoprecipitate was used for  
 22 in-patient. I really do not think that you can treat  
 23 a small child with cryoprecipitate at home, so it has  
 24 to be an in-patient treatment.  
 25 So if you have a small child whereby you could

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1 give enough cryoprecipitate to deal with  
 2 haemarthrosis, or you think you could do it, then you  
 3 use it, you always do a post infusion Factor VIII.  
 4 But if that is not adequate, then you have to use  
 5 concentrate. And I'm sure that's what Cardiff would  
 6 have used anyway, even though it's a -- when I say  
 7 where feasible, that is exactly what it really means,  
 8 that it is not always feasible. So if you have a small  
 9 child whereby you could give enough cryoprecipitate to  
 10 deal with haemarthrosis, or you think you could do it,  
 11 then you use it, you always do a post infusion  
 12 Factor VIII. But if that is not adequate, then you  
 13 have to use concentrate. And I'm sure that's what  
 14 Cardiff would have used anyway, even though it's a --  
 15 when I say where feasible, that is exactly what it  
 16 really means, that it is not always feasible.  
 17 **Q.** We can see in (3), "Adults with severe haemophilia",  
 18 cryoprecipitate, again, is identified "where feasible"  
 19 as the treatment of choice for in-patient treatment,  
 20 but we've seen from the Swansea returns that the use  
 21 of cryoprecipitate declined in 1982 and 1983. Do you  
 22 think you were following the order set out here?  
 23 **A.** I think so. And, as I said, 1982/83 was, you know,  
 24 sort of very much under the direction of my  
 25 colleagues, but I'm sure he was following what

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1 Professor Bloom and the order in Cardiff was there  
 2 really.  
 3 **Q.** But in terms of this actual document, you've got no  
 4 particular recollection of seeing it at the time?  
 5 **A.** No, I don't. And I've seen the name on the document  
 6 and I tried to figure out who's that and I still  
 7 cannot.  
 8 **Q.** Again, I'm thinking about the period 1982 to 1985, in  
 9 particular. To what extent were patients offered  
 10 a choice about which treatments to receive?  
 11 **A.** In terms of cryoprecipitate or NHS or commercial?  
 12 **Q.** Certainly, by way of example, yes, to what extent  
 13 would they be offered a choice?  
 14 **A.** I honestly don't know. I say I don't know because, by  
 15 the time I joined, it was the same patient who was  
 16 treated before that we carried on with their  
 17 treatment. A choice is usually offered at the start  
 18 of a treatment, so if I put the example of previously  
 19 untreated patient, then I would explain to the patient  
 20 and the family what products we have and what the  
 21 advantages and disadvantages known to me at any one  
 22 time of each product, and very often patient and  
 23 family would say "What would you suggest, doctor?"  
 24 And I think that is not just true of haemophilia, true  
 25 of so many other conditions that, you know, sort of

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1 when a person is faced with a choice and they do not  
 2 really know what would be the best choice for them.  
 3 As I said in my statement -- and I think that's  
 4 because I was more trained in haematological  
 5 malignancies, and in haematological malignancies you  
 6 truly cannot take a decision for a patient, and the  
 7 reason for that, even with the conditions that are  
 8 curable, the treatment itself may shorten the life of  
 9 the patient because of its complication. So in  
 10 haematological malignancies, you cannot take  
 11 a decision for the patient. You can inform the  
 12 patient with all the information you have at the time  
 13 and try to get the patient to make the choice for you.  
 14 Sometimes the patient would insist that they cannot  
 15 make the choice so you turn to their carer and  
 16 whatever and ask them to help, and you ask them, look,  
 17 don't make today you can come and make the choice  
 18 tomorrow.

19 I think that attitude toward haematological  
 20 malignancy influenced my practice not just in  
 21 haematological malignancy but in non-malignant  
 22 conditions in haematology, whether that is in general  
 23 haematology, and we have certain conditions in general  
 24 haematology which are even more awful than  
 25 haematological malignancies. So that influenced my

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1 approach: try to say to the patient, "Look, I'm here  
 2 to help you to make a decision but I cannot take that  
 3 decision for you".

4 That certainly was my practice when I started to  
 5 deal with haemophilia. But you've asked a simple  
 6 question: do you know whether these patients were  
 7 given a choice? That choice is usually explained  
 8 right at the beginning of offering a patient any  
 9 treatment. You explain what the treatments available,  
 10 and if the patient come to you and say, "Look, I've  
 11 heard in the news that such and such a thing could  
 12 give me a problem, can you change me", you certainly  
 13 would sit down and try to explain to the patient "Yes,  
 14 I will change you but you have to go through the  
 15 following".

16 But throughout my career no patient came to me  
 17 and say, "Look, I've heard in the news about this  
 18 product will cause such a problem, can I change to  
 19 something different?"

20 **Q.** So is this right: in the period '82 to '85/'86 because  
 21 you were dealing with patients who were already on  
 22 a course of treatment, any conversation about choices  
 23 would have been with Dr Khurshid or Professor Bloom,  
 24 rather than with you?

25 **A.** Yes.

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1 **Q.** I wanted to ask you about your knowledge of hepatitis.

2 **A.** Yes.

3 **Q.** First of all, what did you learn as part of your  
 4 haematology training about the risks of transmission  
 5 of hepatitis?

6 **A.** Well, from medical school, I think we knew about  
 7 homologous CM jaundice, and then the Australia antigen  
 8 and then hepatitis B and whatever, and we knew that  
 9 blood could transmit viruses. We also knew, by the  
 10 way, that blood could transmit malaria. That was the  
 11 only thing which remained in my mind, until, I think,  
 12 when I sat my MRCPath in 1980, I had to master  
 13 everything, if you like. So I came to know that some  
 14 patients who were hepatitis B negative would also have  
 15 altered liver function test, but there are different  
 16 views as what's the cause of that, some people called  
 17 it non-A, non-B hepatitis, some people thought it's  
 18 nothing to do with an infective agent. Interestingly,  
 19 at the time, I wondered if it is an infective agent  
 20 why somebody does not take the plunge and say non-A,  
 21 non-B viral hepatitis, but nobody did that. They said  
 22 non-A, non-B hepatitis.

23 So I knew of that but whenever you come in  
 24 a discussion or whatever you were told that, look,  
 25 this is probably going to be a mild problem because

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1 it's not a big issue. I think I am right in saying  
 2 that during the '80s, even though since the Inquiry  
 3 came in and I've become more knowledgeable about  
 4 publication before the '80s, you know, during the '80s  
 5 most of us thought that non-A, non-B hepatitis is not  
 6 going to be a big issue, is not going to be a big  
 7 issue for the vast majority of patients. So this  
 8 is -- you know, the initial knowledge I had about  
 9 hepatitis was mainly hepatitis B but then this issue  
 10 about patients with altered liver function tests.

11 **Q.** What, if anything, did Professor Bloom teach you or  
 12 discuss with you about non-A, non-B hepatitis?

13 **A.** Well, yes, we did ask and he said he, I think -- he  
 14 would have referred to all the publication which have  
 15 happened and, I must say, you know, at that time  
 16 I don't think any of them stuck in my mind for a long  
 17 time until hepatitis C became known and whatever. But  
 18 he would have told us about, you know, sort of what  
 19 other -- you know, what the literature said and his  
 20 opinion that, you know, sort of for the vast majority  
 21 of patients non-A, non-B hepatitis is probably not  
 22 going to be a big issue. But I don't think he was  
 23 alone in that.

24 I think -- I remember that we talked about the  
 25 liver biopsy which happened in Sheffield and we also

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1 heard about a patient who died in the Royal Free  
2 because of a liver biopsy and we certainly, you know,  
3 sort of we felt that Professor Bloom was not a person  
4 who would be keen to do liver biopsy on a patient who  
5 had got this, what you call, non-A, non-B hepatitis.

6 But he would have -- I mean, as I said, he used  
7 to come and present -- in Cardiff we had always  
8 a Thursday lunchtime meeting. So people would munch  
9 their crisps while the presenter would present. You  
10 know, there used to be invitation for, you know,  
11 different speakers, even from abroad. Allan Jacobs  
12 was very well known in the haematology world, really,  
13 and so many of these talks would have been on  
14 haemophilia and allied disorders and, you know, sort  
15 of, so many of the presentation would have included  
16 some of the latest, you know, papers.

17 But if you ask me how much of that stuck in my  
18 mind later on, very little, I would think.

19 **Q.** So you have some recollection of the Sheffield biopsy  
20 work. We know that that was reported in The Lancet in  
21 1978. Would you have been reading The Lancet in 1978  
22 regularly or is that something you would have picked  
23 up from Professor Bloom?

24 **A.** Well, the journals which I used to get at home were  
25 the New England Journal of Medicine, the British

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1 Journal of Haematology, the BMJ, and later on the --  
2 Blood, the American Society of Hematology. The  
3 Lancet, if I need to read it, I would have to go to  
4 the library to read it. But, yes, I would have --  
5 I don't remember reading the article but I remember  
6 that Professor Bloom told us about the work in  
7 Sheffield.

8 **Q.** What did -- I can show you the article if you want to  
9 but as you may not have read it at the time it may not  
10 be particularly useful.

11 Do you recall what Professor Bloom told you  
12 about what the Sheffield work showed or what the  
13 significance or otherwise of it was?

14 **A.** Unfortunately, no, I can't really, you know, sort of  
15 with any clarity tell you. I mean, it is all,  
16 unfortunately, munched in the brain, 40 years ago.

17 **Q.** I am going to show you two short documents. You would  
18 not have seen them at the time but they're two  
19 expressions of you about non-A, non-B hepatitis and  
20 its nature. And I want to show them to you and then  
21 ask you again about Professor Bloom's views.

22 The first, please, Soumik, is BART0002487.

23 Now, this is part of the general material the  
24 Inquiry sent you but you would not have seen this,  
25 I think, at the time. It's a letter, April 1979, and

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1 it's from Dr Kernoff at the Royal Free to Dr Colvin at  
2 The London Hospital.

3 If we could go to the second page, please,  
4 Soumik. And if we just go slightly a little further  
5 down the page, so we can see the whole of paragraph 2  
6 please. Thank you.

7 So there is a long paragraph there under "Types  
8 of therapeutic material available", and I'm going to  
9 direct your attention, doctor, to one sentence. It's  
10 about two thirds of the way down, and it says -- well,  
11 two sentences:

12 "The clinical reason [this is for preferring NHS  
13 material] is the growing awareness of the probability  
14 that commercial concentrates have a higher risk of  
15 transmitting non-A, non-B hepatitis than NHS  
16 material."

17 I'm not asking you to comment on that, doctor.  
18 But then it continues:

19 "This [so non-A, non-B hepatitis] is a serious  
20 disease with long-term consequences ..."

21 Now that's the view being expressed by  
22 Dr Kernoff, who had a particular interest in  
23 hepatitis, to Dr Colvin.

24 Do you recall Professor Bloom ever discussing  
25 non-A, non-B hepatitis in these kind of terms, as

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1 being a serious disease with long-term consequences?

2 **A.** Now if I say I don't remember, and I don't remember,  
3 that does not mean that he has not actually maybe  
4 discussed the full implication of non-A, non-B  
5 hepatitis with us.

6 But the simple answer is I don't remember. But  
7 as I said, that does not mean he did not discuss it.

8 **Q.** No, I understand that, doctor. But your impression --  
9 or your evidence suggests that Professor Bloom's view  
10 as communicated to you was that non-A, non-B hepatitis  
11 was a fairly mild condition, not something to be too  
12 concerned about.

13 **A.** Well, I think he -- you know, the way he said in the  
14 vast majority of patients he's seen it was a mild  
15 condition, but because we did not know what the cause  
16 of it and there was no particular treatment, he taught  
17 us what our role would be, is to monitor, advise  
18 against any, you know, advice about alcohol, advise  
19 against any drug which could worsen the liver function  
20 tests, and whatever. Well, I think he -- you know, the  
21 way he said in the vast majority of patients he's seen  
22 it was a mild condition, but because we did not know  
23 what the cause of it and there was no particular  
24 treatment, he taught us what our role would be, is to  
25 monitor, advise against any, you know, advice about

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1 alcohol, advise against any drug which could worsen  
2 the liver function tests, and whatever.

3 You know, there are certain things which sticks  
4 in your mind simply because you are involved with them  
5 and I was -- when I was an SHO and it was Saturday and  
6 it was not unusual, either Saturday or Christmas Day  
7 or whatever, it was, you know, not a normal working  
8 day, and I remember there was a patient with  
9 haemophilia who had deep jaundice and because I was  
10 the SHO I was looking after that patient as well and  
11 I remember Professor Bloom came on that day,  
12 particularly to see the patient because he was worried  
13 about the patient.

14 The thing about that patient when you look at  
15 the liver function test, you find that the jaundice  
16 was not really what we call a hepatocellular jaundice,  
17 it was what we call an obstructive jaundice. There is  
18 something blocking the drainage of the bile.

19 Now, I remember that case because when I looked  
20 at the medication I saw that the patient was on  
21 an anti-sickness, which is called Largactil and that  
22 is well known to cause obstructive jaundice and, like  
23 any of these things, when you have done something  
24 useful, you tend to stick into your mind. So  
25 I mentioned that to the registrar and he mentioned it

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1 to Professor Bloom, and I think he said to the effect  
2 that all that is -- "I'm glad that is the case because  
3 I haven't seen such a type of jaundice in a patient  
4 who is not hepatitis B".

5 You know, these are glimpses which I could  
6 recall but, as to the rest of it, I'm afraid I cannot  
7 recall everything as what he said, but he used to  
8 convey to us in, you know, sort of -- I mean, he's not  
9 a person who actually was opinionated, he was very  
10 willing to change his opinion depending on what he had  
11 learned and he would convey to as trainees as what was  
12 the understanding of the time and he would not be  
13 a person who would take one position and will continue  
14 with that even when the evidence shows to the  
15 contrary.

16 Q. There's just one further description of non-A, non-B  
17 hepatitis, contemporaneous description, I wanted to  
18 ask you about. Again you would not have seen this  
19 document at the time, doctor. Soumik, it's  
20 WITN0282008.

21 This is an internal Department of Health memo,  
22 doctor. Again, it's in the material that has been  
23 generally provided to you but there's no reason to  
24 think you would ever have seen it at the time. It's  
25 September 1980. In the third paragraph, it says this:

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1 "I must emphasise that 90 per cent of all  
2 post-transfusion (and blood-product infusion)  
3 hepatitis in the USA and elsewhere is caused by non-A,  
4 non-B hepatitis viruses which (unlike hepatitis B)  
5 cannot, at present, be detected by testing donor  
6 blood. This form of hepatitis can be rapidly fatal  
7 (particularly when acquired by patients with  
8 pre-existing liver disease) or can lead to progressive  
9 liver damage. It can also result in a chronic carrier  
10 state, thus increasing the 'pool' of these viruses in  
11 the community."

12 I just wanted to break that down and see to what  
13 extent you understood any of these matters in the  
14 early 1980s.

15 A. I did not -- sorry.

16 Q. I'll just do it bit by bit if that's all right. Were  
17 you aware in the early 1980s, so 1980 through to  
18 1983/4, that 90 per cent of post-transfusion  
19 hepatitis, or the majority in any event, whatever the  
20 precise percentage, of post-transfusion hepatitis was  
21 caused by non-A, non-B hepatitis viruses?

22 A. I do not remember the non-A, non-B -- as I said, I was  
23 always intrigued why they call it non-A, non-B  
24 hepatitis and not non-A, non-B viral hepatitis. So  
25 this is maybe one of the few times where the word

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1 "virus" is mentioned.

2 I knew that after hepatitis B was eliminated  
3 from the blood transfusion and concentrates, the vast  
4 majority of patients which showed the abnormal liver  
5 function test is what this called non-A, non-B  
6 hepatitis. But that is after the elimination of the  
7 hepatitis B, yes, so it will be in the 80s.

8 Q. Did you know, did you understand, that non-A, non-B  
9 hepatitis could be rapidly fatal?

10 A. No, I haven't -- I haven't seen that. I'm sure there  
11 would have been reports about it but I haven't seen  
12 that.

13 And just to reflect on the small practice we had  
14 in Swansea, I've seen only two cases with hepatitis C  
15 who actually developed liver cirrhosis and was --  
16 probably participated in their death. One is  
17 a patient with hepatitis C and HIV. Unfortunately, he  
18 was severely disabled, even though he lived to  
19 his 50s. His mother found it very difficult to  
20 persuade him to have any of the treatment for either.  
21 He did have some treatment for HIV but he would not  
22 continue with that.

23 The other patient is what I referred to you in  
24 my statement who -- we knew that he had a concentrate,  
25 because of the teeth extraction, and then he wouldn't

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1 attend the haematology out-patient clinic, and the  
2 next thing I knew is that he was under my colleague,  
3 who is a hepatologist, with liver cirrhosis, and he  
4 died of liver cirrhosis.

5 So, you know, as far as my own experience,  
6 I haven't seen that, but -- because I haven't seen  
7 enough of them, but non-A, non-B hepatitis in the 80s  
8 were by the vast majority of the haematologist. And  
9 not just in the UK, worldwide. I mean, there were the  
10 publication which shows that if you do a liver biopsy  
11 and you could find chronic persistent hepatitis,  
12 chronic active hepatitis, cirrhosis, even in some of  
13 the children from Lilleyman, who was -- used to work  
14 in Cardiff.

15 But I think the vast majority of us thought that  
16 non-A, non-B hepatitis was not a big issue.

17 **Q.** But did you know as a matter of fact, were you aware  
18 that it could, as put here, lead to progressive liver  
19 damage?

20 **A.** Yes. I mean, we knew that it could lead to  
21 progressive liver damage, but if you ask me when did  
22 you actually become aware of that, that I cannot tell  
23 you. I cannot tell you as when -- I knew that even in  
24 the 80s we used to send those patients for ultrasounds  
25 and that is -- really was -- and we would examine

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1 every single patient clinically for any signs of  
2 cirrhosis, including spider naevi, including ascites,  
3 including whatever signs we knew of palmar erythema.  
4 But I really did not know that -- you know, sort of,  
5 there are quite a percentage of them who would develop  
6 progressive liver disease and could die of cirrhosis  
7 or hepatocellular carcinoma.

8 **Q.** You have explained that in terms of the general  
9 approach to the treatment of patients with bleeding  
10 disorders, you relied upon and you deferred to the  
11 advice of Professor Bloom for the reasons you have  
12 given, that you understood him to be more well  
13 informed than you were. Is the same true in relation  
14 to hepatitis, that you would have regarded  
15 Professor Bloom as more knowledgeable than yourself or  
16 was that not the case?

17 **A.** No, I think we were blessed in Swansea in that shortly  
18 after I was appointed, my colleague Jerry Kingham was  
19 appointed I think a year or two later, and he made it  
20 very clear he was interested in hepatology as well as  
21 gastroenterology. And later on, in 2006, we had  
22 a superb colleague as well appointed who was -- main  
23 interest in hepatology.

24 So I think I, you know, sort of, was so  
25 fortunate really in that in Swansea, all the time

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1 I worked in Swansea, we had a good hepatologist who we  
2 would be able to refer patients to. And I must say,  
3 I mean, for any liver condition, I would have informed  
4 Arthur that such a patient would, you know, may be  
5 experiencing whatever, but I would have to referred to  
6 the hepatologist.

7 **Q.** Can you recall in what year was Dr Kingham appointed?  
8 Was that -- you said when you were appointed -- was  
9 that '82 or are you talking about '85?

10 **A.** I think he was appointed in '84, '83 or '84.  
11 I can't -- I mean, he was appointed soon after me.

12 **Q.** Do you recall any discussions with him in the early or  
13 mid-80s about the nature of non-A, non-B hepatitis?

14 **A.** Now, interestingly, one thing which springs to my  
15 mind, we were in the coffee room and -- but don't ask  
16 me on the year because I won't be able to tell you --  
17 and he said to me, "Saad, I've been to this  
18 international meeting, did you know that all your  
19 patients who had received concentrate had non-A, non-B  
20 hepatitis?" I said, "Yes, I knew about that. What we  
21 are going to do about them, Jerry?" And he said,  
22 "I don't know."

23 **Q.** What, if any, information did you personally provide  
24 to your patients in the early or mid-80s about the  
25 risks of hepatitis from treatment with blood products?

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1 **A.** As I said before, the risk of treatment with hepatitis  
2 you would discuss with the patient when you offer the  
3 treatment. But I'll tell you what would happen in the  
4 out-patient clinic. When we started regular  
5 out-patient clinic and, for that matter, even before  
6 we start regular out-patient clinic, what happened in  
7 when haemophiliacs would come in, the usual thing is  
8 you listen to the patient, what are the issues and  
9 whatever, you examine their joint, and then you go  
10 through with them with the investigation.

11 So you start with the full blood count and you  
12 go through the liver function test and you say, oh, by  
13 the way your liver function test showed that your  
14 enzymes, liver enzymes, are raised. What does that  
15 mean, doctor? Well, it means that there is an  
16 inflammation in the liver, probably related to the  
17 treatment but we do not really know how that is going  
18 to change, whether it is ever going to change but  
19 we'll advise you, you know, to be careful with alcohol  
20 and, you know, sort of in terms of what medication you  
21 are on to see any of that.

22 That is the sort of conversation and so many of  
23 them would say: Is there any treatment for it? No,  
24 there isn't any treatment that we know of, simply  
25 because we do not know what is causing it.

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1 That would be, if you like, the classical  
2 conversation with a haemophiliac and, for that matter,  
3 for any abnormality. So if the patient had anaemia  
4 you would talk about, look, you've got anaemia and the  
5 picture is of iron deficiency, probably because you  
6 have lost blood in the urine or whatever. These are  
7 the sort of information. So the patient would know  
8 what their result would have shown and we would have  
9 explained to them what we think of it, gave them the  
10 chance to ask any questions. Very often, when you say  
11 that "Would you like me to ask our liver specialist to  
12 have a look", so many of them would say, yes, please,  
13 others would say, well, if they haven't got anything  
14 to offer me I would rather leave that for the time  
15 being. So that sort of conversation.

16 **Q.** I understand what you say about conversations in  
17 relation to liver function abnormalities, but did you,  
18 in the early or mid-'80s, have conversations with your  
19 patients in which you would tell them that there was  
20 a risk of them developing non-A, non-B hepatitis or  
21 developing chronic liver disease, as a result of the  
22 blood products that they were receiving?

23 **A.** Well, by definition they would have had non-A, non-B  
24 hepatitis, because they had concentrates. If they  
25 have not had concentrate and if I am to embark on

1 concentrate, I would have explained that, look, there  
2 is a risk that, even though we know that hepatitis B  
3 is not transmitted any more, that there is a risk of  
4 your liver showing an abnormality, we call it non-A,  
5 non-B hepatitis.

6 But if you ask me have you told them that, look,  
7 this could progress to cirrhosis or this could  
8 progress to cancer, no. If they had -- if you turn  
9 the question the other way around and if they say,  
10 "Could that mean that I could die of it", well,  
11 I don't know, you could if it progresses but because  
12 we are monitoring you we will be checking how you are  
13 progressing. Now, I'm saying that not as to remind me  
14 of a particular conversation but I'm saying that  
15 because that is the attitude I would have taken with  
16 a patient. I've always said to my patients, look, the  
17 one thing I do not do here is speculate. I'll tell  
18 you the facts as I know them, but don't you ask me to  
19 speculate because I will not be able to speculate  
20 unless I know, you know, sort of the high percentage  
21 of certain things happening.

22 **MS RICHARDS:** Sir, I note the time. Is that a convenient  
23 point for lunch?

24 **SIR BRIAN LANGSTAFF:** Well, it is. Just before we break  
25 for lunch, can I mention one thing. We have been

1 exploring a little, for obvious reasons, what  
2 Professor Bloom, Dr Bloom as he was in the 1970s, may  
3 have thought of the risks of non-A, non-B hepatitis  
4 and you've addressed the general risks by reference to  
5 a couple of documents. But I do have a note, and I am  
6 addressing this really to you and for those who may be  
7 listening, because the doctor won't himself have come  
8 across this but I have a note of a letter which  
9 Dr Bloom wrote on 10 February 1975. That's a date  
10 which may -- and I shall have to place the  
11 significance of this in due course, no doubt with the  
12 assistance of any submissions -- that date is some  
13 three years after the test for hepatitis B was first  
14 introduced. It is about six months after Prince wrote  
15 in The Lancet identifying that more than 70 per cent  
16 of post-transfusion hepatitis was caused by something  
17 which wasn't hepatitis B, therefore virus or viruses  
18 non-A, non-B. What he said to a GP concerning  
19 a patient of his, whom I certainly shan't mention, the  
20 reference is witness W0047002, he said a small  
21 percentage of these freeze-dried preparations --  
22 plainly he is talking about concentrate -- contain,  
23 unavoidably, the virus of serum hepatitis and  
24 therefore potentially dangerous -- that's the word he  
25 uses, "dangerous" -- to the patient, his relatives,

1 et cetera.

2 That's a note which I came across and it struck  
3 me for three reasons. First, that he is describing  
4 serum hepatitis which could be and may well be in  
5 context non-A, non-B, as well as hepatitis B. He  
6 described it as "potentially dangerous", and he is  
7 describing the possibility that it may infect others  
8 than patient, ie it is transmissible, potentially.  
9 Since we have been talking about that I thought it  
10 right to indicate what is at least part of the state  
11 of knowledge -- the state of information, I won't say  
12 knowledge -- which I have and I will have to place  
13 that in due course.

14 **MS RICHARDS:** Yes, which we looked at --

15 **A.** Can I make a comment on that?

16 **Q.** Yes, of course, doctor.

17 **A.** I think -- you know, sir, from what you have read to  
18 me now, I think when he says a small percentage would  
19 have serum hepatitis, I -- you correct me if you think  
20 I'm wrong -- I think he was referring to perhaps the  
21 concentrates which escaped the elimination of  
22 hepatitis B.

23 **SIR BRIAN LANGSTAFF:** You may well be right, but the  
24 problem is that he can't help us with what he meant.  
25 It has to be interpreted in the light of the context,

1 and he uses the expression "serum hepatitis", which is  
2 capable of covering, and almost certainly did, before  
3 the identification of hepatitis B, cover both B and  
4 any other virus which was causing hepatitis. So  
5 I just raise it. I don't want to debate it here.  
6 It's for other times -- thank you.

7 **A.** If you permit me, I just want to say one word, because  
8 when he says a small percentage, he must have known  
9 that, in fact, the vast majority of patients who  
10 haven't got hepatitis B would have these  
11 abnormalities. When he says a small percentage, in my  
12 mind, and I think he -- even in the 80s we will say  
13 "Look" -- to the patient -- "hepatitis B is very  
14 unlikely, but there is a small risk that, you know,  
15 some of these may actually -- these concentrates may  
16 convey it."

17 The reason why I'm mentioning that I think he is  
18 referring to hepatitis B, the words "small  
19 percentage", because if he was referring to the  
20 hepatitis as we know it now, non-A, non-B, it  
21 certainly was not a small percentage.

22 **SIR BRIAN LANGSTAFF:** Thank you, doctor.  
23 I will have to consider that in due course. But  
24 for the moment let us take a break for lunch. We will  
25 be back, please, at 2.05. So 2.05.

1 Again, doctor, don't talk to anyone about your  
2 evidence, but I hope you have a pleasant lunch where  
3 you are and look forward to seeing you again at 2.05.  
4 **A.** Thank you, sir. I hope you will have a pleasant  
5 lunch. I am having a packed one. I do not know  
6 whether you are having a packed one as well.

7 (1.07 pm)

8 (Luncheon Adjournment)

9 (2.05 pm)

10 (Technical issues - no audio feed)

11 **SIR BRIAN LANGSTAFF:** The reason for doing it is this,  
12 that not only are your words being heard, and online,  
13 if they can be heard, but they are also being  
14 transcribed. I am being told there is no sound.

15 If that's right and people can't hear what you  
16 have to say, and that's obviously the whole point of  
17 this, and also it can't be transcribed. So for both  
18 reasons we will just take a break at and see what is  
19 happening and see if -- ah, we've got it back.

20 **MS RICHARDS:** Yes, I understand the issue is now resolved.  
21 **SIR BRIAN LANGSTAFF:** The position is resolved. Thank you  
22 very much.

23 Do you want to ask that question again? I am  
24 sorry to have to ask you to go through that again.

25 **MS RICHARDS:** Yes.

1 What I'm trying to explore with you, doctor, is  
2 the extent to which you advised patients of the risks  
3 involved in the use of concentrates, specifically the  
4 risk that concentrates might cause liver disease.

5 **A.** Okay. I'll start right from the beginning because I'm  
6 not very sure whether you heard me, Ms Richards, or  
7 not.

8 **SIR BRIAN LANGSTAFF:** Assume we didn't hear anything,  
9 please, and start again.

10 **A.** As I said before, the risk of the treatment the  
11 patient likely or could have would have been explained  
12 with the first consultation, when the treatment was  
13 explained. And I certainly did that when I had a new  
14 patient, I certainly did that when a patient who had  
15 not had treatment before needed to have concentrate.

16 But what I did is, as I explained before lunch,  
17 when a patient would come to see me we would go  
18 through -- after examining the patient, we would go  
19 through the results of the patient. And if --  
20 the result, I'll say that, "Your blood count is okay",  
21 or, "By the way, we did a liver test, and that showed  
22 an increased enzymes", and if they ask me, "What does  
23 that mean?"

24 "That is probably related to the treatment you  
25 had."

1 "What does that mean, doctor?"

2 "I really do not know what is going to come out  
3 of it, but if you like, I could send you to the liver  
4 doctor."

5 "Would he have any treatment to offer me?"

6 "Not at the moment. We do not have any  
7 treatment because we do not know the cause of it."

8 But I would not have held any information from  
9 the patient. I have not had any patient who would  
10 turn to me and say, "By the way, if you think that is  
11 causing the disturbance in my liver test, I'd rather  
12 stop it". I've never had that. And I have never had  
13 a patient who would say, "Would there be a possibility  
14 to switching to another treatment and seeing what  
15 happens?" I've never had that.

16 **MS RICHARDS:** So is this right, doctor, that because in  
17 the period in the early to mid-1980s you were not  
18 seeing new patients, you were not seeing patients  
19 being treated for the first time, your assumption is  
20 that they would have -- any conversation about the  
21 risks of treatment would have taken place beforehand,  
22 whether with Dr Khurshid, Professor Bloom or someone  
23 else.

24 **A.** Yes, I think -- you know, sort of, when you see  
25 a patient for the first time, it is the usual practice

1 to explain to the patient what you've got to offer to  
2 them. And it is usual to explain what is the known  
3 side effect of what you have offered to them. And you  
4 tried to explain that to the best you can.

5 Q. Did you ever, in the course of the 1980s, before the  
6 test for hepatitis C was available, diagnose non-A,  
7 non-B hepatitis in your patients?

8 A. Oh, yes. I mean, some of the patients who were  
9 referred from other centres were referred, and they  
10 already with the first consultation they said that we  
11 know we've got this condition called non-A, non-B  
12 hepatitis. The patients who I have and they have this  
13 disturbed liver function test has said, "What does  
14 that mean?"

15 "Well, we've got a name for it. They call it  
16 non-A, non-B hepatitis."

17 "But what does that mean, doctor?"

18 Well, to be honest with you, I don't know."

19 "Is it a virus, is it any --"

20 "I don't know. Until we know the answer to it,  
21 I don't know what the answer to that."

22 Q. Was it your practice to record discussions about risks  
23 or discussions about non-A, non-B hepatitis in the  
24 patient's medical records?

25 A. If I am to see the patient for the first time

1 I certainly do that. And I'm saying that because that  
2 is my practice with patients, whether they are  
3 haemophiliac -- as I said, the vast majority of my  
4 patients were patient with the blood cancers. And  
5 I would document, maybe in bullet points, what has  
6 been discussed with the patient. It is usual to --  
7 that is -- usually happens with the first consultation  
8 or when something new crop up. For example, if you  
9 want to offer a treatment and whatever, you would  
10 probably go back and talk about the reason why you are  
11 offering treatment and so on and so forth.

12 That usually would be either in the notes in the  
13 letter or both. That would be the usual thing. If  
14 you ask me have you done it with every single case,  
15 I wouldn't be able to answer yes or no unless I see  
16 the notes.

17 Q. Can I then move on to the question of AIDS.

18 You have said in your statement that you are not  
19 sure exactly when you came to know about the  
20 association between blood and blood products and AIDS,  
21 but you have recorded in your statement that the  
22 Centers for Disease Control in Atlanta published its  
23 first report about AIDS in haemophiliacs soon after  
24 you started your post as a consultant haematologist in  
25 Swansea in 1982. And, indeed, we know that

1 publication was July 1982. Does that -- sorry, carry  
2 on.

3 A. Sorry. Keep going.

4 Q. Does that mean that at some point soon after you  
5 started your post you became aware of the  
6 CDC announcement?

7 A. I wish I know when, because I honestly cannot tell you  
8 when I knew. But at some stage I knew about the CDC  
9 announcement, about their report, and I knew, for  
10 example, in -- I think it was in 1983 I've heard about  
11 the patient with AIDS in Cardiff. So I came to know  
12 about the CDC report at some stage. But with all  
13 honesty I cannot tell you exactly when, which year.

14 Q. You told us in your statement, and you said earlier  
15 today, that in terms of the publications you read,  
16 they included the New England Journal of Medicine.

17 A. Correct.

18 Q. I won't go to the detail of all the various articles  
19 but does it follow it's likely that you would have  
20 read, for example, the articles and communications in  
21 the January 1983 edition in which there were various  
22 reports and discussions about AIDS?

23 A. I probably would have. If you particularly show me  
24 what you have in mind and I will be able to tell you  
25 whether that's something I know or it's something new

1 to me.

2 Q. We'll look at just one. There are a number of  
3 examples but we'll just look at one.

4 It's PRSE0002410, please.

5 This is January 13, 1983, in the New England  
6 Journal of Medicine, "AIDS and preventative treatment  
7 in hemophilia".

8 A. This is Jane Desforges --

9 Q. That's right. Do you think you would have seen that  
10 at the time?

11 A. I've seen it but I tell you it did not impress me  
12 then. Now, looking at it retrospectively now, it was  
13 very, you know, far-thinking article, but it did not  
14 impress me at the time. And if you permit me I'll  
15 tell you why.

16 Q. Yes.

17 A. Because I think you probably know that -- the  
18 New England Journal of Medicine had a habit of -- the  
19 main editorial usually discusses or discussed the  
20 couple of publications which are important in that  
21 journal. Now, the two publications which came with  
22 this article, I think one is Liderman and one is  
23 McNorth or whatever, both publications what they talk  
24 about, they talk about a change in the lymphocyte  
25 subsets in patients with haemophilia who had



1 concentrates. Okay? But if you look at what their  
2 results shows, in fact neither group of patients had  
3 any evidence of AIDS, and even the T4 lymphocytes were  
4 not below normal but was lower than the patient who  
5 did not have the concentrates.

6 And if you go back to the last paragraph of this  
7 article, please.

8 **Q.** Second page, please, Soumik.

9 Zoom in on the left hand column, bottom of the  
10 page.

11 **A.** If you can enlarge the last paragraph, let's read this  
12 paragraph together:

13 "The fact that haemophiliacs are at risk for  
14 AIDS is becoming clear. If the use of cryoprecipitate  
15 will minimise this risk, the current home-infusion  
16 programme needs to be revised. The studies reported  
17 in this issue demonstrate in vitro abnormalities of  
18 immuno-regulation, but the numbers are too small for  
19 [definite] comparison of the risks of different modes  
20 of treatment."

21 **SIR BRIAN LANGSTAFF:** "Definitive", I think.

22 **A.** "Definitive".

23 "Unfortunately, the data or consistent with  
24 a greater potential ... [whatever]. Physicians  
25 involved in the care of haemophiliacs must now be

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1 alert to this risk. Preventing the complications of  
2 the present treatment may have to take precedence ..."  
3 If you go to the paragraph before that, it is --  
4 the one before it before the last paragraph.

5 **SIR BRIAN LANGSTAFF:** Top of the page, I think.

6 **MS RICHARDS:** That's the one.

7 **SIR BRIAN LANGSTAFF:** "This issue of the Journal  
8 contains", I think is what you are looking for?

9 **A.** No, "Ease in obtaining the commercially ..."

10 "It would be difficult to design a home-infusion  
11 programme with a cryoprecipitate therapy since the  
12 material must be stored in the frozen state. The  
13 present programme has been extremely successful and  
14 would be given up by physicians and patients only with  
15 great reluctance. Yet it is time to consider doing  
16 so, even though we may not have enough evidence to  
17 demand such a radical change."

18 So that was suggested with this wording when  
19 there was no credible alternative and the author  
20 clearly said, you know, sort of cryoprecipitate is  
21 going to be a difficult thing to do when there was no  
22 credible alternative to concentrate.

23 The other thing is, of course, if, let's say,  
24 theoretically that we would do that, you know,  
25 changing to cryoprecipitate that means the BPL would

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1 have to stop providing us with NHS concentrate and the  
2 logistics of the process of changing to  
3 cryoprecipitate is immense. I already hinted to the  
4 difficulty of giving cryoprecipitate as home  
5 treatment, and I refer to the patient which described  
6 to me that cryoprecipitate dominated her life and, in  
7 fact, at the end of the day, cryoprecipitate  
8 unfortunately did not deliver the goods.

9 So that is the reason why, you know, sort of  
10 most of us were not impressed by the suggestions.  
11 40 years later, of course, her prediction and other  
12 people's prediction proved to be correct but, at the  
13 same time, the World Federation of Haemophilia, the  
14 Haemophilia Society, what is called the equivalent of  
15 The Haemophilia Society in the US, they all came to  
16 the same conclusion that you could not stop using  
17 concentrates.

18 Then you talk to people, you know, sort of in  
19 big treatment centres, Cardiff, Manchester,  
20 Royal Free, and you mention to them, you know, would  
21 we be going to back to cryoprecipitate? Oh, you must  
22 be joking, it's impossible.

23 So that is the reason why cryoprecipitate was  
24 not a credible alternative. If there was a credible  
25 alternative, I think many people would have thought

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1 again, you know, than continuing with the programme.  
2 But there was no credible alternative.

3 **MS RICHARDS:** Can we just look at this article again, the  
4 last paragraph. There are two parts to this  
5 paragraph. You've alighted upon the second part of  
6 it, which is the suggestion that there may need to be  
7 revisiting the current home infusion programme and the  
8 greater use of cryoprecipitate, but the first part of  
9 it is the statement that the fact that haemophiliacs  
10 are at risk for AIDS is becoming clear. Did you take  
11 issue in January 1983, or whenever you became aware of  
12 it in 1983, with that statement, and did you  
13 understand by early 1983 that there was reason to  
14 consider that the haemophiliacs were at risk of AIDS?

15 **A.** In the early 1983, and I think I've sent you so many  
16 references, and fortunately you have already had them  
17 because you send me back the reference numbers, you  
18 know, there were two arguments going on at the same  
19 time. One argument is saying: look, the issues of  
20 AIDS in haemophilia is not related to an infective  
21 agent, it's related to the exposure to the antigen  
22 that is the foreign protein which comes with the  
23 Factor VIII from another person; and there is a group  
24 which said, look, this is going to be very much like  
25 hepatitis B. You know, you really do not know -- you

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1 did not know then as what is credible.  
 2 By 1983/84, the argument that an infective agent  
 3 is more likely became more and more acceptable until  
 4 the agent was identified as the retrovirus HTLV-III,  
 5 initially. So there were two arguments going on at  
 6 the same time but I think I sense what you want to ask  
 7 me. Did you share that with your patient,  
 8 Saad Al-Ismaïl? Well, you may know that the  
 9 haemophiliacs, unlike other groups of chronic  
 10 illnesses, they were truly informed as to what is  
 11 happening around them in the world and I have yet to  
 12 have had a patient who would come to me and say, well,  
 13 I've heard about this, I want to stop using anything  
 14 which may, you know, sort of, give me an infection.  
 15 I would have happily discussed that with them  
 16 and thought what are the alternatives, the alternative  
 17 is cryoprecipitate, but for the patients who were  
 18 receiving cryoprecipitate, most of them have to and  
 19 did having it in hospital, and for those who have to  
 20 have it at home it was a big issue, and I think one of  
 21 the witnesses which you sent me the statement for said  
 22 that he spent most of his life in hospital.  
 23 I have not watched the programme World in Action  
 24 but I saw it since, when you actually included it in  
 25 one of your evidences, and I managed to listen to it

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1 on the YouTube, and I remember one thing which  
 2 Professor Bloom said to me, which I didn't understand  
 3 at the time. He said to me, you know, the  
 4 haemophiliacs are aware that they are taking risks,  
 5 and I thought he was referring to the hepatitis B and  
 6 I did not understand what he meant really until  
 7 I watched that programme and I got the references for  
 8 the transcript, which you've kindly sent, which I've  
 9 read after watching the programme, which were  
 10 Mr Robinson, I think, said that we knew of the risk  
 11 and Mrs Robinson said -- I'm not quoting her  
 12 exactly -- but she said we did not take a chance or  
 13 something with our children's lives, but we knew of  
 14 the risk. I think the programme was about Hemofil and  
 15 she said Hemofil was a calculated risk.  
 16 The reason why I went into such a long answer is  
 17 to say that I really do believe that haemophiliacs  
 18 knew the risk and my understanding that with every  
 19 single concentrate there was, you know, sort of, the  
 20 drug information leaflet.  
 21 I was assured -- I haven't seen one, but I was  
 22 assured by Professor Bloom that in each one of them  
 23 a reference was made, for example, to the hepatitis,  
 24 not to the AIDS. So I think, you know, sort of,  
 25 a long answer to your question: did I take action on

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1 the first sentence? No, because there was  
 2 a counter-argument and there was no credible  
 3 preference. Did I discuss it with the patient? Well,  
 4 none of the patients certainly raised the issue with  
 5 me and if I am to raise the issue I should really have  
 6 a clear view as which argument is going to be the more  
 7 credible argument. I think the argument of  
 8 an infective agent would have been acted on if there  
 9 was a credible alternative to cryoprecipitate much  
 10 earlier.  
 11 **Q.** As I understand the answer to the question that you  
 12 correctly anticipated I was going to ask you, you  
 13 didn't yourself tell patients in 1983/1984 of the risk  
 14 of AIDS. As I understand your answer, that's for  
 15 potentially two reasons: firstly, you're saying that  
 16 in early 1983 at least, I think you're saying that  
 17 there was a credible alternative explanation and,  
 18 secondly, you're saying that you assumed that patients  
 19 would have the information themselves.  
 20 Is that right?  
 21 **A.** The third one is that there wasn't a credible  
 22 alternative, for treatment.  
 23 **Q.** What's the basis for your assumption that patients in  
 24 1983 and 1984 understood the risk of AIDS from the use  
 25 of blood products?

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1 **A.** Well, I didn't understand fully the risk of AIDS from  
 2 use of blood and blood products, simply because there  
 3 were too many arguments, one pointing in one direction  
 4 and one pointing in the other, and you asked me  
 5 whether I've read The Lancet and I said I've read The  
 6 Lancet in the library. There were so many articles,  
 7 leading articles, in The Lancet to say, look, this  
 8 AIDS issue is -- this reduced immunity in the  
 9 haemophiliac is very much related to the  
 10 concentrate -- to the antigens in the concentrate.  
 11 There were other arguments saying, look, the AIDS in  
 12 the haemophiliac is going to be different from the  
 13 AIDS in the homosexuals and the drug abusers because  
 14 there are certain mitigating issues in that population  
 15 using nitrates and whatever, and that in the  
 16 haemophiliacs the processes may have altered that.  
 17 There were so many arguments going at the time  
 18 that it was very difficult to give an informed opinion  
 19 to any patient as what I knew as for a fact then.  
 20 When the virus was diagnosed and we had a test, it was  
 21 much easier then to talk about it but it was too late.  
 22 In fact, it was too late by 1982/83 as we learned  
 23 later. But it was -- really to discuss something with  
 24 a patient you have to be informed. We may be able to  
 25 talk about variant CJD later on but when I call

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1 a patient I give them the opportunity to sit down and  
 2 talk about variant CJD, some of them said why did you  
 3 tell us this if you do not know the answer to it?  
 4 I explained, look, one of the reasons why I'm telling  
 5 you is because of the public health issues whatever.  
 6 The point is you really are only be able to discuss  
 7 with a patient an issue if you really have made a firm  
 8 opinion as what you want to advise the patient.  
 9 **Q.** Dr Al-Ismail, if you didn't fully understand the risk  
 10 of AIDS, what's the basis for your assumption that  
 11 your patients were sufficiently well informed?  
 12 **A.** Well, the patients were informed because of the  
 13 meeting of The Haemophilia Society. The fact that  
 14 Professor Bloom called the patients even from Swansea  
 15 and their relatives to go to a meeting in Cardiff,  
 16 I think he probably had more than one meeting, the  
 17 newsletters which The Haemophilia Society distributed,  
 18 there were so many things distributed. I'm not saying  
 19 that they were better informed than me. What I am  
 20 saying, for me to actually preach to a patient  
 21 something, I really need to understand fully what are  
 22 the evidences for it. Is it truly an infective agent?  
 23 If it is an infective agent, like so many people have  
 24 said, is it going to be like the hepatitis B virus or  
 25 is it going to be like the non-A, non-B hepatitis?

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1 There were so many issues I did not know and  
 2 that is not just me. I think the vast majority of  
 3 people, unless they are strongly in one camp or  
 4 another, have the same view. Some of the haemophiliac  
 5 doctors their patients, look, it is definitely not  
 6 an infective agent, the others told them it is. But  
 7 I did not really know which argument was going to be  
 8 the true argument or the true cause of AIDS.  
 9 **Q.** Did you ask Professor Bloom for his advice as to what  
 10 patients should be told about the risk of AIDS?  
 11 **A.** I think we have talked about it. Professor Bloom had  
 12 initially, prior to -- I think, the first death he  
 13 had, if I remember right, was in August '83 prior to  
 14 that he thought that the AIDS is not going to be a big  
 15 issue in the haemophiliacs. Even in 1984, as you well  
 16 know, when his survey of more than 100 haemophilia  
 17 centres including UK and Europe he had 13,000  
 18 haemophiliacs who were treated and that is 1984.  
 19 Only 11 of them showed the Acquired Immune Deficiency.  
 20 Now we know things that we did not know then.  
 21 Now we know the incubation period of Acquired Immune  
 22 Deficiency, of HIV, is a long one. Now we know that  
 23 it is -- you know, sort of -- when the antibody test  
 24 came in, we did not know what that antibody test meant  
 25 until we had a chance to actually look for the

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1 transcript of the virus. So that antibody was not  
 2 a protective antibody.  
 3 There were so many issues that nobody knew, but  
 4 you have asked me did I speak to Professor Bloom?  
 5 I spoke to him about this many times, and his view is  
 6 initially that we are not going to have -- we are not  
 7 going to see the same problem as the -- in the  
 8 homosexual population and the drug addict, we're going  
 9 to see it in some of the patients, and he based his  
 10 opinion on the survey that so many patients were  
 11 treated, so many patients had HIV antibodies but so  
 12 a few of them developed.  
 13 Then, unfortunately for all of us, when the  
 14 disease started to progress, it was like a bushfire  
 15 really. Everybody was so depressed when that  
 16 happened.  
 17 **Q.** Can I ask you to look at --  
 18 **SIR BRIAN LANGSTAFF:** Just before we leave this, can  
 19 I just ask you a couple of things that arise out of  
 20 the questions you have been asked, doctor, if I may?  
 21 **A.** Please.  
 22 **SIR BRIAN LANGSTAFF:** As I understand it, your first  
 23 reason for not telling patients about AIDS was there  
 24 were two different arguments. There was  
 25 a counter-argument to the argument that it was a virus

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1 contained in the factor concentrate; have I understood  
 2 that correctly?  
 3 **A.** You understood that correctly. But if a patient had  
 4 asked me what -- "I've heard about this, doctor, what  
 5 do you think", I would have presented both argument to  
 6 them.  
 7 **SIR BRIAN LANGSTAFF:** You were taken to the very first  
 8 sentence in that last paragraph:  
 9 "The fact that haemophiliacs are at risk for  
 10 AIDS is becoming clear."  
 11 That's linked to concentrates. There's nothing  
 12 in that sentence that talks about a virus, is there?  
 13 **A.** No.  
 14 **SIR BRIAN LANGSTAFF:** If it wasn't a virus, it was the  
 15 factor concentrate, was it, that was creating the lack  
 16 of immune reaction or the antigenic reaction which  
 17 gave rise to AIDS, was it?  
 18 **A.** That's true.  
 19 **SIR BRIAN LANGSTAFF:** So whether it was the argument or  
 20 the counter-argument as to what was the cause, there  
 21 was, on both accounts, a risk of catching AIDS from  
 22 having concentrate. Quite how you got it was unsure  
 23 but there was a risk.  
 24 **A.** Yes.  
 25 **SIR BRIAN LANGSTAFF:** So in the light of that, was it

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1 really an argument to say that you shouldn't say  
2 anything about the risks of using concentrate to your  
3 patients when both the argument and the  
4 counter-argument ended up at the same place, that it  
5 was the concentrate that was likely could give rise to  
6 AIDS?

7 **A.** With all respect, sir, I did not say that it's not  
8 right for -- to mention anything. What I was asked:  
9 would you have to explain the risk of AIDS to your  
10 patients? If I knew exactly what the risk of AIDS in  
11 a particular patient, I would have, but I did not know  
12 what would be the risk of AIDS in a particular  
13 patient --

14 **SIR BRIAN LANGSTAFF:** That was all that I was asking.  
15 I just wanted to clarify that. Thank you very much.

16 **A.** Pleasure.

17 **MS RICHARDS:** Could we have PRSE0002647, please.  
18 Doctor, these are the notes of a meeting at  
19 which there was a discussion on AIDS chaired by  
20 Professor Bloom. It's not a meeting you attended.  
21 It's 24 January 1983 and it was a meeting between  
22 a number of clinicians and representatives of Immuno  
23 at a London airport hotel. If we could go to page 3  
24 please, you'll see there's a heading, "Acquired  
25 Immunodeficiency Syndrome" -- bottom half of the page

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1 please, Soumik -- and there's a description given,  
2 what's said to be a summary of the current position by  
3 Dr Craske.

4 Go down so we can see the bottom of the  
5 paragraph in full, please. Thanks.

6 So we can see in the penultimate paragraph it  
7 says:

8 "Some 800 people had been reported as suffering  
9 from AIDS, and there was a 45 per cent mortality."

10 Then there's an update about the position in  
11 relation to haemophiliacs and then a reference to  
12 other cases involving blood and blood product  
13 transmission, including platelets transfused in three  
14 cases, and specific reference to the case of  
15 a 20-month old child who had received several units  
16 including platelets and had developed a possible AIDS  
17 state. We refer to that elsewhere, doctor, as "the  
18 San Francisco baby case".

19 Go over the page, please. Look at the top half  
20 of the page. We can see there there's express  
21 reference to the length of the incubation period, it  
22 appears to be six months to two years. Reference to  
23 only one or two cases having been reported. Reference  
24 to possible precautions. There's then a discussion  
25 about articles in the New England Journal of Medicine

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1 and a distinction between concentrates and  
2 cryoprecipitate and then comments on the possible  
3 nature of the transmissible agents, indicating that  
4 there may not be just one agent but a mixture, ie  
5 possibly a barrage of viruses.

6 Two questions for you, doctor, arising out of  
7 this. We know from this, we in fact know from other  
8 material as well, that Professor Bloom was aware of  
9 the case of the San Francisco baby case, the child  
10 transfused with platelets developing an AIDS state.  
11 Do you recall any discussions between you and  
12 Professor Bloom about that case and its significance?

13 **A.** No, but I recall what he has written in his report.  
14 That's his litigation report. And I recall very  
15 clearly that he said in his report -- I think he was  
16 in a meeting with The Haemophilia Society in 1983,  
17 only two months after his first patient died  
18 with AIDS, and in that report he said -- what was his  
19 wording? "I became more concerned about the  
20 possibility of ..."

21 I've written it here somewhere. He said ... he  
22 was more circumspect than previously -- that is in  
23 October 1983 -- than previously with regard to blood  
24 products and AIDS. So really by then he clearly  
25 started to believe in the -- more the theory that an

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1 agent is probably responsible for the AIDS.

2 So I'm very aware of that report. But as  
3 I said, until the virus was identified, many of us  
4 really -- the argument shifted more and more toward an  
5 infective agent but it was only when the virus  
6 identified that it was convincing. And by the way,  
7 even when the virus was identified, so many papers  
8 appeared afterward saying that this is not the cause  
9 of AIDS, this is an opportunistic infection in  
10 patients who has got AIDS.

11 So you could see how the arguments we know sort  
12 of moved over the years. But if you ask me -- what  
13 was the date of this meeting?

14 **Q.** 24 January 1983.

15 **A.** Yes. So if you ask me has he shifted his opinion,  
16 yes. Have he conveyed that to me? I don't know when,  
17 but I certainly read it when he shared the report with  
18 me.

19 **Q.** Did he -- I think the answer to this is "no", from  
20 your earlier answer -- did he, whether following this  
21 meeting or otherwise, discuss with you the  
22 significance of the infection of the baby in  
23 California?

24 **A.** No, he did not.

25 **Q.** Would you agree -- and picking up on the chairs

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1 question a few moments ago, looking at this  
 2 discussion, there are obviously matters which are not  
 3 yet known but there's no suggestion here that there's  
 4 anything other than concentrates and a transmissible  
 5 agent that are being put forward as the likely causal  
 6 connection?  
 7 **A.** Yes, but this is, as I said, one argument. There were  
 8 a plethora of publications talking about an  
 9 alternative arguments. And the difficulty for people  
 10 who really was -- I think even people in the  
 11 haemophilia world, the people in the Royal Free and  
 12 the like, initially they did not believe an infective  
 13 agent was responsible until later on.  
 14 So I don't think Professor Bloom was alone in  
 15 that thought really. I think -- so if you are talking  
 16 about people like him, he probably would have  
 17 intermingled with people in the USA, in Europe and  
 18 whatever, and he was on regular correspondences with  
 19 them.  
 20 He reminded me so many times that, "Look, in  
 21 Germany they use more American concentrate than we use  
 22 here but they haven't had a case of AIDS". So all  
 23 this these things were happening. And he was a person  
 24 who, as I said, was listening to all these views  
 25 and -- and I said before, he wasn't an opinionated

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1 man, he was quite happy to shift his opinion when the  
 2 argument points him in one direction or another.  
 3 **Q.** What steps were taken at Swansea in response to the  
 4 possibility that concentrates might cause AIDS in  
 5 haemophiliacs?  
 6 **A.** Well, I don't know of any specific -- I mean, what  
 7 happened is that we would -- became more adamant that  
 8 mild haemophiliacs should not receive anything but  
 9 cryoprecipitate or DDAVP. We became more adamant  
 10 that, if it is all possible, children should be  
 11 treated with the cryoprecipitate. Fortunately for me,  
 12 as I said before, there were -- I did not have any new  
 13 patients until the advent of the safe products came  
 14 through.  
 15 So in terms of the current patients we had, the  
 16 only thing we could do is really monitor them and look  
 17 after them. But in terms of changing the practice of  
 18 treatment, there were no change of practice, simply --  
 19 and we used as much NHS concentrate -- I've already  
 20 said that before -- as we could get hold of. And when  
 21 the heat treated product became available, we used  
 22 that. But there was no other alternative, credible  
 23 alternative, in the severe haemophiliacs and for home  
 24 treatment.  
 25 So the short answer to your question, was there

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1 any specific measures apart from, you know, sort of  
 2 monitoring the patients more carefully? No. Apart  
 3 from trying to answer any question which the patient,  
 4 their mother or their family have raised? No. But we  
 5 answered the questions according to what we have read  
 6 in the literature.  
 7 **Q.** Could we have, please, HCDO0000517\_001.  
 8 This is a letter dated 22 March 1983. It was  
 9 sent to centre directors from Dr Craske, Dr Rizza and  
 10 Professor Bloom. And you will see it asked for the  
 11 reporting of possible cases of AIDS, and various  
 12 papers are there referred to.  
 13 Do you know -- this would have been addressed to  
 14 Dr Khurshid, as centre director, rather than you. Did  
 15 you see this, as far as you can recall, at the time or  
 16 are you unable to say?  
 17 **A.** I say that Dr Khurshid always would have told me what  
 18 he received and what he's acted, and I think I found  
 19 later on that he had some forms and he reported to the  
 20 UKHCDO, Dr Craske or whatever, whatever they have  
 21 asked him to report.  
 22 So I'm sure that Dr Khurshid would have told me  
 23 that he -- that "You've got another set of forms which  
 24 you have to fill", and about the patients. But,  
 25 again, I do apologise for taking, you know, so long

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1 because I could not remember in full, but that, I'm  
 2 sure he would have discussed it, knowing what used to  
 3 happen. You know, whenever he received anything, he  
 4 always mentioned it to me.  
 5 **Q.** If we could have HCDO0000517\_002, please.  
 6 This is a report, Dr Al-Ismael, from Dr Craske  
 7 dated 1 March 1983. I'm not going to go through it in  
 8 great detail. The Inquiry has looked at it on  
 9 a number of occasions, or earlier versions of it.  
 10 If we just go very briefly to page 3 you will  
 11 see the bottom half of the page says "Aetiology", and  
 12 says several theories have been advanced --  
 13 **A.** Can I ask to "Aetiology":  
 14 "The effect of drugs such as amyl nitrate taken  
 15 by homosexuals ... This is not a factor as the disease  
 16 has been described in patients who do not use the  
 17 drug."  
 18 Okay. So there are so many things which were  
 19 going round the immuno-suppressive cytomegalovirus.  
 20 Sorry, carry on.  
 21 **Q.** We can see that -- my main question about this  
 22 document, Dr Al-Ismael, is, do you think you would  
 23 have seen this at the time? Is this one of the  
 24 category of documents Dr Khurshid would have shared  
 25 with you?

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1 A. I can't remember seeing the document, but I think,  
 2 knowing how we worked together, is that he would have  
 3 talked to me about it or mentioned it to me. But  
 4 I cannot remember seeing the document myself.  
 5 Q. Did you yourself report any suspected AIDS cases to  
 6 Dr Khurshid or Professor Bloom in the course of 1983  
 7 or 1984?  
 8 A. No.  
 9 Q. You have --  
 10 A. I didn't see it.  
 11 Q. You have referred to "the Cardiff patient". What, if  
 12 anything, can you recall Professor Bloom telling you,  
 13 not about the individual patient or who they were, but  
 14 about the fact that he had a patient under his care  
 15 who had AIDS, a haemophiliac patient?  
 16 A. I don't know where I've heard it, but most probably  
 17 because, you know, doctors in Cardiff and Swansea  
 18 talked on a regular basis. I don't know whether he  
 19 told us or somebody else told us. I don't know. But  
 20 I do remember that, you know, sort of, if you like,  
 21 the first hint that it is happening at our doorstep  
 22 happened in 1983, but we didn't really know what --  
 23 what's going to happen after. Is it going to be the  
 24 odd case for whatever reason? We didn't know. We  
 25 really didn't know.

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1 But I've heard about it, whether it was from  
 2 Professor Bloom or talking to colleagues in Cardiff.  
 3 We very often talked to each other for different  
 4 reasons, and whether they have told me, I don't know,  
 5 but I've heard about it, yes.  
 6 Q. Did Professor Bloom ever suggest to you that the cause  
 7 of his patient's AIDS was something other than the  
 8 treatment he had received with factor concentrates?  
 9 A. No, he didn't discuss that. He didn't discuss that  
 10 with me. But if you ask me whether he would have --  
 11 he could have -- even if he discussed it, could have  
 12 said that with me, I don't think he would. I think he  
 13 would have said it's the concentrate.  
 14 Q. We know in December 1984 UKHCDO recommended a move to  
 15 heat-treated product. Do you recall any discussions,  
 16 whether with Dr Khurshid or Professor Bloom, about the  
 17 move to heat-treated products?  
 18 A. I think as soon as the UKHCDO suggested that we move  
 19 to heat-treated products, I think Arthur was, you  
 20 know, sort of instrumental in making sure that all of  
 21 us would have gone to heat-treated product as soon as  
 22 they became available. And I think we started with  
 23 Armour and then we added Cutter later on.  
 24 Q. What steps were taken to ask patients who were on home  
 25 treatment, and who had supplies of unheated

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1 concentrates in their home, to bring those back in.  
 2 Were any such steps taken?  
 3 A. Yeah, I've asked that question to the MLSO, the  
 4 biomedical scientist who was -- and I asked him what  
 5 did we do, and he said, "I'm certain that we asked  
 6 patients to bring what they've got and we exchanged it  
 7 with each input."  
 8 Q. Do you recall any difficulties in obtaining sufficient  
 9 supplies of heat-treated products?  
 10 A. No.  
 11 Q. Do you recall whether any of your patients were  
 12 infected with HIV through the use of heat-treated  
 13 products?  
 14 A. Yes.  
 15 Q. What can you tell us about that? Again, without  
 16 identifying any patients.  
 17 A. Well, it was a patient who was on Armour product. And  
 18 to be honest, we would probably not have known about  
 19 the cause until, I think, the Armour product was  
 20 identified, because that batch, one of the donors was  
 21 an HIV -- later developed HIV and AIDS, and he had  
 22 donated. Then we had -- we had to follow all the  
 23 patients who received that products, and sure enough  
 24 one of them converted on that product.  
 25 MS RICHARDS: Could we have on screen HCDO0000132\_039,

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1 please.  
 2 Sir, I understand there's a problem with the  
 3 external broadcast and so I'm being asked by RTS if we  
 4 can have a break so they can resolve that problem.  
 5 SIR BRIAN LANGSTAFF: Yes. I just had that message  
 6 myself.  
 7 So I'm sorry to stop you in mid-flow, Professor,  
 8 it has happened twice this afternoon, but I hope we  
 9 will have better luck a bit later on. We will take  
 10 a break now. We normally have a break in the  
 11 afternoon. We will have a break for about  
 12 half-an-hour. So we will do that now and come back at  
 13 3.30. It gives us all a chance to have a cup of tea  
 14 and for our broadcaster to resolve what the problems  
 15 are.  
 16 A. Thank you.  
 17 (3.00 pm)  
 18 (A short break)  
 19 (3.45 pm)  
 20 SIR BRIAN LANGSTAFF: Right.  
 21 MS RICHARDS: Could we have the document that we were  
 22 going to go to before we broke, HCDO0000132\_039.  
 23 We can see that this is a letter from you, dated  
 24 18 December 1986. I'm not going to ask you about the  
 25 specific patient, doctor. But it refers to a patient

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1 having been exposed to an Elstree Batch, HL3186, in  
2 September 1984, and then you say this:  
3 "Three of our haemophiliacs who were recipients  
4 of that batch seroconverted to HIV Antibody  
5 positive ..."

6 Then you refer to the seroconversion in one of  
7 them occurring between June 1985 and March 1986 and  
8 then you wonder if the particular patient about whom  
9 you are writing represents a another delayed  
10 seroconversion after exposure to that particular batch  
11 or possibly some other treatment he had.

12 Doctor, the first question is this: do we  
13 correctly understand from this letter that three,  
14 possibly four, of your patients seroconverted to HIV  
15 following receipt of this particular infected batch,  
16 HL3186?

17 We can't hear you, doctor. Hold on a second.  
18 We can see that you are speaking, but we can't hear  
19 you.

20 **A.** Can you hear me now?

21 **Q.** We can. Did you hear my question?

22 **A.** Yes, I heard your question very well. Do you want me  
23 to tell you a bit about this batch?

24 **Q.** About the batch, yes, not the specific patients, but  
25 the batch, please.

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1 **A.** So this is a batch which actually was prepared in  
2 Wessex region, 7,000 donations and we were alerted to  
3 it by the head of Blood Transfusion Service there and  
4 that, in one of the patients who donated then  
5 developed AIDS. Now, unfortunately -- well, the batch  
6 was distributed in different places but seven of the  
7 haemophiliac in Wales got infected with this  
8 particular batch, and you'd find that in the report of  
9 Professor Bloom actually.

10 So that is the Elstree Batch HL3186, and you've  
11 kindly sent me a couple of other Elstree documents,  
12 I think, last week and you see they carry different  
13 numbers. So would it be in order for me to actually  
14 tell you that all these documents refer to the same  
15 patient? I'll give you the number of the documents.

16 So the first one is HCDO0000348\_005. You find  
17 that is the letter from Dr Rizza to me, dated  
18 11 December, asking me the question is: how come that  
19 we're having report of seroconversion in 1986 when we  
20 did not see that. Do you want me to repeat that  
21 number?

22 **Q.** I think we have it.

23 **A.** So that is the letter from Dr Rizza to me saying we  
24 need to know how come that this patient was not  
25 reported before all of a sudden appeared as being

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1 reported to us. Can I give you -- about the same  
2 patient you have sent me two other documents and I've  
3 tied them together. Can I give you these, please?

4 So the first one is a letter from Dr Khurshid to  
5 Professor Bloom, the number, I'll spell it  
6 phonetically, Charlie Victor Hotel Bravo 0000003\_65.

7 **Q.** It will be \_065, I think. Could you just repeat that  
8 number please?

9 **A.** Charlie Victor Hotel Bravo 0000003\_065.

10 So the only difference is that, I think the  
11 secretary there on our part got the year of birth  
12 wrong, '75. It should be '76, but you could check the  
13 particular of the patient, and I've checked it through  
14 another document on the same. So that is the document  
15 which Dr Khurshid sent to Professor Bloom saying,  
16 would it be possible to see this patient who received  
17 HL3186, and Dr Khurshid had a meeting with the parents  
18 but he thought that Professor Bloom would need to have  
19 a meeting with them. This is an example of how we  
20 collaborated with Cardiff.

21 The other number is Professor Bloom's response,  
22 which is Charlie Victor Hotel Bravo, again,  
23 0000003\_064. That is Professor Bloom's response to  
24 Dr Khurshid. So that is the same patient which  
25 Dr Rizza has written to me, asking: how come that

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1 we're having this report here, we thought that you're  
2 using heat treatment?

3 There is an issue with the frequency of testing  
4 in this patient, in that the patient was -- even  
5 though we saw the patient, you know, sort of, maybe  
6 once a year or twice a year in Cardiff, the patient's  
7 residence was [redacted] so ...

8 **Q.** Forgive me --

9 **SIR BRIAN LANGSTAFF:** Just stop there.

10 **MS RICHARDS:** Dr Al-Ismail, I'm keen not to get into  
11 a discussion of the particular circumstances of  
12 particular patients.

13 **SIR BRIAN LANGSTAFF:** Can we just remove that from the  
14 record, please.

15 **A.** I apologise.

16 **SIR BRIAN LANGSTAFF:** Don't worry. We will make sure you  
17 don't say anything untoward.

18 **A.** Yes. That patient was not living in our area so we  
19 would not test him as frequently as we would test our  
20 patients. So that is the reason for the delay,  
21 I don't know when he converted, but according to us  
22 the tests we did in 1976 show that he converted. So  
23 that was the recipient of that particular Elstree  
24 Batch. So all these documents tie together.

25 **MS RICHARDS:** Could we just go back to HCDO0000132\_039,

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1 please, Soumik. The point I just wanted to clarify  
 2 with you, Dr Al-Ismail, is this: the batch in  
 3 question, HL3106, which seems from this letter to have  
 4 resulted in three or possibly four of your patients,  
 5 or of the local patients, sero-converting to HIV, this  
 6 is a batch that was, as I understand it, supplied in  
 7 August or September 1984 for use by the hospitals.  
 8 **A.** Yes.  
 9 **Q.** I think you made a point earlier in your evidence,  
 10 doctor, you suggested that many seroconversions would  
 11 have taken place in the early part of the 1980s, but  
 12 a number of your patients were infected at  
 13 a relatively late stage through the exposure to this  
 14 particular batch; is that right?  
 15 **A.** Yes.  
 16 **Q.** This is obviously a communication that you're having  
 17 with Dr Rizza, presumably in his capacity as  
 18 maintaining the records at the Oxford Haemophilia  
 19 Centre, nationally, of patients?  
 20 **A.** Yes.  
 21 **Q.** Did you tell your patients that you were providing  
 22 information on a named basis, so not an anonymised  
 23 basis, about their HIV status to Oxford?  
 24 **A.** Yes. We told the patients when the tests became  
 25 positive that we would be sharing -- the HTLV test was

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1 unlike any other test we did on haemophiliacs. There  
 2 was quite a stringent way of doing it, really, in that  
 3 we could not do it on the patient unless we had  
 4 actually counselled the patient and very often we  
 5 asked a patient if they want to bring anybody with  
 6 them before we do the test. Then we do the test and  
 7 when we convey the results, we also do it in  
 8 one-to-one basis, and we tell the patient that -- we  
 9 ask the patient that we need to inform their partner,  
 10 wife and whatever, if it is a child then we would tell  
 11 the guardian of the child, and our attitude then was  
 12 not to tell the child because of the stigma, and the  
 13 so many mishaps and stories you've heard about  
 14 children inadvertently telling their friends in school  
 15 and then being picked on, and some of the families  
 16 they had graffiti written on the doors and whatever.  
 17 We've heard the stories, didn't occur in our area.  
 18 So the point I was making is that the testing  
 19 telling the patient and asking the patient if they  
 20 don't mind it's important to share the information  
 21 with their GP, I didn't have any patient who refused  
 22 that and also telling them that we would be sharing  
 23 the information with the UKHCDO because they will be  
 24 monitoring the issue on the UK basis.  
 25 That is what used to be happening in terms of

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1 the HTLV-III. So I don't think I remember a situation  
 2 whereby we actually had to do it so regimentally as we  
 3 did it in HTLV-III, simply because there was no  
 4 treatment. We did not know what it meant in terms of  
 5 the outcome. Much more importantly, there was such  
 6 an awful social stigma about HTLV-III and the way it  
 7 could be transmitted.  
 8 So all these sensitive issues, really, we --  
 9 needed to be handled very carefully.  
 10 **Q.** Could we have a look next at ARMO0000574, please  
 11 Soumik. This is a letter that you wrote in  
 12 August 1986 to Dr Christie of Armour Pharmaceutical  
 13 Company and it's headed "Heat Treated Factorate Batch  
 14 Y69402":  
 15 "I am writing to update you on the HTLVIII  
 16 status on patients who had received the above batch of  
 17 Factorate."  
 18 You refer to an earlier letter, and then you  
 19 provide information about five patients. We're not  
 20 quite clear what the redacted passage bits are but it  
 21 doesn't look like you were providing names but you  
 22 were providing information about individual patients.  
 23 Is this the heat-treated batch from which one of  
 24 your patients was infected?  
 25 **A.** Yes.

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1 **Q.** Although this information doesn't appear to contain  
 2 names, did you tell your patients that you were  
 3 providing any information about them to Armour?  
 4 **A.** As far as I remember, whenever we see a patient or  
 5 guardians we will discuss saying that, you know, we  
 6 received this information about an Armour product,  
 7 where one of the donors, I believe, actually developed  
 8 AIDS and whatever, and we will be -- we have been  
 9 asked to provide information to -- now that is how  
 10 I remember it. Whether we documented it or not,  
 11 I don't know, but most probably we did. But that is  
 12 as far as I can tell you.  
 13 **Q.** Then there's a follow-up letter, ARMO0000573, please,  
 14 Soumik. We can see it's from Armour to you, dated  
 15 22 August 1986. It refers to there having been  
 16 a visit and then it says that:  
 17 "... we have been asked [that's 'we', Armour] by  
 18 the DHSS to follow up the progress and history of all  
 19 other patients who were sero-negative at the time this  
 20 batch was administered to them."  
 21 Then it is said that a particular interest is  
 22 one of your patients, and continues:  
 23 "It would be most valuable to check with you, in  
 24 strict confidence, the pattern of previous treatment  
 25 with heat-treated and non-heat-treated Factor VIII

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1 concentrates. Perhaps this would be best achieved  
 2 during a visit, if you feel able to disclose this  
 3 information to me."  
 4 There's some later reference to a visit being  
 5 arranged. Can you recall whether you provided further  
 6 information along these lines to Armour?  
 7 **A.** Well, I wouldn't -- I mean, as I said in my statement,  
 8 I'm not -- that's not just in haemophilia. You get  
 9 visited by different representatives and some of them  
 10 will try to find out what I felt about their other  
 11 product, or anything.  
 12 I was very careful and I made it very clear to  
 13 a representative that I will be discussing their  
 14 particular product. But in this situation there was,  
 15 I believe, an issue in the sense that, in one of the  
 16 meetings which I wasn't party of, it was said that  
 17 haemophiliacs in Swansea converted on a heat-treated  
 18 product. In fact, what they were referring to was the  
 19 patient we were discussing a minute ago, the patient  
 20 with the Elstree Batch.  
 21 I was a bit annoyed, and I shared that with  
 22 Arthur at the time, saying if the UKHCDO was to get  
 23 their fact right, then they really have to not listen  
 24 to second-hand information, either they write to you  
 25 or they write to me. But the answer to your question,

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1 would I have discussed with Dr Christie and --  
 2 I apologise for him if he is to listen to this,  
 3 because in my statement I referred to him as "she",  
 4 because I couldn't remember who was Dr Christie --  
 5 I would have, told Dr Christie whether in a -- that  
 6 patient had received this product but I would not have  
 7 said, you know, sort of -- I may have said look if  
 8 that patient reported in the UKHCDO did not receive  
 9 your product but may have received other product,  
 10 I may have said that but I would not have given full  
 11 details.  
 12 **Q.** Can I then move on to the arrangements that were made  
 13 for testing patients for HTLV-III. You have  
 14 touched --  
 15 **SIR BRIAN LANGSTAFF:** Can I just be clear: the Elstree  
 16 Batch given the date that it was administered in  
 17 September 1984 was almost certainly not heat-treated;  
 18 am I right?  
 19 **A.** Oh, yes, it wasn't heat-treated.  
 20 **SIR BRIAN LANGSTAFF:** Thank you.  
 21 **MS RICHARDS:** Moving to the arrangements that were made  
 22 for the testing of patients for HTLV-III, as  
 23 I understand your answers a few moments ago, patients  
 24 were invited to attend the hospital, were they, to  
 25 give a sample for testing?

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1 **A.** No, they were invited to come and talk about the  
 2 testing before they gave a sample and I think you may  
 3 find, because I blanked the names and did not keep  
 4 the -- you will find in that copy of the letter, which  
 5 is -- I think is the same document, which is the  
 6 returns one, in one of the pages you'd find the  
 7 testing on the patients in 1976, maybe.  
 8 **Q.** 1986.  
 9 **A.** Yes. You would find that some of them did not attend  
 10 the appointment. So they were given appointments and  
 11 the appointment was really to discuss the tests and  
 12 the significance of the test and the importance of  
 13 having the test. None of the patients refused the  
 14 test, but we explained that, depending on the result,  
 15 we have another meeting and, as soon as the results  
 16 came back, that meeting was arranged and, I think  
 17 I probably would be right in saying, most of the  
 18 patients when they got the phone call to come to the  
 19 meeting, they sensed what to expect, particularly when  
 20 they were asked if they could bring their partner with  
 21 them, if they liked. Some of them did, some of them  
 22 didn't but it was so important that, you know, sort of  
 23 to explain to them the mode of transmission. If you  
 24 want to ask me about that later on.  
 25 But, again, I do apologise for the long answer

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1 but the point is the appointment is not just for the  
 2 test, the appointment is for a meeting and the test.  
 3 **Q.** Is this correct, the patients provided a sample, it  
 4 was sent off for testing and then when the result came  
 5 back and you notified patients that the result had  
 6 come back, was news of the positive result told to  
 7 them by you or by a nurse or by someone else?  
 8 **A.** No, definitely by the consultant, either me or my  
 9 colleague Dr Beddall, all that information, because  
 10 there were so many questions that were asked and had  
 11 to be discussed. The hepatitis C was different that  
 12 the results were conveyed by the nurse to the patient,  
 13 but the HIV was definitely by the consultant.  
 14 **Q.** Your statement tells us that six adults with severe  
 15 haemophilia A were HIV positive and two children with  
 16 severe haemophilia A were HIV positive.  
 17 **A.** Yes.  
 18 **Q.** No patient who had mild or moderate haemophilia  
 19 seroconverted to HIV and no patient with  
 20 von Willebrand's seroconverted to HIV; is that  
 21 correct?  
 22 **A.** True. Even the patient who had used all these units  
 23 of cryoprecipitate, she was having regular testing and  
 24 even the year she unfortunately died after the  
 25 accident, she was seronegative for HIV.

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1 **Q.** Do you recall over what time period roughly this  
 2 process of speaking to patients, testing them and  
 3 notifying them of their results took place?  
 4 **A.** Well, given the -- I mean, if you just give me  
 5 a second, please, because I want to give you more  
 6 details because I summarised them.  
 7 (Pause)  
 8 Okay, so of the patients who were tested in  
 9 Swansea, the first test started in December '84. All  
 10 the patients except the ones which were not living in  
 11 our area they were all positive in '84 or '85. The  
 12 only patient who we tested in '86, as I said we talked  
 13 about that patient previously.  
 14 Now, three of these patients were actually very  
 15 much -- even though they were living in our area, they  
 16 were attending Cardiff. They were tested in our area  
 17 but they were seen more in Cardiff. So all of the  
 18 patients, as far as I remember, once the results were  
 19 there, the patients were informed within the week. So  
 20 the patient would be called back in as soon as the  
 21 result is.  
 22 As I said, that was not difficult, given the  
 23 small number of patients we had to deal with, and  
 24 there were two of us.  
 25 **Q.** Then the process for testing for hepatitis C, I think

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1 your statement tells us this began in 1990, can you  
 2 recall over what period that process took place and  
 3 whether it involved more than one type of test?  
 4 **A.** Well, unfortunately, I can't give you the details  
 5 because we started in 1990 because I found the  
 6 earliest positive result in 1990. Unfortunately, the  
 7 virologist who was doing all these tests has since  
 8 passed away. So there was first generation, second  
 9 generation, and God knows how many generation of  
 10 tests, but I remember that as soon as the test became  
 11 available, the haemophilia nurse contacted -- I think  
 12 she started with the severe haemophiliacs and said,  
 13 look, you know that you've got this what we call  
 14 non-A, non-B; yes. We've got a test for it, and she  
 15 actually arranged the test. She would give the  
 16 patient the form for the test and I think I've sent  
 17 you one request form which you could see her  
 18 handwriting. That's not my handwriting.  
 19 The result would come to her and I've seen some  
 20 of the results where they came -- I've written her  
 21 name -- to [her name], and she would see the patient.  
 22 Unfortunately, at that time, as I said, we did not  
 23 have a proper haemophilia centre. So she would call  
 24 the patient in and tell them the results and I think  
 25 what she said, look, if you want to see Dr Al-Ismael

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1 or Dr Beddall, you just let me know. I think I've  
 2 only seen one or two after she gave them the result on  
 3 their request. Most of them were seen on the ordinary  
 4 out-patient clinic.  
 5 **Q.** Did you receive the results of the tests yourself and  
 6 see them before they were communicated to the patient  
 7 or was it something that was left to the nurse?  
 8 **A.** No, the result of the test would have come to the  
 9 secretary and the secretary would have passed it to  
 10 the nurse but I've seen, at least in one of the tests,  
 11 the result actually was put on my desk, and I've  
 12 written "to [her name]", to be given the form, so she  
 13 could communicate the result to the patients.  
 14 The number was, you know, in their 30s or 40s.  
 15 So the number was much larger than the HIV and I think  
 16 most of the ones who came positive had a notion that  
 17 they probably would become positive, because they were  
 18 told that they've got abnormal liver function tests.  
 19 **Q.** If we just look at your witness statement,  
 20 paragraph 130, doctor, it's WITN3761005 and it's  
 21 page 41, please. WITN3761005. I think I might have  
 22 given you an extra zero there.  
 23 My screen's not working. Is your screen  
 24 working, sir?  
 25 **SIR BRIAN LANGSTAFF:** The last thing I've got is:

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1 "My screen's not working. Is your screen  
 2 working, sir?"  
 3 So I think it is.  
 4 **MS RICHARDS:** In terms of the actual ability to see the  
 5 documents.  
 6 **SIR BRIAN LANGSTAFF:** Yes, I've got the document, page 41.  
 7 **A.** Do you want me to tell you the references I've got --  
 8 **MS RICHARDS:** Don't worry. I think everyone except me has  
 9 probably got it.  
 10 **A.** Okay, sorry.  
 11 **Q.** It's paragraph 130 of your statement, in any event,  
 12 doctor, if you have that?  
 13 **A.** Yes.  
 14 **Q.** This is as at 2006, you say 22 had blood borne virus  
 15 infections which was made up of four patients  
 16 co-infected with HIV and HCV and 18 that had HCV only?  
 17 **A.** Yes.  
 18 **Q.** So that's 22 patients with hepatitis C, of whom four  
 19 were co-infected. That's by 2006, I think the number  
 20 you gave us a moment ago was you thought the magnitude  
 21 of the patients infected was in the 30s or 40s. Are  
 22 you able to be more specific?  
 23 **A.** Yes, that may be in 2006, but then if you look at the  
 24 number of patients in 2019, there were 25. So, yes,  
 25 I apologise.

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1 Q. That's all right.  
 2 A. May be a bit of an exaggeration.  
 3 Q. Did you have any system in place or take any steps to  
 4 check whether patients were being informed of their  
 5 diagnosis promptly by the nurse?  
 6 A. Because the nurse really was concentrating on the one  
 7 issue at a time, I believe that she informed them  
 8 promptly, knowing our patients they were in a, sort  
 9 of -- really quite well informed and had good  
 10 relationship with the -- in terms of the Morrision  
 11 Hospital. I would be very surprised if they did not  
 12 know the result within a week or two, very, very  
 13 surprised.  
 14 Q. Would you expect --  
 15 **SIR BRIAN LANGSTAFF:** Just a moment. The question  
 16 actually was whether you have put any system in place  
 17 or whether you checked to see that had happened?  
 18 I understand that you are saying you assumed it had.  
 19 A. Yes, I assumed, yes.  
 20 **MS RICHARDS:** Sorry --  
 21 A. I was thinking of a proper system in place to say,  
 22 look, you had the -- I told the nurse what needs to be  
 23 done, and the issues need to be discussed and if the  
 24 patient was to be seen by a consultant, to be seen,  
 25 but apart from that I did not check on the, if you

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1 like, the execution of that request.  
 2 Q. Your statement suggests that the nurse might have  
 3 informed some patients by telephone?  
 4 A. Yes.  
 5 Q. Do you know that to be the case, that some patients  
 6 were told by telephone?  
 7 A. I don't know but I wouldn't be surprised because, as  
 8 I said, patients would probably, if they don't come to  
 9 the centre. I could see it from the correspondence  
 10 that she had difficulty in getting the patient to come  
 11 and see her on a regular basis. So if the patient had  
 12 called, saying what my results was, I wouldn't be  
 13 surprised that she told them the result and gave them  
 14 the offer to be seen by the consultant, if they want.  
 15 Q. Would you expect the nurse's communication of that  
 16 diagnosis whether by phone or in person to be recorded  
 17 in the notes?  
 18 A. That I do not know, and knowing the situation of the  
 19 notes and their availability when we did not have  
 20 a proper haemophilia centre, the notes would have been  
 21 in the general records. It would not be in the  
 22 haematology department. It's only when we moved to  
 23 Singleton that we kept the haemophilic notes in the  
 24 Haematology Department.  
 25 So whether the nurse did manage that, I'll be

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1 very pleasantly surprised if she did.  
 2 Q. What arrangements were made at the centre for the  
 3 counselling of patients, first of all, who were  
 4 infected with HIV after the test result? Was there  
 5 any ongoing psychological or equivalent support  
 6 available for them?  
 7 A. No, we did not have any but, I tell you what, we  
 8 offered every single patient to go and see  
 9 Professor Bloom at his department in Cardiff because  
 10 they really had more facilities, and we had one  
 11 psychiatrist who actually was helping us with the  
 12 patients with haematological malignancy and we -- if  
 13 there was any issue with any other patient to be  
 14 counselled, we would have referred to him. But  
 15 I can't remember any particular patient who had maybe  
 16 requested they need that.  
 17 So the quick answer to your question:  
 18 unfortunately, we did not have anything until 2004 in  
 19 terms of a proper psychological counselling attached  
 20 to the haemophilia centre. Prior to that it would be  
 21 Cardiff or whatever help we could muster in Swansea.  
 22 Q. You said in a moment ago "2004", do you mean 2014  
 23 which is what your statement suggests?  
 24 A. 2014, I beg your pardon. You are absolutely right.  
 25 Q. In terms of HIV care, to what extent was HIV care

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1 something that you undertook or did you make  
 2 arrangements for referrals for specialist assistance?  
 3 A. Okay. When the HIV start to -- patients come through,  
 4 first of all it started with the homosexual and drug  
 5 addicts and my colleague, who -- the late,  
 6 great Cobbold was -- came to see me and said, look,  
 7 some of these patients will need to be admitted,  
 8 because they are immunocompromised it would be best if  
 9 we could have a look at them together.  
 10 Then there was a new consultant respiratory  
 11 position appointed and we actually recruited him into  
 12 this group of clinicians to discuss any patient. So  
 13 that started with the patient with acquired immune  
 14 deficiency outside haemophilia. When the haemophilia  
 15 patient started to occur, then that arrangement  
 16 continued until the need or the availability of  
 17 treatment for the patient and the appointment of  
 18 a specialist, a genito-urinary physician, who took  
 19 specialisation in HIV. I think he was appointed in  
 20 1995 or 6 -- I can't remember.  
 21 But he was appointed to look after the  
 22 non-haemophilic HIV population. When he settled down  
 23 and I've asked him whether you would consider seeing  
 24 the haemophiliacs, he said the only place you could  
 25 see them is in the genito-urinary clinic and he would

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1 not have -- you know, we did not have the ability to  
 2 come and do a joint clinic with us.  
 3 So I put it to the patients. Some of the  
 4 patients agreed to it, some of the patients actually  
 5 reminded me saying, look, do you mind if we go to the  
 6 genito-urinary physician, and -- but some of the  
 7 patients refused point blank to go to the  
 8 genito-urinary physician department. I remember one  
 9 particular patient, fortunately that was the only  
 10 patient who did not require any treatment for HIV, but  
 11 he said he would not go to the genito-urinary  
 12 department to be seen, and I suspect if he would need  
 13 to have anything done he would have to be seen with  
 14 the genitery physician in my department.  
 15 The good thing we had is that we were able to  
 16 monitor CD4:CD8, long before the HIV came in. We had  
 17 a flow cytometer and we were using that for  
 18 haematological malignancies. So when the HIV hit us,  
 19 both in terms of the homosexuals, the drug addicts, as  
 20 well as the haemophiliacs, we were, if you like, the  
 21 centre who would do the testing for these patients,  
 22 both for us and for the West Wales, whatever, if  
 23 anybody who wants to have a test on their patients.  
 24 For our patients, we kept the records in the  
 25 notes, as well as giving it to the genito-urinary

1 physician. For the patients who is entirely under the  
 2 GU physician we sent the results to them. So we know  
 3 what is happening to our patients, even when they were  
 4 referred to the genito-urinary physician in terms of  
 5 the CD4 count. Needless to say, we also saw them  
 6 regularly in the out-patient clinic and asked them if  
 7 they have any symptoms and whatever, and offered them  
 8 the prophylactic treatment and whatever.  
 9 Q. In terms of the patients who were diagnosed with  
 10 hepatitis C in the 1990s, were they all referred to,  
 11 I think, your colleague, Dr Kingham, for assessment  
 12 and management or did that vary depending upon the  
 13 particular circumstances of the patient?  
 14 A. Did I hear you right, you said hepatitis B?  
 15 Q. Hepatitis C. So after they were diagnosed with  
 16 hepatitis C in the 1990s, did you refer all the  
 17 patients who were hepatitis C positive to Dr Kingham?  
 18 A. Yes. Before we referred, we told the patient would he  
 19 like to be referred to the liver specialist. Some of  
 20 the patients said, do they have any treatment for me,  
 21 and we'll say, well, as far as we know we don't have  
 22 any treatment, but they could monitor you. Some of  
 23 them accepted, some of them refused, and even when the  
 24 treatment became available and I remember, you know,  
 25 some of them were very well informed professionals,

1 and I said, look, treatment is now available would you  
 2 like me to refer you to him, and they said, look, we  
 3 read about the treatment and, because we feel okay, we  
 4 don't want to be referred.  
 5 But when the, you know, the proper treatment  
 6 came through later on, they all accepted referral.  
 7 But before referral was made to the hepatologist, each  
 8 patient was asked whether they accept the referral and  
 9 they said, yes, they were referred.  
 10 Q. If we have up on screen, please -- and I'm now looking  
 11 at arrangements for specialist liver care in more  
 12 recent years. You've told us in your statement that  
 13 after 2006 patients could be referred to a consultant  
 14 physician with a special interest in liver disease.  
 15 Then could we have ABMU0000021, please.  
 16 You will see this refers to an issue about --  
 17 this is from 2011 -- about access to a fibroscan, and  
 18 the hope being expressed by the specialist physician  
 19 to you is that they were hoping to have one soon.  
 20 Can you recall how long it took before fibroscan  
 21 provision was available for patients in your area?  
 22 A. Well, I know we've got it after the Royal Gwent but  
 23 I can't tell you the exact year. But we certainly --  
 24 I think, as I said, we were lucky in Swansea in terms  
 25 of hepatologist service. We had two clinicians, one

1 was Dr Kingham and then the other was Dr Chin Lye.  
 2 Dr Chin Lye actually was -- his particular interest,  
 3 and was very active, in looking after these patients.  
 4 But I can't tell you exactly -- you may find the  
 5 answer in the original statement in 2018, because he  
 6 gave me a briefing about liver services when I asked  
 7 him to give me a briefing about liver services to  
 8 present to the Chief Executive to include it in her  
 9 response to the Inquiry. I can't tell you exactly but  
 10 I know it was not long after Royal Gwent that we got  
 11 ours.  
 12 Q. Do you recall from your own knowledge whether there  
 13 was any difficulty in obtaining funding for treatments  
 14 for your patients for either HIV or hepatitis C?  
 15 A. No.  
 16 Q. So you didn't experience difficulties in obtaining  
 17 funding?  
 18 A. No, I didn't -- I mean, I -- actually, if you go back  
 19 to the top of this letter, if you go back, and you  
 20 could see that the -- I sent the letter to  
 21 Dr Chin Lye, copied it to the radiology, copied it to  
 22 the finance department, copied it to the manager  
 23 Swansea locality, to tell you that we really needed to  
 24 have as much pressure as possible to say that, look,  
 25 we really need, desperately need a sort of a proper

1 monitoring of these patients.  
 2 So I suspect, you know, sort of this may have  
 3 been -- this letter was prompted by the Task and  
 4 Finish Group to look at the haemophilia services and  
 5 whatever -- and what things we provide to them. But  
 6 I do not remember either the GU physician or the  
 7 hepatologist saying to me they are experiencing  
 8 difficulty in getting proper funding for drugs.  
 9 I know that Dr Chin Lye actually got the  
 10 protease inhibitors initially for some of our patients  
 11 because he recruited them into national and  
 12 internationally, and that's how he got the protease  
 13 inhibitors. But as soon as the protease inhibitors  
 14 became available, I know that it was made available to  
 15 all the patients. And I'll tell you that I know that  
 16 because I was chairing the medicine group, which is  
 17 part of the WSMG, that is to monitor the entry of  
 18 drugs in Wales, and Wales was one of the first who  
 19 actually allowed all the protease inhibitors to be  
 20 available to hepatitis C.  
 21 **Q.** Dr Al-Ismail, I'm not going to ask you about the  
 22 detail of the vCJD notification process because we  
 23 have quite a lot of documentation about that, but can  
 24 you recall whether and if so to what extent patients'  
 25 statuses of being at risk for public health purposes,

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1 did that cause difficulties for them in terms of  
 2 accessing surgery and the like or cause deferments of  
 3 surgical procedures?  
 4 **A.** Well, not in terms of accessing surgery, definitely  
 5 none whatsoever, but in terms of deferring,  
 6 unfortunately some of the patients forgot to tell the  
 7 person they were referred to, and when they were  
 8 referred without our knowledge, and by our knowledge,  
 9 the haematology department knowledge, the -- whoever  
 10 had accepted the referral on the surgical side or the  
 11 endoscopy side would have written to me saying: what  
 12 am I to do in terms of treatment of this patient?  
 13 We picked some of these patients through this  
 14 way, saying: look, just hold on a sec, this is  
 15 a patient who needs special arrangements for the  
 16 endoscope because it has to be quarantined, or for the  
 17 equipment, if they are not disposable, to have to be  
 18 quarantined, did you know about that?  
 19 And, of course, you know, you tell the patient,  
 20 the patient forgets, GP sometimes forgets, colleagues  
 21 who have been circulated with a different notification  
 22 forget. So -- but in terms of accessing surgery or  
 23 accessing endoscopy or accessing any service, no  
 24 patient was refused such intervention based on their  
 25 risk factor, but some of them may have been given an

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1 appointment but that appointment had to be altered  
 2 simply because it came to the attention of the  
 3 treating surgeon or physician that special  
 4 arrangements need to be made.  
 5 **Q.** Dr Al-Ismail, I have a handful of questions suggested  
 6 by others that I want to ask you about next, so we may  
 7 dot round from topic to topic now.  
 8 Could we have, please, the doctor's witness  
 9 statement back on screen. WITN3761005. And could we  
 10 go to page 20, please.  
 11 If we look at the bottom of the page,  
 12 paragraph 66, you have referred there to  
 13 cryoprecipitate being used for patients with  
 14 hypofibrinogenaemia, and you explain that's a rare  
 15 bleeding disorder. How much cryoprecipitate did  
 16 patient with that condition tend to require?  
 17 **A.** They usually require about ten packs. And it is  
 18 something which is -- people still were using even  
 19 just before I retired. Simply because fibrinogen was  
 20 not licensed. I know that some of my colleagues in  
 21 Cardiff were using fibrinogen but we continued to use  
 22 cryoprecipitate in patients who have  
 23 hypofibrinogenaemia. We continued to use  
 24 cryoprecipitate in patients who needed massive blood  
 25 transfusion. We had a cardiac centre and so there are

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1 patients who would have, you know, bypass surgery,  
 2 patients who would have valve surgery, and they  
 3 usually would require cryoprecipitate simply because  
 4 they would have massive blood transfusion.  
 5 So the usual thing is to give 10 units of  
 6 cryoprecipitate, check their fibrinogen level, make  
 7 sure it is above 2 before you stop giving them  
 8 cryoprecipitate.  
 9 **Q.** Were any such patients in that category infected with  
 10 HIV or hepatitis C as a result of their treatment?  
 11 **A.** Not to my knowledge. Mind you, I think since the --  
 12 you know, that all donors were checked for HIV and  
 13 then, later, for HCV, then all the donations were  
 14 fine. But you can look at cryoprecipitate, in that  
 15 context, in a very similar way to looking at a unit of  
 16 blood, because many patients were transfused with  
 17 blood at times we did not know about hepatitis C, and  
 18 testing for hepatitis C really was not done afterward.  
 19 And one of the things which I personally believe, in  
 20 that every patient who had a blood transfusion or  
 21 blood product should have a test for hepatitis C.  
 22 It's such a simple test and the treatment is so  
 23 effective.  
 24 **Q.** You said during the course of your earlier answers  
 25 this morning that when you were trying to find out

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1 what the various stages were for ordering products,  
 2 you couldn't access all of the blood transfusion  
 3 records before 1984, and you said that that was  
 4 possibly something to come back to. Could you just  
 5 expand upon that, please?  
 6 **A.** I think you have sent me a document last week, and  
 7 that is why I thought you may be coming back to it.  
 8 So let me tell you a bit more about this.  
 9 So prior to 19 -- up to 1980, all the blood  
 10 transfusion documents, that is blood and blood  
 11 products on part of haemophiliacs, were actually paper  
 12 documents, and they were since, being many years, been  
 13 lost.  
 14 Then between 1980 and 1984 we acquired the  
 15 computer system called TelePath, and -- oh, maybe  
 16 before that we acquired a computer system.  
 17 Anyway, so at 1985 that was changed. It may be  
 18 changed to TelePath, and we were told that the  
 19 previous computer system we -- would be microfiched  
 20 and stored. And -- but that actually -- it was  
 21 microfiched but it was unrecoverable, I was told by  
 22 the head of blood transfusion, when the first request  
 23 from the Infected Blood Inquiry came to the Chief  
 24 Executive.  
 25 In 1985 to 1981 was TelePath, and this is the

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1 one which was microfiched. And then after 1991 until  
 2 2003 we changed to another system, called ACT, and  
 3 when that laboratory system moved to another system,  
 4 called MasterLab, in 2003, all the documents were  
 5 transferring to MasterLab.  
 6 So anything really which was in TelePath -- if  
 7 you like, you would not be able to get any  
 8 documentation after 1991 from our computer system,  
 9 unfortunately.  
 10 **Q.** After 1991 or 1981?  
 11 **A.** 1991. So after 1991 -- before 1991 you could not  
 12 retrieve anything.  
 13 **Q.** Are those records of blood transfusions?  
 14 **A.** Yes.  
 15 **Q.** They are not records relating to haemophilia patients  
 16 or do they --  
 17 **A.** No, no, the haemophilia records were separate, really,  
 18 because, you know, sort of all the time we gave a unit  
 19 of cryoprecipitate or a unit of -- or a bottle of  
 20 concentrate, that was documented in the patient notes  
 21 and then transferred to UKHCDO. So that's different.  
 22 **Q.** Next question, doctor, you will recall this morning we  
 23 talked about the annual returns and the fact that  
 24 DDAVP doesn't feature on the returns until 1985.  
 25 You thought that an explanation for that might

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1 be that DDAVP was ordered by the pharmacy and that its  
 2 use may not have been communicated to the person  
 3 completing the returns. Who was it who completed the  
 4 returns? Was it the centre director?  
 5 **A.** No, I wish. Well, the centre director, as I said to  
 6 you, would not have the time to complete the returns.  
 7 These returns have to be done on a daily/weekly basis.  
 8 So it was the MLSOs -- and I'm ever so grateful to  
 9 them because it's not really part of their job --  
 10 until the haemophilia nurse was appointed, and then  
 11 the haemophilia nurse was filling the returns. And  
 12 we -- as the director, whether it's Dr Khurshid or  
 13 myself, looked over the returns and made sure that  
 14 there is no major inaccuracies.  
 15 But the DDAVP would be ordered on a drug chart,  
 16 and it still is, which would go to the pharmacy and  
 17 the pharmacy would issue the DDAVP. So unless we  
 18 highlight that to the person who is doing the return,  
 19 the person who is doing the return would not know  
 20 about it.  
 21 When the haemophilia nurse came in, then she  
 22 would know exactly what each haemophiliac patient  
 23 would have received for any particular treatment. So  
 24 any DDAVP would be entered in the patient notes and  
 25 would be on the chart, so she would know about that.

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1 But the MLSOs, if we do not communicate that  
 2 information to them, they do not see the patient notes  
 3 on a regular basis or they don't even see the patient  
 4 notes, so the onus really was on us to communicate  
 5 that to them.  
 6 **Q.** We can see that the 1985 return does record DDAVP.  
 7 Why, if it was being used earlier than that, was it  
 8 not recorded on the 1982, '3, '4 runs checked by you  
 9 and Dr Khurshid?  
 10 **A.** Well, I mean, you are asking me something which  
 11 I can't give you the answer to. 1985, I took over  
 12 checking the returns, and I'm sure -- you have to  
 13 remember, when Dr Khurshid was working, and until  
 14 I came to the scene, he was working single-handed. He  
 15 was doing all the things that two haematologists did,  
 16 then three haematologists did, then four, five, six --  
 17 six haematologists did in recent years. So, you know,  
 18 there is a limit to what a person could do.  
 19 But I agree if you want for the record, then you  
 20 would need to record everything about the patient.  
 21 The only tragic thing is that if we did not have the  
 22 destruction of the notes of the haemophiliacs, this  
 23 Inquiry would have been much better informed about  
 24 exactly what happened.  
 25 **Q.** Just picking up on that, doctor, what notes relating

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1 to haemophiliacs were, to your knowledge, destroyed  
 2 within Swansea?  
 3 **A.** Well, Swansea, and if you look into the Chief  
 4 Executive response, has a destruction policy for  
 5 notes. And I don't think they differ in any other  
 6 health board in relation to that.

7 The haemophiliac notes, when we moved to  
 8 Singleton, were kept in the haemophilia centre. But  
 9 when a patient dies, very often the notes would be  
 10 taken by the medical records to prepare the death  
 11 certificates. And unless you insist on the patient --  
 12 on the notes being returned because you wanted to  
 13 complete one thing or another, then that would be put  
 14 in with the other notes, and I think after eight years  
 15 or whatever they would have been destroyed.

16 As I said, I think one of the good things that  
 17 happened in Cardiff is that somehow they stopped the  
 18 destruction of these notes by pleading with the  
 19 managers and whatever. And I wish I, you know, sort  
 20 of -- or Dr Khurshid or any one of us had done the  
 21 same. And to be honest with you, until the Inquiry  
 22 came into one of the patients who was a mild  
 23 haemophiliac and then -- I mentioned him earlier, and  
 24 I've put him in my statement -- until that patient  
 25 I was told that they could not find the notes of,

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1 I said, "Look, it's only a few years ago, two years  
 2 ago that I got the notes, how come the notes are not  
 3 there?"

4 "Oh, because they were destroyed."

5 I did not know about that policy about  
 6 haemophiliacs until that time. But it is one of the  
 7 things which, you know, sort of -- it would have  
 8 helped immensely, either the Inquiry would have  
 9 taken -- been conducted many years back or we did not  
 10 have any destruction of the notes. Because then you  
 11 would have the facts as -- not just trying to recall  
 12 from one's memory 30 or 40 years ago.

13 **Q.** I asked you earlier about the treatment policy in  
 14 relation to mild haemophiliacs and you discussed the  
 15 possibility of treating a mild haemophiliac with  
 16 concentrate if surgery was required. Between 1980 and  
 17 1985 or 1986, when heat-treated products became  
 18 available, what would the treatment policy have been  
 19 for a mild haemophiliac who required surgery if there  
 20 was no NHS concentrate available and so the choice was  
 21 between cryoprecipitate or commercial concentrate?

22 **A.** Heat-treated or not heat-treated?

23 **Q.** Not heat-treated.

24 **A.** Cryoprecipitate would have been preferred. But if it  
 25 is surgery, it would have -- if it's surgery, that

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1 meant that you really need to achieve haemostasis with  
 2 50 -- with levels between 50 and 100 per cent, if you  
 3 like, in simple terms, all the time for ten days, then  
 4 the only way probably would have been concentrates.

5 **Q.** I asked you questions about discussions that you had  
 6 with Professor Bloom about the risks of AIDS. Did you  
 7 ever ask Professor Bloom what advice he,  
 8 Professor Bloom, was giving to his patients about the  
 9 emerging picture on AIDS?

10 **A.** I think Professor Bloom has, as I said in the morning,  
 11 had a few meetings, and we encouraged our  
 12 haemophiliacs to go to the same meetings, really, and  
 13 he called them all to -- I think he -- to a lecture  
 14 theatre and, I think, explained, you know, the issues  
 15 as he knew them at the time.

16 The patients who went from Swansea were, you  
 17 know, sort of quite comfortable with the meeting.  
 18 I did not have any negative things to say from any  
 19 patient, you know, sort of reflecting back on the  
 20 meeting to me. So that is what happened.

21 And as I said, The Haemophilia Society had  
 22 regular meetings, The Haemophilia Society sent  
 23 regular, you know, sort of leaflets to patients. We  
 24 had a stand in the haemophilia centre in Singleton  
 25 Hospital whereby we kept these leaflets, including The

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1 Haemophilia Society leaflets, and I distinctly  
 2 remember that every time the haemophiliacs would come,  
 3 the nurse would say, "Look, have you got this leaflet,  
 4 have you got that leaflet", and -- you know, so she  
 5 usually prepare a pack for them and give them -- do  
 6 that with, you know, whatever else she had in terms  
 7 of, you know, sort of freebies and whatever to them  
 8 and to the children. So that is the way it was  
 9 communicated to the patients.

10 Needless to say, if patients either tested  
 11 positive or before they test positive had requested  
 12 any information, we would have sat and explained to  
 13 them whatever we could. I said that, and I'm  
 14 repeating myself again here, is that I kept saying to  
 15 my patients that I cannot speculate but I'll tell them  
 16 the fact as I know them.

17 **Q.** Just to go back to my question, doctor, did you ask  
 18 Professor Bloom what advice he was giving to his  
 19 patients about AIDS?

20 **A.** I did not.

21 **Q.** Do you accept that there maybe had been haemophiliacs  
 22 or patients with bleeding disorders who were not  
 23 members of The Haemophilia Society or not regular  
 24 attenders at a haemophilia centre or regularly engaged  
 25 with The Haemophilia Society, particularly if they

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1 were infrequent bleeders and had mild or moderate  
2 haemophilia?

3 **A.** Would you like to repeat the question again, please?

4 **Q.** Of course. The question, Dr Al-Ismael, arises out of  
5 your evidence that you thought patients were very well  
6 informed and they had access to information from The  
7 Haemophilia Society or from the nurse at the centre,  
8 and so on. Do you accept that there may have been  
9 patients particularly those with mild or moderate  
10 bleeding disorders, who may not have engaged with The  
11 Haemophilia Society or the centre on a regular basis  
12 and may not have had access to information?

13 **A.** I suppose there's always that possibility and they  
14 haven't read the newspapers and they haven't seen TV,  
15 there's always a possibility.

16 **Q.** In relation to the authorisation of purchases for  
17 commercial products, you said earlier you didn't sign  
18 invoices or the equivalent. Do you know who did, not  
19 necessarily by name, but in terms of the role or job  
20 description of those who signed the invoices or  
21 authorised the actual purchases?

22 **A.** It would have been a finance director of -- it would  
23 have gone to the finance director's office and, you  
24 know, whatever arrangement they had there.

25 **Q.** To your knowledge in the 1980s, did the Welsh Chief

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1 Medical Officer play any part in arrangements for the  
2 supply of blood and blood products in Wales or in  
3 providing information to consultants, such as  
4 yourself?

5 **A.** I don't know anything about that, really. I don't  
6 know whether they had anything. I know that they were  
7 never named in any litigation but I don't know whether  
8 they were engaged in any way, in relation to blood or  
9 blood products.

10 **Q.** Then your returns for 1985 and 1986 show that, in  
11 relation to patients with haemophilia B -- and I think  
12 the returns prior to that show no patients with  
13 haemophilia B -- you were using predominantly or  
14 exclusively commercial Factor IX concentrates. If we  
15 could have up on screen please, Soumik  
16 BAYP0000008\_084.

17 Go to the last page of this, please. This is  
18 another internal Cutter document, doctor. We can see  
19 at the bottom paragraph -- sorry, the last paragraph,  
20 please -- it says:

21 "Most English centres are receiving NHS  
22 Factor IX. Swansea is an exception."

23 Can you recall why you were using predominantly  
24 commercial Factor IX products in 1985 and 1986?

25 **A.** Yes, I do. If we go to -- do you have the returns of

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1 1985?

2 **Q.** Yes, we do. It's WITN3761008. If you go to page 28,  
3 please, Soumik. So that's haemophilia A. If you go  
4 on two pages, it should be the return for 1985 for  
5 haemophilia B.

6 **A.** As you rightly said, up to 1984, we didn't have  
7 a single patient with haemophilia B. In 1985 one  
8 patient, a 39-year old came in, he actually moved from  
9 London to us. He was in St Thomas'. And I had  
10 a letter -- the reason why I recall that so vividly is  
11 because I only looked at it last week.

12 I had a letter from St Thomas' to say that  
13 so-and-so is a patient with severe haemophilia B and  
14 he's moving to your area. They did not tell me what  
15 the patient was on, so the first question -- he was  
16 actually seen by my colleague Dr Beddall on  
17 2 August 1985, and Dr Beddall recorded that the  
18 patient is on heat treatment product and that is --  
19 I could figure out from the notes. So that is why he  
20 went on heat-treated product.

21 I can't -- you know, could not find out whether  
22 he was started on Alpha and then Cutter or vice versa,  
23 or whether we started on the same one as he was in  
24 St Thomas' because St Thomas' letter did not tell us  
25 exactly what products he was on, and my colleague has

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1 written to Dr Savidge at the time saying can you  
2 please give me full details of what the patient was  
3 on, and I could not find a reply in the notes.

4 So the reason why we've used the commercial one  
5 is because the patient was already on heat-treated and  
6 he was, again, a well-informed patient and he asked  
7 for heat-treated. At that time we did not have  
8 heat-treated Factor IX.

9 **Q.** You didn't have heat-treated NHS Factor IX?

10 **A.** Yes. If you go to the year after, that is 1986.

11 **Q.** That should be if you go to page 35, possibly, Soumik.  
12 Yes.

13 **A.** This time there's another patient. This was a 19-year  
14 old who joined the Swansea University, and he was  
15 a severe haemophiliac and he was already on NHS  
16 Factor IX, so he continued on NHS Factor IX and the  
17 patient on the heat treatment product was continued on  
18 the Cutter product. So that is why, I suppose when  
19 you have one patient in 1985, you'd be the odd-one-out  
20 that is why Swansea was the odd one out.

21 **SIR BRIAN LANGSTAFF:** Just pause for a moment. At this  
22 time, 1986, there would have been heated Factor IX,  
23 would there not, from the NHS?

24 **A.** Yes, I think so.

25 **SIR BRIAN LANGSTAFF:** Thank you.

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1 **MS RICHARDS:** You referred a few moments ago to a meeting  
 2 or meetings which you understood Professor Bloom to  
 3 have arranged in a lecture theatre, or equivalent, in  
 4 Cardiff. Do you know approximately when that took  
 5 place?  
 6 **A.** No, unfortunately, I can't tell you, but it was soon  
 7 after the -- I think -- I don't know whether it was  
 8 before his patient developed acquired immune  
 9 deficiency or -- I can't tell you.  
 10 **MS RICHARDS:** Sir, those are my questions for  
 11 Dr Al-Ismail. Do you have any questions for him?  
 12 **SIR BRIAN LANGSTAFF:** Yes, I do just a few, if I may,  
 13 doctor. Can we go back to your witness statement at  
 14 page 18. You were asked about this this morning.  
 15 **A.** Yes.  
 16 **MS RICHARDS:** WITN7631005, page 18.  
 17 **SIR BRIAN LANGSTAFF:** Thank you. you were asked about  
 18 paragraph 56. Now, so far as choosing or selecting  
 19 a particular product was concerned, you didn't have to  
 20 ask anyone's permission to select which product to  
 21 use, did you?  
 22 **A.** Well, I would ask have asked Professor Bloom and  
 23 Dr Khurshid would have asked Professor Bloom.  
 24 **SIR BRIAN LANGSTAFF:** For permission?  
 25 **A.** Sorry?

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1 **SIR BRIAN LANGSTAFF:** For permission to buy the product or  
 2 just for advice as to which to buy?  
 3 **A.** For advice as to which to buy. The problem I had  
 4 actually in figuring out how did we buy these  
 5 products, did we buy them directly, did we -- because  
 6 there was a paper by Rizza et al that talked about --  
 7 I think it's one of the documents which you've sent  
 8 me -- talked about the management of haemophilia in  
 9 the UK between 1980 or 1991, or whatever. I've got  
 10 the reference to it if you want and in one paragraph  
 11 of that paper, it said the commercial product were  
 12 supplied free to the haemophilia centres in England  
 13 and Wales until 1992.  
 14 If you ask me what did that occur or did not  
 15 that -- and I actually put it in my statement, I said  
 16 I believe that the commercial product were supplied  
 17 free based on that paper. The bottom line is I did  
 18 not know what were the mechanisms of purchasing  
 19 a product, whether in a, sort of, my health authority  
 20 was solely responsible for it, or was there a central  
 21 funding which the health authority had, but in terms  
 22 of which product to select, Professor Bloom would have  
 23 been asked what his opinion and we would usually  
 24 follow it.  
 25 Does that answer your question?

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1 **SIR BRIAN LANGSTAFF:** Well, it does. You've said, which  
 2 is consistent with the evidence you gave about when  
 3 you went with Cutter, you said you'd asked  
 4 Professor Bloom for his opinion and he'd given you it.  
 5 But it's in relation to 56(ii). You didn't know the  
 6 mechanism for purchase. When selecting a product,  
 7 I understand that you relied heavily upon what  
 8 Professor Bloom was telling you, but in your answers  
 9 you gave a further reason, I think, which was that the  
 10 product had been licensed and you took it on trust, as  
 11 I understand.  
 12 **A.** Yes.  
 13 **SIR BRIAN LANGSTAFF:** So when the -- this paragraph  
 14 begins:  
 15 "... the basis of decisions made about the  
 16 selection of a particular product or particular  
 17 concentrate for an individual patient."  
 18 Safety and efficacy came into that. Did it come  
 19 into that and, if so, how, if what you were doing was  
 20 placing your trust in the advice of Professor Bloom  
 21 and the decisions of the regulator to allow product to  
 22 be sold in the UK?  
 23 **A.** Would you suggest any other way of putting my  
 24 decision, because the -- since the Thalidomide  
 25 disaster happened, no product should have been

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1 authorised for human consumption in the UK unless that  
 2 product has been passed by the -- what is the  
 3 equivalent of the MHRA previously, that the product  
 4 should have shown safety and efficacy. In other  
 5 words, we did not use any product which is not  
 6 licensed.  
 7 Professor Bloom's advice would have been on the  
 8 basis that he would have an experience in what product  
 9 would probably be more -- be better than others in  
 10 whatever measures he used. So the safety and efficacy  
 11 of a selected product, I personally would not have any  
 12 other way of assessing that.  
 13 **SIR BRIAN LANGSTAFF:** I see. So this was really relying  
 14 upon the regulator doing its job properly and, for  
 15 that matter, those who had more experience, perhaps,  
 16 in treating those with haemophilia giving you their  
 17 best advice?  
 18 **A.** Absolutely.  
 19 **SIR BRIAN LANGSTAFF:** Thank you. Do you have anything  
 20 generally to say about what experience has shown you,  
 21 from your experience, about the nature of the quality  
 22 of the product that the regulator permitted to be used  
 23 in the UK?  
 24 **A.** Well, do I need to say much except that, you know, if  
 25 the regulator had known or had any information about

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1 the source of donation which had been used for any  
2 product, these products should not -- in my opinion,  
3 should not have been allowed to be marketed in the UK.

4 Unfortunately, and I say that with, you know,  
5 heavy heart, really, that even in the UK, you know,  
6 the Blood Transfusion Service relied on sourcing blood  
7 from prisoners at some time I was told. I can't tell  
8 you the figure but I'm sure you would have access to  
9 that information.

10 I think if the regulator had any information  
11 about the skid row type of donations that were used to  
12 prepare the product -- foolishly, probably they  
13 thought hepatitis B, once it's excluded everything is  
14 fine. And that is clearly not a way forward for  
15 anybody who would think at any time, even now, that we  
16 know everything about what blood and blood product  
17 could transmit.

18 So, yeah, I think the regulators at the time has  
19 really failed in making sure that whatever is marketed  
20 in terms of blood and blood product, whether that is  
21 from abroad or from the UK for that matter, should  
22 really have had probably proved more safety than, you  
23 know, sort of just to be taken that hepatitis B was  
24 excluded.

25 **SIR BRIAN LANGSTAFF:** Can I turn to something else.

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1 You said, in one sentence which caught my ear in  
2 particular, in haematological malignancy you truly  
3 can't take a decision for a patient. That was my note  
4 of what you said. What struck me about that was the  
5 word "truly"; you truly can't take a decision for  
6 a patient.

7 Does that reflect your general understanding  
8 that other clinicians in the country sometimes did  
9 take decisions for patients? There were certain  
10 circumstances in which you in particular found you  
11 simply couldn't?

12 **A.** I can't speak in general like this but I know that --

13 **SIR BRIAN LANGSTAFF:** Well, I'm asking you about what you  
14 said, you see, and the word "truly" did strike me.

15 **A.** I was trained in, in terms of haematological  
16 malignancies, in Cardiff, and that was most of the  
17 training. I remember what my consultant,  
18 Mr Jack Whittaker, used to do with leukaemia, and  
19 I sat with him and -- when he discussed a new  
20 diagnosis with a patient and their family, and I was  
21 taken back for the first time I noticed that  
22 a consultant cannot really tell the patient what to  
23 do. I did not -- you know, it's not something which  
24 you experience before when you become a junior. You  
25 think -- in medicine, you are always seeing your

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1 seniors and making decision and convincing the  
2 patient. In haematological malignancy, it did not  
3 work like that because, as I said, even though you may  
4 have a good treatment and even though that treatment  
5 may actually be curative, you may lose the patient  
6 just through the side effect of the treatment. So you  
7 explain to the patient what are the risks and possible  
8 benefits and then you put it to the patient and ask  
9 them for a decision.

10 Very often and most of the time the patients  
11 will take the decision that they would go for  
12 a particular treatment. But I had a number of  
13 occasions when I was a consultant and I sat with  
14 a patient and explained the diagnosis and the  
15 treatment, and the fact that once I start the  
16 treatment they have to spend about a month in hospital  
17 before the second course of treatment, and then they  
18 ask me what are the chances of them recovering  
19 completely and I explained the percentage, they turned  
20 to me and said, "No, thank you very much. I'd rather  
21 go home and come back to you and have a blood  
22 transfusion whenever I need it, and how long am  
23 I likely to live?" And I would say, well, you know  
24 about half of the patients will die within three to  
25 six months. And he said, "I'll take that". I had

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1 that occasion.

2 And so -- and I think that in a way is the  
3 current thinking, not just in cancers and haematology  
4 and whatever, in modern medicine is that you really  
5 explain -- you try to empower the patient, to give  
6 them as much knowledge as you can convey to them in  
7 as simplified way as possible without going into  
8 details of path of physiology and whatever, and try to  
9 get the patient to make the decision for you.

10 **SIR BRIAN LANGSTAFF:** So the way you see it, is it, is  
11 that treatment is something that is done for a patient  
12 rather than done to them?

13 **A.** Yes. My role is to explain to the patient to the best  
14 way I can as what are the conditions they have, what  
15 is the ailment, what can we offer them, what does that  
16 mean in terms of their quality of life, what does that  
17 mean in likely change to their longevity and their  
18 survival, and may even when they ask for a graph, show  
19 them the graphs, and then ask them what they want to  
20 do. And try to encourage them not to make an  
21 instantaneous decision, try to encourage them to go  
22 away, read about that. I always told patients when  
23 the internet became available: please do go on the  
24 internet if you wish to go on the internet, read as  
25 much as you like, come and talk to me because I would

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1 only tell you what I know as facts.  
 2 I found that really so easy with the patients,  
 3 because I don't really need to write in full details  
 4 every single word I've told the patients. I would  
 5 almost certainly know what I have told patient A and  
 6 patient B, because it will be exactly the same.  
 7 **SIR BRIAN LANGSTAFF:** The next question I'd like to ask  
 8 you, again comes from something that you were  
 9 describing, which is when you were talking to patients  
 10 about HIV, and you said the conversation might go  
 11 something like, and you described how the patient  
 12 might say, "Well, will I die of it?" and you'd say,  
 13 well, you don't know but you will be checking.  
 14 **A.** What I would have said -- I said some patients would  
 15 die. How long -- whether you would be one of these --  
 16 this is the very early days, when we did not know how  
 17 long a patient is going to be. You see, if I could  
 18 take you back a bit, when people started talking that  
 19 this acquired immune deficiency is all related to  
 20 antigenic stimulation. Now if that was true, that  
 21 meant some patients may have this antigenic  
 22 stimulation for years but they did not show any  
 23 problem with HIV, while others are showing it now.  
 24 Even when the virus was discovered and we found that  
 25 it is a virus which is causing it, the number of

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1 patients going down and unfortunately succumbing to  
 2 the infection, initially, were very small, compared  
 3 with the positivity in terms of antibody, and we  
 4 thought, or we hoped, that it is going to be something  
 5 which is not that disastrous.  
 6 Unfortunately, we all were proven wrong and  
 7 I think that is, in a way ... yes, that was the  
 8 tragedy, really.  
 9 **SIR BRIAN LANGSTAFF:** Do you want to say any more about  
 10 that?  
 11 **A.** Well, not in the sense that, you know, sort of -- you  
 12 know, the initial thinking that the HIV maybe is going  
 13 to be different in the haemophilic -- on the other  
 14 patients' group, because the haemophilic did not have  
 15 any other what we thought contributing issues, all  
 16 proved to be wrong.  
 17 **SIR BRIAN LANGSTAFF:** Do you think that you, collectively,  
 18 erred on the side of optimism?  
 19 **A.** Yes, I think -- and I think the reason why we erred on  
 20 the side of optimism is because, if you like, by the  
 21 time we -- the test became available to us -- and as  
 22 I said, all the patients with the first lot of testing  
 23 proved to be positive, and we -- really, that was  
 24 the -- if you like, the only thing you could do, in  
 25 the sense that if you did not err on the side of

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1 optimism, it would have been very difficult to  
 2 continue with one's career really.  
 3 There isn't a treatment. There isn't anyone who  
 4 will tell you in which path these patients are going  
 5 to go. At least in haematological malignancy you have  
 6 so many parameters that you could plot and you could  
 7 say to the patient: this is the patient in the very  
 8 high risk group, this is the patient in the lower risk  
 9 group. You didn't have any of that. The only thing  
 10 you had was to watch and wait. And until such a time  
 11 as then the -- you start to learn what to try to avoid  
 12 or protect the patient against in terms of infections,  
 13 and you use that. But these were all, if you like,  
 14 preventative of secondary infection. It was only when  
 15 the real treatment came in that we could see the light  
 16 at the end of the tunnel.  
 17 Prior to that it was terrible.  
 18 **SIR BRIAN LANGSTAFF:** Hepatitis C or non-A, non-B, I think  
 19 you described a very similar conversation that you  
 20 might have in respect of that, that you didn't know  
 21 what the consequence of that infection would be, but  
 22 we'll keep checking.  
 23 How would you have checked? How did you check?  
 24 **A.** Well, by, as I said patients, would have maybe once  
 25 a year ultrasounds of the liver. Looking for the

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1 stigmata of liver disease, because when you start to  
 2 develop cirrhosis there are certain things which you  
 3 could see on the skin. You could see on the palm of  
 4 the hand, you could see in the development of ascites  
 5 you always relied on your hepatology colleague to have  
 6 a look at your patients every now and then and tell  
 7 you, well, nothing has changed really, the patient is  
 8 told the same. The hepatologists are very familiar  
 9 dealing with different liver disease the auto immune  
 10 disease, the alcoholic liver disease, the different  
 11 type of liver diseases. So they really have a better  
 12 understanding of what to look for in a patient.  
 13 I remember, and I think the Inquiry have asked  
 14 me about one particular patient I referred to  
 15 Dr Kingham, and his registrar wrote to me back saying  
 16 "We're going to adopt a policy of watch and wait",  
 17 because they knew what they were doing. They were  
 18 testing for the virus in the blood but they knew what  
 19 are the issues to look for. Liver biopsy, certainly  
 20 in, you know, in my practice or in Cardiff practice  
 21 was not something to be undertaken lightly.  
 22 Later on when Dr Chin Lye came to hepatology he  
 23 actually could do liver biopsy through an endoscope,  
 24 so if there would be any bleeding it will be much  
 25 manageable, but he did not do it any of the

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1 haemophiliacs. Then the issues, you know, about  
 2 FibroScan became available and, as I said, with the  
 3 hepatitis C, I think it is a sad story, but the happy  
 4 ending is that, for the vast majority of the patients,  
 5 the effective treatments came into effect, and  
 6 I think, or we're hoping that all these patients would  
 7 have a normal life expectancy.  
 8 **SIR BRIAN LANGSTAFF:** Thank you. The last thing which  
 9 I want to ask you about is in respect of the number of  
 10 patients of yours who converted to HIV seroconverted,  
 11 and I think you said there were eight.  
 12 **A.** Yes, six adults and two children, yes.  
 13 **SIR BRIAN LANGSTAFF:** Now, roughly what proportion of  
 14 those patients that were loosely under the care of the  
 15 Swansea centre, roughly what proportion was that?  
 16 **A.** What proportion of all the patients?  
 17 **SIR BRIAN LANGSTAFF:** Yes.  
 18 **A.** So it's eight out of -- I think at that time we  
 19 probably had 60 patients, so 8 out of 60 or  
 20 68 patients. So it's about -- you know, more than --  
 21 it's about 12 per cent.  
 22 **SIR BRIAN LANGSTAFF:** Yes. We get -- 8 out of 60 might be  
 23 15 per cent, perhaps, but it's something of that  
 24 order.  
 25 The reason I ask -- oh, let me ask, how many

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1 severe haemophiliacs were there in that 60 or so?  
 2 Roughly.  
 3 **A.** I think all the severe haemophiliacs became  
 4 HIV positive.  
 5 **SIR BRIAN LANGSTAFF:** Thank you.  
 6 Do you have a reason that you can tell us, from  
 7 your experience, why you think it was that all the  
 8 severe haemophiliacs should suffer from HIV infection  
 9 and largely the mild and moderate haemophiliacs did  
 10 not?  
 11 **A.** Well, it's all to do with their treatment. It's all  
 12 to do -- I think "should" is not the right word, with  
 13 all respect. They were unfortunate to suffer with  
 14 the HIV simply because the treatment they needed  
 15 conveyed that infection on them.  
 16 Now the mild who -- the occasional mild who may  
 17 have had a concentrate, you know, on the laws of  
 18 probability it's probably that concentrate did not  
 19 carry the virus, but for the severe haemophiliacs, the  
 20 number of infusions they would have, they would be  
 21 very lucky to escape the HIV virus, considering the  
 22 fact that, you know, sort of the issue probably  
 23 started in the late 70s and continued until 19 -- you  
 24 know sort of when the testing of donors for HIV came  
 25 into practice and the heat treatment came into

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1 practice.  
 2 So the number of infusions they had, as I said,  
 3 would be very, very, very lucky severe haemophiliacs  
 4 to have escaped it. But fortunately, you know, some  
 5 of them did survive it, and we managed to get them the  
 6 treatment. And I hope -- well, there's -- even  
 7 though, you know, the treatment itself is not an easy  
 8 panacea, they did have so many side effects with  
 9 a different treatment, but at least in terms of life  
 10 expectancy then we would be able to say that hopefully  
 11 they would live an almost normal or normal life  
 12 expectancy.  
 13 But the unfortunate ones are the ones who  
 14 actually succumbed to the infection before  
 15 an effective treatment became available to us.  
 16 **SIR BRIAN LANGSTAFF:** Thank you very much. That's all  
 17 that I have to ask.  
 18 Ms Richards.  
 19 **MS RICHARDS:** Dr Al-Ismail, is there anything further that  
 20 you wanted to say?  
 21 **A.** If I may, I would like to make a brief comment really,  
 22 a brief statement. Would I be able to do that?  
 23 **MS RICHARDS:** Yes.  
 24 **SIR BRIAN LANGSTAFF:** Yes, indeed.  
 25 **A.** Well, I've written it down so I didn't want to miss

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1 any important points.  
 2 What I'm saying is that I firmly believe that  
 3 the most devastating experience for a doctor is to  
 4 witness harm inflicted on his or her patient that  
 5 resulted from treatment the patient had received.  
 6 Now, this feeling of devastation is felt regardless  
 7 whether the harm occurred unintentionally and even if  
 8 the harm could not have been foreseen.  
 9 Now, I've seen that, particularly in the  
 10 haematological malignancies, as I said some of them  
 11 are curable, but the patients succumb because of the  
 12 infection which followed when the treatment -- you  
 13 know, as a result of treatment and their immune  
 14 suppression. So that had a devastating effect on the  
 15 whole department.  
 16 Now, I believe that feeling of devastation is  
 17 shared by many of my current and previous colleagues  
 18 that looked after the patient with haemophilia and  
 19 other inherited bleeding disorders. I would like to  
 20 mention specifically in that context, if I may, the  
 21 late Professor Bloom.  
 22 Now, Professor Arthur Bloom, as I said before,  
 23 was one of the most gentle, kind, compassionate and  
 24 caring doctors that I knew. He was also an excellent  
 25 mentor. I think it is true to say that his main aim

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1 in his professional life was to improve the care and  
 2 outcome for the patients with inherited bleeding  
 3 disorder.  
 4 Arthur was a wise man, truly wise man and,  
 5 hence, you find that his involvement in so many  
 6 national and international advisory groups, really, in  
 7 haemophilia and allied disorders. As I said before,  
 8 he was never, never an opinionated man, always  
 9 listened to the views of his patients and, as I said,  
 10 he used to sit down on the side of the bed of the  
 11 patient and give the patient as much time as the  
 12 patient want, but he also listened to his colleagues.  
 13 Now, he taught us about the devastating effect  
 14 of haemophilia on the life and well-being, not only of  
 15 the patients but also their families as well. He  
 16 really drilled that into us. Now, I remember this  
 17 anecdote, there was a very pleasant young man in his  
 18 late teens with severe haemophilia. He was from the  
 19 Far East and was referred to Professor Bloom for  
 20 advice and management in Cardiff. Now, that  
 21 patient -- I think that was second or third year I was  
 22 in Cardiff -- now, that patient had the most deformed  
 23 joints I've ever, ever witnessed.  
 24 Now, I remember I told the other registrars who  
 25 were not doing haemophilia at the time that we had

1 that and they would go and ask Professor Bloom whether  
 2 they could go with him and see the patient because  
 3 none of us have seen such terrible joints.  
 4 Now, Professor Bloom told us that such picture  
 5 was not unusual, not uncommon in the UK, before the  
 6 advent of concentrate. Now, I taught medical  
 7 students, you know throughout my career but, you know,  
 8 sort of from the 2000s onwards, or maybe before the  
 9 2000s, it's difficult when the session comes to talk  
 10 about haemophilia and try to show them a young patient  
 11 with haemophilia and at the age of 40 with a deformed  
 12 joint, fortunately, you will not find one.  
 13 I do believe that Professor Bloom became aware,  
 14 maybe in the early '80s that acquired immune  
 15 deficiency could be transmitted by treatment for  
 16 haemophiliacs. I believe that -- not just believe it,  
 17 I think he may have mentioned it to me that he thought  
 18 initially perhaps not going to be a big issue. His  
 19 belief was perhaps based on the small number of the  
 20 haemophiliacs that showed the clinical disease  
 21 initially, but he also did the survey in 19 -- end of  
 22 1983/84. He published in 30 June, and that survey, as  
 23 I said, included 13,147 patients, from 121  
 24 haemophiliac centres in the UK and Europe, and only  
 25 11 out of the 13,000-odd patients had AIDS, like it

1 was, you know, as we knew then.  
 2 I think he thought that, unlike the transmission  
 3 of AIDS -- and I'm talking 19 -- early 1983 -- that  
 4 unlike the transmission of AIDS in the IV drug addicts  
 5 and homosexuals, the causative agent maybe could have  
 6 been attenuated or modified in the process of  
 7 preparing the concentrate and that there were other  
 8 mitigating factors in the non-haemophiliacs.  
 9 You know, he wasn't alone in these thoughts. If  
 10 you look at the publication that came in the early  
 11 80s, as to the possible cause of AIDS, the  
 12 publication -- the number of publications testified  
 13 that the world leaders in haemophilia held similar  
 14 views. Now he documented so many of that in the  
 15 report he prepared in 1989 as part of the defence  
 16 against the litigation raised at the time.  
 17 Now Swansea and its staff and the West Glamorgan  
 18 Health Authority were never named or never had to  
 19 answer any litigation in relation to the management of  
 20 haemophilia or other inherited bleeding disorders.  
 21 But Arthur sent me a copy of the report, and he did  
 22 that because some of the patients who he looked after  
 23 were shared with Swansea, and he said, "You know,  
 24 I think you should read this". And to be honest,  
 25 I read the report and I understood so many of the

1 issues that must have made him say what he said at the  
 2 time. Now I'm sure the Inquiry would give due  
 3 consideration to his report, but I truly wish that his  
 4 report would be made public, and the reason for that  
 5 is so that patients and their families could read the  
 6 facts as he saw them and he stated them in the report.  
 7 Now, I knew he was so concerned about the pain  
 8 and suffering that haemophiliac could endure if the  
 9 concentrate were abandoned, particularly when there  
 10 was no credible alternatives. And I repeat I did not  
 11 think that cryoprecipitate was a credible alternative.  
 12 Again, that was not just his views but the vast  
 13 majority of world leader in the care of haemophilia,  
 14 as well as the doctor specialised in the haemophilia  
 15 care in the UK, Europe and North America. I think he  
 16 addressed The Haemophilia Society Council in  
 17 October 1983 and he said that in his report -- he said  
 18 that he became more circumspect than previously with  
 19 regard to blood products and AIDS.  
 20 Now he suggested to the meeting at the time,  
 21 that is in October 1983, two months after the death of  
 22 his first patient, he asked if the role of concentrate  
 23 could become -- he said until the role of concentrate  
 24 became clearer it would be wise to revise the dosage  
 25 and the treatment for haemophiliacs and ask if the

1 haemophiliac could modify their lifestyle to reduce  
 2 the need for these concentrates.  
 3 He reported in his report that he met with very  
 4 poor reception by the audience, and I've read the same  
 5 thing in -- when it was mentioned by the National  
 6 Haemophilia Federation, which is similar to the  
 7 Haemophilia Society in the US and the World Federation  
 8 of Haemophilia.  
 9 Finally, I explained that the worst nightmare  
 10 for a caring doctor is to witness the ill effect of  
 11 the medication on their patients.  
 12 Now, I truly witnessed that on Arthur. The last  
 13 time I saw him was -- was on 18 September 1992.  
 14 I think it was a UKHCDO meeting. Now, I had not seen  
 15 him before that meeting for quite a long time,  
 16 actually, and I was taken aback. You know, whenever  
 17 we used to meet, he was full of -- he had a big smile  
 18 on his face and whatever, but he was looking -- he  
 19 really looked terrible. He was so down and clearly  
 20 was, you know, sort of -- something which is troubling  
 21 him immensely. I said to him, "Arthur, what's the  
 22 matter?" and he said "Oh, it's my gait, I'm having  
 23 problem with my gait". Then when I pressed him  
 24 I really did not ... I thought: this can't be true.  
 25 I asked him about his family, could it be his wife,

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1 could it be his children, and he said no.  
 2 Then I really continued to press him because he  
 3 really looked terrible, and then he looked at me and  
 4 said -- I'm sorry. He said, "Saad, our patients have  
 5 come to great harm". Now I firmly believe that the  
 6 thought tormented him for the rest of his life.  
 7 Now that is regardless of the fact that he and  
 8 my colleague, Dr Les Moffatt, had published a series  
 9 in 1985 in The Lancet to say that he -- they did  
 10 a look-back and they found that their HIV conversion  
 11 started in 1980s. So he knew that he could not have  
 12 changed much of what happened later on, but that made  
 13 no difference to him. And I really feel that until he  
 14 died that feeling of sadness stayed with him. It did  
 15 not make a difference to his feelings of sadness for  
 16 the haemophilia patients, what they had to go through  
 17 and what they are currently going through as well.  
 18 Thank you.  
 19 **SIR BRIAN LANGSTAFF:** Well, thank you, Dr Al-Ismael. I'm  
 20 sorry that we've kept you here for longer than you  
 21 might have anticipated but you don't have to come back  
 22 tomorrow.  
 23 **A.** Thank you.  
 24 **SIR BRIAN LANGSTAFF:** I am sorry too for those who have  
 25 been listening remotely that they may have been on the

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1 screen for much longer than they too had anticipated,  
 2 because they too are part and parcel of this hearing.  
 3 But can I thank you in particular for giving us a view  
 4 of what it was like to be in a much smaller centre,  
 5 close to a centre of influence and knowledge, in  
 6 Cardiff, and for giving us your views, from being the  
 7 trainee doctor to taking up your role in 1984/85 in  
 8 Swansea at the various places that you operated. The  
 9 Inquiry is grateful to you for that and for your full  
 10 answers in your statement. So thank you very much.  
 11 **A.** Of course.  
 12 **MS RICHARDS:** Sir, tomorrow we have Dr Mitchell at  
 13 ten o'clock.  
 14 **SIR BRIAN LANGSTAFF:** Ten o'clock tomorrow. Dr Mitchell.  
 15 Thank you.  
 16 **(5.45 pm)**  
 17 **(Adjourned until 10.00 am the following day)**  
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<p><b>MS RICHARDS: [26]</b> 3/25 7/7 45/15 45/20 86/22 88/14 90/20 90/25 92/16 98/6 100/3 109/17 119/25 120/21 124/10 124/25 130/21 136/4 136/8 137/20 161/1 161/10 161/16 175/19 175/23 183/12</p> <p><b>SIR BRIAN LANGSTAFF: [61]</b> 1/3 1/7 1/25 3/20 24/23 44/24 45/9 45/16 86/24 88/23 89/22 90/11 90/21 91/8 97/21 98/5 98/7 107/18 107/22 108/7 108/14 108/19 108/25 109/14 120/5 120/20 124/9 124/13 124/16 130/15 130/20 135/25 136/6 137/15 160/21 160/25 161/12 161/17 161/24 162/1 163/1 163/13 164/13 164/19 165/25 166/13 168/10 169/7 170/9 170/17 171/18 173/8 173/13 173/17 173/22 174/5 175/16 175/24 182/19 182/24 183/14</p> <p><b>THE WITNESS: [3]</b> 1/5 1/24 3/16</p> <hr/> <p>'3 [1] 152/8 '4 [1] 152/8 '75 [1] 123/12 '76 [1] 123/12 '80s [6] 57/21 72/2 72/4 72/4 85/18 178/14 '82 [2] 70/20 83/9 '83 [2] 83/10 106/13 '84 [4] 83/10 83/10 133/9 133/11 '85 [3] 70/20 83/9 133/11 '85/'86 [1] 70/20 '86 [2] 70/20 133/12 '90s [2] 57/21 62/11 'pool' [1] 79/10 'we' [1] 128/17</p> <hr/> <p>... [3] 111/21 170/7 181/24</p> <hr/> <p><b>0</b> 0000003 [3] 123/6</p>	<p>123/9 123/23 001 [1] 115/7 002 [1] 116/5 005 [1] 122/16 006 [1] 65/14 039 [3] 119/25 120/22 124/25 064 [1] 123/23 065 [2] 123/7 123/9 080 [1] 43/19 084 [1] 158/16</p> <hr/> <p><b>1</b> 1 June 1976 [1] 5/7 1 March 1983 [1] 116/7 1 per cent [1] 62/20 1,000 [1] 24/22 1.07 pm [1] 90/7 10 February 1975 [1] 87/9 10 units [1] 148/5 10,000 [2] 1/2 183/17 100 [3] 16/17 59/10 106/16 100 per cent [2] 59/9 155/2 100,534 [1] 29/3 11 [1] 106/19 11 December [1] 122/18 11 out [1] 178/25 11 patients [1] 35/17 11.21 [1] 45/17 11.51 [1] 45/19 110,600 [1] 29/8 12 [2] 45/14 45/16 12 per cent [1] 173/21 121 [1] 178/23 13 [2] 29/21 96/5 13,000 [1] 106/17 13,000-odd [1] 178/25 13,147 [1] 178/23 130 [2] 135/20 136/11 130,000 [1] 24/25 130,970 [3] 24/11 24/14 24/21 15 [1] 32/16 15 per cent [1] 173/23 150,978 [1] 25/12 150/200 people [1] 2/19 151 [2] 11/23 24/2 157,540 [1] 35/6 16 [2] 26/8 27/12 17 [1] 28/21 17 November 2020 [1] 1/1 1724 [1] 24/23 18 [5] 32/14 48/1 136/16 161/14 161/16 18 December 1986 [1] 120/24</p>	<p><b>18 May 1983 [1]</b> 65/18 <b>18 months [1]</b> 6/4 <b>18 September 1992 [1]</b> 181/13 <b>19 [5]</b> 24/6 149/9 174/23 178/21 179/3 <b>1970 [1]</b> 4/9 <b>1970s [1]</b> 87/2 <b>1975 [2]</b> 6/19 87/9 <b>1976 [3]</b> 5/7 124/22 131/7 <b>1978 [2]</b> 73/21 73/21 <b>1979 [1]</b> 74/25 <b>1980 [13]</b> 6/11 6/12 23/19 23/25 25/14 58/25 71/12 78/25 79/17 149/9 149/14 154/16 162/9 <b>1980s [9]</b> 13/19 18/3 79/14 79/17 92/17 93/5 125/11 157/25 182/11 <b>1981 [3]</b> 28/18 149/25 150/10 <b>1982 [17]</b> 4/6 7/10 10/25 11/6 11/24 21/6 29/19 29/25 31/13 42/23 46/14 65/5 67/21 68/8 94/25 95/1 152/8 <b>1982/83 [2]</b> 67/23 104/22 <b>1983 [27]</b> 32/13 34/18 34/20 65/16 65/18 65/21 67/21 95/10 95/21 96/5 100/11 100/12 100/13 100/15 103/16 103/24 109/21 111/16 111/23 112/14 115/8 116/7 117/6 117/22 179/3 180/17 180/21 <b>1983/1984 [1]</b> 103/13 <b>1983/4 [1]</b> 79/18 <b>1983/84 [2]</b> 101/2 178/22 <b>1984 [16]</b> 34/7 34/11 34/15 42/6 103/13 103/24 106/15 106/18 117/7 118/14 121/2 125/7 130/17 149/3 149/14 159/6 <b>1984/85 [1]</b> 183/7 <b>1985 [30]</b> 10/25 11/1 11/24 23/20 35/15 35/22 36/7 42/23 43/5 43/7 43/21 47/5 47/12 58/13 68/8 121/7 149/17 149/25 150/24 152/6 152/11 154/17 158/10 158/24 159/1 159/4 159/7 159/17</p>	<p>160/19 182/9 <b>1985/86 [1]</b> 65/5 <b>1986 [11]</b> 120/24 121/7 122/19 127/12 128/15 131/8 154/17 158/10 158/24 160/10 160/22 <b>1987 [7]</b> 17/14 20/7 20/7 20/11 27/21 54/3 54/3 <b>1988 [1]</b> 49/8 <b>1989 [1]</b> 179/15 <b>1990 [3]</b> 134/1 134/5 134/6 <b>1990s [3]</b> 22/20 142/10 142/16 <b>1991 [8]</b> 18/16 150/1 150/8 150/10 150/11 150/11 150/11 162/9 <b>1991/1992 [1]</b> 20/1 <b>1992 [3]</b> 20/1 162/13 181/13 <b>1995 [1]</b> 140/20</p> <hr/> <p><b>2</b> <b>2 August 1985 [1]</b> 159/17 <b>2.05 [3]</b> 89/25 89/25 90/3 <b>2.05 pm [1]</b> 90/9 <b>20 [3]</b> 40/10 57/25 147/10 <b>20 minutes [1]</b> 44/25 <b>2000s [3]</b> 57/22 178/8 178/9 <b>2003 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[2]</b> 67/23 104/22 <b>84 [2]</b> 101/2 178/22 <b>85 [1]</b> 183/7 <b>86 [1]</b> 65/5</p> <hr/> <p><b>9</b> <b>90 per cent [2]</b> 79/1 79/18</p> <hr/> <p><b>A</b> <b>A7 [1]</b> 5/9 <b>aback [1]</b> 181/16 <b>abandoned [1]</b> 180/9 <b>ability [3]</b> 56/12 136/4 141/1 <b>able [20]</b> 1/11 19/21 22/4 44/18 45/25 46/19 56/16 83/2 83/16 86/19 94/15 95/24 104/24 105/6 129/2 136/22 141/15 150/7 175/10 175/22 <b>ABMU0000021 [1]</b> 143/15 <b>abnormal [3]</b> 62/18 80/4 135/18 <b>abnormalities [3]</b> 85/17 89/11 97/17 <b>abnormality [2]</b> 85/3 86/4 <b>about [201]</b> <b>above [2]</b> 127/16 148/7 <b>abroad [2]</b> 73/11 165/21 <b>absolutely [6]</b> 18/6 19/1 31/2 39/10 139/24 164/18 <b>abused [1]</b> 62/16 <b>abusers [1]</b> 104/13 <b>academic [1]</b> 6/14 <b>accept [3]</b> 143/8 156/21 157/8 <b>acceptable [2]</b> 37/6 101/3 <b>accepted [4]</b> 37/5 142/23 143/6 146/10 <b>access [6]</b> 42/6 143/17 149/2 157/6 157/12 165/8 <b>accessing [5]</b> 146/2 146/4 146/22 146/23 146/23 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<b>I finished [1]</b> 5/18	81/20 83/3 83/11 93/8	113/24 113/25 114/12	98/5 98/8 99/25	129/12 129/21 137/21	120/24 124/10 129/8
<b>I firmly [2]</b> 176/2	114/6 129/7 133/4	129/7 133/12 133/22	100/15 101/6 101/20	145/16 149/21 153/25	143/10 145/21 151/8
182/5	152/10	134/22 138/8 143/1	102/10 102/14 102/24	165/7 166/15 166/20	152/12 156/13 165/8
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<b>I found [3]</b> 115/18	<b>I met [2]</b> 26/7 27/11	162/15 167/3 169/14	112/19 113/10 115/18	<b>I watched [1]</b> 102/7	182/19
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<b>I gave [1]</b> 64/2	<b>I must [6]</b> 36/12 39/14	175/2 176/10 176/22	118/22 119/19 122/12	<b>I will [7]</b> 1/15 56/15	11/10 16/13 27/1
<b>I give [2]</b> 13/25 105/1	52/15 72/15 79/1 83/2	177/7 177/9 181/21	123/7 123/10 131/2	86/19 88/12 89/23	34/17 38/13 38/25
<b>I got [4]</b> 6/3 12/12	<b>I need [3]</b> 74/3 164/24	<b>I sat [5]</b> 6/10 6/12	131/5 131/16 133/25	95/24 129/13	40/7 46/20 49/18
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<p><b>M</b></p> <p><b>my...</b> [69] 16/21 17/18 30/4 34/15 41/15 47/20 49/22 51/10 56/14 56/15 58/24 59/2 59/2 64/7 67/24 69/3 69/20 69/25 70/4 70/16 71/11 71/12 72/16 73/17 80/24 81/2 81/5 82/18 83/14 86/16 89/11 92/11 94/2 94/3 102/18 116/21 121/21 129/7 130/3 132/8 134/18 135/11 135/23 136/1 138/12 140/5 141/14 147/20 148/11 153/24 156/15 156/17 159/16 159/25 161/10 162/15 162/19 163/23 165/2 166/1 166/3 166/17 168/13 172/20 176/17 178/7 181/22 181/23 182/8</p> <p><b>myself</b> [11] 14/7 14/25 15/24 27/20 37/14 56/6 64/7 117/4 120/6 151/13 156/14</p> <p><b>mystery</b> [1] 43/17</p>	<p>137/23 139/16 140/7 140/16 141/12 144/25 144/25 147/4 152/20 155/1 164/24 167/22 169/3 181/2</p> <p><b>needed</b> [16] 8/21 16/24 31/20 41/11 41/12 46/12 51/24 55/2 56/8 59/1 63/13 91/15 127/9 144/23 147/24 174/14</p> <p><b>needle</b> [1] 55/25</p> <p><b>Needless</b> [2] 142/5 156/10</p> <p><b>needs</b> [3] 97/16 137/22 146/15</p> <p><b>negative</b> [3] 71/14 128/19 155/18</p> <p><b>neither</b> [1] 97/2</p> <p><b>never</b> [16] 8/13 41/18 41/19 47/19 48/12 48/13 53/22 54/10 92/12 92/12 92/15 158/7 177/8 177/8 179/18 179/18</p> <p><b>new</b> [17] 15/25 23/2 62/11 62/22 66/8 73/25 91/13 92/18 94/8 95/16 95/25 96/5 96/18 110/25 114/12 140/10 166/19</p> <p><b>New England</b> [5] 73/25 95/16 96/5 96/18 110/25</p> <p><b>Newsport</b> [1] 42/11</p> <p><b>news</b> [3] 70/11 70/17 132/6</p> <p><b>newsletters</b> [1] 105/17</p> <p><b>newspapers</b> [1] 157/14</p> <p><b>next</b> [9] 10/19 34/13 38/14 63/25 81/2 127/10 147/6 150/22 169/7</p> <p><b>NHS</b> [46] 12/18 12/24 13/11 25/1 25/10 25/20 28/24 30/1 30/13 30/15 30/15 30/17 32/20 33/5 33/14 33/18 35/1 35/5 35/11 36/1 39/3 39/13 39/17 60/14 60/16 60/21 61/6 61/8 61/19 61/19 61/22 61/24 66/12 66/16 66/18 68/11 75/12 75/15 99/1 114/19 154/20 158/21 160/9 160/15 160/16 160/23</p> <p><b>NHS concentrate</b> [1] 154/20</p>	<p><b>NHS Factor VIII</b> [3] 25/10 25/20 66/12</p> <p><b>night</b> [5] 8/6 9/15 9/20 10/4 42/14</p> <p><b>nightmare</b> [1] 181/9</p> <p><b>nights</b> [1] 9/18</p> <p><b>nitrate</b> [1] 116/14</p> <p><b>nitrates</b> [1] 104/15</p> <p><b>no</b> [74] 17/5 18/4 31/18 34/6 34/9 35/22 37/11 43/17 44/17 45/12 47/18 50/12 56/12 65/9 65/24 65/24 66/8 66/20 68/3 68/5 70/16 74/14 76/8 76/16 76/23 78/23 80/10 82/17 84/23 86/8 87/11 90/10 90/14 94/15 98/9 98/19 98/21 100/2 103/1 103/2 108/13 111/13 112/19 112/24 113/3 114/18 114/22 115/2 115/4 117/8 118/9 119/10 127/3 131/1 132/8 132/18 132/19 135/8 139/7 144/15 144/18 146/23 150/17 150/17 151/5 151/14 154/20 158/12 161/6 163/25 167/20 180/10 182/1 182/13</p> <p><b>nobody</b> [4] 1/20 49/21 71/21 107/3</p> <p><b>noises</b> [1] 39/23</p> <p><b>non</b> [84] 60/23 60/23 69/21 71/17 71/17 71/20 71/21 71/22 71/22 72/5 72/5 72/12 72/12 72/21 72/21 73/5 73/5 74/19 74/19 75/15 75/15 75/19 75/19 75/25 75/25 76/4 76/4 76/10 76/10 78/16 78/16 79/3 79/4 79/21 79/21 79/22 79/22 79/23 79/23 79/24 79/24 80/5 80/5 80/8 80/8 81/7 81/7 81/16 81/16 83/13 83/13 83/19 83/19 85/20 85/20 85/23 85/23 86/4 86/5 87/3 87/3 87/18 87/18 88/5 88/5 89/20 89/20 93/6 93/7 93/11 93/11 93/16 93/16 93/23 93/23 105/25 105/25 128/25 134/14 134/14 140/22 171/18 171/18 179/8</p> <p><b>non-A</b> [40] 60/23</p>	<p>71/17 71/20 71/22 72/5 72/12 72/21 73/5 74/19 75/15 75/19 75/25 76/4 76/10 78/16 79/3 79/21 79/22 79/23 79/24 80/5 80/8 81/7 81/16 83/13 83/19 85/20 85/23 86/4 87/3 87/18 88/5 89/20 93/6 93/11 93/16 93/23 105/25 134/14 171/18</p> <p><b>non-B</b> [40] 60/23 71/17 71/21 71/22 72/5 72/12 72/21 73/5 74/19 75/15 75/19 75/25 76/4 76/10 78/16 79/4 79/21 79/22 79/23 79/24 80/5 80/8 81/7 81/16 83/13 83/19 85/20 85/23 86/5 87/3 87/18 88/5 89/20 93/7 93/11 93/16 93/23 105/25 134/14 171/18</p> <p><b>non-haemophiliac</b> [1] 140/22</p> <p><b>non-haemophiliacs</b> [1] 179/8</p> <p><b>non-heat-treated</b> [1] 128/25</p> <p><b>non-malignant</b> [1] 69/21</p> <p><b>none</b> [8] 8/14 25/8 28/23 30/8 103/4 131/13 146/5 178/3</p> <p><b>normal</b> [6] 31/5 77/7 97/4 173/7 175/11 175/11</p> <p><b>normally</b> [2] 2/13 120/10</p> <p><b>North</b> [1] 180/15</p> <p><b>North America</b> [1] 180/15</p> <p><b>nose</b> [1] 26/23</p> <p><b>not</b> [307]</p> <p><b>not ... I thought</b> [1] 181/24</p> <p><b>note</b> [7] 41/16 44/20 86/22 87/5 87/8 88/2 166/3</p> <p><b>notes</b> [29] 10/14 10/18 32/2 94/12 94/16 109/18 138/17 138/19 138/20 138/23 141/25 150/20 151/24 152/2 152/4 152/22 152/25 153/5 153/7 153/9 153/12 153/14 153/18 153/25 154/2 154/2 154/10 159/19 160/3</p>	<p><b>nothing</b> [3] 71/18 108/11 172/7</p> <p><b>noticed</b> [1] 166/21</p> <p><b>notification</b> [2] 145/22 146/21</p> <p><b>notified</b> [1] 132/5</p> <p><b>notifying</b> [1] 133/3</p> <p><b>notion</b> [1] 135/16</p> <p><b>November</b> [1] 1/1</p> <p><b>now</b> [63] 16/7 16/15 24/18 26/9 26/9 36/1 38/2 39/25 44/19 52/14 61/17 74/23 75/21 76/2 77/19 83/14 86/13 88/18 89/20 90/20 96/12 96/12 96/21 97/25 106/20 106/21 106/22 120/10 120/12 121/20 122/5 128/9 133/14 143/1 143/10 147/7 161/18 165/15 169/20 169/23 172/6 173/13 174/16 176/6 176/9 176/16 176/22 177/13 177/16 177/20 177/22 177/24 178/4 178/6 179/14 179/17 180/2 180/7 180/20 181/12 181/14 182/5 182/7</p> <p><b>number</b> [32] 2/15 8/12 11/23 24/2 24/4 28/20 30/7 32/16 34/20 44/4 46/8 96/2 109/22 116/9 122/15 122/21 123/5 123/8 123/21 125/12 133/23 135/14 135/15 136/19 136/24 167/12 169/25 173/9 174/20 175/2 178/19 179/12</p> <p><b>numbers</b> [3] 97/18 100/17 122/13</p> <p><b>nurse</b> [30] 9/5 17/12 17/14 20/8 20/9 20/10 23/7 23/8 23/9 23/11 23/15 51/3 51/25 52/1 63/5 132/7 132/12 134/11 135/7 135/10 137/5 137/6 137/22 138/2 138/25 151/10 151/11 151/21 156/3 157/7</p> <p><b>nurse's</b> [1] 138/15</p> <p><b>nurses</b> [2] 15/9 23/16</p>	<p><b>obstructive</b> [2] 77/17 77/22</p> <p><b>obtained</b> [4] 38/3 38/4 39/3 40/13</p> <p><b>obtaining</b> [8] 38/1 38/8 39/25 40/21 98/9 119/8 144/13 144/16</p> <p><b>obvious</b> [1] 87/1</p> <p><b>obviously</b> [4] 24/7 90/16 113/2 125/16</p> <p><b>occasion</b> [1] 168/1</p> <p><b>occasional</b> [3] 5/14 22/11 174/16</p> <p><b>occasions</b> [3] 56/10 116/9 167/13</p> <p><b>occur</b> [3] 126/17 140/15 162/14</p> <p><b>occurred</b> [2] 57/21 176/7</p> <p><b>occurring</b> [1] 121/7</p> <p><b>October</b> [3] 111/23 180/17 180/21</p> <p><b>October 1983</b> [3] 111/23 180/17 180/21</p> <p><b>odd</b> [7] 25/25 32/22 36/3 117/24 160/19 160/20 178/25</p> <p><b>odd-one-out</b> [1] 160/19</p> <p><b>off</b> [1] 132/4</p> <p><b>offer</b> [8] 63/22 84/2 85/14 92/5 93/1 94/9 138/14 168/15</p> <p><b>offered</b> [6] 68/9 68/13 68/17 93/3 139/8 142/7</p> <p><b>offering</b> [2] 70/8 94/11</p> <p><b>office</b> [2] 20/11 157/23</p> <p><b>officer</b> [3] 5/6 20/23 158/1</p> <p><b>officers</b> [1] 18/22</p> <p><b>often</b> [9] 41/16 55/22 60/4 68/22 85/10 118/3 126/4 153/9 167/10</p> <p><b>oh</b> [8] 84/12 93/8 99/21 130/19 149/15 154/4 173/25 181/22</p> <p><b>okay</b> [13] 4/9 7/13 40/3 45/8 50/25 91/5 91/20 97/1 116/18 133/8 136/10 140/3 143/3</p> <p><b>old</b> [4] 38/20 110/15 159/8 160/14</p> <p><b>once</b> [10] 8/23 15/14 47/9 51/21 51/21 124/6 133/18 165/13 167/15 171/24</p> <p><b>oncology</b> [1] 13/17</p>					
<p><b>N</b></p>					<p><b>naevi</b> [1] 82/2</p> <p><b>name</b> [7] 34/15 68/5 93/15 134/21 134/21 135/12 157/19</p> <p><b>named</b> [3] 125/22 158/7 179/18</p> <p><b>names</b> [3] 127/21 128/2 131/3</p> <p><b>Napier</b> [5] 33/10 33/19 33/23 39/12 39/18</p> <p><b>national</b> [4] 54/15 145/11 177/6 181/5</p> <p><b>nationally</b> [1] 125/19</p> <p><b>nature</b> [4] 74/20 83/13 111/3 164/21</p> <p><b>nearly</b> [1] 4/17</p> <p><b>Neath</b> [7] 14/4 14/11 14/12 14/20 14/23 15/10 15/16</p> <p><b>necessarily</b> [1] 157/19</p> <p><b>necrosis</b> [1] 28/5</p> <p><b>need</b> [41] 2/9 7/15 11/13 12/25 14/9 15/5 15/5 16/10 17/12 19/20 22/7 22/11 23/5 26/15 41/9 46/22 51/3 56/5 59/4 63/12 63/25 74/3 100/6 105/21 122/24 123/18 126/9</p>	<p><b>New England</b> [5] 73/25 95/16 96/5 96/18 110/25</p> <p><b>Newsport</b> [1] 42/11</p> <p><b>news</b> [3] 70/11 70/17 132/6</p> <p><b>newsletters</b> [1] 105/17</p> <p><b>newspapers</b> [1] 157/14</p> <p><b>next</b> [9] 10/19 34/13 38/14 63/25 81/2 127/10 147/6 150/22 169/7</p> <p><b>NHS</b> [46] 12/18 12/24 13/11 25/1 25/10 25/20 28/24 30/1 30/13 30/15 30/15 30/17 32/20 33/5 33/14 33/18 35/1 35/5 35/11 36/1 39/3 39/13 39/17 60/14 60/16 60/21 61/6 61/8 61/19 61/19 61/22 61/24 66/12 66/16 66/18 68/11 75/12 75/15 99/1 114/19 154/20 158/21 160/9 160/15 160/16 160/23</p> <p><b>NHS concentrate</b> [1] 154/20</p>	<p><b>NHS Factor VIII</b> [3] 25/10 25/20 66/12</p> <p><b>night</b> [5] 8/6 9/15 9/20 10/4 42/14</p> <p><b>nightmare</b> [1] 181/9</p> <p><b>nights</b> [1] 9/18</p> <p><b>nitrate</b> [1] 116/14</p> <p><b>nitrates</b> [1] 104/15</p> <p><b>no</b> [74] 17/5 18/4 31/18 34/6 34/9 35/22 37/11 43/17 44/17 45/12 47/18 50/12 56/12 65/9 65/24 65/24 66/8 66/20 68/3 68/5 70/16 74/14 76/8 76/16 76/23 78/23 80/10 82/17 84/23 86/8 87/11 90/10 90/14 94/15 98/9 98/19 98/21 100/2 103/1 103/2 108/13 111/13 112/19 112/24 113/3 114/18 114/22 115/2 115/4 117/8 118/9 119/10 127/3 131/1 132/8 132/18 132/19 135/8 139/7 144/15 144/18 146/23 150/17 150/17 151/5 151/14 154/20 158/12 161/6 163/25 167/20 180/10 182/1 182/13</p> <p><b>nobody</b> [4] 1/20 49/21 71/21 107/3</p> <p><b>noises</b> [1] 39/23</p> <p><b>non</b> [84] 60/23 60/23 69/21 71/17 71/17 71/20 71/21 71/22 71/22 72/5 72/5 72/12 72/12 72/21 72/21 73/5 73/5 74/19 74/19 75/15 75/15 75/19 75/19 75/25 75/25 76/4 76/4 76/10 76/10 78/16 78/16 79/3 79/4 79/21 79/21 79/22 79/22 79/23 79/23 79/24 79/24 80/5 80/5 80/8 80/8 81/7 81/7 81/16 81/16 83/13 83/13 83/19 83/19 85/20 85/20 85/23 85/23 86/4 86/5 87/3 87/3 87/18 87/18 88/5 88/5 89/20 89/20 93/6 93/7 93/11 93/11 93/16 93/16 93/23 93/23 105/25 105/25 128/25 134/14 134/14 140/22 171/18 171/18 179/8</p> <p><b>non-A</b> [40] 60/23</p>	<p>71/17 71/20 71/22 72/5 72/12 72/21 73/5 74/19 75/15 75/19 75/25 76/4 76/10 78/16 79/3 79/21 79/22 79/23 79/24 80/5 80/8 81/7 81/16 83/13 83/19 85/20 85/23 86/4 87/3 87/18 88/5 89/20 93/6 93/11 93/16 93/23 105/25 134/14 171/18</p> <p><b>non-B</b> [40] 60/23 71/17 71/21 71/22 72/5 72/12 72/21 73/5 74/19 75/15 75/19 75/25 76/4 76/10 78/16 79/4 79/21 79/22 79/23 79/24 80/5 80/8 81/7 81/16 83/13 83/19 85/20 85/23 86/5 87/3 87/18 88/5 89/20 93/7 93/11 93/16 93/23 105/25 134/14 171/18</p> <p><b>non-haemophiliac</b> [1] 140/22</p> <p><b>non-haemophiliacs</b> [1] 179/8</p> <p><b>non-heat-treated</b> [1] 128/25</p> <p><b>non-malignant</b> [1] 69/21</p> <p><b>none</b> [8] 8/14 25/8 28/23 30/8 103/4 131/13 146/5 178/3</p> <p><b>normal</b> [6] 31/5 77/7 97/4 173/7 175/11 175/11</p> <p><b>normally</b> [2] 2/13 120/10</p> <p><b>North</b> [1] 180/15</p> <p><b>North America</b> [1] 180/15</p> <p><b>nose</b> [1] 26/23</p> <p><b>not</b> [307]</p> <p><b>not ... 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<b>transferred [1]</b> 150/21	<b>try [16]</b> 12/18 12/24 13/1 39/12 46/18 59/7 69/13 70/1 70/13 129/10 168/5 168/8 168/20 168/21 171/11 178/10	<b>undertaken [1]</b> 172/21	<b>unrecovered [1]</b> 149/21	<b>used [90]</b> 5/8 5/16 8/4 8/15 9/6 9/11 10/19 14/6 14/24 15/12 15/12 15/22 16/8 18/24 20/17 20/22 21/4 24/10 24/25 25/2 25/8 25/12 27/3 27/14	
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<b>transfused [3]</b> 110/13 111/10 148/16	<b>try [16]</b> 12/18 12/24 13/1 39/12 46/18 59/7 69/13 70/1 70/13 129/10 168/5 168/8 168/20 168/21 171/11 178/10	<b>undertaken [1]</b> 172/21	<b>unrecovered [1]</b> 149/21	<b>used [90]</b> 5/8 5/16 8/4 8/15 9/6 9/11 10/19 14/6 14/24 15/12 15/12 15/22 16/8 18/24 20/17 20/22 21/4 24/10 24/25 25/2 25/8 25/12 27/3 27/14	
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