

Annual Returns for 1992

The attached tables and graphs contain the information available from the UK Haemophilia Centre Directors Annual Returns. Returns were requested from 108 Centres and returns have been received from 106 Centres. Four Centres sent in discrepant or incomplete data and still have some queries outstanding. As requested at the AGM held on 07.10.91, we have compiled a list showing the dates the returns were received from Centres, the Centres whose returns are incomplete and the Centres who have not yet sent in their returns (Appendix A). Two Centres reported that no patients with coagulation defects were treated by them during 1992. In view of the possible re-organisation of Haemophilia Centres, we have looked at the number of severely affected patients (Factor VIII/IX <2%) treated by each Centre. The results of this analysis are shown in Fig. 1, from which it will be seen that only 3 Centres treated more than 100 severely affected patients in 1992 and 59 Centres treated less than 10 severely affected patients. Eight of the 59 Centres who treated less than 10 patients in fact treated no severely affected patients during 1992.

By 31.12.92 there were 5,352 haemophilia A patients known to Haemophilia Centres (Table 1). This is a decrease of 62 compared with the previous year. Thirty-seven per cent of these patients were severely affected with factor VIII levels <2% average normal. The incidence of antibodies to factor VIII remains as approximately 5% of all haemophilic patients (Table 2) although 15 new cases were detected during the year and are being investigated by Dr. Brian Colvin on behalf of the Adverse Events Working Party. One of the patients is a new UK resident who already had inhibitors before arriving and two patients usually live overseas. In the previous year (1991) four new cases of antibodies to factor VIII in haemophilia A patients were detected.

The total number of patients with Christmas disease now stands at 1,081 (Table 3) which is 11 less than in the previous year. Thirty-two per cent of the patients are severely affected. The number of patients with antibodies to factor IX has decreased as 1 patient has died, leaving 7 cases alive (Table 2).

The number of patients reported as suffering from von Willebrands disease has risen to 3,129 (Table 4) which is 173 more than in 1991. Forty-eight have factor VIII:c levels <2% of average normal and of these 27 required treatment in 1992 and 15 were on home therapy. Forty-six per cent of all von Willebrands patients treated had factor VIII:c levels greater than 30% of normal. Five patients with von Willebrands disease had antibodies to factor VIII (Table 2).

Treatment of patients

Of the 5,352 haemophiliacs registered 2,430 (45%) received replacement therapy in 1992 (Table 5) and 1,475 (Table 1) were receiving home therapy. The total amount of factor VIII used at

Haemophilia Centres in 1992 was 137M units an increase of 10M units over the amount used in the previous year. Haemophiliacs received 131.7M units, 9.21M units more than in 1991 (table 5 and Fig. 2). Patients with von Willebrands disease used 5M units (Table 5) compared with 4M units in 1991. The total amount of NHS factor VIII used rose by 2.15M and the amount of commercial factor VIII rose by 8.21M compared with 1991. The number of patients treated by Centres in 1992 who did not receive blood products but were given only other materials is shown in Table 5a.

A total of 7.5M units of human factor VIII was used to treat 114 haemophilia A patients who had factor VIII antibodies (Table 6). In addition 706,000 units of porcine factor VIII, 1.4M units of NHS factor IX, 85,000 units of Commercial Factor IX, 5.2M units of FEIBA, 2M units of RVIa and 65,000 units of Autoplex were used.

With regard to factor IX, the total amount of factor IX used has increased since 1991 by 1.6M units to 21M units. There has been an increase of 2.5M units in commercial factor IX used to treat haemophilia B patients (Table 7 and Fig. 3). 1.4M units of NHS factor IX was used to treat haemophilia A patients who had factor VIII antibodies.

Table 8 gives an analysis of the causes of death in the 98 haemophilic patients, 8 Christmas disease and 13 von Willebrands patients who died in 1992. AIDS was the commonest cause of death - 55 (46%), with cerebral haemorrhage - 13 (11%) the second. There were 5 cancer deaths and 10 deaths (not AIDS cases) from liver disease. Seven patients died from ischaemic heart disease, four from pneumonia (not PCP) and two (not AIDS cases) from septicaemia. One patient died from head injuries and one committed suicide. The cause of the death of 18 patients was not known at their Haemophilia Centres. Further details regarding the cause of death in patients diagnosed as having AIDS are given in Table 9, from which it will be seen that respiratory diseases were the most common cause - 23 (42%). Table 10 shows the HIV status of the patients known to have died in 1992.

Table 11 shows the number of patients with rare blood coagulation defects known to Haemophilia Centre Directors, the number treated in 1992 and the number on home treatment. Platelet defects form the largest group registered (375), followed by Factor XI deficiency (327) and Factor XII deficiency (236).

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Table 1

Haemophilia A patients known at Haemophilia Centres in 1992, showing the number of patients treated during 1992, with the severity of the coagulation defect and age. Patients known to have died before 01.01.92 have been excluded.

Age (Years)	Number of Patients Factor VIII Level (%)														
	<2% a.n.			2-10% a.n.			>10% a.n.			Not Known			Total		
	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992
<5	137	115	37	97	59	6	56	15	2	1	0	0	291	189	45
5-9	171	152	121	104	63	27	81	22	2	2	2	0	358	239	150
10-14	158	136	117	107	67	39	92	25	4	3	0	0	360	228	160
15-19	151	128	113	122	75	34	111	20	0	8	0	0	392	223	147
20-29	457	351	317	283	127	56	277	50	10	21	0	0	1038	528	383
30-39	396	284	240	285	106	37	247	28	4	23	1	1	951	419	282
40-49	265	171	134	226	67	22	183	26	3	23	0	0	697	264	159
50-59	141	99	80	165	51	12	153	20	2	11	1	0	470	171	94
60-69	65	40	32	107	22	5	139	38	3	6	0	0	317	100	40
70+	36	19	10	80	21	2	111	23	3	11	2	0	238	65	15
N/K	20	0	0	14	1	0	9	0	0	197	6	0	240	7	0
TOTAL	1997	1495	1201	1590	659	240	1459	267	33	306	12	1	5352	2433	1475

Table 2

The number of patients known to Haemophilia Centre Directors on 31.12.92 and the occurrence of Factor VIII and Factor IX antibodies. Patients known to have died before 31.12.92 have been excluded.

	Haemophilia A	Haemophilia B	von Willebrands
Cumulative total number of patients known at Centres	5254	1073	3136
Cumulative total number of patients with factor VIII or IX antibodies	277	7	5
% with factor VIII or IX antibodies	5.3	0.65	0.16

Table 3

Haemophilia B patients known at Haemophilia Centres in 1992, showing the number of patients treated during 1992, with the severity of the coagulation defect and age. Patients known to have died before 01.01.92 have been excluded.

Age (Years)	Number of Patients Factor IX Level (%)														
	<2% a.n.			2-10% a.n.			>10% a.n.			Not Known			Total		
	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992
<5	26	19	5	16	12	2	7	2	0	2	0	0	51	33	7
5-9	34	27	15	31	16	4	17	3	0	0	0	0	82	46	19
10-14	29	22	19	37	25	10	27	7	1	1	0	0	94	54	30
15-19	27	19	17	35	17	11	24	7	1	2	0	0	88	43	29
20-29	71	54	50	79	31	11	38	6	1	10	0	0	198	91	62
30-39	60	41	35	73	24	12	48	7	1	5	0	0	186	72	48
40-49	56	38	32	50	15	3	38	8	1	2	0	0	146	61	36
50-59	17	12	10	31	5	3	27	2	0	4	1	0	79	20	13
60-69	14	8	7	27	8	3	15	1	0	0	0	0	56	17	10
70+	10	4	2	22	7	1	14	1	0	5	0	0	51	12	3
N/K	3	0	0	3	0	0	3	0	0	41	2	0	50	2	0
TOTAL	347	244	192	404	160	60	258	44	5	72	3	0	1081	451	257

Table 4

von Willebrands disease patients known at Haemophilia Centres in 1992, showing the number of patients treated in 1992, with the Factor VIIIc level and age in 1992. Patients known to have died before 01.01.92 have been excluded.

Age (Years)	Factor VIIIc Level																	
	<2% a.n.			2-14% a.n.			15-29% a.n.			>30% a.n.			Not Known			Total		
	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992	In Reg	Trtd 1992	On HT 1992
<5	2	2	0	24	16	1	23	5	1	59	12	0	6	2	0	114	37	2
5-9	7	5	2	23	8	1	39	12	1	104	16	1	8	1	0	181	42	5
10-14	3	2	0	20	8	2	46	13	2	153	26	1	5	1	0	227	50	5
15-19	1	1	0	24	5	0	40	8	0	160	15	0	5	2	0	230	31	0
20-29	13	4	0	74	12	0	109	18	0	397	38	2	16	4	1	609	76	3
30-39	8	2	4	68	19	1	122	20	0	372	29	3	12	3	0	582	73	8
40-49	8	7	2	56	10	3	120	19	0	299	31	1	15	3	0	498	70	6
50-59	2	3	5	32	6	1	69	7	1	155	18	2	11	3	0	269	37	9
60-69	2	0	2	21	5	0	39	4	0	94	11	0	4	0	1	160	20	3
70+	2	1	0	18	1	1	47	4	0	103	13	1	19	3	0	189	22	2
N/K	0	0	0	2	0	0	9	0	0	19	0	0	40	0	0	70	0	0
TOTAL	48	27	15	362	90	10	663	110	5	1915	209	11	141	22	2	3129	458	43

Table 5
Factor VIII units used by Haemophilia Centres in 1992

Type of Patient	Total number * of patients treated	Plasma	Cryo.	NHS F.VIII conc.	Commercial F.VIII conc.	Total F.VIII Units
Haemophilia A **	2430	2,000	1,000	91,927,000	39,771,000	131,701,000
Carriers of Haem. A	40	0	0	111,000	21,000	132,000
von Willebrands ***	273	16,000	78,000	2,147,000	2,791,000	5,032,000
Acquired Haem. A ****	25	0	0	245,000	287,000	532,000
TOTAL	2768	18,000	79,000	94,430,000	42,870,000	137,397,000
% TOTAL	-	0.01	0.06	68.73	31.20	-

* Adjusted for duplicates and excluding patients who did not receive blood products (see Table 5a)

** Including materials used for treatment of Haemophilia A patients with factor VIII antibodies
(See Table 6)

*** von Willebrands disease patients also received 304,000 units of VWF

**** Acquired Haemophilia A patients also received the following materials:

Porcine F.VIII:	275,000 Units
FEIBA:	426,000 FEIBA Units
NHS F.IX:	58,000 Units
R VIIa:	340 Mgs.

Table 5a

Number of patients treated in 1992 who received no blood products but who received other therapeutic agents

Material	Number of Patients				
	Haemophilia A	Carriers of Haemophilia A	von Willebrands disease	Acquired Haemophilia A	Total
DDAVP	138	21	145	-	304
Tranexamic Acid	4	1	5	1	11
TOTAL	142	22	150	1	315

Table 6

Materials used by Haemophilia Centres in 1992 to treat 114 Haemophilia A patients who had F.VIII antibodies.
In addition, 9 other patients were treated but received no blood products.

Material	Factor VIII units		
	Used at Hospital	Supplied for HT	Total F.VIII units
Plasma	-	-	-
Cryoprecipitate	-	-	-
NHS F.VIII conc.	3,461,000	1,997,000	5,458,000
Commercial Human F.VIII conc.	521,000	1,589,000	2,110,000
Total Human F.VIII conc.	3,982,000	3,586,000	7,568,000
Porcine F.VIII	621,000	85,000	706,000
Other Materials:			
	Units	Units	Units
FEIBA	3,004,000	2,290,000	5,294,000
AUTOPLEX	65,000	-	65,000
NHS F.IX conc.	600,000	797,000	1,397,000
Commercial F.IX conc.	2,000	83,000	85,000
R VIIa	2,085,000	250	2,085,250

Table 7
Factor IX Units used by Haemophilia Centres in 1992

Type of Patient	Total number of Patients *	Plasma	NHS IX	Commercial IX	Total Units
Haemophilia B **	439	-	15,023,000	4,363,000	19,386,000
Carriers of Haemophilia B	9	-	63,000	103,000	166,000
Haem. A patients with F.VIII antibodies	20	-	1,397,000	85,000	1,482,000
TOTAL	468	-	16,483,000	4,551,000	21,034,000
% TOTAL	-	-			

* Adjusted for duplicates and excluding patients who did not receive blood products

** Including 4 Haemophilia B patients with Factor IX antibodies

In addition 1 Haemophilia B patient with F.IX antibodies received 185,000 units of FEIBA

Table 8

Causes of death of 98 Haemophilia A, 8 Haemophilia B and 13 von Willebrand's disease patients in 1992, showing severity of coagulation defect and age at death.

Cause of death	F.VIII /IX level %	Age at Death (years) and Number of Deaths *									TOTAL
		<5	5-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
AIDS **	<2	-	-	3	12(1)	13	9(1)	6(1)	1	-	55(4)
	2-10	-	-	3	2(1)	2	-	1	2	-	
	>10	-	-	-	-	1	-	-	-	-	
Cerebral haemorrhage/ Stroke	<2	1	-	-	-	-	1	1(1)	1	2	13(1)
	2-10	1	-	-	-	-	-	1	2	1	
	>10	-	-	-	-	-	-	-	1	1	
Ischaemic Heart Disease	<2	-	-	-	-	-	-	1	2	-	7
	2-10	-	-	-	-	1	-	1	-	-	
	>10	-	-	-	-	-	-	1	-	1	
Cancer	<2	-	-	-	-	-	-	1	-	1	5
	2-10	-	-	-	-	-	-	-	1	-	
	>10	-	-	-	-	-	-	-	1	1	
Liver Disease	<2	-	-	-	1(1)	-	3	1	1	-	10(1)
	2-10	-	-	-	-	2	-	1	1	-	
Pneumonia (Not PCP)	<2	-	-	-	1	1	-	1	-	1	4

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Table 8 (continued)

Cause of death	F.VIII /IX level %	Age at Death (years) and Number of Deaths *									TOTAL
		<5	5-9	10-19	20-29	30-39	40-49	50-59	60-69	70+	
Septicaemia	<2	-	-	-	2	-	-	-	-	-	2
Retroperitoneal bleed	<2	-	-	1	-	-	-	-	-	-	
	>10	-	-	-	-	-	-	-	-	1	2
Abdominal aneurysm	>10	-	-	-	-	-	-	-	1	-	1
Accident - Head injury	>10	-	-	-	-	-	-	-	-	1	1
Suicide	2-10	-	-	-	-	-	1	-	-	-	1
Not known	2-10	-	-	-	-	-	-	-	-	2	
	>10	-	-	-	-	-	2	2	1	9	18
	n/k	-	-	-	-	-	-	-	-	2	
TOTAL		2	-	7	18	20	16	18	16	22	119(6)

* Figs. in brackets() = Number of patients who had F.VIII antibodies

** See Table 9 for further details.

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Table 8 (continued)

There were also 25 other deaths during 1992:

12 Acquired Haemophilia A	2 Cerebral haemorrhage
	3 Other haemorrhages
	1 Diabetes and gangrene
	1 Cancer
	5 Details not known at Centres
1 Factor V deficiency	1 Porencephalic cyst
8 Factor XI (PTA) deficiency	2 Renal failure and heart failure
	1 Leukaemia
	1 Cerebral haemorrhage
	4 Details not known at Centre
1 Factor X deficiency	1 Details not known at Centre
1 Factor XII (Hageman) defect	1 Details not known at Centre
1 Factor V + Factor VIII deficiency	1 Acute allergic shock
1 Platelet defect	1 Relapsed myelodysplastic syndrome

Table 9

Cause of death during 1992 in patients diagnosed as having AIDS

<u>Clinical Information/Autopsy Details</u>	<u>Number of Patients</u>	
<u>Respiratory Diseases</u>		
PCP	2	23
Pneumonia / bronchopneumonia	14	
Bronchopneumonia, liver failure, mycobacterium tuberculosis	1	
Bronchopneumonia, Parkinsons disease	1	
Pneumonia / septicaemia	1	
Bronchopneumonia / MAI	1	
Fungal pneumonia	1	
Fulminating bronchopneumonia	1	
Respiratory failure	1	
<u>Cerebral infections</u>		
HIV-related encephalopathy	3	7
HIV wasting / ?brain lymphoma	1	
Cerebral AIDS / dementia	1	
Cerebral toxoplasmosis	1	
HIV encephalopathy and wasting syndrome	1	
<u>Other infections</u>		
MAI	3	8
Staphylococcal septicaemia / staphylococcal septic arthritis	1	
Septicaemia	1	
Septicaemia / leukaemia	1	
Cryptosporidiosis	1	
Disseminated KS, CMV retinitis	1	
<u>Other conditions</u>		
AIDS wasting syndrome	4	14
Liver failure / cerebral atrophy	1	
Liver failure, chronic hepatitis, lymphoma right tonsil	1	
Allergic reaction to local anaesthetic during bronchoscopy	1	
Haematemesis and haemoptysis	1	
HIV-related lymphoma	1	
Haemorrhagic colitis	1	
Pancreatitis	1	
Intracranial haemorrhage	2	
Pancytopenia	1	
No details		3
TOTAL		55

Table 10

HIV Status of Haemophilia A, Haemophilia B and von Willebrands disease patients known to have died during 1992.

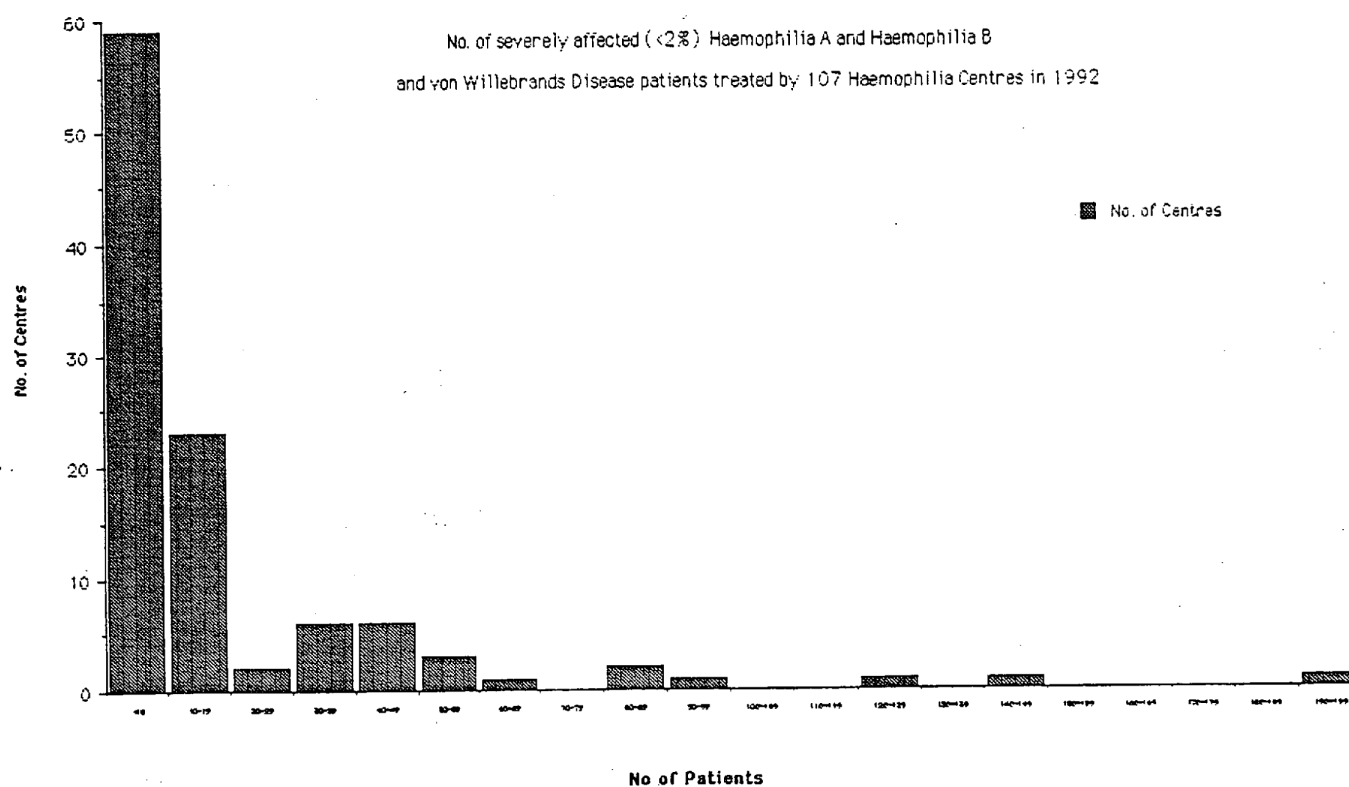
Cause of Death	Number of Patients			
	HIV Status			Total
	Positive	Negative	Not Known	
AIDS	54	-	1	55
Cerebral haemorrhage/stroke	2	7	4	13
Ischaemic heart disease	3	2	2	7
Cancer	2	3	-	5
Liver disease	8	1	1	10
Pneumonia (not PCP)	4	-	-	4
Septicaemia	2	-	-	2
Retroperitoneal haemorrhage	1	1	-	2
Abdominal aneurysm	-	1	-	1
Suicide	-	-	1	1
Accident - Head injury	-	-	1	1
Not known	-	3	15	18
TOTAL	76	18	25	119

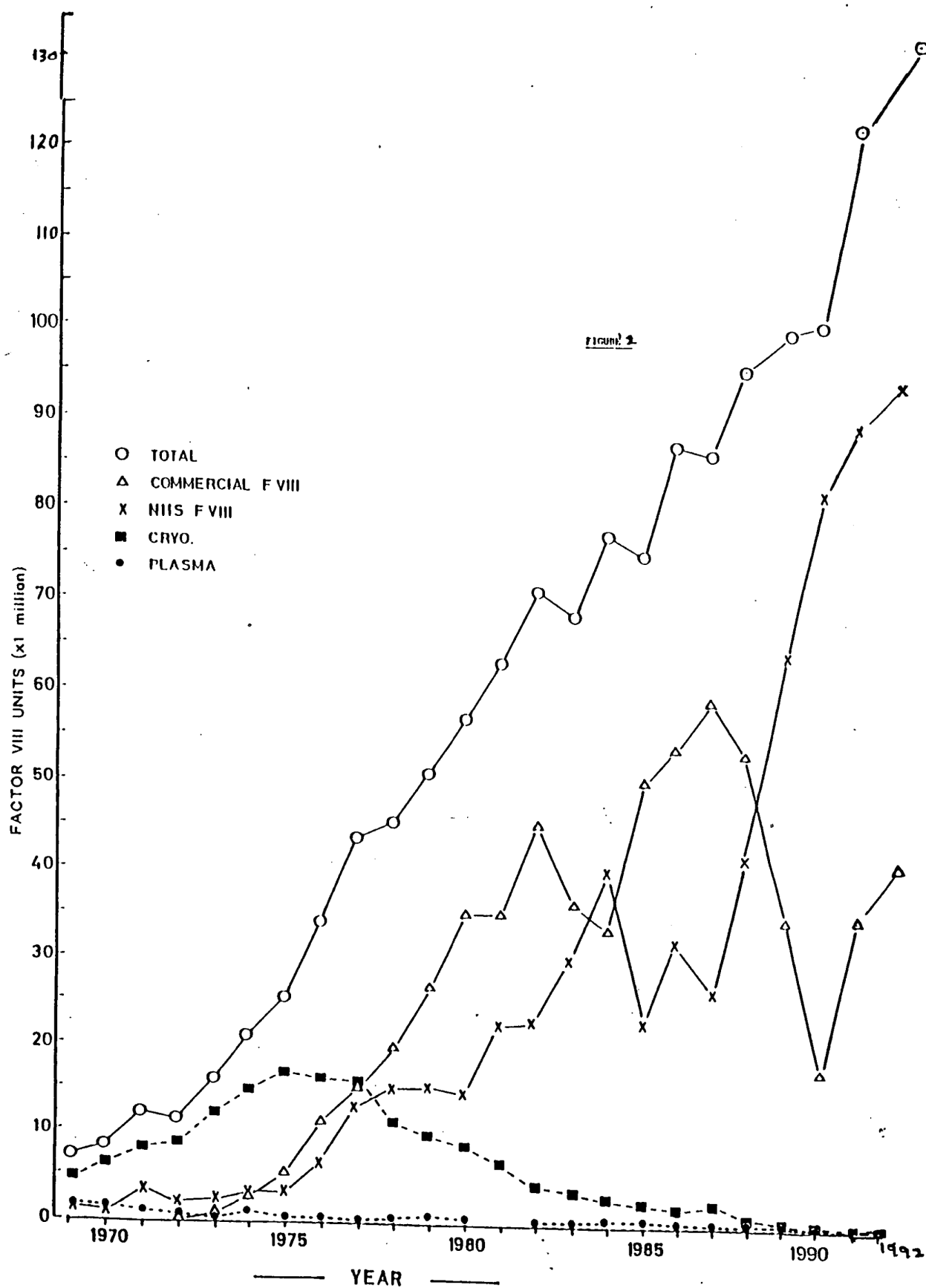
Table 11

Number of Patients with rare congenital blood coagulation defects known to UK Haemophilia Centres, showing the number treated with blood products during 1992 and the number on home treatment.

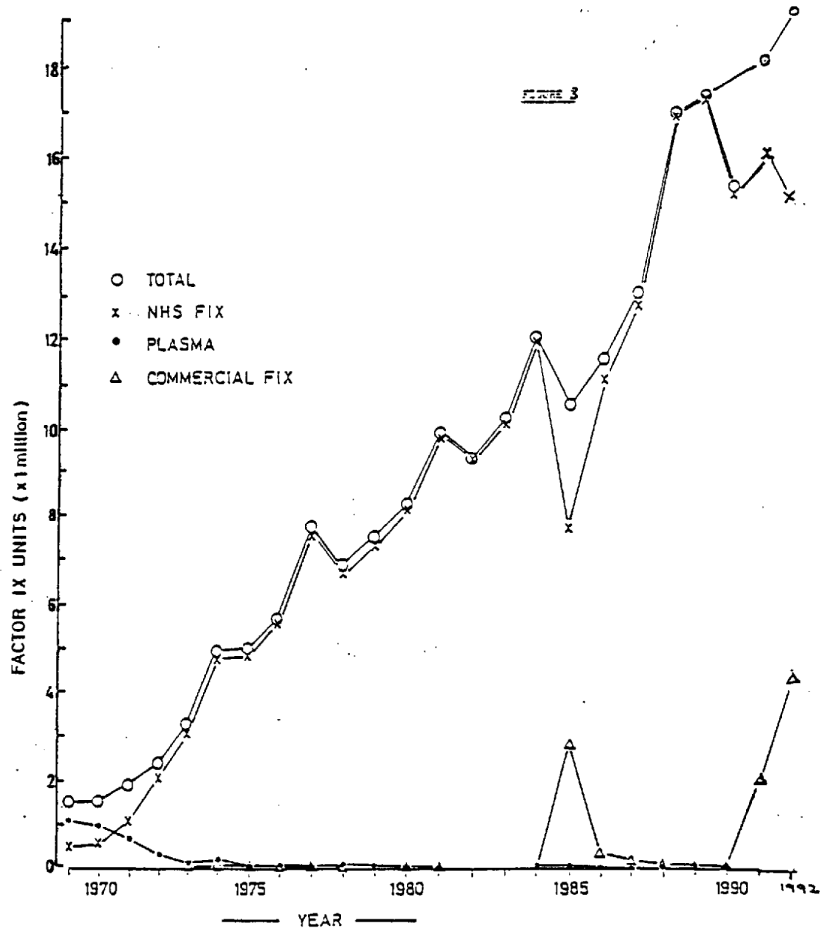
Coagulation defect	Number of Patients		
	In Register in 1992	Treated in 1992	On HT in 1992
Congenital Fibrinogen Deficiency	55	11	2
Congenital Prothrombin Deficiency	11	-	-
Factor V Deficiency	28	5	1
Factor VII Deficiency	93	12	2
Factor X Deficiency	62	15	5
Factor XI (PTA) Deficiency	327	20	1
Factor XII (Hageman) Deficiency	236	3	-
Factor XIII (FSF) Deficiency	23	16	1
Combined XI + XII Deficiency	3	-	-
Combined II + VII + X Deficiency	4	-	-
Combined V + VIII Deficiency	15	4	-
Combined XI + VIII Deficiency	6	1	-
Combined VIII + IX Deficiency	1	-	-
Other combined defects	10	-	-
Antithrombin III Defect	64	4	-
Platelet Defects	375	11	-
Fletcher Factor	7	-	-
TOTAL	1320	102	12

Fig.1





AMOUNT OF BLOOD PRODUCTS (F.VIII UNITS) USED TO TREAT HAEMOPHILIA A PATIENTS IN THE UK



AMOUNT OF BLOOD PRODUCTS (F.IX UNITS) USED TO TREAT HAEMOPHILIA B PATIENTS IN THE UK

Appendix A

Date Complete Annual Returns Received from Centres

<u>Date Received</u>	<u>Centre</u>
03.03.93	G.O.S. Slough
04.03.93	Colchester Chertsey Hastings
05.03.93	Dorchester
08.03.93	Worthing Hull
09.03.93	Chatham
11.03.93	Guy's Brighton Inverness Harrogate
12.03.93	Derby
15.03.93	Camberley
16.03.93	Lincoln Nottingham
17.03.93	Barnstaple Edgware Newport
19.03.93	Blackburn Hammersmith
22.03.93	Thornton Heath
29.03.93	Bournemouth Swansea Manchester (Childrens) Bath Wolverhampton Shrewsbury Ipswich
30.03.93	Plymouth
31.03.93	Oxford Staffordshire Manchester (Adults) Bedford

Incomplete

Data received included in report but data incomplete/queries
outstanding

St. Thomas'
Bradford
Middlesex Hospital / UCH
Glasgow R.I.

No returns

Harlow
Winchester