

*Over a period of 10 years*

IN THE HIGH COURT OF JUSTICE  
QUEEN'S BENCH DIVISION

*Lynne  
v. Bumble*

RE HIV HAEMOPHILIACS LITIGATION

*Jian  
9/12*

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THE REAMENDED  
MAIN STATEMENT OF CLAIM

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*for (*  
*the*  
*copy*  
NOTE: All particulars of knowledge of any length are now in  
appendices at the end. They have very few amendments.

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## 1. Definitions and abbreviations:

AIDS: Acquired Immune Deficiency Syndrome

ARC: AIDS-related complex.

ASTMS: Assoc. of Scientific, Technical and Managerial Staff.

BPL: The Blood Products Laboratory, Elstree

CBLA: The Central Blood Laboratories Authority

CDC: The Centers for Disease Control, United States

CDSC: The Communicable Disease Surveillance Centre.

THE CENTRAL DEFENDANTS: the Department of Health, the Welsh Office, the Licensing Authority and the Committee on the Safety of Medicines.

CSM: The Committee on the Safety of Medicines

DHA: District Health Authority.

DHSS: The Department of Health and Social Security.

FDA: The Food and Drugs Administration, United States.

THE FIRST CENTRAL DEFENDANTS: The Department of Health and the Welsh Office.

THE HEALTH AUTHORITIES: The Regional Health Authority Defendants, the District Health Authority Defendants and the Special Health Authority Defendants.

HIV: Human Immuno-Deficiency Virus, formerly HTLVIII/LAV.

INTIMATE: Sexual partners and/or people living in the same household and/or people in regular intimate physical contact.

MMWR: Morbidity and Mortality Weekly Report, published by the CDC.

NANB: Non A Non B (Re Hepatitis).

OTHER VIRAL INFECTION: defined in paragraph 22A.

RHA: Regional Health Authority.

SHA: Special Health Authority.

I DESCRIPTION OF THE PARTIESA CATEGORIES OF PLAINTIFFS

2. (a) (1) Haemophiliacs who have been treated with non-heat-treated Factor VIII and have developed AIDS;

(ii) Haemophiliacs who have been treated with non-heat-treated Factor IX and have developed AIDS;

(iii) Haemophiliacs who have been treated with heat-treated Factor VIII or IX and have developed AIDS;

(b) (1) Haemophiliacs who have been treated with non-heat-treated Factor VIII and who have seroconverted and/or been infected with HIV, but have not yet developed AIDS;

(ii) Haemophiliacs who have been treated with non-heat-treated Factor IX and who have seroconverted and/or been infected with HIV, but have not yet developed AIDS;

(iii) Haemophiliacs who have been treated with heat-treated Factor VIII or IX, and who have seroconverted and/or been infected with HIV but have not yet developed AIDS;

- (c) Plaintiffs who are not Haemophiliacs but are the intimates of Haemophiliacs and have sero-converted and/or been infected with HIV and developed AIDS through contact (direct or indirect) with their Haemophiliac intimate;
- (d) Plaintiffs who are not Haemophiliacs but are the intimates of Haemophiliacs and have sero-converted and/or been infected with HIV (but not yet developed AIDS) through contact (direct or indirect) with their Haemophiliac intimate;
- (e) Plaintiffs HIV ~~AIDS~~ infected in utero, perinatally or through contact (direct or indirect) with their haemophiliac intimate and have sero-converted and/or been infected with HIV and developed AIDS;
- (f) Plaintiffs HIV infected in utero, perinatally or through contact (direct or indirect) with their haemophiliac parent and have sero-converted and/or been infected with HIV (but not yet developed AIDS);
- (g) Plaintiffs who have not sero-converted and/or been infected with HIV to their knowledge, but are at risk of doing so because they are the intimates of



Haemophiliacs who have sero-converted and/or been infected with HIV or developed AIDS.

(h) An infant falling within any of the foregoing categories.

(i) The Executor or Administrator of a Deceased, who fell within any of the foregoing categories.

#### B THE CENTRAL DEFENDANTS

3. At all material times The Secretary of State for Health and the Secretary of State for Wales as regards Wales and their predecessors in office (for whose acts and omissions they are responsible) have owed the following statutory duties (since 29th August 1977 pursuant to Section 1 of the National Health Service Act 1977 and before that date pursuant to the National Health Service Act 1946 as amended by the National Health Service Reorganisation Act 1973): to provide and secure in England and Wales the effective provision of medical and other services for the improvement of physical and mental health and for the prevention, diagnosis and treatment of illness. In particular, and without prejudice to the generality of the foregoing, the Secretary of State for Health and/or the Secretary of State for Wales and their predecessors in office are and at all material times have been responsible for:

- (a) The provision of a national blood transfusion service;
- (b) The provision of a national blood products laboratory;
- (c) The provision of a national epidemiological service;
- (d) The provision and coordination of research;
- (e) The acquisition and dissemination of information (relevant to any of their statutory duties and functions) both within and outside the health services;
- (f) The formulation and dissemination of advice (relevant to any of their said statutory duties) both within and outside the health services;
- (g) The formulation and dissemination of warnings (relevant to any of their said statutory duties) both within and outside the health services;
- (h) The consideration, formulation, dissemination and imposition of both mandatory and prohibitory instructions (relevant to any of their said statutory duties) both within and outside the health services;
- (i) The supervision, coordination and control of the health authorities of England and Wales.

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4. The Licensing Authority, by virtue of Section 6 and 7 of the Medicines Act 1968, is responsible for the grant, renewal, variation, suspension and revocation of licences in relation to the sale, supply or import of medicinal products.

5. ~~No person, with certain exceptions, may sell, supply or~~  
import medicinal products except in accordance with a  
product licence granted to them by the Licensing Authority.
6. The Licensing Authority, by virtue of Sections 19 and 24 of  
the Medicines Act 1968, shall, in considering the grant or  
renewal of a licence, take into account the safety of the  
medicinal product in question.
7. The Licensing Authority, by virtue of Section 28 of the  
Medicines Act 1968, may suspend, revoke or vary the  
provisions of any licence on the grounds that the medicinal  
product in question can no longer be regarded as a product  
which can safely be administered for the purposes indicated  
in the licence.
8. The Committee on the Safety of Medicines ("CSM") is  
established under the Medicines (Committee on Safety of  
Medicines) Order 1970 pursuant to Section 4 of the  
Medicines Act 1968 with the following purposes:
  - (a) giving advice with respect to safety, quality and  
efficacy, in relation to medicinal products;
  - (b) promoting the collection and investigation of  
information relating to adverse reactions, for the  
purpose of enabling such advice to be given.

C THE HEALTH AUTHORITIES1 REGIONAL HEALTH AUTHORITIES

9. ~~In Wales there are no Regional Health Authorities and instead the Welsh Office performs the function performed of a Regional Health Authority for the Principality; accordingly in this pleading RHA refers to the 14 Regional Health Authorities in England and to the Welsh Office in its role as a Regional Health Authority for Wales.~~  
In Wales there are no Regional Health Authorities and instead the functions performed by Regional Health Authorities in England are performed by the Welsh District Health Authorities; accordingly in this pleading RHA refers to the 14 Regional Health Authorities in England and to the Welsh District Health Authorities in their roles as Regional Health Authorities in Wales.
10. At all material times, the RHAs are and have been responsible within their respective regions, along with the Secretaries of State for Health and for Wales and their predecessors in office, for discharging the duties pleaded in paragraph 3. In particular, and without prejudice to the generality of the foregoing, they are responsible within their respective regions for:
- a. The blood transfusion service;
  - b. The provision of hospital, medical, nursing, specialist and administrative services;

- c. The provision of care, treatment, management and medication for haemophiliacs;
- d. The provision and administration of haemophilia centres;
- e. Research into the care, treatment, management and medication for and needs of haemophiliacs;
- f. Co-operation and co-ordination with other RHAs in respect of the above matters;
- g. RHAs are vicariously responsible for the acts and omissions of:
  - i Medical practitioners appointed by them;
  - ii Their other servants and agents;
  - iii DHAs within their region;
  - iv Servants and agents of DHAs within their region.

In addition:

- h. The following RHAs are or have been responsible for the provision and administration of haemophilia reference centres, whose responsibilities extend beyond the region in question:

|  |                         |
|--|-------------------------|
| Northern RHA                                       | (Newcastle);            |
| Trent RHA  | (Sheffield);            |
| North Western RHA                                  | (Manchester);           |
| Oxford RHA   | (Oxford);               |
| <del>Welsh Office</del> <u>South Glamorgan DHA</u> | (Cardiff);              |
| North East Thames RHA                              | (Royal Free Hospital);  |
| South East Thames RHA                              | (St.Thomas's Hospital). |

- i. In addition to the BPL, Oxford RHA has responsibility for manufacture of Factor VIII and Factor IX concentrate.

10A From 1978 until 1st December 1982 North West Thames RHA had the task on behalf of the Secretary of State for Health and Social Services to administer, develop and manage the Blood Products Laboratories. During the said period the said RHA was responsible, along with the said Secretary of State, for the provision of a National Blood Products Service, for the provision and coordination or research into blood products and for the formulation and dissemination to Health Authorities and clinicians of advice and warnings relating to the collection of blood and the use of blood products.

## 2 DISTRICT HEALTH AUTHORITIES

11. At all material times, the DHAs are and have been responsible within their respective districts, along with the Secretary of State for Health and in Wales the Secretary of State for Wales and the relevant RHA, for discharging the duties pleaded in paragraph 3. In particular, and without prejudice to the generality of the foregoing, they are responsible within their respective districts for:

- a. The provision of hospital, medical, nursing, specialist and administrative services;
- b. The provision of care, treatment, management and medication for haemophiliacs;
- c. The provision and administration of haemophilia centres in certain districts;
- d. Research into the care, treatment, management and medication for and needs of haemophiliacs;
- e. Co-operation and co-ordination with other DHAs and their RHA in respect of the above matters;
- f. DHAs are vicariously responsible for the acts and omissions of:
  - i Medical practitioners appointed by them;
  - ii Their other servants and agents.

### 3 SPECIAL HEALTH AUTHORITIES

12. At all material times, the SHAs are and have been responsible within their respective fields of activity, along with the Secretary of State for Health and in Wales the Secretary of State for Wales and the relevant RHA and the neighbouring DHAs, for discharging the duties pleaded in paragraph 3. In particular, and without prejudice to the generality of the foregoing, they are responsible within their respective fields of activity for:

- a. The provision of hospital, medical, nursing, specialist and administrative services;
- b. The provision of care, treatment, management and medication for haemophiliacs;
- c. The provision and administration of haemophilia centres in certain cases;
- d. Research into the care, treatment, management and medication for and needs of haemophiliacs;
- e. Co-operation and co-ordination with neighbouring DHAs and the relevant RHA in respect of the above matters;
- f. SHAs are vicariously responsible for the acts and omissions of:
  - i Medical practitioners appointed by them;
  - ii Their other servants and agents.

12A. By Statutory Instrument 1982 No 1515 made by the Secretary of State for Social Services a SHA called the Central Blood Laboratories Authority was created on 1st December 1982 to administer, develop and manage the Blood Products Laboratories. It inherited the tasks then being performed by North West Thames RHA. It was thereafter responsible, along with the said Secretary of State, for the provision of a National Blood Products Service, for the provision and coordination of research into blood products and for the formulation and dissemination to the Health Authorities and



Clinicians of advice and warnings relating to the collection of blood and the use of blood products.

## II HISTORY

### A HAEMOPHILIA AND BLOOD PRODUCTS

13. Haemophilia is generally an hereditary disease and is characterised by an impaired ability of the blood to clot. There is a tendency to spontaneous bleeding which is controlled with difficulty.
14. Haemophilia A consists of a deficiency of blood component Factor VIII. Haemophilia B, or Christmas Disease, consists of a deficiency of blood component Factor IX. Haemophilia A is approximately ten times as common as Haemophilia B. There are other ~~rarer~~ forms of haemophilia.
15. Haemophiliacs with under 1% of normal levels of Factor VIII or IX are severely affected. Haemophiliacs with between 1% and 5% of normal levels are moderately affected and have infrequent attacks of bleeding. Haemophiliacs with between 5% and 20% of normal levels are mildly affected and very seldom suffer spontaneous bleeding, requiring assistance only while undergoing surgery, dental extractions or trauma. People with between 20% and 40% of normal levels are very mild haemophiliacs, and only require treatment

during major surgery or major trauma. These definitions are generally accepted.

16. Methods of treatment of haemophiliacs include the following:

*Cryoprecipitate*  
(a) Cryoprecipitate. Plasma can be frozen and thawed, precipitating protein rich in Factor VIII which is separated and refreezed, forming cryoprecipitate. The potency varies, and it has to be stored frozen. It is prepared from blood given by one or a small number of donors, so that there is a far smaller risk of conveying hepatitis viruses or HIV ~~AIDS~~ or other viruses than there is with concentrate. Cryoprecipitate became available in or about 1967.

*Concentrate*  
(b) Concentrates. Concentrated Factor VIII and IX preparations have a high and standardised potency, so large amounts can conveniently be given to a patient. There are two main types of concentrate: NHS Concentrate is a freeze-dried concentrate made within the NHS, mostly at the BPL but also at Oxford, from plasma pooled from voluntary donations of blood. Commercial concentrate is imported, mostly from the United States. It is made from pools of blood supplied in the main by paid donors collected typically by plasmapheresis, a method of collection where red cells are returned to the donor after the

extraction of plasma, and hence the paid donor can give blood and collect payment much more frequently.

(c) Animal Concentrates. These are prepared from bovine or porcine plasma.

(d) Desmopressin. Desmopressin can be injected into a patient and produces a marked, transient, increase in Factor VIII activity in patients with mild or moderate haemophilia A and patients with von Willebrand's disease. It is not a blood product.

(e) Tranexamic acid. This damps down the natural tendency to dissolve blood clots. It is used in superficial bleeding and bleeding in the mouth. It is not a blood product.

(f) Haemophiliacs may be treated by transfusing plasma.

(g) No treatment, with or without immobilization of the site of any bleeding.

17. Blood products, including Factor VIII and Factor IX concentrates, are medicinal products within the meaning of The Medicines Act 1968.

18. Transfusions of blood and blood products have long been known to carry the risk of transmission of a variety of viral, bacterial and other diseases, notably hepatitis.

B HEPATITIS AND/OR OTHER VIRAL INFECTIONS1. THE MAGNITUDE OF THE RISK

19. Hepatitis is an infective condition affecting the liver. The symptoms may include jaundice, fever, digestive disturbances, an enlarged and tender liver and abnormalities of liver enzymes, with permanent or temporary damage to the liver. Infection with hepatitis may be fatal. Hepatitis is caused by viruses which are found (inter alia) in the blood and in blood products. Hepatitis arising from contact with blood or blood products is caused by either hepatitis B virus, or by a virus causing hepatitis NANB identified as hepatitis C virus, or by a virus or viruses causing hepatitis NANB which has or have not been identified. Hereinafter the expression 'hepatitis NANB virus' means any virus or viruses transmitted by blood or blood products which can cause hepatitis NANB.
20. At all material times, haemophiliacs were at great and particular risk of infection with hepatitis B and/or NANB viruses and/or other viral infections from blood products used by them, which, in the case of Hepatitis B and/or NANB could cause the serious illness of jaundice, liver disease, and could sometimes lead to death, and in the case of other viral infections could cause serious illness and could lead to death. Haemophiliacs are at particular risk because of their exposure to blood products.

21. At all material times, the magnitude of the special risk of hepatitis and/or other viral infections to haemophiliacs, as aforesaid, was or should have been known to the Defendants or any of them.

## 2 THE RISKS FROM COMMERCIAL CONCENTRATE

22. At all material times:

- (a) Commercial Concentrate was several times more likely to transmit hepatitis and/or other viral infections to haemophiliacs than NHS concentrate;
- (b) making concentrate from a large pool of donors increased the risk to haemophiliacs of hepatitis and/or other viral infections; this was because one donation infected with the hepatitis or other viruses would infect the whole pool;
- (c) making concentrate from paid donors increased the risk to haemophiliacs of hepatitis and/or other viral infection; this was because paid donors are more likely to come from classes of people such as intravenous drug abusers at an increased risk of hepatitis and/or other viral infection, and because paid donors have a motive not to disqualify themselves from giving blood if they are at risk of transmitting hepatitis and/or other viral infection;
- (d) the increased risk of hepatitis and/or other viral infection from imported commercial concentrate as compared with NHS concentrate was due to the larger

pool size and the use of paid donors and plasmapheresis.

22A. 'Other viral infection' referred to in paragraph 22 herein is infection by

- (a) Exotic viruses, being viruses not endemic in United Kingdom; and
- (b) Unknown viruses, being viruses as yet unknown or unidentified or unidentified in human beings but the existence or future existence of which could or should have been anticipated and catered for, given the evolution of viruses and their study during the Twentieth Century; and
- (c) Known viruses not previously affecting blood donors and/or not previously associated with blood transfusion.

The communities of intravenous drug abusers and sexually active homosexuals in the United States (from whom much of the commercial concentrate derives) are communities in which such viral infections were liable to take hold and spread rapidly.

23. At all material times the facts pleaded in paragraphs 22 and 22A were or should have been known by the Defendants or any of them.

PARTICULARS OF KNOWLEDGE

The best particulars that the Plaintiffs are able to give before discovery and interrogatories are ~~as follows~~ listed in appendix 1.

### 3 THE ECONOMICS OF SELF SUFFICIENCY

24. At all material times it was alternatively on the best available estimates it was more economically efficient to produce Factor VIII concentrates in the United Kingdom and/or England and Wales than it was to import commercial concentrate.
25. Published estimates of the cost benefits of self-sufficiency always alternatively generally ignored the increased expense of treating haemophiliacs infected with hepatitis and/or other viruses by reason of the greater infectivity of imported Factor VIII concentrate.
26. At all material times the Central Defendants or any of them knew or should have known the matters pleaded in paragraph 24.

### PARTICULARS OF KNOWLEDGE

The best particulars that the Plaintiffs are able to give before discovery and interrogatories are listed in Appendix 2. ~~as follows:~~

#### 4. SELF SUFFICIENCY

27. The following were the estimated consumption requirements of clotting products in the United Kingdom at various times, which the Central Defendants knew or should have known:

- (a) In or about 1974, the Report of the Medical Research Council's Blood Transfusion Committee estimated that the total requirement of Factor VIII in England and Wales was between 38,327,800 and 53,000,000 Factor VIII units per annum, and the majority of that would be concentrate.
- (b) In an article published in the British Medical Journal on 18th September 1976, Dr JD Cash, Director of the South-East Scotland Regional Blood Transfusion Centre, Edinburgh, estimated that 50 million units of Factor VIII would be needed each year in the UK.
- (c) In 'The treatment of Haemophilia A and B and Von Willebrand's Disease' edited by Dr Rosemary Biggs, Oxford 1978, Dr Biggs stated in Chapter four that between 41,250,000 and 49,500,000 Factor VIII units per year were required to treat United Kingdom haemophiliacs.
- (d) In the Medical World in December 1980, Norman Pettitt of the ASTMS covering the BPL recommended United Kingdom self-sufficiency in blood products of 90 million Factor VIII units.



- (e) In the House of Commons on 15th December 1980, Sir George Younger, Under-Secretary of State for Health and Social Security, in an adjournment debate on the blood transfusion service, announced new investment to double BPL production to 30 million units, but recognised that this would not be enough for self-sufficiency.
  - (f) The December 1981 Report of the Working Party on Plasma Supplies of the Advisory Committee on the National Blood Transfusion Service determined that 100 million units of Factor VIII concentrates was a reasonable estimate for requirements in the mid 1980's.
28. In or about 1975 the following parliamentary written answers made on behalf of the Secretary of State for Social Services committed the Department of Health to investing sufficient monies to ensure United Kingdom self-sufficiency in blood products, recognised the economic efficiency of so doing, and recognised the harm caused to haemophiliacs by the delay:
- (a) On 22nd January 1975, Dr David Owen stated that imported Factor VIII concentrate was very expensive. He said that it was vitally important that the NHS should become self-sufficient as soon as practicable, and announced that he had authorised finance to boost

- United Kingdom production with the objective of becoming self-sufficient over the coming few years.
- (b) On 25th February 1975, Dr David Owen stated that he had authorised finance of £500,000 to increase production of United Kingdom Factor VIII, which should make the United Kingdom self-sufficient in two or three years, and that all commercial concentrate would cost £1.5 million to £2 million annually. He recognised the hardship that could be caused by under-treatment with Factor VIII caused by the lack of self-sufficiency.
- (c) On 26th February 1975, Dr David Owen stated that imported concentrate was very expensive. He said that it was vitally important that the NHS should become self-sufficient as soon as practicable, and announced that he had authorised finance of £500,000 to boost United Kingdom production.
- (d) On 14th March 1975, Mr Alec Jones implicitly recognised that the shortage of United Kingdom Factor VIII had caused disabilities in patients. He stated that £500,000 was being invested to produce sufficient Factor VIII.
- (e) On 25th March 1975, Dr David Owen stated that he had already authorised up to £500,000 to increase Factor VIII production with the aim of making the NHS self-sufficient.

- (f) On 6th May 1975, Dr David Owen stated that he was distributing £500,000 to enable enough production of plasma from which the BPL could produce Factor VIII, with the aim of becoming self-sufficient.
  - (g) On 7th July 1975, Dr David Owen stated that the Department of Health's policy was to make the NHS self-sufficient in the production of Factor VIII as soon as possible.
  - (h) On 8th July 1975, Dr David Owen stated that he had allocated additional funds so the regional blood transfusion centres can provide more plasma for increased production of Factor VIII concentrate, and he stated that the NHS would be self-sufficient in such concentrate within two to three years.
  - (i) On 14th October 1975, Dr David Owen stated that the NHS did not produce sufficient clotting concentrate, and that money had been allocated to the regional blood transfusion centres to provide more plasma for this material. He hoped that two-thirds of the present requirement of clotting factor would be met in about a year, and that the target recommended by an expert group would be met within two years.
29. (a) In a parliamentary written answer on 2 ~~0~~<sup>6</sup>th June 1978 Mr Moyle on behalf of the Secretary of State for Social Services stated that the target of 15 million

international units of Factor VIII had been met. He recognised that the target had become insufficient.

- (b) The said target was unrealistically low, given the best estimates of consumption requirements.

30. (a) In a parliamentary written answer on 7th December 1978 Mr Moyle on behalf of the Secretary of State for Social Services recognised that self sufficiency had not been reached, and stated that the Department of Health was reviewing current levels of production.

- (b) No alternatively no substantial capital expenditure was started until December 1980, and no capital expenditure sufficient to raise production levels significantly was started until November 1981.

31. Actual consumption of Factor VIII in the United Kingdom and Northern Ireland in millions of units from 1969 to 1987 was approximately as follows:

| Year | Total including<br>Concentrate and<br>Cryoprecipitate | NHS<br>Concentrate | Commercial<br>Concentrate |
|------|---|--------------------|---------------------------|
| 1969 | 6.945   | 1.025              | nil                       |
| 1970 | 8.189   | .884               | nil                       |
| 1971 | 11.823  | 3.071              | nil                       |
| 1972 | 11.039  | 1.939              | .095                      |
| 1973 | 15.829  | 2.481              | .875                      |

|      |        |        |        |
|------|--------|--------|--------|
| 1974 | 20.548 | 2.732  | 2.681  |
| 1975 | 24.886 | 3.085  | 5.152  |
| 1976 | 33.716 | 6.915  | 11.069 |
| 1977 | 43.193 | 12.949 | 15.017 |
| 1978 | 45.050 | 14.600 | 19.273 |
| 1979 | 50.716 | 15.092 | 26.178 |
| 1980 | 57.271 | 14.364 | 34.749 |
| 1981 | 65.7   | 22.472 | 35.5   |
| 1982 | 73.732 | 22.892 | 45.644 |
| 1983 | 71.008 | 30.018 | 26.217 |
| 1984 | 79.910 | 40.192 | 34.003 |
| 1985 | 77.344 | 23.097 | 50.902 |
| 1986 | 88.491 | 31.483 | 53.754 |
| 1987 | 87.857 | 25.982 | 59.186 |

[Source Haemophilia Centre Directors' Annual Statistics for 1975, British Journal of Haematology 1977; Treatment of Haemophilia and related disorders in Britain and Northern Ireland during 1976-1980, British Medical Journal 19th March 1983; Centre Directors annual statistics]

32. The Department of Health started investing the following approximate sums in the National Blood Transfusion Service and/or BPL in order to increase the production of Factor VIII concentrate at the approximate dates given:

(a) In or after 1975, £0.5 m.

- (b) In or after December 1980, £1.25m.
- (c) In or after November 1981, £21.1m.
33. In or about 1980, the BPL was declared unfit for good manufacturing practice by the Department of Health's Medicines Division.
34. (a) Up until October 1978, the BPL was managed by the Lister Institute. From October 1978, the BPL was managed by the North West Thames Regional Health Authority on an interim basis while a permanent solution to the organisation and management of the BPL was found. From 1st December 1982, the BPL was managed by the Central Blood Laboratories Authority.
- (b) At all material times the Secretary of State for Health and his predecessors in office are and were answerable for the acts and omissions of the Lister Institute, North West Thames Regional Health Authority and the Central Blood Laboratories Authority in and about their management of the BPL.
35. Between 1970 and about the mid 1980's the average size of the pools of donors used to produce NHS concentrate increased greatly from approximately 200 to approximately 15,000.

36. From about 1976, the Protein Fractionation Centre in Scotland was capable of providing England with all alternatively a sizeable proportion of the requirements for Factor VIII and IX concentrates which were not met by NHS concentrate made in England.

37. The Defendants or any of them did or should have known the facts and matters pleaded in paragraph 36 above from about 1975.

PARTICULARS OF KNOWLEDGE

(a) In a World In Action television programme broadcast in or about the end of 1975, Dr John Watt of the Scottish Blood Transfusion Service stated that with sufficient plasma supplied, the Protein Fractionation Centre, Edinburgh, could supply sufficient Factor VIII concentrate for about half of the needs of the haemophiliacs in Britain.

(b) In an article by DO Gordon published in Medical World in September/October 1981, it was reported that the Protein Fractionation Centre, Edinburgh, was opened in 1976 and was under utilised and could process blood to serve a population of around 25 million.

~~38. At all material times, the National Blood Transfusion Service was managed by Regional Health Authorities; there was little or no central administration or coordination.~~

#### 5 HEAT TREATMENT OF BLOOD PRODUCTS

39. From the late nineteenth century pasteurisation was widely used to render substances free from infective organisms, including particularly viruses. For over forty years, Albumin, a blood product, has been heat-treated against viral infections such as hepatitis.
40. At all material times, heat-treatment of blood products used to treat haemophiliacs would, alternatively might, have offered them total, alternatively substantial, alternatively some protection against infection with hepatitis B and/or NANB and/or other viral infections from blood products.
41. From 1982 or such later date as may be justified on the evidence at trial, commercial heat-treated clotting concentrate was available in the United States. From about 1980, commercial heat-treated clotting concentrate was available in West Germany.
42. In or about 1981 work to reduce the infectivity of Factors VIII and Factors IX concentrate by heat-treatment was



started at the BPL. The first successful preparations were produced in August 1984.

43. At the times stated in the relevant paragraph, alternatively soon thereafter, the Central Defendants and/or Health Authorities or any of them were or should have been aware of the matters referred to in Paragraphs 40 and 41 above.

PARTICULARS OF KNOWLEDGE

The best particulars that the Plaintiffs are able to give before discovery and interrogatories are listed in Appendix 3. as follows:

6 OTHER SOLUTIONS TO THE RISK OF HEPATITIS

AND/OR OTHER VIRAL INFECTIONS

44. At all material times, cryoprecipitate was available for the treatment of haemophiliacs suffering from Factor VIII deficiency, and was much less likely to transmit hepatitis and/or other viral infections than treatment by concentrate.
45. At all material times the Central Defendants and/or the Health Authorities or any of them knew or should have known the same.

PARTICULARS OF KNOWLEDGE

The best particulars the Plaintiffs are able to give before discovery and interrogatories are listed in Appendix 4. as follows:

46. Desmopressin was available from about 1977 as an acceptable form of treatment for mild and moderate haemophiliacs. Desmopressin could not transmit hepatitis and/or other viral infections.
47. From the dates pleaded, the Defendants or any of them knew or should have known the matters pleaded in paragraph 46.

PARTICULARS OF KNOWLEDGE

The best particulars the plaintiffs are able to give before discovery and interrogatories are listed in Appendix 5. as follows:

48. In or before 1977, Animal Factor VIII and/or IX was available as a form of treatment for haemophiliacs in certain cases. Animal Factor did not transmit hepatitis and/or other viral infections, alternatively was much less likely to do so than Concentrate.
49. The Defendants or any of them knew or should have known the matters pleaded in paragraph 48 above.

PARTICULARS OF KNOWLEDGE

- (a) In 'The treatment of Haemophilia A and B and Von Willebrand's Disease' edited by Dr Rosemary Biggs, Oxford 1978, Dr Biggs stated in Chapter two that Animal Factor VIII could be used to treat haemophiliacs.
- (b) In a letter to the ~~Lancet~~ British Medical Journal on 24th January 1981, E Mayne et al recommended the use of porcine factor VIII to treat haemophiliacs who had developed antibodies to Factor VIII.
- (c) In an article in Clinical and Laboratory Haematology in 1983, BT Colvin et al reported that highly purified porcine Factor VIII was successfully used.
- (d) In 'Blood Transfusion in Clinical Medicine' by Professor P Mollison published in or about January 1983, it was stated that a new porcine Factor VIII concentrate had been recently introduced which was less antigenic than previous animal Factor VIII concentrates.
- (e) In the British Medical Journal for 19th March 1983, C Rizza et al reported on behalf of the directors of haemophilia centres in the United Kingdom that Porcine Factor VIII used to treat patients with antibodies against human Factor VIII were 16,000 units in 1977, 279,000 units in 1979, and 4,491,000 units in 1980.
- (f) In an article published in the British Medical Journal on 10th December 1983, Dr Peter Jones recommended

Porcine Factor VIII for the treatment of mild haemophiliacs.

## C AIDS

### 1 DESCRIPTION OF AIDS

50. AIDS is a disease which occurs where the immune system has been destroyed or damaged by HIV. The sufferer exhibits a prolonged state of vague ill-health, followed by opportunistic potentially lethal infections. Some sufferers develop confusion and other signs of progressive neurological degeneration. The Condition and its direct consequences are probably almost invariably fatal. There is no known cure.
51. AIDS is caused by HIV. HIV invades inter alia white blood cells known as T Helper or T4 cells, that are primarily responsible for preventing infectious diseases. The HIV programmes the invaded T4 cell to produce copies of HIV, at the expense of its immune function. HIV viruses thus produced repeat the process on other T4 cells and in due course sufficient T4 cells have been corrupted in this way to lay the body open to the sort of infections which characterise AIDS.

52. HIV is a virus that is generally contracted through contact of infected blood, blood products or semen with blood, (mainly by sexual intercourse (both homosexual and heterosexual), by the sharing of needles and syringes by intravenous drug abusers, by the transfusion of blood and blood products) and in utero and perinatally and through breast feeding.
53. Infection with the virus is sometimes quickly followed by a feverish illness of short duration. Within a matter of months of infection antibodies to HIV are normally detectable in the blood. The subject is then in the seropositive state and has sero-converted. A person who is in the seropositive state does not by reason of that alone experience any symptoms nor will he know, in the absence of a blood test, that he has sero-converted. A person is and remains HIV infectious from the time that he is infected with the HIV virus and this does not depend on sero-conversion.
54. A person in the seropositive state may develop the condition known as ARC (AIDS-related complex) which is characterised by non-specific symptoms of illness such as swelling of the lymph node, fever, weight loss, diarrhoea, fatigue and night sweats.

55. The incubation period between seroconversion and/or infection with HIV and the development of AIDS is variable but is generally accepted to be usually a matter of years. It is not yet known how long the maximum period may be.
56. All, alternatively most, of the people who have contracted HIV will contract AIDS.

## 2 THE DEVELOPMENT OF THE AIDS EPIDEMIC

57. From 1980, AIDS quickly developed to epidemic proportions in the United States. The spread of the disease was regularly reported by the CDC in MMWR from June 1981 on, and widely reported in Medical Journals, particulars of which are given in paragraph 61 below.
58. From the last quarter of 1982, AIDS developed into epidemic proportions in Britain.
59. In or about September 1982, a scheme to monitor AIDS in the United Kingdom was set up by the CDSC. Information on patients with AIDS was acquired from death certificates mentioning Kaposi's sarcoma, from laboratory reports, and from clinicians. The results were published regularly in the Lancet and other Journals.

60. Important events in the developments of AIDS were as follows:

- (a) In or about June 1981, reports of a very unusual epidemic of the rare diseases Kaposi's sarcoma, pneumocystis carinii pneumonia and severe cases of herpes simplex were reported among New York and Californian homosexuals. The mortality rate was high, which suggested an underlying immunosuppression. Further related diseases were added in time. The epidemic grew rapidly.
- (b) In or about August 1981, an underlying immunosuppression to the said disease was suggested, and such suggestions were reiterated with greater certainty in the following months.
- (c) In or about December 1981, the said diseases were reported to be linked with a virus, and the suggestion of the link was reiterated with greater certainty in the following months.
- (d) In or about December 1981, the first English sufferer from AIDS was reported. From early 1982, there were reports of AIDS sufferers in other European countries.
- (e) In or about April 1982, T cell impairment similar to that found in sufferers of AIDS was found to be widespread in New York homosexuals. Similar findings were reported in the following months. Implicit in such findings was the possibility that existing cases

of AIDS represented only the tip of the iceberg of the epidemic. That possibility was canvassed in articles from the end of 1982.

- (f) In or about July 1982, United States haemophiliacs were first reported as infected by AIDS, and the epidemic grew among United States haemophiliacs in the following months.
- (g) In or about July 1982, a link between AIDS and blood products was suggested, and was repeated with greater certainty in the following months.
- (h) In or about January 1983, a widespread T cell impairment similar to that of AIDS sufferers was reported in United States haemophiliacs receiving clotting factors. Similar reports appeared in the following months. Implicit in such reports was the possibility that the existing haemophiliac sufferers of AIDS represented only the tip of the iceberg of the epidemic. That possibility was canvassed in articles from April 1983.
- (i) In or about March 1983, the tentative identification of the virus responsible for causing AIDS was reported. The confirmed identification of the same was reported in April 1984. The virus was identified as a retrovirus. Implicit in such an identification was the likelihood that the average period from seroconversion to AIDS and thus to severe illness and



death would be many years, and thus existing sufferers  
of AIDS might represent only the tip of the iceberg of  
the epidemic.

61. The Central Defendants and/or the Health Authorities or any of them were or should have been aware of the matters set out in paragraphs 57, 58 and 60 above.

PARTICULARS OF KNOWLEDGE

The best particulars that the Plaintiffs are able to give before discovery and interrogatories are listed in Appendix 6. as follows:

62. In the premises, from July 1982 or soon thereafter, and growing with time, the Defendants or any of them did or should have suspected that haemophiliacs would or might be subject to a grave threat of infection by AIDS, and/or death by reason of the same, by reason of the matters pleaded in paragraphs 57 to 61 above.
63. Between about 1982 and about 1985, the Defendants their servants and agents expressed views doubting the link between AIDS and blood products, and under-estimating and/or under-stating the risk of persons who had seroconverted developing AIDS.

PARTICULARS

The best particulars the Plaintiffs are able to give before discovery and/or interrogatories are as follows:

- (a) In an article published in The Health Services on 6th May 1983, Dr Peter Jones, Director of the Regional Haemophiliac Centre in Newcastle upon Tyne, was reported as saying: "If AIDS was affecting haemophiliacs to such a extent that we should be changing our treatment policies we should already have seen many more cases in America and in West Germany, where vast quantities of blood products are used in their treatment".
- (b) In an article published in the Health Services on 6th May 1983, a DHSS spokesman was reported as saying that there was no concrete evidence that AIDS was being transmitted by American blood imported into Britain; no action could be taken until more information was available.
- (c) In an article published in the Health and Social Service Journal on 12th May 1983, a DHSS spokesman was reported as stressing that there was no proven scientific evidence of a link between AIDS and blood.
- (d) In an article in the Health Services published on 20th May 1983, Dr Peter Jones, director of the Regional Haemophilia Centre, Newcastle upon Tyne stated: "Because some people with haemophilia have contracted a disorder similar to AIDS the suggestion has been

made that the agent responsible is probably a virus which can be transmitted through blood products. The evidence for this is by no means clear, and no special precautions, other than careful follow up, have been suggested for patients in this country".

- (e) In a DHSS press release of 1st September 1983, Mr Kenneth Clarke, Minister for Health, was reported as having said: "It has been suggested that AIDS may be transmitted in blood or blood products. There is no conclusive proof that this is so".
- (f) On 14th November 1983, Mr Kenneth Clarke said in parliament: " There is no conclusive evidence that acquired immune deficiency syndrome (AIDS) is transmitted by blood products."
- (g) In a report published in the Lancet on 5th January 1985, the Chief Medical Officer of the DHSS was reported as saying that even if a person proved positive in the antibody screening test it did not mean that he or she would get AIDS. Only a very small proportion of people with positive results went on to have symptoms.

64. These views were not supported by the information available, as hereinbefore pleaded. They were in the nature of the expression of hope or unjustified optimism, and the adoption of the position that the worst would not

be anticipated in the absence of evidence to that effect. Given what was known of AIDS and its potential risks and implications, it would have been preferable to adopt a position of cautious pessimism and to anticipate the worst. In particular, since AIDS was a new and serious disease of first unknown and then later imperfectly understood aetiology, there was no, alternatively insufficient justification for optimistic assumptions as to its incubation period and as to the likely incidence of the full illness among those who were HIV infected.

### 3 HEAT TREATMENT OF BLOOD PRODUCTS

65. Heat treatment of blood products gives total, alternatively nearly total, protection against the transmission of HIV.
66. In or before February 1985, imported heat-treated Factor VIII and/or IX concentrate was available in England and Wales on a "named patient" basis, implying there were restrictions on its use other than for limited numbers of selected patients. However, as hereinbefore appears, such heat-treated concentrate was obtainable from abroad from 1982 or such earlier date as may be revealed on the evidence at trial.

67. NHS Factor VIII concentrate, heat-treated against HIV, became available from April 1985. It was not, however, available in quantities sufficient to meet the demand.
68. Non heat-treated Factor VIII and/or Factor IX was still in use in England and Wales in May 1985 or such later date as may be justified on the evidence at trial.
69. In or about February 1983, or such later date as may be justified on the evidence at trial, the Central Defendants and the Health Authority Defendants knew or should have known that heat-treatment of blood products could well offer haemophiliacs total, alternatively substantial, alternatively some, protection against infection with HIV and/or AIDS from blood products.

#### PARTICULARS OF KNOWLEDGE

The best particulars that the Plaintiffs are able to give before discovery and interrogatories are listed in Appendix 7. as follows:

#### 4 OTHER METHODS OF TREATMENT

70. At all material times:
- (a) Commercial concentrate was more likely to be contaminated with HIV than NHS concentrate;

(b) Commercial concentrate and NHS concentrate were more likely to be contaminated with HIV than cryoprecipitate, Desmopressin, and animal factor.

71. In or about January 1983 or such later date as may be justified on the evidence at trial, the Central Defendants and/or the Health Authorities or any of them knew or should have known the matters pleaded in paragraph 70 to be true, alternatively likely, alternatively possible.

#### PARTICULARS OF KNOWLEDGE

The best particulars the Plaintiffs are able to give before discovery and interrogatories are listed in Appendix 8. ~~as follows:~~

##### 5 SELECTION AND SCREENING OF BLOOD DONORS

72. The risk of blood being infected with HIV is eliminated alternatively reduced:
- (a) by excluding the blood of donors who are at high risk of contracting AIDS; donors at high risk include all homosexuals, bisexuals and intravenous drug abusers; and
  - (b) by the use of tests to screen blood donations for antibodies to HIV.

73. The DHSS gave the following warnings to exclude and/or discourage blood donors at risk to carrying infection by HIV and/or AIDS:
- (a) On 1st September 1983, the DHSS published a leaflet entitled 'AIDS and how it concerns Blood Donors'.
  - (b) In or about January 1985, the DHSS published advice for blood donors, stating that donors in the following groups should not give blood: practising homosexual and bisexual men; intravenous drug abusers; and sexual contacts of the same.
74. From 1983, the Defendants or any of them knew or should have realised that all homosexual and bisexual males who had had homosexual relations in recent years were high risk donors.

PARTICULARS OF KNOWLEDGE

- (a) In a joint statement issued by the American Association of Blood Banks and other groups on 13th January 1983 and reported in the Journal of the American Medical Association on 4th February 1983, Transfusion for March/April 1983 and Hospitals for 1st May 1983, it was recommended, inter alia, that:
  - (i) donor screening should include specific questions to detect possible AIDS or exposure to patients with AIDS;

- (ii) persons with responsibility for donor recruitment should not target their efforts towards groups that may have a high incidence of AIDS.
- (b) In March 1983, FDA recommended persons at risk of AIDS be asked to refrain from giving blood, those at risk including persons with symptoms and signs suggestive of AIDS, sexually active homosexual or bisexuals with multiple partners, present or past intravenous drug abusers, and sexual partners of the above. The recommendations were promptly implemented by blood collecting agencies in the United States.
- (c) On 23rd June 1983 the Committee of Ministers of the Council of Europe adopted the recommendation and notified the measure to (inter alia) the Department of Health that information should be provided on AIDS to all blood donors so that those in risk groups might refrain from donating.
- (d) In the Autumn of 1983, a committee of Red Magen David, Israel, made recommendations, which were widely followed, that potential donors be asked to avoid giving blood if they had practised homosexual relations in recent years.
- (e) From 1st September 1984, West Germany introduced new regulations requiring the publication on Factor VIII preparations of details of the origin and preparation of the blood, and rules on the identification of



donors, exclusion of ill donors and testing of blood for pathogens.

- (f) In an article published in the ~~Lancet~~ British Medical Journal on 9th March 1985, M Contreras et al of the North London Blood Transfusion Centre stated that they had altered the DHSS leaflet of advice to donors to state that the advice applied to non-promiscuous male homosexuals, and they asked donors to complete a questionnaire.

75. In or about 1983, surrogate tests for AIDS were or could have been available in the United Kingdom, and were available in the United States. Such surrogate tests either detected cellular abnormalities associated with AIDS, or detected past infections with diseases such as hepatitis which have a high incidence in the same population groups that are at increased risk for AIDS.
76. Reliable blood screening tests were available shortly after the definitive identification of the HIV virus was reported in April 1984.
77. In or before February 1985, the Department of Health decided not to make available in England and Wales existing or proposed screening tests until what they deemed to be thorough tests had been performed on those tests.

78. (a) On 2nd March 1985, the FDA approved the first application to market a kit to detect antibodies to HIV.
- (b) Such approval would only have been based on reliable evidence of efficacy.
79. Routine blood Screening began in the United Kingdom in October 1985.
80. The Central Defendants and/or Health Authorities or any of them knew or should have known that reliable blood screening tests were available in or about 1984 alternatively in or about early 1985.

PARTICULARS OF KNOWLEDGE

The best particulars the Plaintiffs are able to give before discovery and interrogatories are as follows:

- (a) On 23rd April 1984, Margaret Heckler, Secretary of the Department of Health and Human Service announced, at a press conference announcing the discovery of the virus responsible for AIDS, that there would be a test to screen blood donors within six months.
- (b) In a report published on 14th September 1984 in Science, it was stated that five competitors were developing test kits for HIV, and it was expected that most of them would be ready soon.

- (c) On December 20th 1984, reported in the Lancet on 5th January 1985, the DHSS's Chief Medical Officer stated that a screening test was being developed in the United Kingdom.
- (d) In an editorial in the Lancet on 22nd December 1984, it was reported that five American companies were confident of producing antibody test kits to exclude seroconverted donors.
- (e) In a statement by the American Association of Blood Banks on 27th December 1984, the introduction of kits to test for antibodies to HIV was announced for early 1985.
- (f) On January 11th 1985, MMWR published the Public Health Service Inter-Agency Recommendations that all donated blood and plasma should be screened for HIV. Dr S Weiss in the Journal of the American Medical Association of the same day stated that the new screening test would be useful.
- (g) On 25th February 1985, Mr Kenneth Clarke, on behalf of the Secretary of State for Social Services, stated that screening tests would be available for general use later in the year after thorough evaluation of the tests on offer.
- (h) On 2nd March 1985, the FDA approved the first application to market a kit to detect antibodies to HIV.

- (i) In a letter in the Lancet on 2nd March 1985 J Carlson et al reported that the United States regulations would soon require the screening of all blood donors for HIV.
- (j) In or about March 1985, the screening of donors was widely used in blood collection centres in the United States.
- (k) At a conference on 15th to 17th April 1985, a group of World Health Authority consultants recommended that blood donors should be screened for HIV antibodies where feasible.
- (l) In an article in the Journal of the American Medical Association on 21st June 1985 by P Miller et al, the question of negligence for not screening blood donations was discussed.

#### D. LICENSING

81. The first commercial concentrate to be licensed was licensed in November 1973. Thereafter three other commercial concentrates (Hemofil, Kryobulin and Profilate) had been licensed by 1975. Other commercial concentrates (Factorate and another Profilate product) had been licensed by 1976. These are the best particulars (including the question of the terms on which products were licensed) that the Plaintiffs can give before discovery.

### III DUTIES OF CARE AND BREACHES OF DUTIES OF CARE

#### A THE FIRST CENTRAL DEFENDANTS

82. At all material times, The First Central Defendants and their predecessors in office, their servants or agents owed the following duties:

(a) To discharge their responsibilities pleaded in paragraph 3 with due diligence and reasonable care;

(aa) To conduct themselves with reasonable care so as not to injure persons liable to be affected by their conduct;

(b) In discharging their duties and responsibilities, to have special regard for inter alia the vulnerable position of haemophiliacs and their intimates;

(c) The said duties are and were owed to all the said categories of Plaintiff and each of them.

83. The First Central Defendants and their predecessors in office, their servants or agents were negligent and/or in breach of their statutory duty.

#### PARTICULARS OF NEGLIGENCE AND/OR

#### BREACH OF STATUTORY DUTY

#### BY THE FIRST CENTRAL DEFENDANT

The best particulars that the Plaintiffs can give before discovery and interrogatories are as follows:

#### 1 SELF-SUFFICIENCY AND THE BLOOD TRANSFUSION SERVICE

- (a) They failed to achieve self-sufficiency for England and Wales in blood products made from blood donated and processed in England and Wales, alternatively the United Kingdom, by a date 2 to 3 years after 1975 or thereafter;
- (b) They permitted the BPL to deteriorate to such an extent that in or about 1980 it was declared unfit for good manufacturing practice by inspectors of the D.H.S.S.'s Medicines Division;
- (c) They failed to devote any significant capital expenditure to the BPL between 1975 and 1983;
- (d) They failed to administer the BPL properly or at all at all material times and in particular between October 1978 and December 1982;
- (e) After the allocation of £21.3M to the BPL in November 1981 they failed to set in place with urgency, alternatively diligence, a proper policy of development and improvement;
- (f) Having embarked upon the redevelopment of the BPL in or about 1982, they failed to achieve self sufficiency by 1989 or such later time as may be revealed by the evidence at trial;
- (g) They failed, from 1970 or such later time as may be justified on the evidence at trial, to create an effective and integrated national blood transfusion service removed from RHA funding and control;

- (h) They failed, from 1970 or such later time as may be justified on the evidence at trial, properly or at all, to control and administer the role of RHAs in the National Blood Transfusion Service;
- (i) They failed, from 1975 or such later time as may be justified on the evidence at trial, either properly or at all to assess future needs for Factor VIII;
- (j) They failed, from 1975 or such later time as may be justified on the evidence at trial, either properly or at all to set targets, alternatively reasonable targets, for the BPL and RHAs both for the future production of Factor VIII and for the collection of blood;
- (k) They failed, from 1975 or such later time as may be justified on the evidence at trial, to impose such targets on the BPL and RHAs;
- (l) They failed, from 1975 or such later time as may be justified on the evidence at trial, to use the spare production capacity in Scotland to eliminate or reduce the Welsh and English need to import commercial Factor VIII concentrate;
- (m) They failed, from 1975 or such later time as may be justified on the evidence at trial, to expand the spare production capacity in Scotland (the Scottish Service being at that time more efficient and less neglected than the English service) to eliminate or

further reduce the Welsh and English need to import commercial Factor VIII concentrate;

(m)A They failed, from 1975 or such later time as may be justified on the evidence at trial, to instruct, alternatively advise, Health Authorities to use plasmapheresis to boost the yield of plasma from volunteer donors in England and Wales so as to eliminate or reduce the need to import commercial Factor VIII concentrate;

(m)B They failed, from 1975 or such later time as may be justified on the evidence at trial, to instruct, alternatively advise, Health Authorities to approach commercial blood products manufacturers to fractionate plasma from volunteer donors in England and Wales.

## 2 MANUFACTURE OF NON-HEAT-TREATED CONCENTRATES

- (n) They should not, from 1977 or such other time as may be justified on the evidence at trial, have permitted the size of donor pools for Factors VIII and IX concentrate to increase, given the risk of hepatitis and/or other viral contamination and given from 1982 the risk of HIV contamination;
- (o) On the contrary they should from the same times and for the same reasons have reduced the size of such donor pools;



- (p) They failed, from the late 1970's or such other time as may be justified on the evidence at trial, to increase the production of home-produced Factor VIII concentrate;
- (q) They permitted the production of home-produced Factor VIII concentrate to fall in 1984/1985;

### 3 HEAT TREATMENT

- (r) They failed, from at least 1970 or such later time as may be justified on the evidence at trial, to have any or any sufficient regard to the need to heat-treat Factors VIII and IX concentrates, given:
  - (i) The ancient principle of pasteurisation;
  - (ii) The risk of hepatitis and/or other viral contamination of such concentrates;
  - (iii) From mid-1982, the risk of HIV contamination of such concentrates;
- (s) They failed, from at least 1970 or such later time as may be justified on the evidence at trial, either sufficiently or at all to require and/or commission and/or encourage research and development of heat treatment of home donated and produced Factors VIII and IX concentrates, given the reasons hereinbefore pleaded;
- (t) They failed, in 1980 or such later time as may be justified on the evidence at trial, to introduce and

impose in England and Wales the use of heat-treated Factors VIII and IX concentrates, in place of non-heat-treated product, given the risk of hepatitis and/or other viral contamination.

- (u) They failed, from mid-1982 or such later time as may be justified on the evidence at trial, to introduce and impose in England and Wales the use of heat-treated Factors VIII and IX concentrates, in place of non-heat-treated product, given the risk of hepatitis and/or other viral contamination and the additional risk of HIV contamination.
- (v) They failed to achieve production of home donated and produced heat-treated Factors VIII and IX concentrates earlier than April 1985; they should have achieved such production by 1980 or such later time as may be justified on the evidence at trial
- (w) Having, in late 1984, announced that home-produced Factor VIII would be heat-treated at the BPL from April 1985, they should forthwith have taken steps to introduce and impose in England and Wales the use of heat-treated Factors VIII and IX concentrates, in place of non-heat-treated product; in particular they should have:
  - (i) directed, alternatively forcefully advised, RHAs, DHAs, SHAs and all prescribing doctors to switch forthwith to imported heat-treated Factor VIII;

- (ii) secured Health Authorities against any financial and budgetary consequences of switching to imported heat-treated Factor VIII.
- (iii) informed Health Authorities that they would be secured against any financial and budgetary consequences of switching to imported heat-treated Factor VIII;
- (iv) directed, alternatively forcefully advised, RHAs, DHAs and SHAs to heat-treat or have heat-treated their existing stocks of concentrate.
- (x) As it was they had, by their announcement, confirmed that they accepted (belatedly, the Plaintiffs will contend) the need for heat treatment to avoid the risk of HIV infection from blood products, yet they offered no instructions or even guidance to Health Authorities and clinicians as to the policy to adopt while waiting for home-produced heat treated Factor VIII to be available in sufficient quantity to satisfy all requirements;

#### 4 SCREENING OF DONORS AND TESTING FOR HIV

- (y) They failed from 1982, or such later time as may be justified on the evidence at trial, to appreciate properly or at all the categories of HIV high risk blood donors and act accordingly, both by appropriate public announcements directed to prospective donors

and by confidential instructions and advice to RHAs and the National Blood Transfusion service;

(z) They failed from 1982, or such later time as may be justified on the evidence at trial, to consider properly or at all the possibility of screening donors by "surrogate testing", namely testing donated blood for evidence of abnormalities of the immune system thought to be associated with AIDS, alternatively testing for hepatitis B;

(aa) From 1982, or such later time as may be justified on the evidence at trial, they should have directed RHAs and the National Blood Transfusion service to:

i refuse and/or to mark for non-use and destruction blood offered by prospective donors who on enquiry revealed themselves to be or on impression and examination appeared to be homosexuals, bisexuals or intravenous drug abusers;

ii perform surrogate testing on blood received from donors and not to use blood where such testing revealed signs of abnormalities of the immune system or hepatitis B;

(ab) They failed, from mid-1984 or such later time as may be justified on the evidence at trial, to introduce and impose in England and Wales routine testing of donated blood for HIV antibodies and/or antigens;

(ac) They adopted a policy of not introducing such testing, in the belief that the test methods were not sufficiently reliable; in adopting such a policy they were in error and, given the nature and gravity of the HIV infection risk and the urgency of the situation, they were negligent;

(ad) They did not introduce and impose routine testing of donated blood in England and Wales until October 1985;

5 HEPATITIS RISK AND/OR RISK OF OTHER VIRAL INFECTIONS

(ae) They failed from the early 1970's or such later time as may be justified on the evidence at trial to appreciate sufficiently or at all:

(i) The risk of infection with hepatitis and/or other viruses to which haemophiliacs were exposed by treatment with Factor VIII and Factor IX concentrate;

(ii) The serious and potentially fatal nature of hepatitis and/or other viruses;

(iii) That the risk of infection with hepatitis and/or other viruses was substantially higher for haemophiliacs treated with commercial concentrate;

(af) They failed from the early 1970's or such later time as may be justified on the evidence at trial to take any or any sufficient steps to remove, alternatively, reduce that risk by:

- (i) Eliminating the need to use imported (non-heat-treated) commercial Factor VIII concentrate;
- (ii) Prohibiting the use of imported (non-heat-treated) commercial Factor VIII concentrate;
- (iii) Favouring, if it was necessary to import non-heat-treated Factor VIII concentrate, imported concentrate from volunteer donors' blood;
- (iv) Heat-treating both Factor VIII and Factor IX concentrate;
- (v) Reducing pool sizes of donated blood for home-produced product;
- (vi) Directing, alternatively forcefully advising, RHAs, DHAs, SHAs and all prescribing doctors to use cryoprecipitate, Desmopressin, porcine factor VIII or other forms of treatment instead of Factor VIII and Factor IX concentrate whenever possible including no treatment; and not, in any event, to use imported (non-heat-treated) Factor VIII or Factor IX concentrate to treat children;

#### 6 AIDS RISK

- (ag) From about 1982 or such later time as may be justified on the evidence at trial they should have been aware of the emergence of AIDS and its implications and acted in the light of that;

- (ah) They should thereafter have been keeping themselves informed of advances in learning and experience in respect of AIDS and acted in the light of that;
- (ai) They should, in particular, in mid-1982 have known of the growing suspicion in the USA of a connection between AIDS and the supply and use of blood products and of the facts and matters pleaded in paragraph 60 hereof and acted in the light of that;
- (aj) They failed from mid-1982 or such later time as may be justified on the evidence at trial to pay any or any sufficient regard to the risk of AIDS to which haemophiliacs were exposed by treatment with Factor VIII and Factor IX concentrate, whether home-produced or commercial;
- (ak) They failed from mid-1982 or such later time as may be justified on the evidence at trial to take any or any sufficient steps to remove, alternatively, reduce that risk by:
  - (i) Eliminating the need to use imported (non-heat-treated) commercial Factor VIII concentrate;
  - (ii) Prohibiting the use of imported (non-heat-treated) commercial Factor VIII concentrate;
  - (iii) Favouring, if it was necessary to import non-heat-treated Factor VIII concentrate, imported concentrate from volunteer donors' blood;

- (iv) Proper screening and/or testing of donors, as hereinbefore particularised;
  - (v) Heat-treating both Factor VIII and Factor IX concentrate;
  - (vi) Reducing pool sizes of donated blood for home-produced product;
  - (vii) Directing, alternatively forcefully advising, RHAs, DHAs, SHAs and all prescribing doctors to use cryoprecipitate or other forms of treatment instead of Factor VIII and Factor IX concentrate whenever possible including no treatment; and not, in any event, to use imported non-heat-treated Factor VIII or Factor IX concentrate to treat children;
- (a1) They adopted an increasingly unjustified position of optimistic scepticism in the face of cumulating material pointing to the gravity of AIDS and its implications for haemophiliacs, as particularised in paragraph 63;
- (am) By their unjustified statements pleaded in paragraph 63 both of optimism and reassurance and understating the risks of HIV infection, they failed both to instil an appropriate awareness and urgency in the minds of health service agents and employees and to encourage the necessary alertness, policy decisions and care by RHAs, DHAs, SHAs and doctors;



- (an) They failed, from 1982 until a time which the Plaintiffs cannot yet particularise, to accept and act upon the association between HIV and the supply and use of blood products and the consequent risk to haemophiliacs of HIV infection;
- (ao) Given the suspected and later established risk of HIV infection from blood products, from 1982 alternatively from 1983 they should have directed, alternatively forcefully advised, RHAs, DHAs, SHAs and all prescribing doctors:
  - (i) To use cryoprecipitate or other forms of treatment including no treatment instead of Factor VIII and Factor IX concentrate whenever possible.
  - (ii) In any event not to use imported non-heat-treated Factor VIII or Factor IX concentrate to treat children.
  - (iii) To avoid elective surgery and other non-essential treatment requiring the administration of Factor VIII or Factor IX concentrate, when heat-treated concentrate was not available.
  - (iv) Not to use non-heat-treated commercial Factor VIII concentrate.
- (ap) After mid-1982, they continued to permit the use of non-heat-treated commercial Factor VIII concentrate.

83A. Further or in the alternative, in so far as the First Central Defendants, their predecessors in office, their servants and their agents have purported to exercise discretions conferred by Parliament, they have, as particularised in paragraph 83, not acted within the limits of those discretions properly exercised and/or they have acted unreasonably and so as to frustrate the objects of the statute conferring the discretions.

#### B LICENSING AUTHORITY

84. The Licensing Authority owe and at all material times owed the following duties:

- (a) In considering the grant or renewal of a product licence to take into account the safety and quality of the medicinal product in question;
- (b) In considering whether to suspend, vary or revoke a product licence, to have regard to whether:
  - (i) The medicinal product in question may still be regarded as a product which can safely be administered for the purposes indicated in the licence;
  - (ii) The specification and standards to which the product in question is manufactured may still be regarded as satisfactory.

- (c) To keep themselves informed of matters likely to affect the patients to be treated with the product under their consideration;
- (d) To weigh the risks to those patients of continuing to be treated with the product in question;
- (e) By their decision in respect of the product under consideration, not to expose patients to the risk of serious and/or fatal side effects from the product.
- (f) By inspection or otherwise to monitor standards of manufacture and manufacturing processes, if necessary by enlisting the assistance of their counterparts in other Countries.
- (g) To ensure that information supplied and/or published by manufacturers of products and their servants and agents, notably in Data Sheets, effectively communicated any risks inherent in the use of such products and means by which such risks might be reduced or avoided.

85. In the premises, at all material times, The Licensing Authority, their servants or agents owed the following duties to the Plaintiffs:

- (a) To discharge their responsibilities pleaded in paragraphs 4 to 7 hereof and their duties pleaded in paragraph 84 hereof with due diligence and reasonable care;

- (aa) To conduct themselves with reasonable care so as not to injure persons liable to be affected by their conduct;
- (b) In discharging their said responsibilities and duties, to have special regard inter alia for the vulnerable position of haemophiliacs and their intimates;
- (c) These said duties are and were owed to all the said categories of Plaintiff and each of them.

86. The Licensing Authority and their predecessors in office, their servants or agents were negligent and/or in breach of their statutory duty.

PARTICULARS OF NEGLIGENCE AND/OR

BREACH OF STATUTORY DUTY

BY THE LICENSING AUTHORITY

The best particulars that the Plaintiffs can give before discovery and interrogatories are as follows:

1 HEPATITIS RISK AND/OR RISK OF OTHER VIRAL INFECTIONS

- (a) They failed from the early 1970's to pay any or any sufficient regard to the risk of hepatitis and/or other viral infection to which haemophiliacs were exposed by treatment with Factor VIII and Factor IX concentrate.

(b) From in or about 1975 or such later time as may be justified on the evidence at trial, they should have varied existing product licences for commercial non-heat-treated Factor VIII concentrate so as to exclude its use in the treatment of children and they should only have granted or renewed licences for such products upon the same exclusion for its use in treating children.

9  
loss of control  
(c) From in or about 1980 or such later time as may be justified on the evidence at trial they should have revoked existing product licences for commercial non-heat-treated Factor VIII concentrate and they should have not have granted or renewed licences for such products.

#### 2 HEAT TREATMENT

(d) From 1980 or such later time as may be justified on the evidence at trial (in particular as to the availability of heat-treated-product World-wide) they should only have granted product licenses for commercial Factor VIII concentrate where it was heat-treated.

#### 3 AIDS RISK

(e) They failed from the 1982 or such later time as may be justified on the evidence at trial to pay any or any sufficient regard to the risk of AIDS to which

haemophiliacs were exposed by treatment with Factor VIII and Factor IX, as set out in paragraphs 60 and 70 hereof.

- (f) From mid-1982 or such later time as may be justified on the evidence at trial (in particular as to the availability of heat-treated-product World-wide) they should have revoked existing product licences for commercial non-heat-treated Factor VIII concentrate and they should have not have granted or renewed licences for such products.
- (g) Alternatively, from mid-1980, they should have varied existing product licences for commercial non-heat-treated Factor VIII concentrate so as to exclude its use in the treatment of children and should only have granted or renewed licences for such products upon the same exclusion for its use in treating children.
- (h) The Plaintiffs do not plead any breaches of the duty set out at paragraph 84 (g) hereof pending Discovery herein.

86A. Further or in the alternative, in so far as the Licensing Authority, their servants and agents have purported to exercise discretions conferred by Parliament, they have, as particularised in paragraph 86, not acted within the limits of those discretions properly exercised and/or they

have acted unreasonably and so as to frustrate the objects of the statute conferring the discretions.

C COMMITTEE ON THE SAFETY OF MEDICINES

87. At all material times, the CSM owed the following duties:
- (a) To give to the Licensing Authority and/or the First Central Defendants advice with respect to safety, quality and efficacy, in relation to human use, of any medicinal product to which any provision of the Medicines Act 1968 is applicable;
  - (b) To promote the collection and investigation of information relating to adverse reactions, for the purpose of enabling such advice to be given;
  - (c) To keep themselves informed of matters likely to affect the patients to be treated with the product under their consideration;
  - (d) To weigh the risks to those patients of continuing to be treated with the product in question;
  - (e) In formulating their advice in respect of the product under consideration, to guard patients against exposure to the risk of serious and/or fatal side effects from the product;
  - (f) In collecting and investigating information relating to adverse reactions and in formulating their advice, to have regard not only to events and experience in

England and Wales, but to have regard to events and experience World-wide by means of research and personal enquiry and contact;

- (g) To provide the Licensing Authority with appropriate and sufficient information and advice to allow the Licensing Authority to ensure that information supplied and/or published by manufacturers of products and their servants and agents, notably in Data Sheets, effectively communicated any risks inherent in the use of such products and means by which such risks might be reduced or avoided.

88. By reason of their forming part of the Licensing Authority, at all material times advice, information and material obtained by the CSM and proffered to the Licensing Authority was also available to the Secretary of State for Health and his predecessors in office to assist and guide them in the discharge of their duties in that capacity.

89. In the premises, at all material times, The CSM, their servants or agents owed the following duties to the Plaintiffs:

- (a) To discharge their responsibilities pleaded in paragraph 8 hereof and their duties pleaded in



paragraph 87 hereof with due diligence and reasonable care;

(aa) To conduct themselves with reasonable care so as not to injure persons liable to be affected by their conduct;

(b) In discharging their said responsibilities and duties, to have special regard inter alia for the vulnerable position of haemophiliacs and their intimates;

(c) These said duties are and were owed to all the said categories of Plaintiff and each of them.

90. The CSM, their servants or agents, were negligent and/or in breach of their statutory duty.

PARTICULARS OF NEGLIGENCE AND/OR

BREACH OF STATUTORY DUTY BY THE CSM

The best particulars that the Plaintiffs can give before discovery and interrogatories are as follows:

1 HEPATITIS RISK AND/OR RISK OF OTHER VIRAL INFECTIONS

(a) Failing from the early 1970's or such later time as may be justified on the evidence at trial to urge on the Licensing Authority and/or the First Central Defendants sufficiently or at all:

(1) The risk of infection with hepatitis and/or other viruses to which haemophiliacs were exposed by

treatment with Factor VIII and Factor IX concentrate;

(ii) The serious and potentially fatal nature of hepatitis and/or other viral infection;

(iii) That the risk of infection with hepatitis or other viruses was substantially higher for haemophiliacs treated with commercial concentrate;

(iv) (in relation to the First Central Defendants) The need for self sufficiency for England and Wales in blood products made from blood donated and processed in England and Wales, alternatively the United Kingdom.

(b) From in or about 1975 or such later time as may be justified on the evidence at trial, they should have urged the Licensing Authority to vary existing product licences for commercial non-heat-treated Factor VIII concentrate so as to exclude its use in the treatment of children and should have advised the Licensing Authority only to grant or renew licences for such products upon the same exclusion for its use in treating children.

(c) From in or about 1980 or such later time as may be justified on the evidence at trial they should have urged the Licensing Authority to revoke existing product licences for commercial non-heat-treated

Factor VIII concentrate and not to grant or renew licences for such products.

## 2 HEAT TREATMENT

- (d) From the early 1970's or such later time as may be justified on the evidence at trial, should have been advising the Licensing Authority and/or the First Central Defendants of the desirability of heat-treatment of Factor VIII and Factor IX concentrates to remove the risk of infection of haemophiliacs with hepatitis and/or other viruses.
- (e) From 1980 or such later time as may be justified on the evidence at trial should have urged the Licensing Authority to grant product licenses for commercial Factor VIII concentrate only where it was heat-treated.

## 3 AIDS RISK

- (f) From 1982 or such later time as may be justified on the evidence at trial they should have been advising the Licensing Authority and/or the First Central Defendants of the emergence of AIDS and its implications;
- (g) They should thereafter have been keeping the Licensing Authority and/or the First Central Defendants advised

- of advances in learning and experience in respect of AIDS;
- (h) They should, in particular, in mid-1982 have informed the Licensing Authority and/or the First Central Defendants of the growing suspicion in the USA of a connection between AIDS and the supply and use of blood products;
  - (i) They failed from mid-1982 or such later time as may be justified on the evidence at trial to pay any or any sufficient regard to the risk of AIDS to which haemophiliacs were exposed by treatment with non-heat-treated Factors VIII and IX concentrate, in particular when imported from the U.S.A.;
  - (j) They failed from mid-1982 or such later time as may be justified on the evidence at trial to offer any or any sufficient advice to the Licensing Authority and/or the First Central Defendants as to the risk of AIDS to which haemophiliacs were exposed by treatment with non-heat-treated Factor VIII and Factor IX concentrate, in particular when imported from the U.S.A.;
  - (k) From mid-1982 or such later time as may be justified on the evidence at trial they should have advised the Licensing Authority to revoke existing product licences for commercial non-heat-treated Factor VIII and Factor IX concentrate imported from the U.S.A. and

advised them not to grant or renew licences for such products.

(1) Alternatively, from mid-1980, they should have advised the Licensing Authority to vary existing product licences for commercial non-heat-treated Factor VIII and Factor IX concentrate imported from the U.S.A. so as to exclude its use in the treatment of children and should have advised them only to grant or renew licences for such products upon the same exclusion for its use in treating children.

(m) The Plaintiffs do not plead any breaches of the duty set out at paragraph 87(g) hereof pending Discovery herein.

90A. Further or in the alternative, in so far as the CSM, their servants and agents have purported to exercise discretions conferred by Parliament, they have, by reason of the matters particularised in paragraph 90, not acted within the limits of those discretions properly exercised and/or they have acted unreasonably and so as to frustrate the objects of the statute conferring the discretions.

D THE HEALTH AUTHORITIES

91. At all material times, RHAs, DHAs and SHAs, their servants and agents owed the following duties:
- (a) To discharge their responsibilities pleaded in paragraphs 10, 11 and 12 with due diligence and reasonable care;
  - (aa) To conduct themselves with reasonable care so as not to injure persons liable to be affected by their conduct;
  - (b) In discharging their responsibilities, to have special regard inter alia for the vulnerable position of haemophiliacs and their intimates;
  - (c) The said duties are and were owed to all the said categories of Plaintiff and each of them.

92. The RHAs, the DHAs and the SHAs, their servants or agents were negligent and/or in breach of duty.

PARTICULARS OF NEGLIGENCE AND/ORBREACH OF STATUTORY DUTYBY THE HEALTH AUTHORITY DEFENDANTS

In the course of pleading these particulars the Plaintiffs will indicate where an allegation is made against the RHAs alone or only against certain RHAs or against DHAs alone or against RHAs and DHAs alone. The best particulars that the Plaintiffs can give before discovery and interrogatories are as follows:

1 THE BLOOD TRANSFUSION SERVICE

- (a) They have failed, from 1970 or such later time as may be justified on the evidence at trial to cooperate with each other sufficiently or at all in providing a national blood transfusion service (RHAs only);
- (b) They failed, from 1975 or such later time as may be justified on the evidence at trial, either properly or at all to assess future needs for Factor VIII;
- (c) They failed, from 1975 or such later time as may be justified on the evidence at trial, either properly or at all to set themselves targets, alternatively reasonable targets, and coordinate such targets both for the future production of Factor VIII and for the collection of blood (RHAs only);
- (d) They failed, from 1975 or such later time as may be justified on the evidence at trial, to achieve such targets (RHAs only);
- (e) They failed, from 1975 or such later time as may be justified on the evidence at trial, to turn to the Scottish Blood Transfusion Service, supply it with blood and benefit from its spare capacity to manufacture blood products, thus eliminating, alternatively reducing, their need to use commercial Factors VIII concentrate (RHAs only);
- (f) They failed, from 1975 or such later time as may be justified on the evidence at trial, to turn to the

Scottish Blood Transfusion Service for supplies of concentrates, thus eliminating, alternatively reducing, their need to use commercial Factors VIII and IX concentrate;

(f)A They failed, from 1975 or such later time as may be justified on the evidence at trial, to use plasmapheresis to boost the yield of plasma from volunteer donors in England and Wales so as to eliminate or reduce the need to import commercial Factor VIII concentrate;

(f)B They failed, from 1975 or such later time as may be justified on the evidence at trial, to approach commercial blood products manufacturers to fractionate plasma from volunteer donors in England and Wales.

## 2 MANUFACTURE OF NON-HEAT-TREATED CONCENTRATE

[(g) to (j) Only Oxford RHA and its relevant DHA and any other RHA and its relevant DHA and/or SHA with the responsibility for pooling blood donations and producing concentrates]

(g) They should not, from 1977 or such other time as may be justified on the evidence at trial, have permitted the size of donor pools for Factors VIII and IX concentrate to increase, given the risk of hepatitis and/or other viral contamination and given from 1982 the risk of HIV contamination;



- (h) On the contrary they should from the same times and for the same reasons have reduced the size of such donor pools;
- (i) They failed, from the late 1970's or such other time as may be justified on the evidence, at trial, to increase the production of home-produced Factor VIII concentrate;
- (j) They permitted the production of home-produced Factor VIII concentrate to fall in 1984/1985;

### 3 HEAT TREATMENT

- (k) They failed, from at least 1970 or such later time as may be justified on the evidence at trial, to have any or any sufficient regard to the need to use heat-treated Factors VIII and IX concentrates, given:
  - (i) The ancient principle of pasteurisation;
  - (ii) The risk of hepatitis and/or other viral contamination of such concentrates;
  - (iii) From mid-1982, the risk of HIV contamination of such concentrates;
- (l) They failed, from at least 1970 or such later time as may be justified on the evidence at trial, either sufficiently or at all to commission and/or encourage and/or engage in research and development of heat treatment of home donated and produced Factors VIII

and IX concentrates, given the reasons hereinbefore pleaded;

- (m) They failed, in 1980 or such later time as may be justified on the evidence at trial, to use heat-treated Factors VIII and IX concentrates, in place of non-heat-treated product, given the risk of hepatitis and/or other viral contamination.
- (n) They failed, from mid-1982 or such later time as may be justified on the evidence at trial, to use heat-treated Factors VIII and IX concentrates, in place of non-heat-treated product, given the risk of hepatitis and/or other viral contamination and the additional risk of HIV contamination.
- (o) The Department of Health having, in late 1984, announced that home-produced Factor VIII would be heat-treated at the BPL from April 1985, they should forthwith have taken steps to introduce and impose in their respective regions/districts/fields of activity the use of heat-treated Factors VIII and IX concentrates, in place of non-heat-treated product; in particular they should have:
  - (i) advised SHAs (RHAs and DHAs only), directed DHAs (RHAs only) and all prescribing doctors to switch forthwith to imported heat-treated Factor VIII;

- (ii) secured DHAs against any financial and budgetary consequences of switching to imported heat-treated Factor VIII (RHAs only).
- (iii) secured doctors against any budgetary consequences of switching to imported heat-treated Factor VIII.
- (p) As it was, the Department of Health had, by their announcement, confirmed that they accepted (belatedly, the Plaintiffs will contend) the need for heat treatment to avoid the risk of HIV infection from blood products, yet they offered no instructions or even guidance to Health Authorities and clinicians as to the policy to adopt while waiting for home-produced heat treated Factor VIII to be available in sufficient quantity to satisfy all requirements; the RHAs, DHAs and SHAs should have taken it upon themselves in their respective regions or districts or fields of activity to give guidance to SHAs (RHAs and DHAs only), instructions and guidance to DHAs (RHAs only) and to clinicians (RHAs, DHAs and SHAs) on the policy to adopt, which should have been to switch immediately to imported heat-treated Factor VIII;

#### 4 SCREENING OF DONORS AND TESTING FOR HIV

- (q) They failed from 1983, or such later time as may be justified on the evidence at trial, to appreciate

properly or at all the categories of HIV high risk blood donors and act accordingly, both by appropriate public announcements directed to prospective donors and by confidential advice to SHAs (RHAs and DHAs only) instructions and advice to the DHAs (RHAs only) and to their servants and agents (RHAs, DHAs and SHAs);

- (r) From 1983, or such later time as may be justified on the evidence at trial, they should have advised SHAs (RHAs and DHAs only), directed DHAs (RHAs only) and their servants and agents (RHAs, DHAs and SHAs) to refuse and/or to mark for non-use and destruction blood offered by prospective donors who on enquiry revealed themselves to be or on impression and examination appeared to be homosexuals, bisexuals or intravenous drug abusers;
- (s) They failed, from 1983, to apply and enforce what instructions as to screening of donors were in fact being issued by the Department of Health;
- (t) They failed, from mid-1984 or such later time as may be justified on the evidence at trial, to introduce and impose in their respective regions or districts or fields of activity routine testing of donated blood for HIV antibodies and/or antigens;
- (u) They accepted and/or adopted and/or encouraged the policy of the Department of Health of not introducing

such testing, in the belief that the test methods were not sufficiently reliable; in accepting and/or adopting and/or encouraging such a policy they were in error and, given the nature and gravity of the HIV infection risk and the urgency of the situation, they were negligent;

- (v) They did not introduce routine testing of donated blood in their respective regions or districts or fields of activity until in or about October 1985;

#### 5 HEPATITIS RISK AND/OR RISK OF OTHER VIRAL INFECTION

- (w) They failed from the early 1970's or such later time as may be justified on the evidence at trial to appreciate sufficiently or at all:
  - (i) The risk of infection with hepatitis and/or other viruses to which haemophiliacs were exposed by treatment with Factor VIII and Factor IX concentrate;
  - (ii) The serious and potentially fatal nature of hepatitis and/or other viral infections;
  - (iii) That the risk of infection with hepatitis and/or other viruses was substantially higher for haemophiliacs treated with imported commercial concentrate;
- (x) They failed from the early 1970's or such later time as may be justified on the evidence at trial to take

any or any sufficient steps to remove, alternatively, reduce that risk by:

- (i) Eliminating or reducing the need to use imported non-heat-treated commercial Factor VIII concentrate;
- (ii) Reducing pool sizes of donated blood for home-produced product (Only Oxford RHA and its relevant DHA and other RHAs and their relevant DHAs and/or SHAs responsible for pooling donated blood);
- (iii) Forcefully advising SHAs (RHAs and DHAs only), directing, alternatively forcefully advising, DHAs (RHAs only) and all prescribing doctors (RHAs, DHAs and SHAs) in their respective regions or districts or fields of activity to use cryoprecipitate or other forms of treatment including no treatment instead of Factor VIII and Factor IX concentrate whenever possible and not, in any event, to use imported non-heat-treated Factor VIII or Factor IX concentrate to treat children;

#### 6 AIDS RISK

- (y) From 1982 or such later time as may be justified on the evidence at trial they should have been aware of

the emergence of AIDS and its implications and acted in the light of that;

- (z) They should thereafter have been keeping themselves informed of advances in learning and experience in respect of AIDS and acted in the light of that;
- (aa) They should, in particular, from mid-1982 have known of the growing suspicion in the USA of a connection between AIDS and the supply and use of blood products and acted in the light of that;
- (ab) They failed from mid-1982 or such later time as may be justified on the evidence at trial to pay any or any sufficient regard to the risk of AIDS to which haemophiliacs were exposed by treatment with Factor VIII and Factor IX concentrate, whether home-produced or commercial;
- (ac) They failed from mid-1982 or such later time as may be justified on the evidence at trial to take any or any sufficient steps to remove, alternatively, reduce that risk by:
  - (i) Eliminating or reducing the need to use imported non-heat-treated commercial Factor VIII concentrate;
  - (ii) Prohibiting the use of imported (non-heat-treated) commercial Factor VIII concentrate in their respective regions or districts or fields of activity;

- (iii) Proper screening and/or testing of donors, as hereinbefore particularised;
  - (iv) Reducing pool sizes of donated blood for home-produced product (Only Oxford RHA and its relevant DHA and other RHAs and their relevant DHAs and/or SHAs responsible for pooling donated blood);
  - (v) Forcefully advising SHAs (RHAs and DHAs only), directing, alternatively forcefully advising, DHAs (RHAs only) and all prescribing doctors (RHAs, DHAs and SHAs) in their respective regions or districts or fields of activity:
    - A. to use cryoprecipitate or other forms of treatment including no treatment instead of non-heat-treated Factor VIII and Factor IX concentrate whenever possible;
    - B. and not, in any event, to use imported non-heat-treated Factor VIII or Factor IX concentrate to treat children;
    - C. and to avoid elective surgery and other non-essential treatment requiring the administration of Factor VIII or Factor IX concentrate.
- (ad) They failed, from 1982 until times which the Plaintiffs cannot yet particularise, to accept and act upon the association between HIV and the supply and



use of blood products and the consequent risk to haemophiliacs of HIV infection;

- (ae) Given the suspected and later established risk of HIV infection from blood products, from 1982 alternatively from 1983 they should have forcefully advised SHAs (RHAs and DHAs only), directed, alternatively forcefully advised, DHAs (RHAs only) and all prescribing doctors (RHAs, DHAs and SHAs) in their respective regions or districts or fields of activity:
- (i) To use cryoprecipitate or other forms of treatment instead of Factor VIII and Factor IX concentrate whenever possible.
  - (ii) Not, in any event, to use imported non-heat-treated Factor VIII or Factor IX concentrate to treat children.
  - (iii) To avoid using non-heat-treated commercial Factor VIII concentrate.
  - (iv) To avoid elective surgery and other non-essential treatment requiring the administration of Factor VIII or Factor IX concentrate, when heat-treated concentrate was not available.
- (af) After mid-1982, they continued to permit the use of non-heat-treated commercial Factor VIII concentrate in their respective regions/districts/fields of activity;

7 CLINICAL MANAGEMENTFactor VIII

- (ag) Treated the Plaintiff with home-produced Factor VIII concentrate, when another form of treatment might have been used;
- (ah) Treated the Plaintiff with commercial Factor VIII concentrate, when another form of treatment might have been used;
- (ai) Treated the Plaintiff with commercial Factor VIII concentrate instead of home-produced Factor VIII concentrate;
- (aj) Treated the Plaintiff with non-heat-treated Factor VIII concentrate instead of heat-treated Factor VIII concentrate;
- (ak) Failed to inform the Plaintiff of the risk of being infected with HIV and/or AIDS if treated with Factor VIII concentrate;
- (al) Failed to furnish the Plaintiff with the information necessary to make an informed choice between running the risk of infection with HIV and/or AIDS from Factor VIII concentrate and avoiding that risk but suffering the consequences in terms of his haemophilia with or without any other form of treatment that might be available;
- (am) Failed to advise the Plaintiff on the need to modify his life style and activities so as to avoid the need

- for Factor VIII ~~IX~~ concentrate therapy and thereby avoid exposure to the risk of HIV infection;
- (an) Caused or permitted the Plaintiff to be treated with non-heat-treated Factor VIII ~~IX~~-prophylactically;
  - (ao) Caused or permitted the Plaintiff to undergo elective surgery, thus creating an unnecessary requirement for the administration of Factor VIII concentrate and consequent exposure to infection with HIV and/or AIDS;
  - (ap) Caused or permitted the Plaintiff to undergo elective treatment other than surgery, whereby an unnecessary requirement for the administration of Factor VIII concentrate was created with consequent exposure to infection with HIV and/or AIDS;
  - (aq) Failed to furnish the Plaintiff with the information necessary to make an informed choice between running the risk of infection with HIV and/or AIDS from Factor VIII concentrate and avoiding that risk by forgoing the said elective surgery or other treatment;
  - (ar) Failed to advise the Plaintiff to accept, for the time being, to suffer his haemophilia without treatment with Factor VIII concentrate, given the risk of infection with HIV and/or AIDS and the grave consequences of such infection;
  - (as) Failed to advise the Plaintiff as aforesaid from mid-1982, alternatively early 1983, upon the basis that

heat-treated Factor VIII concentrate would soon be available;

- (at) Failed to advise the Plaintiff as aforesaid from late 1984, when it was known that heat-treated home-produced Factor VIII concentrate would be available in April 1985;

Factor IX

- (au) The Plaintiffs now repeat particulars (ag) to (at) in respect of Factor IX:
- (av) Treated the Plaintiff with home-produced Factor IX concentrate, when another form of treatment might have been used;
- (aw) Treated the Plaintiff with non-heat-treated Factor IX concentrate instead of heat-treated Factor IX concentrate;
- (ax) Failed to inform the Plaintiff of the risk of being infected with HIV and/or AIDS if treated with Factor IX concentrate;
- (ay) Failed to furnish the Plaintiff with the information necessary to make an informed choice between running the risk of infection with HIV and/or AIDS from Factor IX concentrate and avoiding that risk but suffering the consequences in terms of his haemophilia with or without any other form of treatment that might be available;

- (az) Failed to advise the Plaintiff on the need to modify his life style and activities so as to avoid the need for Factor IX concentrate therapy and thereby avoid exposure to the risk of HIV infection;
- (ba) Caused or permitted the Plaintiff to be treated with non-heat-treated Factor IX prophylactically;
- (bb) Caused or permitted the Plaintiff to undergo elective surgery, thus creating an unnecessary requirement for the administration of Factor IX concentrate and consequent exposure to infection with HIV and/or AIDS;
- (bc) Caused or permitted the Plaintiff to undergo elective treatment other than surgery, whereby an unnecessary requirement for the administration of Factor IX concentrate was created with consequent exposure to infection with HIV and/or AIDS;
- (bd) Failed to furnish the Plaintiff with the information necessary to make an informed choice between running the risk of infection with HIV and/or AIDS from Factor IX concentrate and avoiding that risk by forgoing the said elective surgery or other treatment;
- (be) Failed to advise the Plaintiff to accept, for the time being, to suffer his haemophilia without treatment with Factor IX concentrate, given the risk of infection with HIV and/or AIDS and the grave consequences of such infection;

- (bf) Failed to advise the Plaintiff as aforesaid from mid-1982, alternatively early 1983, upon the basis that heat-treated Factor IX concentrate would soon be available;
- (bg) Failed to advise the Plaintiff as aforesaid from late 1984, when it was known that heat-treated home-produced Factor IX concentrate would be available in April 1985;

#### 8 TESTING AND COUNSELLING

- (bh) Failed to test the Plaintiff in a timely manner for HIV infection;
- (bi) Failed to inform the Plaintiff in a timely manner that he was HIV positive;
- (bj) Failed to offer to test the Plaintiff's intimates for HIV infection;
- (bk) Failed to inform the Plaintiff's intimates in a timely manner that he was HIV positive;
- (bl) Failed to inform the Plaintiff's intimates in a timely manner that they or he were HIV positive;
- (bm) Failed to provide the Plaintiff with any or any adequate pre-HIV test counselling;
- (bn) In the case of Plaintiffs who had not undergone HIV testing, failing to provide that Plaintiff with appropriate HIV counselling in social and sexual

precautions to take, in case they were in fact HIV infected;

- (bo) In the case of Plaintiffs who had undergone HIV testing and whose test indicated that they were not HIV infected, failing to provide that Plaintiff nevertheless with appropriate HIV counselling in social and sexual precautions to take, in case they were recently HIV infected and had not yet sero-converted;
- (bp) In the case of Plaintiffs who had undergone HIV testing and whose test indicated that they were HIV infected, failing to provide that Plaintiff with full and proper HIV counselling including social and sexual precautions to take and with advice and assistance in respect of the numerous problems that their sero-positivity would pose them;
- (bq) In the case of Plaintiffs' intimates who had not undergone HIV testing, failing to provide that Plaintiff's intimates with appropriate HIV counselling in social and sexual precautions to take, in case they were in fact HIV infected;
- (br) In the case of Plaintiffs' intimates who had HIV testing and whose test indicated that they were not HIV infected, failing to provide that Plaintiff's intimates nevertheless with appropriate HIV counselling in social and sexual precautions to take,

in case they were recently HIV infected and had not yet sero-converted;

(bs) In the case of Plaintiffs' intimates who had undergone HIV testing and whose test indicated that they were HIV infected, failing to provide that Plaintiff's intimates with full and proper HIV counselling including social and sexual precautions to take and advice and assistance with the numerous problems that their sero-positivity would pose them.

(bt) Particulars (ak), (al), (am), (aq), (ar), (as), (at), (ax), (ay), (az), (bd), (be), (bf), (bg), (bi), (bm), (bn), (bo) and (bp) are repeated in the case of infant Plaintiffs as particulars of failure to inform, advise and counsel the Plaintiff's parents and/or guardians and/or the person having the care of the Plaintiff.

(bu) Particulars (bi), (bj), (bk), (bl), (bq) and (br) are repeated in the case of infant intimates as particulars of failure to inform advise and counsel the intimate's parents and/or guardians and/or the person having the care of the intimate.

92A. Further or in the alternative, in so far as the RHAs, the DHAs and the SHAs, their servants and agents have purported to exercise discretions conferred by Parliament, they have, as particularised in paragraph 92 (with the exception of sections 7 and 8), not acted within the limits of those



discretions properly exercised and/or they have acted unreasonably and so as to frustrate the objects of the statute conferring the discretions.

E THE BLOOD PRODUCTS LABORATORIES

93. In respect of the BPL, the following duties were owed from 1978 until 30th November 1982 by the North West Thames RHA and since 1st December 1982 by the CBLA:

(a) To discharge their responsibilities pleaded in paragraphs 10A and 12A with due diligence and reasonable care;

(aa) To conduct themselves with reasonable care so as not to injure persons liable to be affected by their conduct;

(b) In discharging their responsibilities, to have special regard for the vulnerable position of haemophiliacs and their intimates;

(c) The said duties are and were owed to all the said categories of Plaintiff and each of them.

94. The North West Thames RHA, its servants and agents were negligent and/or in breach of duty.

PARTICULARS OF NEGLIGENCE AND/OR BREACH OF STATUTORY DUTY

BY THE NORTH WEST THAMES RHA IN RESPECT OF THE BPL

The best particulars that the Plaintiffs can give before discovery and interrogatories are as follows:

1 SELF-SUFFICIENCY AND THE BLOOD TRANSFUSION SERVICE

- (a) Failed to achieve self-sufficiency for England and Wales in blood products made from blood donated and processed in England and Wales, alternatively the United Kingdom, at any time during their stewardship of the BPL;
- (b) Permitted the BPL to deteriorate to such an extent that in or about 1980 it was declared unfit for good manufacturing practice by inspectors of the D.H.S.S.'s Medicines Division;
- (c) Failed to devote any significant capital expenditure to the BPL during their stewardship;
- (d) Failed to administer the BPL properly or at all;
- (e) After the allocation of £21.3M to the BPL in November 1981 they failed to set in place with urgency, alternatively diligence, a proper policy of development and improvement;
- (f) Failed, from 1978 to 1982 to cooperate with other Health Authorities sufficiently or at all in providing a national blood transfusion service sufficient for the BPL's needs;
- (g) Failed, from 1978, either properly or at all to assess future needs for Factor VIII;
- (h) Failed, from 1978 or such later time as may be justified on the evidence at trial, either properly

or at all to set themselves targets, alternatively  
reasonable targets, and communicate and coordinate such  
targets both for the future production of Factor VIII  
and for the collection of blood to and with other  
Health Authorities;

(i) Failed, from 1978 or such later time as may be  
justified on the evidence at trial, to achieve such  
targets;

(j) Failed, from 1978 or such later time as may be  
justified on the evidence at trial, to advise the  
Department of Health and the Health Authorities to use  
the spare production capacity in Scotland to eliminate  
or reduce the Welsh and English need to import  
commercial Factor VIII concentrate;

(k) Failed, from 1978 or such later time as may be  
justified on the evidence at trial, to advise the  
Department of Health and the Health Authorities to use  
plasmapheresis to boost the yield of plasma from  
volunteer donors in England and Wales so as to  
eliminate or reduce the need to import commercial  
Factor VIII concentrate;

(k)A They failed, from 1978 or such later time as may be  
justified on the evidence at trial, to approach  
commercial blood products manufacturers to fractionate  
plasma from volunteer donors in England and Wales,

and/or they failed to advise the Department of Health and the Health Authorities to do this.

## 2 MANUFACTURE OF NON-HEAT-TREATED CONCENTRATES

- (l) They should not, from 1978 or such other time as may be justified on the evidence at trial, have permitted the size of donor pools for Factors VIII and IX concentrate to increase, given the risk of hepatitis contamination and/or contamination with other viruses and given from 1982 the risk of HIV contamination; alternatively they should have warned and advised the Department of Health and other Health Authorities against such increase;
- (m) On the contrary they should from the same times and for the same reasons have reduced the size of such donor pools; alternatively they should have advised the Department of Health and other Health Authorities to make such reductions;
- (n) Failed, from the late 1978 or such other time as may be justified on the evidence at trial, to increase the production of home-produced Factor VIII concentrate;

## 3 HEAT TREATMENT

- (o) Failed, throughout their stewardship of the BPL, to have any or any sufficient regard to the need to heat-treat Factors VIII and IX concentrates, given:

- (i) The ancient principle of pasteurisation;
  - (ii) The risk of contamination with hepatitis and/or other viruses of such concentrates;
  - (iii) From mid-1982, the risk of HIV contamination of such concentrates;
- (p) Failed, throughout their stewardship of the BPL, either sufficiently or at all to require and/or commission and/or encourage and/or engage in research and development of heat treatment of home donated and produced Factors VIII and IX concentrates, given the reasons hereinbefore pleaded;
- (q) Failed, in 1980 or such later time as may be justified on the evidence at trial, to advise the Department of Health and other Health Authorities to use heat-treated Factors VIII and IX concentrates, in place of non-heat-treated product, given the risk of contamination with hepatitis and/or other viruses.
- (r) Failed, from mid-1982 or such later time as may be justified on the evidence at trial, to advise the Department of Health and other Health Authorities to use heat-treated Factors VIII and IX concentrates, in place of non-heat-treated product, given the risk of contamination with hepatitis and/or other viruses and the additional risk of HIV contamination.
- (s) Failed to achieve production of home donated and produced heat-treated Factors VIII and IX concentrates; they should have achieved such production by 1980 or

such later time as may be justified on the evidence at trial.

#### 4 SCREENING OF DONORS AND TESTING FOR HIV

- (t) Failed in 1982 to consider properly or at all the possibility of screening donors by "surrogate testing", namely testing donated blood for evidence of abnormalities of the immune system thought to be associated with AIDS or testing for hepatitis B;

#### 5 HEPATITIS RISK AND/OR RISK OF OTHER VIRAL INFECTIONS

- (u) Failed from 1978 or such later time as may be justified on the evidence at trial to appreciate sufficiently or at all:
  - (i) The risk of infection with hepatitis and/or other viruses to which haemophiliacs were exposed by treatment with Factor VIII and Factor IX concentrate;
  - (ii) The serious and potentially fatal nature of hepatitis and/or infection with other viruses;
  - (iii) That the risk of infection with hepatitis and/or other viruses was substantially higher for haemophiliacs treated with commercial concentrate;
- (v) Failed from 1978 or such later time as may be justified on the evidence at trial to take any or any sufficient steps to remove, alternatively, reduce that risk by:
  - (i) Eliminating or reducing the need to use imported (non-heat-treated) commercial Factor VIII concentrate;

- (ii) Heat-treating both Factor VIII and Factor IX concentrate;
- (iii) Reducing pool sizes of donated blood for home-produced product; alternatively requiring and/or advising that such reduction to be made;

#### 6 AIDS RISK

- (w) From about 1982 they should have been aware of the emergence of AIDS and its implications and acted in the light of that;
- (x) They should thereafter have been keeping themselves informed of advances in learning and experience in respect of AIDS and acted in the light of that;
- (y) They should, in particular, from mid-1982 have known of the growing suspicion in the USA of a connection between AIDS and the supply and use of blood products and of the facts and matters pleaded in paragraph 60 hereof and acted in the light of that;
- (z) They failed from mid-1982 to pay any or any sufficient regard to the risk of AIDS to which haemophiliacs were exposed by treatment with Factor VIII and Factor IX concentrate, whether home-produced or commercial;

(aa) Failed from mid-1982 to set in train any or any sufficient steps to remove, alternatively, reduce that risk by:

- (i) Eliminating the need to use imported (non-heat-treated) commercial Factor VIII concentrate;
- (ii) Proper screening and/or surrogate testing of donors, as hereinbefore particularised; alternatively advising RHAs to perform such screening and/or testing;
- (iii) Heat-treating both Factor VIII and Factor IX concentrate;
- (iv) Requiring the reduction of pool sizes of donated blood for home-produced product; alternatively advising such reduction;

(ab) Failed, in 1982, to accept and act upon the association between HIV and the supply and use of blood products and the consequent risk to haemophiliacs of HIV infection.

94A Further or in the alternative, in so far as the North West Thames R.H.A., their servants and agents have purported to exercise discretions conferred by Parliament, they have, as particularised in paragraph 94, not acted within the limits of those discretions properly exercised and/or they have acted unreasonably and so as to frustrate the objects of the statute conferring the discretions.



95. The CBLA, its servants and agents were negligent and/or in breach of duty.

PARTICULARS OF NEGLIGENCE AND/OR  
BREACH OF STATUTORY DUTY BY THE CBLA

The best particulars that the Plaintiffs can give before discovery and interrogatories are as follows:

1 SELF-SUFFICIENCY AND THE BLOOD TRANSFUSION SERVICE

- (a) Failed to administer the BPL properly;
- (b) Failed, after its creation on 1st December 1982, to set in place with urgency, alternatively diligence, a proper policy of development and improvement;
- (c) Failed, from 1982 to cooperate with the RHAs sufficiently or at all in providing a national blood transfusion service sufficient for the BPL's needs;
- (d) Failed, from 1982, either properly or at all to assess future needs for Factor VIII;
- (e) Failed, from 1982 or such later time as may be justified on the evidence at trial, either properly or at all to set itself targets, alternatively reasonable targets, and to communicate and coordinate such targets both for the future production of Factor VIII and for the collection of plasma to and with the Health Authorities;

- (f) Failed, from 1982 or such later time as may be justified on the evidence at trial, to achieve such targets;
- (g) Failed, from 1982 or such later time as may be justified on the evidence at trial, to advise the Department of Health and the Health Authorities to use the spare production capacity in Scotland to eliminate or reduce the Welsh and English need to import commercial Factor VIII concentrate;
- (h) Failed, from 1982 or such later time as may be justified on the evidence at trial, to advise the Department of Health and the Health Authorities to use plasmapheresis to boost the yield of plasma from volunteer donors in England and Wales so as to eliminate or reduce the need to import commercial Factor VIII concentrate;
- (h)A They failed, from 1982, to approach commercial blood products manufacturers to fractionate plasma from volunteer donors in England and Wales, and/or they failed to advise the Department of Health and the Health Authorities to do this.
- (i) Being responsible for the redevelopment of the BPL from 1982, failed to achieve self sufficiency by 1989 or such later time as may be revealed by the evidence at trial;

2 MANUFACTURE OF NON-HEAT-TREATED CONCENTRATES

- (j) They should not, from 1982, have permitted the size of donor pools for Factors VIII and IX concentrate to increase, given the risk of contamination with hepatitis and/or other viruses and given from 1982 the risk of HIV contamination; alternatively they should have warned and advised the Department of Health and the Health Authorities against such increase;
- (k) On the contrary they should from the same time and for the same reasons have reduced the size of such donor pools; alternatively they should have advised the Department of Health and the Health Authorities to make such reductions;
- (l) Failed, from the late 1982, to increase the production of home-produced Factor VIII concentrate;

3 HEAT TREATMENT

- (m) Failed, from 1982, to have any or any sufficient regard to pressing and urgent need to heat-treat Factors VIII and IX concentrates, given:
  - (i) The ancient principle of pasteurisation;
  - (ii) The risk with such concentrates of contamination by hepatitis and/or other viruses;
  - (iii) From mid-1982, the risk of HIV contamination with such concentrates;

- (n) Failed, from 1982, either sufficiently or at all to require and/or commission and/or encourage and/or engage in research and development of heat treatment of home donated and produced Factors VIII and IX concentrates, given the reasons hereinbefore pleaded;
- (o) Failed, from 1982, to advise the Department of Health and the Health Authorities to use heat-treated Factors VIII and IX concentrates, in place of non-heat-treated product, given the risk of contamination with hepatitis and/or other viruses.
- (p) Failed, from 1982 or such later time as may be justified on the evidence at trial, to advise the Department of Health and the Health Authorities to use heat-treated Factors VIII and IX concentrates, in place of non-heat-treated product, given the risk of contamination with hepatitis and/or other viruses and the additional risk of HIV contamination.
- (q) Failed to achieve production of home donated and produced heat-treated Factors VIII and IX concentrates; such production should have been achieved by 1980 or such later time as may be justified on the evidence at trial; as it was the CBLA failed to achieve such production from 1982 until 1985;
- (r) The D.H.S.S. having, in late 1984, announced that home-produced Factor VIII would be heat-treated at the BPL from April 1985, the CBLA should thereupon have advised

the Health Authorities to switch forthwith to imported heat-treated Factors VIII and IX concentrates in place of non-heat-treated product and the CBLA should have forthwith invited and encouraged the Health Authorities to submit their existing stocks of concentrate to the BPL for testing and heat-treatment;

#### 4 SCREENING OF DONORS AND TESTING FOR HIV

- (s) Failed from 1982 to consider properly or at all the possibility of screening donors by "surrogate testing", namely testing donated blood for evidence of abnormalities of the immune system thought to be associated with AIDS or testing for hepatitis B;
- (t) Failed from 1983, or such later time as may be justified on the evidence at trial, to appreciate properly or at all the categories of HIV high risk blood donors and act accordingly by confidential advice to Health Authorities;
- (u) From 1983, or such later time as may be justified on the evidence at trial, the CBLA should have advised Health Authorities to refuse and/or to mark for non-use and destruction blood offered by prospective donors who on enquiry revealed themselves to be or on impression and examination appeared to be homosexuals, bisexuals or intravenous drug abusers;

- (v) Failed, from 1983, to consider sufficiently or at all whether Health Authorities were applying and enforcing what instructions as to screening of donors were in fact being issued by the Department of Health and to encourage and advise the health Authorities to act accordingly;
- (w) Failed, from mid-1984 or such later time as may be justified on the evidence at trial, to encourage and advise Health Authorities to introduce and impose in their respective regions or districts or fields of activity routine testing of donated blood for HIV;
- (x) Failed, from mid-1984 or such later time as may be justified on the evidence at trial, to introduce routine testing of donated plasma received at the BPL for HIV antibodies and/or antigens and/or such routine testing of its final product;
- (y) Accepted and/or adopted and/or encouraged the policy of the Department of Health of not introducing such testing, in the belief that the test methods were not sufficiently reliable; in accepting and/or adopting and/or encouraging such a policy the CBLA was in error and, given the nature and gravity of the HIV infection risk and the urgency of the situation, it was negligent;
- (z) The CBLA did not introduce routine testing of donated plasma received at the BPL and/or of its finished

product until in or about October 1985 or such later date as may be revealed on discovery or in evidence at trial;

5 HEPATITIS RISK AND/OR RISK OF OTHER VIRAL INFECTIONS

- (aa) Failed from 1982 to appreciate sufficiently or at all:
  - (i) The risk of infection with hepatitis and/or other viruses to which haemophiliacs were exposed by treatment with Factor VIII and Factor IX concentrate;
  - (ii) The serious and potentially fatal nature of hepatitis and/or other viral infections;
  - (iii) That the risk of infection with hepatitis and/or other viruses was substantially higher for haemophiliacs treated with commercial concentrate;
- (ab) Failed from 1982 or such later time as may be justified on the evidence at trial to take any or any sufficient steps to remove, alternatively, reduce that risk by:
  - (i) Eliminating or reducing the need to use imported (non-heat-treated) commercial Factor VIII concentrate;
  - (ii) Heat-treating both Factor VIII and Factor IX concentrate;
  - (iii) Reducing pool sizes of donated blood for home-produced product; alternatively requiring and/or advising that such reduction to be made;

6 AIDS RISK

- (ac) From 1982 or such later time as may be justified on the evidence at trial the CBLA should have been aware of the emergence of AIDS and its implications and acted in the light of that;
- (ad) The CBLA should thereafter have been keeping itself informed of advances in learning and experience in respect of AIDS and acted in the light of that;
- (ae) The CBLA should, in particular, from 1982 have known of the growing suspicion in the USA of a connection between AIDS and the supply and use of blood products and of the facts and matters pleaded in paragraph 60 hereof and acted in the light of that;
- (af) Failed from 1982 to pay any or any sufficient regard to the risk of AIDS to which haemophiliacs were exposed by treatment with Factor VIII and Factor IX concentrate, whether home-produced or commercial;
- (ag) Failed from 1982 to set in train any or any sufficient steps to remove, alternatively, reduce that risk by:
  - (i) Eliminating the need to use imported (non-heat-treated) commercial Factor VIII concentrate;
  - (ii) Proper screening and/or surrogate testing of donors, as hereinbefore particularised; alternatively advising Health Authorities to perform such screening and/or testing;



- (iii) Heat-treating both Factor VIII and Factor IX concentrate;
- (iv) requiring the reduction of pool sizes of donated blood for home-produced product; alternatively advising such reduction;
- (ah) Failed, from 1982 until times which the Plaintiffs cannot yet particularise, to accept and act upon the association between HIV and the supply and use of blood products and the consequent risk to haemophiliacs of HIV infection.
- (ai) Failed, from 1982 until times which the Plaintiffs cannot yet particularise, either sufficiently or at all to volunteer advice, guidance and warnings in respect of the risk of HIV infection of Factors VIII and IX concentrates produced at the BPL to both the Department of Health and the Health Authorities.

95A Further or in the alternative, in so far as the CBLA, their servants and agents have purported to exercise discretions conferred by Parliament, they have, as particularised in paragraph 95, not acted within the limits of those discretions properly exercised and/or they have acted unreasonably and so as to frustrate the objects of the statute conferring the discretions.

IV CAUSATION AND DAMAGES

96. By reason of the said negligence and breach of duty by the Defendants their servants and agents and each of them, the Plaintiffs and each of them have suffered loss and damage.

PARTICULARS OF LOSS AND DAMAGE

These will be pleaded in the individual Statements of Claim, but the general nature of the Plaintiffs' case is as follows:

- (a) Plaintiffs in categories a.(i) and (ii) suffer all or some of the symptoms of the AIDS disease, which is to say:
  - (i) Infection with the virus is sometimes quickly followed by a feverish illness of short duration.
  - (ii) A person in the seropositive state may develop the condition known as ARC.
  - (iii) Thereafter a prolonged state of vague ill-health, followed by strange and ultimately lethal infections. Some sufferers develop confusion and other signs of progressive neurological degeneration. The disease is invariably fatal. There is no known cure.
  - (iv) They will also have had the same suffering from sero-conversion as Plaintiffs in categories b.(i) and (ii).

(b) Plaintiffs in categories b.(1) and (ii) have suffered the injury of being infected with HIV; they may suffer a feverish illness of short duration shortly after their infection with HIV; they have suffered the worry and distress of learning that they have sero-converted and of trying to come to terms with that and what it implies; they may suffer psychiatric illness as a result; they suffer isolation, hostility, concern for their families both as to infection and as to their future; they suffer considerable financial disadvantages in such matters as insurance and mortgages; they may suffer on the labour market; if children, they suffer at school and in the community of children; if they have children, they suffer the anxiety of safeguarding them and the burden of either revelation or deceit as to their condition. They must avoid having children and their marriages may have suffered or failed. If unmarried, their prospects of doing so are greatly diminished. The incubation period between sero-conversion and the development of AIDS is variable but a matter of years. The better view is that all such Plaintiffs will sooner or later suffer the full disease and die from it. Such Plaintiffs will probably seek orders for provisional damages in their individual Statements of Claim.

- (c) Plaintiffs in category c. will have suffered in the same way as Plaintiffs in categories a.(i) and (ii).
- (d) Plaintiffs in category d. will have suffered in the same way as Plaintiffs in category b.(i) and (ii); they will also in the main be seeking orders for provisional damages.
- (e) Plaintiffs in category e. will have suffered in the same way as Plaintiffs in categories a.(i) and (ii), save that being children their cases will present rather differently; in particular they may well not have been told that they have AIDS, but they will in due course have to be told; their social isolation may bite differently; their future financial prejudice may be different, due to their expectation of life; current views of the likely incubation period vary but it is generally accepted that it is a matter of years and one high estimate is of a mean period of 15 years. By the time of trial this may yet again have to be revised upwards.
- (f) Plaintiffs in category f. will have suffered in the same way as Plaintiffs in categories b.(i) and (ii), save that as children their cases will present differently.
- (g) Plaintiffs in category g. suffer by knowing that their intimate will probably die and by watching it happen; they will suffer the same disruption and deterioration

of the quality of their life as Plaintiffs in categories b.(i) and (ii). In some cases they will be denied the possibility of having children with their intimate; they may suffer psychiatric illness; they have to live with the risk of HIV infection from their infected intimate; the extent of this risk will vary from case to case. They may in due course become HIV infected and accordingly such Plaintiffs will in the main seek orders for provisional damages.

- (h) Plaintiffs in category h. will give rise to the particular considerations in children's cases, whichever main category they belong to.
- (i) Plaintiffs in category i. will be bringing claims under the Fatal Accident Act 1976 and/or for the benefit of the Deceased's estate.

Michael Brooke and Hugh Evans

Michael Brooke and Hugh Evans

Michael Brooke and Hugh Evans

SERVED THIS DAY OF 1989

SERVED AS AMENDED THIS DAY OF 1989

SERVED AS REAMENDED THIS DAY OF 1989

APPENDIX ONEParticulars of paragraph 23

- (a) In a study published in the Annals of Surgery for September 1959, Dr JG Allen et al concluded that recipients of commercial blood had a hepatitis rate of 4.1 per hundred patients transfused, compared with a rate of 0.7 per hundred for recipients of voluntary donor blood.
- (b) In a study published in the Journal of the American Medical Association on 12th January 1970, Dr JH Walsh et al found hepatitis in 42 of 82 patients transfused with commercial blood, but none in 28 patients transfused with volunteer blood.
- (c) In an article published in Vox Sanguinis for 1971, Dr WV Miller et al suggested that the risk of transmitting hepatitis in blood products was significantly higher with commercial donors than with voluntary donors.
- (d) In a letter published in the New England Journal of Medicine on 14th January 1971, Dr Allan Kliman, Director of the Massachusetts Red Cross Blood Program, reported the finding of his Blood Centre of a hepatitis B<sub>e</sub> antigen rate of 1.5% in paid donors and a rate of 0.07% in volunteer donors.
- (e) In a study published in the Annals of Internal Medicine of 1972, Harvey J Alter et al concluded that the exclusion of commercial donors from blood products

- ✓ would decrease the hepatitis rate in haemophiliacs by 70%. JTB  
new  
crg.
- (f) In an article published in the British Medical Bulletin for May 1972, Dr W Maycock of the BPL stated that transmission of viral hepatitis was the most serious complication in the use of blood and blood products, and referred to the study of WV Miller referred to above and other studies.
- (g) In a study published in the Journal of Infectious Diseases of January 1973 by Wolf Szmuness et al, it was found that the prevalence of Hepatitis ~~Haemophilia~~ B antigen was three times greater in paid blood donors than voluntary donors.
- (h) In a review of post-transfusion hepatitis published in the Scandinavian Journal of Infectious Diseases in 1974, Dr V Reinicke concluded that the most important prophylactic measure available to avoid hepatitis from blood products was to adhere to voluntary blood donors only.
- (i) The report of the Medical Research Council Working Council on Post-Transfusion Hepatitis, published in the Journal of Hygiene in 1974, reported United States studies showing a higher rate of hepatitis from commercial blood sources than from volunteer sources.
- (j) In an article published in Transfusion in May/June 1974, JH Lewis et al reported that hepatitis is a

serious threat to haemophiliacs, that the use of fractions prepared from very large pools had increased the risk of exposure to hepatitis, that the introduction of screening had not reduced the incidence of hepatitis, and that Factor IX concentrate was three times more infectious than Factor VIII concentrate. N>!

- (k) In an article published in the Lancet on 3rd August 1974, Alfred M Prince et al reported their study which showed that a non-B hepatitis virus was responsible for over 70% of post-transfusion cases of hepatitis, and that the rate of infection was ten times greater with blood from commercial than from volunteer blood donors.
- (l) In an article by M Goldfield et al published in the American Journal of Medical Science for 1975, it was stated that with whole blood transfusions there was a four to ten times greater risk of the incidence of hepatitis associated with blood obtained from commercial as opposed to voluntary donations.
- (m) In an article published in Thrombosis et Diathesis Haemorrhagic in 1975, Harold R Roberts et al reported that few cases of post transfusion hepatitis occurred before the introduction of Factor VIII concentrates, and that the large pool size and use of paid blood donors increased the risk of infection. N
- (n) In an article published in the Journal of Clinical Pathology in 1975, PM Mannucci et al reported their



study suggesting that repeated and prolonged contact with the agent responsible for post-transfusion hepatitis may cause chronic liver damage, that the rate of exposure to hepatitis had probably increased since the introduction of the use of Factor VIII and IX concentrates with a high risk of contamination because of the use of a large number of donors, and that donor screening was unlikely to eliminate the risk of hepatitis.

- (o) In January and on 13th February 1974, Dr Garrott Allen, a leading US campaigner, wrote to Dr Maycock, a senior adviser to the DHSS, warning of the risks of commercial blood.
- (p) In a review published in the Annals of the New York Academy of Science on 20th January 1975, Alfred M Prince concluded that screening was not sufficient to prevent a major proportion of cases of hepatitis, and the most effective method of preventing hepatitis was the elimination of commercial donors.
- (q) In a paper presented at the symposium on Viral Hepatitis on 17-19 March 1975, Martin Goldfield et al concluded that the enhanced risk of hepatitis associated with the use of commercial blood was now obvious.
- (r) In an article published in the Lancet on 2nd August 1975, J Craske et al reported on an outbreak of

jaundice associated with a brand of commercial Factor VIII concentrate, that concentrate produced in the United Kingdom was required, and that Commercial Factor VIII should be reserved in the meantime for life-threatening bleeds and major operations in severe haemophiliacs.

- (s) In a letter published in the Lancet on 16th August 1975, DS Dane et al reported their tests on fourteen batches of commercial Factor VIII concentrate which showed that eight were infected with hepatitis antigen.
- (t) In an article published in the American Journal of the Medical Sciences in September 1975, Harvey J Alter et al reported that the exclusion of commercial and antigen positive donors markedly reduced the frequency of post-transfusion hepatitis.
- (u) In an article published in the American Journal of the Medical Sciences in September 1975, Leonard B Seeff et al reported their study which showed that an undefined non-B hepatitis agent was responsible for the majority of instances of post-transfusion hepatitis occurring, that the most important risk factor was the use of commercial blood which was five times as infectious as volunteer blood, and they urged that this form of blood be removed from general use.
- (v) In a discussion on post-transfusion hepatitis published in the American Journal of the Medical Sciences in

September 1975, Dr Richard A Aach stated that the most effective means by far of reducing post-transfusion hepatitis was the elimination of commercial donors.

- (w) In an article published in the Lancet on November 1st 1975, Harvey J Alter et al concluded that hepatitis NANB and hepatitis B were considerably more common in recipients of blood obtained from commercial donors than voluntary donors.
- (x) At a meeting held between 9th and 13th December 1975 organised by the WHO and the League of Red Cross Societies, the participants, who included Dr W d'A Maycock, unanimously recommended that a national blood service should rely on volunteer donations of blood.
- (y) In a World In Action television programme broadcast in or about the end of 1975:
  - (i) It was stated that paid donors, used in imported United States concentrate, were six to thirteen times more of a health hazard than British volunteer blood donors.
  - (ii) Haemophiliacs were interviewed who stated that they would prefer United Kingdom blood products to imported products because of the reduced risk of transmitting hepatitis.
  - (iii) Professor Zuckerman of London University stated that it was well recognised that the commercial donor carries a greater risk of transmitting

hepatitis, that the WHO recommended exclusion of commercial donors, and that such exclusion was the single most effective measure to reduce the incidence of hepatitis following transfusion.

- (iv) Dr David Owen, a Department of Health minister, recognised that foreign commercial donors were a greater health risk than volunteer British donors because they had a commercial interest in not disqualifying themselves by declaring previous hepatitis infections.
- (z) In an article published in the Journal of Laboratory and Clinical Medicine in July 1976, Jay H Hoofnagle et al stated that volunteer donors had a lower prevalence of hepatitis antigen than commercial donors.
- (aa) In the British Journal of Haematology for 1977, Dr Rosemary Biggs, basing her conclusions on data collected by the Haemophilia Centre Directors, stated that commercial donors seemed to have a higher incidence of hepatitis than unpaid donors, and recommended self-sufficiency in part on that ground. She stated that NHS concentrate was made from pools of 200 to 760 donors, whereas commercial concentrate was made from pools of more than 2,500 donors.
- (ab) In an International Forum published in Vox Sanguinis in 1977, Harvey J Alter stated that the exclusion of commercial blood decreased post-transfusion hepatitis.

Llewellys F Barker stated there continued to be a considerable amount of post-transfusion hepatitis caused by a non B virus and that all prospective studies had shown that the use of paid donors was the outstanding risk factor for post-transfusion hepatitis. GL Gitnick stated that the conversion of the blood supply from paid to volunteer donors reduced the risk of B and non-B hepatitis. Tibor J Greenwalt stated that the most effective means of reducing the occurrence of post-transfusion hepatitis was the use of volunteer donors. Alfred J Prince reported the finding that recipients of commercial blood were found to have more than ten times the incidence of NANB post-transfusion hepatitis than recipients of volunteer blood. HW Reesink stated that post-transfusion hepatitis was rare in the Netherlands probably because volunteer donors were used. Leonard B Seeff et al reported studies showing that post-transfusion hepatitis was significantly higher in recipients of commercial rather than volunteer blood. William L Bayer stated that the elimination of commercial donors in Kansas had been followed by a dramatic decrease in post-transfusion hepatitis. James W Moseley stated that commercial concentrates from large pools of paid donors continued to cause a very high rate of viral hepatitis in the United States.

- (ac) In an article published in the Scandinavian Journal of Haematology for 1977, Dr GIC Ingram of St Thomas' Hospital, London, referred to the increased risk to haemophiliacs of bloodborn viruses from blood products made from foreign sources.
- (ad) In a study published in the Scandinavian Journal of Haematology in March 1977, Dr V Holsteen et al found that there was a ten fold difference in the rate of infection between Danish voluntary blood and commercial concentrate, and concluded that the most dangerous sources of hepatitis infection in blood products could be avoided by the avoidance of paid blood donors.
- (ae) In a paper published in GN Vyas, ed., Viral hepatitis, Philadelphia 1978, PV Holland reported ten years of data that showed that even after screening, commercial donors carry a higher risk of transmitting hepatitis B and hepatitis NANB in blood products than volunteer donors, and recommended the use of volunteer blood only.
- (af) In 'The treatment of Haemophilia A and B and Von Willebrand's Disease' edited by Dr Rosemary Biggs, Oxford 1978, Dr Biggs reported in chapter nine studies which showed that hepatitis B antigen was found in one in every 50 or 100 samples of United States paid blood, but in only one in every 1,200 or 1,500 in donation from NHS volunteer donors, a figure similar to American

volunteer donors. She stated that even methods to detect the virus would not eliminate all infections, and recommended that mildly affected patients who had never or only infrequently been transfused should not be given commercial concentrates.

- (ag) In an article published in the Journal of Clinical Pathology in 1978, CJ Burrell et al found that the rate of hepatitis B virus seroconversion for haemophiliacs treated with exclusively Scottish blood products from voluntary donations was only about 0.3 per thousand donations.
- (ah) In a survey published in the Journal of Hygiene for 1978, Dr J Craske of the Public Health Laboratory Manchester et al found that a brand of imported commercial Factor VIII prepared from large plasma pools of paid donors was associated with the occurrence of hepatitis in 66 out of a total of 371 transfusions, which is 17.7%, whereas an earlier survey in 1974 had found that the rate of infection before the introduction of commercial concentrate had been 1.8%.
- (ai) On 15th May 1978, a Federal Regulation came into force in the United States requiring blood for transfusion to be labelled as paid donor or volunteer donor blood.
- (aj) In a review published on 22nd June 1978 in the New England Journal of Medicine, George F Grady concluded that the low prevalence of Hepatitis B antigens in the

blood of volunteer donors was such that the most extensive combination of exclusionary tests applied to commercial blood would not lower its infectivity rates to the levels of untested volunteer blood.

(ak) In a letter to the Lancet published on 11th November 1978, Dr J Craske et al on behalf of the United Kingdom Haemophilia Centre Directors' Hepatitis Working Party suggested that a type of non-B hepatitis was only associated with an imported commercial product.

(al) In an article by Dr Paul Ness et al published in the Journal of the American Medical Association on 20th April 1979, it was reported that the FDA had withdrawn fibrinogen concentrates because of the risk of hepatitis from large pools of human plasma.

(am) In a review published in the Annals of Internal Medicine of 1980, Richard D Aach et al stated that viral hepatitis was the most serious post-transfusion complication, and concluded that a marked reduction in hepatitis B and NANB would follow the reduction in the use of commercial blood.

(an) In an editorial in the British Medical Journal published on 9th August 1980, the static deficiency in the Production of Factor VIII concentrate was criticised, and the increased risk of contamination with hepatitis from imported concentrate was noted.



- (ao) At an international symposium held in Glasgow in September 1980 and published in 1982, Dr Craske on behalf of the Public Health laboratory, Withington Hospital, stated that Hepatitis B was strongly correlated with the use of concentrates made from large pools, and suggested that there was an increased risk of infection from NANB hepatitis from commercial Factor VIII. He said that NHS concentrate was made from pools of up to 3,500 donations, but the size of the pools was likely to decrease. His findings were supported by a study of Dr HC Thomas et al reported at the same conference.
- (ap) In the Medical World in December 1980, Norman Pettitt of the ASTMS group covering the BPL stated that imported commercial blood was more infectious than NHS blood.
- (aq) In the House of Commons on 15th December 1980, Mr Martin Flannery, in an adjournment debate on the Blood Transfusion Service, stated that blood collected from paid donors used in imported commercial Factor VIII was ten times more likely to contain hepatitis B virus than blood collected from unpaid donors. Sir George Young, Under-Secretary of State for Health and Social Security, noted the risk of hepatitis from imported products.

- (ar) In an article published in *Seminars in Haematology* in April 1981, M Conrad, reporting on the situation in the United States, stated that the replacement of paid by volunteer donors in blood banks was a major factor in the decline of viral infections in the recipients of blood and blood products, and that hepatitis NANB was responsible for 80% to 90% of post-transfusion hepatitis.
- (as) In an article published in the *Lancet* on 8th August 1981, Drs Robert Crawford and Ruthven Mitchell of the Glasgow and West of Scotland Blood Transfusion Service recommended that the use of large pool coagulation products should be kept to a minimum to reduce the risk of NANB hepatitis.
- (at) In an editorial in the *British Medical Journal* of 4th July 1981, it was reported that the use of volunteer rather than paid donors and the use of small donor pools reduced the risks of hepatitis.
- (au) In an editorial published in the *Lancet* on 11th July 1981, it was stated that NANB hepatitis was accepted as a serious hazard of treatment with Factor VIII, and blood from paid donors was more likely to transmit hepatitis than that from volunteer donors.
- (av) In a study published in *Vox Sanguinis* in September 1981 by G Norkrans et al, it was found that hepatitis NANB infection rates for the first treatment with

Factor VIII obtained from large plasma pools including paid donors was 40%, whereas the rate was 8% for treatment from smaller pools from Scandinavian volunteer donors.

- (aw) In an article in Human Pathology published in December 1981, Paul Holland and Harvey Alter stated that there was no justification for the use of high risk commercial blood products such as clotting concentrates, except for highly specialised or rare blood products, because of the risk of hepatitis.
- (ax) In an article published in Haematologia in 1982, HE Blum et al stated that blood from commercial donors carried a higher risk of transmitting hepatitis than blood from volunteer donors, and the elimination of commercial donors was the most significant factor in the reduction of 70% in post-transfusion hepatitis in the United States.
- (ay) In 'Blood Transfusion in Clinical Medicine', Oxford January 1983, Professor PL Mollinson reported studies showing that commercial blood donors were ten times as frequently infected with hepatitis antigen than volunteer donors.
- (az) At the World Federation of Haemophilia Congress between 27th June and 1st July 1983, published in the Scandinavian Journal of Haematology in 1984, SI Warson recommended the use of small donor populations and

volunteer donors for concentrates to avoid hepatitis B and NANB.

(ba) In an article published in the British Medical Journal on 10th December 1983, and highlighted in an accompanying editorial, ML Fletcher and others found that commercial concentrate was more infectious with hepatitis than NHS concentrate, and suggested the increase in size of the NHS donors pool had increased the infectivity of NHS blood.

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APPENDIX 2Particulars of Paragraph 26

- (a) The matters pleaded in Paragraph 28 below.
- (b) In or about 1974, the Report of the Medical Research Council's Blood Transfusion Committee recommended that a great effort should be made to make the United Kingdom self sufficient in Factor VIII, and stated that self-sufficiency would be very substantially cheaper in the long run than importing commercial concentrate.
- (c) In the British Medical Journal for 21st August 1976, Dr Felicity Carter et al forecasted that supplies of concentrate produced in the United Kingdom would be considerably cheaper than imported concentrate.
- (d) In a paper given at an International Forum published in October 1976, and in an article published in the British Medical Journal on 18th September 1976, Dr JD Cash, Director of the South-East Scotland Regional Blood Transfusion Centre, Edinburgh, stated that reliance on commercial concentrate rather than self-sufficiency would be extremely costly.
- (e) In a World In Action television programme broadcast in or about the end of 1975:
  - (i) it was stated United Kingdom Factor VIII concentrate would cost as little as 3p per unit, whereas imported commercial concentrate cost 12p.

- (ii) Dr John Watt of the Scottish Blood Transfusion Service stated that United Kingdom Factor VIII concentrate would be about half ~~or of~~ a third of the cost of imported commercial concentrate
- (iii) Dr David Owen, a Department of Health minister stated that there was a strong commercial case for self-sufficiency in Factor VIII concentrates.
- (f) In an article published in Thrombosis et Haemostasis 1976, Dr CR Rizza of the Oxford Haemophilia Centre pointed out that imported commercial concentrate is extremely expensive as compared with NHS blood.
- (g) In an article published in the British Journal of Haematology for 1977, Dr Rosemary Biggs recommended self-reliance on the grounds of cost.
- (h) In 'The treatment of Haemophilia A and B and Von Willebrand's Disease' edited by Dr Rosemary Biggs, Oxford 1978, Dr Biggs stated in Chapter four that commercial Factor VIII was very expensive to buy, and the most economic and reasonable plan was for there to be adequate NHS concentrate.
- (i) In an article published in the British Medical Journal on 3rd June 1978, Dr P Jones et al criticised the government for not investing enough money to achieve self sufficiency, and stated that it seemed to be a poor economic policy.

- (j) In an article published in the Lancet on 11th August 1979, Dr John Watt of the Scottish National Blood Transfusion Service calculated that Scottish concentrate cost 7.5p per unit, whereas the lowest priced commercial concentrate cost 9.5p, and thus the Scottish Health Service had achieved a handsome return on investment.
- (k) In the Medical World in December 1980, Norman Pettitt of the ASTMS group covering the BPL recommended United Kingdom self-sufficiency in blood products on the grounds that any investment would easily be recouped.
- (l) In the House of Commons on 15th December 1980, Mr Martin Flannery, in an adjournment debate on the blood transfusion service, stated that the under-investment in self-sufficiency was a false economy.
- (m) In an article in Medical World for October/December 1982, C Jackman of the Oxford Blood Transfusion Centre stated that the United Kingdom was not self-sufficient in Factor VIII, and so had to purchase commercial Factor VIII at great cost.

APPENDIX 3Particulars of Paragraph 43

- (a) In a study published in the Proc Soc Exp Biol Med for 1953, R Murray et al showed that infected plasma heated at 60 degrees for two and four hours partially removed the infectivity of hepatitis B.
- (b) In a study published in the Journal of Infectious Diseases for August 1978, T Shikata et al reported that although it was widely accepted that heat treatment at 60 degrees for 10 hours destroys hepatitis B virus, their studies showed that there was a 10,000 fold decrease in infectivity.
- (c) In a paper published in Vox Sanguinis for 1979, R Harris et al reported a method whereby nearly all useful plasma proteins could be heat-treated to inactivate hepatitis B from contaminated plasma.
- (d) In Die Gelben Hefte for 1980 and in Haemostasis for 1981, N Heimberger et al reported that heat treatment of Factor VIII, to which had been added hepatitis B virus, stopped any infection of hepatitis in chimpanzees.
- (e) In an article in the Lancet on 12th July 1980, E Tabor et al reported on a successful method for preventing the transmission of hepatitis B in clotting factor concentrate by heat treatment.



- (f) In a paper presented at the first International Haemophilia Conference, and referred to in an editorial in the British Medical Journal on 4th July 1981 which looked forward to a commercially practicable product, H Schwinn et al reported that viral contamination may be removed from the blood products given to haemophiliacs by a method of heat-treatment.
- (g) In a paper published in Szmuness et al: Viral hepatitis; 1981 International Symposium, E Tabor et al showed that in plasma derivatives such as Factor VIII and IX the agent for NANB hepatitis could be inactivated by heating at 60 degrees for ten hours.
- (h) In a study published in Thrombosis Res. 1981, E Tabor et al showed that Hepatitis B virus could be inactivated by heating purified stabilised Factor
- (i) In an article in Haemostasis for 1981, N Heimbürger reported on a method of heat-treating Factor VIII concentrate against infection by hepatitis B.
- (j) In an article published in Transfusion for September/October 1982, RJ Gerety et al concluded that heat treating Factor VIII and IX blood products decreased the risk of hepatitis B.
- (k) In a paper published in Thrombosis et Haemostasis 1983, A MacLeod et al reported methods of successfully pasteurising Factor VIII and IX concentrates against hepatitis.

- (l) Heat-treated American concentrates were introduced into Sweden in March 1983.
- (m) On 27th April and 1st June 1983, Scrip reported that the FDA had approved a new heat treatment used in the production of Factor VIII by Travenol Laboratories which reduced the infectivity of viruses, including hepatitis B and NANB, and might reduce the incidence of AIDS.
- (n) At the World Federation of Haemophilia Congress between 27th June and 1st July 1983, published in the Scandinavian Journal of Haematology in 1984, R Gerety stated that heat treatment of stabilised clotting factors inactivated both hepatitis B and NANB viruses. Professor AL Johnson et al reported that several manufacturers had initiated heating of clotting factor at 60 degrees for ten hours.
- (o) In a letter published in the Lancet on 19th November 1983, Anne Welch et al reported on successful pasteurisation of human immunoglobulin against hepatitis, and referred to three successful methods of pasteurisation of Factor VIII and IX.
- (p) In a report in Scrip on 27th February 1984, it was stated that the FDA had approved Revlon's product licence application for heat-treated Factorate, which was intended to reduce the transmission of hepatitis.

(q) In an article in the Journal of Infectious Diseases, published in August 1984, FB Hollinger et al reported that heating Factor VIII in the lyophilized state at 60 degrees for 10 hours inactivated hepatitis viruses and preserved the integrity of the proteins.

APPENDIX 4Particulars of Paragraph 45

- (a) The particulars given at Paragraph 23 are repeated.
- (b) In or about 1974, the report of the Medical Research Council's Blood Transfusion Research Committee stated that bottles of cryoprecipitate were made in Oxford from two donations whereas bottles of concentrate were made from 200 donors, and mildly affected haemophiliacs patients have a higher incidence of hepatitis if large-pool fractions are used.
- (c) In an article published in the Lancet on 2nd August 1975, J Craske et al stated that treatment with Factor VIII concentrates exposes patients to a higher risk of contracting hepatitis than cryoprecipitate which is made from one or two donations.
- (d) In an article published in Blood in July 1977 by Peter Levine et al, studies were reported showing a lower incidence of liver abnormalities in recipients of cryoprecipitate than of concentrate.
- (e) In an article published in Transfusion in September/October 1977, UW Hasiba et al found that much lower incidents of liver abnormality were found in haemophiliacs treated with cryoprecipitate rather than concentrates, and recommended that single donor products should be used for mild haemophiliacs.

- (f) In the Medical Letter for 1978, no 20 page 26, it was recommended that newly diagnosed haemophiliacs, mild or moderate haemophiliacs, and children less than four years old should receive cryoprecipitate rather than concentrate.
- (g) In an article published in the Lancet on 16th September 1978, FE Preston et al reported that the development of chronic liver abnormalities in Sheffield haemophiliacs seemed to be a recent development and was probably related to the introduction of the use of concentrates rather than cryoprecipitate.
- (h) In an article by Dr Paul Ness et al published in the Journal of the American Medical Association on 20th April 1979, it was reported that the FDA had withdrawn fibrinogen concentrates because of the risk of hepatitis from large pools of human plasma, and that cryoprecipitates were a safe method of supplying Factor VIII.
- (i) At an international symposium held in Glasgow in September 1980 and published in 1982, Dr Craske on behalf of the Public Health Laboratory, Withington Hospital, stated that of 138 cases where the transfusion history was known, 103 cases of hepatitis NANB had been associated with concentrate, but only seven with cryoprecipitate. Dr HC Thomas et al stated that abnormal aspartate transaminase levels were lower

in haemophiliacs who had received cryoprecipitate rather than concentrate.

- (j) In an article published in the Journal of Clinical Pathology in 1981, ML Stirling et al reported that liver function in Edinburgh haemophiliacs had deteriorated with treatment with concentrates, whereas it had not for those receiving cryoprecipitate.
- (k) In an article in Progress in Haematology Volume XII in 1981, Dr L Aledort et al stated that patients with infrequent bleeding episodes have a lower risk of developing hepatitis if they use cryoprecipitate.
- (l) In an article in Haemostasis 10 in 1981, it was stated that mild haemophiliacs should avoid pooled blood products because of the risk of hepatitis and use cryoprecipitate instead.
- (m) In a letter published in the British Medical Journal on 8th August 1981, G Gabra et al from the Glasgow and West of Scotland Blood Transfusion Service stated that because of the risk of hepatitis in haemophilia Switzerland used mainly cryoprecipitates, and only used concentrates for bleeding in severe cases of haemophilia A and patients with inhibitors. The authors recommended that cryoprecipitate should be considered wherever possible. On the same date in the Lancet, R Crawford et al from the same organisation made the same recommendation.

- (n) In an article published in Human Pathology in December 1981, Dr PV Holland et al recommended the use of cryoprecipitate wherever possible to reduce the risk of hepatitis.
- (o) In 'Blood Transfusion in Clinical Medicine' by Professor P Mollison, Oxford January 1983, it was stated that Cryoprecipitates were derived from only a small number of donors and so carry a far smaller risk of conveying viral hepatitis than do Factor VIII concentrates.
- (p) In a paper given at the World Federation of Haemophilia Conference between 27th June and 1st July 1983, and published in the Scandinavian Journal of Haematology in 1984, S Warson stated in a discussion of the hepatitis risk to haemophiliacs that patients with infrequent bleeding episodes ought to be treated with cryoprecipitates.
- (q) In an article by Fletcher et al and an editorial published in the British Medical Journal on 10th December 1983, it was reported that the administration of cryoprecipitate was safer than the administration of concentrate for the avoidance of hepatitis.

APPENDIX 5Particulars to paragraph 47

- (a) In the Lancet on 23rd April 1977, Mannucci et al reported successful clinical trials with Desmopressin in the management of mild haemophilia.
- (b) In a letter published in the Lancet on 17th September 1977, Gordon Lowe et al found that Desmopressin was useful for mild and moderate haemophiliacs with high-titre inhibitors.
- (c) In a letter published in the Lancet on 1st October 1977, GIC Ingram et al found that lower levels of Desmopressin than administered by Lowe produced satisfactory Factor VIII levels, and that Desmopressin was a useful method of treatment for mild haemophiliacs.
- (d) In a letter published in the Lancet on 3rd December 1977, PM Mannucci et al reported that smaller levels of Desmopressin than they had used before produced satisfactory results for mild haemophiliacs.
- (e) In the Medical Letter for 1978, no 20 page 26, it was recommended that Desmopressin may be useful for the treatment of mild or moderate haemophilia.
- (f) In an article in the British Journal of Haematology in 1981, Mannucci et al published dosages for the use of Desmopressin, and recommended its use for mild haemophiliacs.



- (g) In an article published in Thromb Haemostas on 24th August 1982, VV Garcia et al recommended Desmopressin for mild to moderate haemophiliacs.
- (h) In an article published in the British Journal of Haematology in 1983, GC Nenci et al reported that Desmopressin increased the level of Factor VIII activity.
- (i) In 'Blood Transfusion in Clinical Medicine' by Professor P Mollison published in or about January 1983, the use of Desmopressin for mild and moderate haemophiliacs was adverted to.
- (j) In an article published in the Journal of Paediatrics in February 1983, Dr AI Warriar et al recommended Desmopressin as a safe and effective alternative to blood products for moderate or mild haemophiliacs.
- (k) In an article published in the Journal of the American Medical Association, Charles Marwick reported that the FDA had been advised to approve Desmopressin, and that it was useful for the treatment of mild haemophiliacs.
- (l) In a paper given at the World Federation of Haemophilia Conference between 27th June and 1st July 1983, and published in the Scandinavian Journal of Haematology in 1984, S Warson stated in a discussion of the hepatitis risk in haemophiliacs that the use of Desmopressin was interesting.

- (m) In an article published in the British Medical Journal on 10th December 1983, Dr Peter Jones recommended Desmopressin and Danazol for the treatment of mild haemophiliacs.
- (n) In an article published in Clinical and Laboratory Haematology in 1984, G Mariana et al reported their findings that Desmopressin was efficacious and was worthy of consideration as a reliable alternative to Factor VIII concentrates in a wide variety of clinical situations.
- (o) In Medical News on 24th June 1984 ~~4~~ 3, it was stated that "DDAVP" (Desmopressin) was marketed in the United Kingdom, and that the commissioner of the FDA had been advised to approve it.

APPENDIX 6Particulars of Paragraph 61

- (a) In MMWR on 5th June 1981 it was reported that five Los Angeles homosexuals had contracted pneumocystis carinii pneumonia between October 1980 and May 1981, and two had died.
- (b) In MMWR on 3rd July 1981, it was reported that the uncommon Kaposi's Sarcoma had been reported in 26 homosexual men in New York and California in the previous 30 months, fifteen cases of pneumocystis carinii pneumonia, and five cases of herpes simplex infections.
- (c) In MMWR on 28th August 1981, it was reported that 70 cases of Kaposi's sarcoma and pneumocystis carinii pneumonia had been reported since 3rd July 1981, almost exclusively among homosexuals, and 40% were fatal. An underlying immunosuppression was suggested.
- (d) In the Lancet on 19th September 1981, Kenneth B Hymes et al reported eight young New York homosexuals with Kaposi's sarcoma, and suggested that sexual transmission may play a role in transmission.
- (e) In the New England Journal of Medicine on 10th December 1981, Dr Michael S Gottlieb et al stated that the cases of pneumocystis carinii pneumonia in previously healthy homosexual men suggested an underlying sexually transmitted agent. Henry Masur et al reported on

pneumocystis carinii pneumonia in homosexuals and drug addicts. Frederick P Siegal et al reported that four homosexuals infected with herpes simplex were found to have severe acquired immunodeficiency, and that viral infection may be an important factor.

- (f) In the Lancet on 12th December 1981:
  - (i) An editorial reported that there were 180 cases of Kaposi's sarcoma and pneumocystis carinii pneumonia in young United States homosexuals, that numbers were increasing by seven to ten a week, that the mortality rate was an alarming 40%, and that a virus may play a part.
  - (ii) Robert O Brennan et al reported on the outbreak of Kaposi's sarcoma and pneumocystis carinii in United States homosexuals, and reported on a sufferer of both diseases.
  - (iii) RM du Bois et al reported on a homosexual suffering from pneumocystis carinii pneumonia admitted to the Brompton Hospital London.
- (g) In an article published in the New England Journal of Medicine on 28th January 1982, it was reported that 218 cases of Kaposi's sarcoma and pneumocystis carinii pneumonia and other serious opportunistic infections had been reported between 1st June 1981 and 13th January 1982, with a 40% mortality rate. It was suggested that there may be a single epidemic of

underlying immunosuppression, and that the reported diseases may represent the tip of the iceberg.

- (h) In a letter published in the Lancet on 30th January 1982, Marcus A Conant et al reported on about a hundred cases of pneumocystis carinii pneumonia and Kaposi's sarcoma in United States homosexuals, suggesting that a new infectious or environmental agent was severely suppressing immunity.
- (i) In an article published in the Journal of the American Medical Association on 26th March 1982, Dr Richard Johnson et al reported on the epidemic of Kaposi's sarcoma in homosexual men in New York and California, and suggested a link with cellular immunodeficiency.
- (j) In a letter published in the Lancet on 17th April 1982, Isabelle Gorin et al remarked on epidemic of severe opportunistic infections in United States homosexuals and the incidence of such cases in European homosexuals with recent American partners, and reported two cases of French homosexuals who were immunocompromised without any American link. Joyce I Wallace et al remarked on the dramatic increase in serious opportunistic infections in United States homosexuals, and reported that lower T4:T8 ratios found in homosexual sufferers of Kaposi's sarcoma and other opportunistic infections were also found in healthy promiscuous New York homosexual men.

- (k) In a letter published in the Lancet on 1st May 1982, Donald C Doll reported a case of Burkitt's lymphoma, another rare malignancy, in a homosexual American. Ole Jensen et al reported two cases of Kaposi's sarcoma in Copenhagen among homosexuals, and stated that it was most likely to represent a truly new disease.
- (l) In an article published in the Lancet on 15th May 1982, Michael Marmor et al remarked on the epidemic of severe opportunistic infections in United States homosexuals which had prompted suggestions that there was one underlying epidemic of immune suppression, and reported an investigation into 20 homosexual men with Kaposi's sarcoma, and they suggested multiple infections may have caused immunosuppression which allowed the disease to develop.
- (m) In the Annals of Internal Medicine in June 1982:
  - (i) Alvin E Friedman-Kien et al reported on 19 cases of Kaposi's sarcoma in homosexual men, and suggested that it is likely that, inter alia, an acquired immunoregulatory effect and one or more infectious agents may be involved.
  - (ii) Dr Donna Mildvan et al reported on four homosexual patients with a syndrome of opportunistic infections and acquired immune deficiency characterised by diminished numbers of T cells.

- (iii) Dr Stephen E Follansbee et al reported on the outbreak of pneumocystis carinii pneumonia in homosexual men, and stated that it was likely that an agent not yet identified, an environmental factor or multiple factors were involved.
- (iv) Dr Lynn Morris et al reported on eleven cases of autoimmune thrombocytopenic purpura in homosexual men diagnosed since November 1981, and linked them to other opportunistic infections.
- (n) In the Journal of the American Medical Association published on 4th June 1982, Dr John D Bartlett reported that 160 cases of Kaposi's Sarcoma and pneumocystis carinii pneumonia had been reported by the end of 1981, with a 30% to 50% mortality rate, and that the compromise in cell-mediated immunity appeared well confirmed. Dr Joseph A Bellanti reported on the same epidemic.
- (o) In an article published in the British Medical Journal on 3rd July 1982, J Gerstoft et al drew the attention of European doctors to the syndrome of severe acquired immunodeficiency in homosexual men, and reported four Danish cases that indicated that the syndrome had spread to Europe.
- (p) On 16th July 1982, MMWR reported three cases of haemophiliacs who had developed AIDS, and suggested possible transmission of an agent through blood

products. It was reported that a Public Health Service Advisory Committee was being formed to consider the implications of the findings.

- (q) In an article published in the Lancet on 17th July 1982, W Lawrence Drew et al suggested a link between Kaposi's Sarcoma and Cytomegalovirus.
- (r) In an article published in the Lancet on 18th September 1982, John L Ziegler et al reported on four new cases of Burkitt's-like lymphoma, and noted two other such cases, which widened the diseases affecting immunosuppressed homosexual men.
- (s) In an article in the Journal of the American Medical Association published on 24th September 1982, the number of AIDS cases was described as alarming, with 233 deaths and 579 reported cases. The existence of three haemophiliac victims of AIDS was reported, and it was suggested that the agent was transmitted through blood products.
- (t) In the Annals of Internal Medicine for October 1982, Dr Henry Masur et al reported opportunistic infections in five previously healthy New York women. Dr Jeffry Greene et al reported a new opportunistic infection of Mycobacterium avium-intracellulare in homosexuals and drug-addicts.
- (u) In a paper published in the Yale Journal of Biology and Medicine for 1982, Dr V Quagliarello reported that



as of November 1982, 691 cases of AIDS had been reported, 639 in the United States, 40% of them fatal. He stated that haemophiliacs were the most recent group at risk, and the very common alteration in T-cell subsets in homosexuals associated with AIDS indicated that only the tip of the iceberg may have been experienced so far.

- (v) In the FDA Drug Bulletin for December 1982, it was reported that the CDC had received reports of 732 cases of AIDS up to 12th November 1982, 284 of them fatal, and occurrence of AIDS among haemophiliacs raised the question of transmission through blood products.
- (w) In an article published in the New England Journal of Medicine on 2nd December 1982, Dr James R Miller et al reported that AIDS had spread to new groups, and that there was typically a decreased proportion of T helper to T suppressor cells.
- (x) In the ~~Lancet~~ New England Journal of Medicine on 9th December 1982, Dr F Greenberg et al reported the spread of AIDS to haemophiliacs.
- (y) In MMWR on 10th December 1982, a possible transfusion-associated link with AIDS was reported. In the same issue it was stated that the three previously reported cases of haemophiliacs with AIDS had been fatal; five new cases of haemophiliacs with AIDS were reported, two of whom had died; a link with Factor VIII

concentrate was suspected. It was reported that 788 AIDS cases among adults had been reported to the CDC.

(z) In the Journal of the American Medical Association published on 10th December 1982, Dr Henry Mazur reported on *Mycobacterium avium-intracellulare* complex in patients with AIDS.

(aa) In an article published in Science on 7th January 1983, it was reported that AIDS may be caused by a virus that can be transmitted by blood products, which raised questions about the safety of blood products used by haemophiliacs. 827 cases of AIDS had been reported, 312 of them fatal, and the evidence of transmission to haemophiliacs was clear cut with seven confirmed cases.

(ab) In the New England Journal of Medicine on 13th January 1983:

(i) Dr J Desforges linked three recent cases of haemophiliacs with AIDS to blood products and warned of the risks from Factor VIII concentrate in particular, suggesting that cryoprecipitate should be used instead.

(ii) Dr Michael M Lederman et al reported on AIDS in haemophiliacs. They found generalised impairment of T-lymphocyte function in healthy haemophiliacs who had received concentrates, but not those who had received cryoprecipitates. Such impairment was also found in AIDS sufferers, and they

suggested that the AIDS pathogen may have caused the impairment.

(iii) Dr Jay E Menitove et al reported that persistent generalised lymphadenopathy was considered to be part of AIDS. AIDS had been discovered in haemophiliacs who used Factor VIII concentrate. Their studies showed abnormal T4/T8 cells in 36% of all treated haemophiliacs and 57% of haemophiliacs using Factor VIII concentrates.

(ac) In a letter published in the Lancet on 15th January 1983, Peter Jones et al reported that 11 out of 16 patients, all of whom had been exposed to United States commercial concentrates, had altered T cell subsets similar to AIDS, and that a New York study was similar.

(ad) In an editorial in the Lancet on 22nd January 1983, it was reported that there were 788 cases of AIDS in the United States, haemophiliacs were a major risk group, and a link with Factor VIII administration was suggested.

(ae) In the Lancet on 29th January 1983, RV Ragni et al reported on the occurrence of an AIDS like syndrome in two haemophiliacs. They stated that transmission by blood products seemed likely, and that haemophiliacs may be at an increased risk of AIDS.

(af) In an article published in the Journal of the American Medical Association on 4th February 1983, it was

reported that there were eight or ten cases of haemophiliacs with AIDS, that there was probably a link with blood products, that many public officials considered that swift action should be taken, and that AIDS was the second leading cause of death amongst haemophiliacs in 1982.

(ag) In the New England Journal of Medicine for 24th February 1983, Dr Oscar Rainoff et al reported on five haemophiliacs receiving Factor VIII concentrate who had chronic idiopathic Thrombocytopenic purpura, which they considered most unusual. They linked the cases with eleven similar cases, the seven haemophiliacs with pneumocystis carinii pneumonia and homosexuals with AIDS, and concluded that there was a need for careful surveillance of haemophiliacs receiving Factor VIII.

(ah) In a series of articles on AIDS in haemophiliacs published in the Annals of Internal Medicine in March 1983:

(i) Dr Kathleen C Davis et al in a study of a haemophiliac with AIDS concluded that the disease was explained by exposure to a virus or other transmissible agent during Factor VIII transfusions.

- (ii) Dr Man-Chiu Poon et al reported that the four known cases of haemophiliacs with AIDS had all received Factor VIII concentrate.
- (iii) Dr James G Elliott et al stated that the possibility that AIDS is associated with a transmissible agent acquired through the use of blood products such as factor VIII concentrates must be considered.
- (iv) Dr Jonathan C Goldsmith et al found that nine out of twelve healthy haemophiliacs had a striking reduction in the helper to suppressor cell ratios similar to those found in AIDS victims.
- (v) Dr James W Curran et al of the CDC suggested that if AIDS was caused by a transmissible agent then haemophiliacs would be at high risk.
- (vi) Dr G White et al suggested that the recent reports of AIDS in haemophiliacs may only be the tip of the iceberg because of frequency in haemophiliacs of cellular abnormalities associated with AIDS.
- (ai) The MMWR on 4th March 1983 reported that 1,200 cases of AIDS had been reported in the United States since June 1981, over 450 persons had died, reports had increased in number, and 11 haemophiliacs had life-threatening infections suggesting AIDS. A parallel was suggested with hepatitis B, blood products were blamed for the infections in haemophiliacs.

- (aj) In a joint statement issued on 4th March 1983, and published in Transfusion for March-April 1983 and in Hospitals on 1st May 1983, issued by inter alia the American Association of Blood Banks and the National Haemophilia Foundation, it was recommended that in response to the suggested link of AIDS and blood products, blood banks should plan for an increased demand for cryoprecipitate, and attempts to discourage likely AIDS victims from giving blood should be made.
- (ak) In an editorial published in the Lancet on 2nd April 1983, the advice from the CDC that steps should be taken to exclude high-risk ~~subject~~ groups from blood or plasmapheresis panels was repeated.
- (al) In an article published in the Lancet on 5th March 1983, Naomi Luban et al suggested that haemophiliacs may be at increased risk to AIDS because of the common abnormal T cell ratios which were similar to those found in AIDS victims.
- (am) In a review published in the British Medical Journal on 5th March 1983, Professor AP Waterson reported that abnormal T cell ratios were a principal immunological feature of AIDS, and that the tally of 788 cases towards the end of 1982 might be the tip of the iceberg.
- (an) In the Lancet on 2nd April 1983, it was stated that the world total of AIDS victims exceeded 1,200.

- (ao) in an article published in the Lancet on 30th April 1983, E Lissen et al reported on three haemophiliac patients treated with commercial concentrates who were the first cases of AIDS in Spain.
- (ap) In an article published in the Lancet on April 30th 1983, Dr J Ammann et al from California reported on a likely case of AIDS in an infant who had received a blood transfusion.
- (aq) In an article published in the Lancet on 30th April 1983, C Kessler et al stated that repeated exposure to blood products could be associated with the development of cellular abnormalities associated with AIDS, and exclusion of concentrates might reduce the incidence of AIDS.
- (ar) On 1st May 1983, in an article entitled 'Hospitals using killer blood' the Mail on Sunday reported that 1,300 Americans were suffering AIDS, 520 had died, that British statistics showing fourteen cases of AIDS and five deaths might understate the problem, and warned that blood and blood products imported from the United States for haemophiliacs and others may transmit AIDS.
- (as) In an editorial in the Journal of the American Medical Association published on 6th May 1983, Dr Anthony S Fauci wrote that the concern about AIDS was justified because the mortality was at least 50% and perhaps as

high as 75% to 100%, and the number of patients afflicted was doubling every six months.

- (at) In a report in The Health Services for 6th May 1983, it was stated that the directors of Britain's blood transfusion and haemophilia centres were facing a deluge of inquiries about the risk of AIDS from blood transfusions, in response to American reports that AIDS was now being transmitted in blood.
- (au) In the Hospital Doctor of 12th May 1983, it was reported that the CSM was keeping a close watch on imported blood products to protect haemophiliacs from AIDS, and Dr C Rizza of the Oxford Haemophilia Centre was reported as saying that until treated blood products became available, haemophiliacs were in the lap of the Gods.
- (av) On or about 12th May 1983, Mr Clive Jenkins of the ASTMS called for stricter controls on the import of blood products to reduce the risk of AIDS.
- (aw) In an article published in Science on 20th May 1983, Dr Barre-Sinoussi et al reported the tentative identification of a virus responsible for AIDS.
- (ax) In an article in the British Medical Journal published on 21st May 1983, WR Gransden et al remarked on 788 cases of the new and apparently lethal syndrome of AIDS in the United States, and reported on a fourth United Kingdom victim of AIDS.



- (ay) In an article published in the Lancet on 28th May 1983, T Andreani et al reported on a case of AIDS linked to transfusion four years before with Haitian whole blood, and stated that it supported the notion that some forms of AIDS may be transmitted by blood with a long incubation period.
- (az) In the Journal of the American Medical Association on 24th June 1983, Tom Hager reported that haemophiliacs receiving Factor VIII concentrates might have abnormal T cells similar to those found in AIDS victims, and suggested a transmissible agent in Factor VIII concentrates.
- (ba) At the World Federation of Haemophilia Congress in Stockholm between 27th June and 1st July 1983, JM Jackson et al reported on the epidemic of AIDS that a number of haemophiliacs had the disorder, and that AIDS was transmitted in blood, and that there were several reports of widespread alterations in T cell lymphocyte populations in haemophilia. J Jason et al drew a parallel between AIDS and hepatitis B. D Green reported that disturbances in immunoregulation were common in haemophiliacs. L Wolff et al reported that young haemophiliacs who had received commercial concentrates had progressive alterations in the T lymphocyte subset, and warranted close investigation. G Biberfeld et al reported that the cellular

abnormalities associated with AIDS were very common in Swedish haemophiliacs treated with concentrates; C Tsoukas et al reported similar findings in Canadian haemophiliacs. A Johnson et al stated that large pools of plasma lead to a greater likelihood of contamination with hepatitis or possibly AIDS.

- (bb) In the House of Commons on 11th July 1983, Mrs Dunwoody asked Mr John Patten, Secretary of State for Social Services, how many people in the United Kingdom had died of AIDS, and how many of them were haemophiliacs. The Secretary of State replied that there had been five male deaths, none haemophiliacs.
- (bc) In the Annals of Internal Medicine for August 1983, Dr Richard D de Shazo et al reported that haemophiliacs receiving Factor VIII therapy had developed AIDS, and that their survey of A and B haemophiliacs showed abnormal T cells in patients receiving concentrates. Dr Michael S Gottlieb et al reported that the fatality rate for AIDS was 90%, and that the cause was probably viral.
- (bd) In or about September 1983, both MMWR and the Journal of the American Medical Association reported that there was recent evidence from work by RC Gallo et al that Human T-cell Leukaemia virus infections occurred in patients with AIDS, and evidence from work by Barre-Senoussi et al of a related retrovirus isolated from

patients with the related condition of Lymphadenopathy syndrome.

- (be) On 1st September 1983, Kenneth Clarke, Minister for Health, recognised that there was a suggestion that AIDS may be transmitted in blood products.
- (bf) In the Journal of the American Medical Association on 2nd September 1983, it was stated that 17 cases of haemophiliacs with AIDS had been reported by June, ten of whom had died, and after haemorrhage AIDS was one of the next most common causes of death in haemophiliacs.
- (bg) In an article published in the Lancet on 24th September 1983, BL Evatt et al reported data which they suggested showed that transfusions with blood products may expose haemophiliacs to a substantial risk of acquiring the virus associated with AIDS.
- (bh) In the Lancet on 15th October 1983, Dr McDonald et al, and Dr RT Ravenholt separately, suggested that hepatitis B played an important part in the aetiology of AIDS. This was supported by a letter to the Lancet by Dr Luan published on 7th January 1984.
- (bi) In a letter published in the Lancet on 17th December 1983, A Shibuta et al reported a case of Burkitt's lymphoma, a disease associated with AIDS, in a Japanese haemophiliac.

- (bj) In a letter published in the Lancet on 19th November 1983, Dr H Daly et al reported the first fatal case of AIDS in a haemophiliac in the United Kingdom, and it was stated that it was highly probable that the development of AIDS was related to treatment with a commercial Factor VIII concentrate. This prompted an investigation of Factor VIII products.
- (bk) On 2nd December 1983, in MMWR, it was reported that 21 cases of AIDS in haemophiliacs had been reported in the United States and 7 outside, and that the possibility of blood or blood products as vehicles for transmission of AIDS to haemophilia patients was supported by the increased risk of AIDS in intravenous drug abusers.
- (bl) In an editorial in the British Medical Journal for 10th December 1983 it was reported that there were 2259 cases of AIDS in the United States by September 1983, 17 in haemophiliacs of which 10 had died, and that 60% of Factor VIII used in Britain in 1980 came from the United States.
- (bm) A letter in the Lancet for 10th December 1983 from J L'age Stehr reported that 44 West Germans had been reported with AIDS, 23 had died, and that one haemophiliac had died in 1983, most West German Factor VIII concentrate being of United States origin.

- (bn) In an article published in Vox Sanguinis in or about January 1984, S Sandler et al reported that 2,258 cases of AIDS had been reported to CDC by 2nd September 1983, 917 of them fatal, and that the link with blood products was supported by AIDS infections in intravenous drug abusers and haemophiliacs.
- (bo) The MMWR on 6th January 1984 reported that 3,000 AIDS sufferers had been reported in the United States, of whom 1,283 had died.
- (bp) A BBC2 Horizon television programme on 2nd April 1984 concerned the risk of AIDS from blood and blood products.
- (bq) In a letter published in the Lancet on 17th March 1984, the similarity of AIDS and hepatitis B was mentioned.
- (br) in the Lancet on 12th May 1984, it was reported that AIDS was probably caused by the HIV virus.
- (bs) In the Lancet on June 30th 1984, Dr AL Bloom and others recognised that the import of American plasma meant that AIDS may arise in haemophiliacs in Europe. In the same issue, R Carr et al reported that all haemophiliacs infected with AIDS had been treated with commercial concentrates. In the same issue, B Safai et al reported that haemophiliacs were a high risk group for infection with AIDS, that blood products were implicated in the transmission of AIDS, and that

the virus now known as HIV was probably the primary cause of AIDS.

- (bt) In an article published in the Annals of Internal Medicine for April 1984, B Evatt et al reported that AIDS in haemophilia was probably caused by concentrates, and that the appearance of AIDS in haemophiliacs two or two and a half years after the appearance in homosexuals might be explained by the latency period of the AIDS agent and the processing time of blood products.
- (bu) On 23rd April 1984, patent applications were filed in the United States for the discovery of the virus responsible for AIDS by R Gallo, and the Department of Health and Human Service announced the discovery at a press conference.
- (bv) In an article published in Science on 4th May 1984, R Gallo et al reported their discovery of the virus responsible for AIDS.
- (bw) In an editorial published in the Lancet on 12th May 1984, the possible discovery of the virus responsible for AIDS was reported.
- (bx) In a survey published in the Lancet on 30th June 1984, Dr A Bloom stated that the occurrence of AIDS in United States haemophiliac patients was normally attributed to an infective agent in concentrates, and as identical concentrates were imported into Europe, there was a

possibility of AIDS developing in European haemophiliacs.

- (by) In a study published in the Lancet on 18th August 1984, R Ramsey et al reported a high risk of exposure to the virus responsible for AIDS in heavy users of Factor VIII concentrate.
- (bz) In the Lancet on 1st September 1984, R Cheinsong-Popov et al reported a high prevalence of the HIV antibodies in British haemophiliacs.
- (ca) In MMWR on 26th October 1984, it was reported that 52 haemophiliacs had AIDS, 30 had died, and blood products were implicated for the infections.
- (cb) In a letter published in the Lancet on 9th February 1985, SJ Machin et al reported three cases of United Kingdom haemophiliacs with AIDS and several with a pre-AIDS condition.

APPENDIX 7Particulars of paragraph 69

- (a) In an article on preventing AIDS transmission published in Medical News on 4th February 1983, it was reported that major commercial plasma producers were working on heat-pasteurisation of Factor VIII and had licenses pending with the FDA.
- (b) On 1st June 1983, Scrip reported that the United States FDA had approved a new heat treatment used in the production of Factor VIII by Travenol Laboratories which reduced the infectivity of viruses, including hepatitis B and NANB, and might reduce the incidence of AIDS.
- (c) In an article published in the Lancet on 29th September 1984, J Levy et al reported that heating lyophilised Factor VIII at 68 degrees for several hours would inactivate infectious retroviruses, such as the virus probably involved in AIDS.
- (d) In an article published on 19th October 1984 in the Journal of the American Medical Association, it was reported that AIDS was probably transmitted to haemophiliacs through concentrates, and that the FDA had recently approved a heat treatment for blood products such as Factor VIII which might reduce the content of infectious agents.



- (e) In MMWR for 26th October 1984, The Medical and Scientific Advisory Council of the National Haemophilia Foundation advised that if concentrates were to be used, those administering the blood product should strongly consider changing to heat-treated products.
- (f) On ~~5th-December~~ 14th November 1984, the Haemophilia Society wrote to the Haemophilia Centre Directors stating that they would write to their members in seven days, and it did so write, recommending that haemophiliacs ask their Centre Directors to make heat-treated product available as soon as possible.
- (g) On 7th December 1984, the Haemophilia Society met with Lord Glenarthur, Parliamentary Under-Secretary of State at the Department of Health, requesting the immediate introduction of imported heat treated products and the release of additional funding to the regions to enable them to buy it.
- (h) In an editorial in the Lancet on 22nd December 1984, it was stated that it was reasonable to switch to heat-treated Factor VIII concentrate.
- (i) In the Lancet on 5th January 1985, the DHSS's Chief Medical Officer was reported as having stated on 20th December that the BPL was developing a method of heat-treating its Factor VIII to inactivate HIV, and that it was hoped to start routine treatment in April 1985.

- (j) In a study published in the Lancet on 26th January 1985, B Spire et al reported that the virus suspected of causing AIDS was inactivated by heating 56 degrees for thirty minutes.
- (k) In a letter published in the Lancet on 2nd February 1985, C Rouzioux et al repeated the advice of the Medical and Advisory Council of the National Haemophilia Foundation and the CDC to use heat-treated Factor VIII concentrate.
- (l) On 5th February 1985, Mr Kenneth Clarke, on behalf of the Secretary of State for Social Services, stated that the BPL had started heat-treating blood products against AIDS. This was repeated on 6th February by the Chief Medical Officer of the DHSS published in a DHSS press release.
- (m) In a letter published in the Lancet on 9th February 1985, Professor AL Bloom recommended the use of heat-treated Factor VIII and stated that they had been in use for over a year without immunological complications being reported.
- (n) On 20th February 1985, Mr Kenneth Clarke, on behalf of the Secretary of State for Social Services, stated in Parliament and was reported in a DHSS press release as stating that imported heat-treated Factor VIII was already available for prescription, applications for product licenses were being considered urgently, and

by April all Factor VIII produced at the BPL should be heat-treated.

- (o) On 22nd February 1985, the CDSC reported that heat treatment should eliminate the risk of AIDS in Factor VIII, and that such treatment had already begun in the United States and was to be introduced in the United Kingdom in April.
- (p) in a letter published on 23rd February 1985 in the Lancet, G Pierce reported a number of studies and recommendations on heat treatment to eliminate the AIDS virus, and concluded by favouring the use of heat-treated products.
- (q) In an article published in the Annals of Internal Medicine in March 1983, Dr G White et al asked whether heat treatment would inactivate the AIDS agent.
- (r) In a letter published in the Lancet on 6th April 1985, JP Allain et al reported studies that showed that there were no immunological complications in the use of heat-treated product, and that 300 million units of one such product had been administered.
- (s) At a conference on 15th to 17th April 1985, and reported in MMWR on 17th May 1985, a group of World Health Organisation consultants recommended that Factor VIII and IX concentrates should be heat-treated.
- (t) In a letter published in the Lancet on 22nd June 1985, J Levy et al reported the extension of their earlier

successful experiments to heat-inactivate Factor VIII against the AIDS virus.

- (u) In a letter published in the Lancet on 28th September 1985, it was noted that heat treatment probably eliminated the risk of HIV transmission.

APPENDIX 8Particulars of Paragraph 71

- (a) The Particulars of Knowledge given in paragraph 61 are repeated.
- (b) In an article published in the New England Journal of Medicine on 13th January 1983, Dr Jane Desforges reported that three haemophiliacs had contracted AIDS, and cellular abnormalities appeared from studies to be more likely in patients receiving concentrates. She recommended that changing to the use of cryoprecipitate should be considered. The article and its advice was mentioned in the Lancet on 2nd April 1983. Dr Michael M Lederman et al reported their findings of generalised impairment of T-lymphocyte function in healthy haemophiliacs who had received concentrates, but not those who had received cryoprecipitates. Such impairment was also found in AIDS sufferers, and they suggested that the AIDS pathogen may have caused the impairment.
- (c) In a joint statement issued by the American Association of Blood Banks and other groups on 13th January 1983 and reported in Transfusion for March/April 1983, it was recommended, inter alia, that:
  - (i) Blood Banks and transfusion services should further extend educational campaigns to

physicians to balance the decision to use any blood product against the risk of transfusion, such as hepatitis and AIDS;

- (ii) Blood banks should plan to deal with increased requests for cryoprecipitate because altered T lymphocyte function, a component of AIDS, had been reported to be less frequent in haemophiliacs treated with cryoprecipitates rather than concentrate.
- (d) On 14th January 1983, the Medical and Scientific Advisory Council of the National Haemophilia Foundation advised that Cryoprecipitate be used for new born infants, children less than four years old, patients never treated with factor VIII concentrates, and persons with mild haemophilia requiring infrequent treatment; furthermore that it should be considered whether to delay elective surgery.
- (e) In an article published in the Annals of Internal Medicine in March 1983, Dr Jonathan C Goldsmith et al found that nine out of twelve healthy haemophiliacs had a striking reduction in the helper to suppressor cell ratios similar to the reductions found in AIDS victims, but that only the other three had not been exposed to commercial factor concentrates.
- (f) In an article published in the Lancet on 30th April 1983, C Kessler et al reported suggestions that the risk of developing cellular abnormalities associated

with AIDS may be negligible in haemophiliacs treated only with cryoprecipitates, and they stated that exclusion of concentrates might reduce the incidence of AIDS.

- (g) In an article in the Journal of Clinical Investigation in May 1983, A Landay et al found normal immune parameters in haemophiliacs treated with cryoprecipitate, but cellular abnormalities similar to those found in AIDS patients in haemophiliacs treated with concentrates.
- (h) On 13th May 1983, the Haemophilia Reference Centre Directors decided to recommend that mildly affected patients be treated with Desmopressin, and children and mildly affected patients be treated be treated with British products.
- (i) On 23rd June 1983 the Committee of Ministers of the Council of Europe adopted the recommendation and notified the measure to (inter alia) the Department of Health that imported blood products from countries where remuneration of donors considerably increased the risk of contamination should be avoided wherever possible.
- (j) In the Journal of the American Medical Association on 24th June 1983, Tom Hager reported that haemophiliacs receiving Factor VIII concentrates might have abnormal T cells similar to those found in AIDS victims, and

suggested a transmissible agent in Factor VIII concentrates.

- (k) In a paper given at the World Federation of Haemophilia Conference between 27th June and 1st July 1983, and published in the Scandinavian Journal of Haematology in 1984, L Wolff et al compared studies which showed that haemophiliacs who had received cryoprecipitate had normal T-Lymphocyte subpopulations with studies which showed that haemophiliacs who had received commercial concentrates had cellular abnormalities. G Biberfeld et al reported greater cellular abnormalities in haemophiliacs treated with American commercial concentrate than those treated with Swedish concentrate. C Tsoukas et al reported higher rates of cellular abnormalities associated with AIDS in haemophiliacs receiving concentrate than those receiving cryoprecipitate.
- (l) In an article in the Journal of Paediatrics in July 1983, Dr J Gill et al reported that haemophiliacs treated with cryoprecipitate prepared from volunteer sources had fewer cellular abnormalities associated with AIDS than those who received commercially prepared concentrate.
- (m) In a letter published in the Lancet on 2nd July 1983, K Rickard et al reported that there were no cases of AIDS in haemophiliacs in Australia, where treatment was only with local voluntary donor products.



- (n) In or about the Autumn of 1983, the committee of the Red Magen David in Israel recommended that no lyophilized Factor VIII should be used for routine therapy, and cryoprecipitate should be used instead.
- (o) In an editorial in Transfusion published in November/December 1983, it was stated that there was a risk of AIDS from commercial concentrates.
- (p) On 14th November 1983 in Parliament, Mrs Currie asked what advice had been given to hospitals concerning the use of imported Factor VIII in the light of recent concern about its possible contamination with the causative agent of AIDS, and Mr Kenneth Clarke, a Minister in the DHSS, stated that professional advice has been made available to designated haemophilia centres.
- (q) In an editorial published in the British Journal of Medicine on 10th December 1983, Dr Peter Jones recommended in response to the threat to haemophiliacs of infection by AIDS, that very young children should receive cryoprecipitate rather than concentrates, and Desmopressin, Danazol and the new porcine material should be used in mildly affected haemophiliacs.
- (r) In a report in the News Brief of the American Association of Blood Banks for April 1984, it was stated that there was a 30% decrease in the use of Factor VIII concentrate and a 30% increase in the use of cryoprecipitate in the United States.

- (s) In an article in the Journal of Laboratory and Clinical Medicine in May 1984, O Ratnoff recommended the use of Cryoprecipitate rather than concentrate to avoid the risk of AIDS.
- (t) In Scrip on June 24th 1984, new West German regulations restricting the use of Factor VIII products to severe to moderate haemophiliacs were reported.
- (u) On 13th October 1984, the National Haemophilia Foundation Medical and Scientific Advisory Council recommended for the treatment of haemophiliacs that:
  - (i) cryoprecipitate be used for children under four and newly identified haemophiliacs;
  - (ii) plasma be used for Factor IX deficient patients in the same category;
  - (iii) Desmopressin be used wherever possible for patients with mild or moderate haemophilia;
  - (iv) patients who did not fit within the above categories should be given heat-treated concentrate.
- (v) In or about October 1984 at a meeting of the Association of Clinical Pathologists, Dr R Tedder said that commercial factor VIII imported from North America during 1981-82 was responsible for all 200 or so cases of seroconversion to HIV in United Kingdom haemophiliacs.
- (w) In an editorial in the Lancet on 22nd December 1984,

it was stated that 52 Haemophilia cases of AIDS had been reported in the United States, three in the United Kingdom, and that in countries that used Factor VIII concentrate from the United States the incidence was likely to increase. In the same issue, and repeated in an editorial, Dr Melbye et al reported that Scottish Haemophiliacs treated with domestic Factor VIII at one centre who had not travelled abroad were not HIV positive, and that seroconversion was correlated with exposure to American concentrate.

