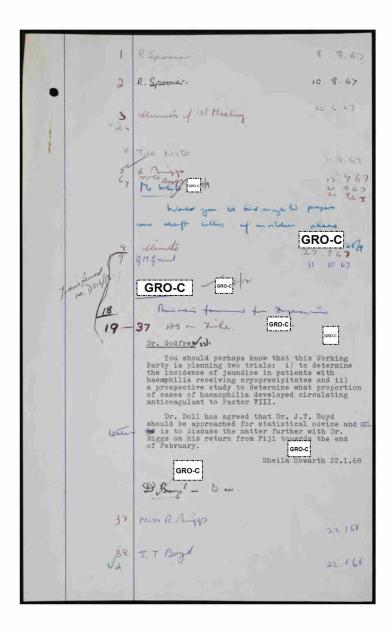
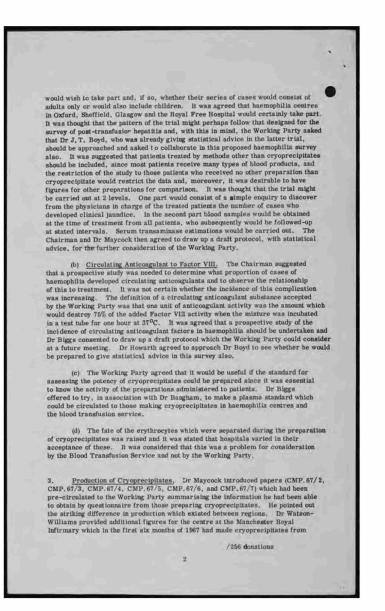


OPENING DATE	MEDICAL RESEA			SERIES SYMBOL
OPENING CORRESPONDENT	GENERAL S	UBJECT		GENERAL NUMBER
TO FROM	BLOOD TRANSI RESEARCH		TTEE	216
CLOSING DATE	SPECIAL SU W/P. ON THE METHOD FOR PREP CONCENTRATES ISTH	CRYOPREC	HF	SPECIAL NUMBER
RELATED TO:			W FOR	TRANSFERRED
FILE NUMBER	SUBJECT	YEAR	INITIALS	т. с.
Dr. Howarth GROC Rysch Dr. Howarth GROC Priss D. Sharmon Rysch Dr. Howarth GROC Dr. Howarth GROC Dr. Goodfrey Dr. Hondern Dr. Man Way Miss Bracon Miss Bracon	18 14 57 C	Plence	heturn	



	MEDICAL	RESEARCH C	JOUNCIL 3
Circul	lation:	S.	MRC. 67/128
Memb	ers of Working Party		<u>CMP.67/8</u>
	BLOOD TRA	NSFUSION RESEARCH CO	MMITTEE
	Working Party on th	e Cryoprecipitate Method	of Preparing AHF
4		neeting held at the Medical don, W.1. on 20 November	
Dr R.	A. Cummings, Dr K. I	ry Biggs (Chairman), Dr I Dormandy, Professor A.S. Jenkins, Professor R.A. 1	
	Also present: Dr She	eila Howarth.	
	Apologies for absence	were received from Dr J.	Wallace.
the eff	ration and production of fects which the wider us	nce of the Working Party w AHF concentrates by the se of this preparation migh ionation" were read and no	cryoprecipitate method and t have on the research
proble	emmittee fell into two n ems associated with cry	reted the terms of reference nain categories: the first oprecipitate preparations a to the production of the cry	included the scientific researc and the second the more
2.	Scientific and Research	ch Aspects	
that it these and Th jaundi Dr Ma the Ch	olved in preparing each was of importance to d preparations. Dr Bigg hrombosis were consid ce in cases of haemoph yccok reminded the Wc airman, was planning usion hepatitis but the	cryoprecipitate dose, the letermine the incidence of gs reported that the Interna ering an international trial ilia treated by transfusion orking Party that another St	aundice in patients receiving tional Committee on Haemosta to discover the incidence of of blood plasma and concentra ab-Committee, of which he is als of the incidence of post-
was ag	cidence of jaundice in p greed that this should b	atients with haemophilia re e a prospective rather than	under their aegis to determine celving cryoprecipitates. It a retrospective survey. oproached about whether they
			/would wish
		1	



256 donations and had used 1800 donations of blood as fresh plasma in 1966 and 1204 in the first six months of 1967. He added that these preparations were compared by <u>in vivo</u> assay and in his experience cryoprecipitate prepared in a standard way gave standard results.

The shelf life of cryoprecipitates was then discussed. Dr Hardisty reported that potency had apparently remained stable over two months in experiments at Great Ormond Street. In Manchester potency was unchanged over a year in cryoprecipitates stored at $\pm 35^{\circ}C_{i}$ yearly assays on the same preparation were planned for a five year period. It was agreed that the optimal temperature for storage was not at present known.

Concern was expressed about the considerable variation which might exist in the potency of preparations made from pools of plasma, since AHG levels were known to vary widely in individuals and this would be reflected in the pools. It was agreed that the determination of pool activity must await the development and circulation of a standard. It might then be feasible to reserve pools of high activity for special cases of haemophilia. Pools of plasma of low activity should perhaps not be used for making cryoprecipitate at all. In this connection it was noted that **slowlbeding** of donors affected AHG levels. It was accepted that there was a bigger yield of activity when the frozen plasma was thawed more rapidly.

Little information appeared to be available as to the best treatment of the supernatant plasma remaining after cryoprecipitate preparation. Dr Maycock told members that he had no facilities for processing this at Elstree at present. Perhaps the supernatants should be added to the red blood cells and distributed for transfusion purposes. It was suggested that ultimately when cryoprecipitate preparation was standardised the residues could be pooled for treatment of Factor IX deficient patients. The alternative was to stop the preparation of cryoprecipitates in local centres and to send all plasma already frozen to a few chosen centres for fractionation, which might exclude the preparation of cryoprecipitates altogether.

It appeared that each blood transfusion centre was following its own method of preparation at the present time and the Working Party thought that the adoption of a standard method should be considered. They agreed that Dr Cleghorn should be invited to join the Working Party since the North London Blood Transfusion Centre, Edgware, was making large quantities of cryoprecipitate. They also felt that a consideration should be given to the question of holding a meeting of all Directors of blood transfusion centres and haemophilia centres who were involved in manufacturing cryoprecipitates to find an answer to the following important questions:

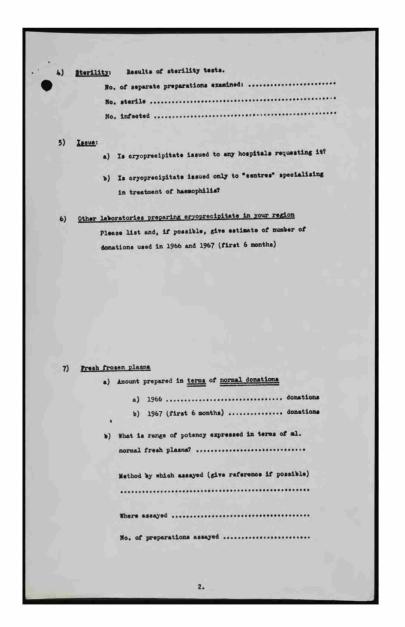
- (a) Is the policy of preparing cryoprecipitates to be a long or a short-term one?
- (b) What is the total requirement of cryoprecipitates?
- (c) Can this ever be supplied centrally?

Date of next meeting. It was considered that the next meeting should be held in February or March 1968.

3

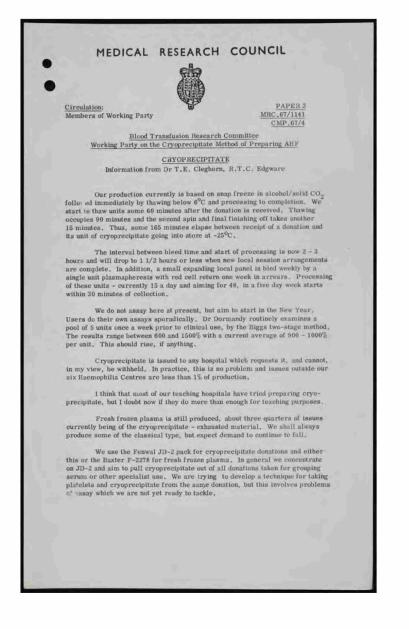
Girc Memb	MEDICAL ulation ers of Working Par	RESEARCH	иниваед 14/11/67 COUNCIL <u>MRC.67/113</u> <u>СМР. 697</u>	32. 0
	BLOOD TRAM	SFUSION RESEARCH	COMMITTEE	
Wor	king Party on the	Cryoprecipitate }	Method of Preparing AF	<u>IF</u>
18.	Agenda fo: to be hell 20, Park (Monday, 20	r the first meetin d at the Medical 1 Crescent, London 1 O November, 1967.	ng of the Working Part Research Council, W.l. at 11 a.m. on	cy
l. and meti migi	Terms of production of AHF nod and the effect it have on the res	Reference: 'to co concentrates by s which the wider earch programme f	nsider the preparation the cryoprecipitate use of this preparat or plasma fractionation	n ion on.'
2. CMP enc	Productio 67/2, CMP 67/3, C losed).	n of Cryoprecipit MP 67/4, CMP 67/5	ates: (Papers 1 - 6: , CMP 67/6, CMP 67/7;	
3.	Any other	Business		
4.	Date of n	ext meeting		
-				

CH1P67/7	
Anti-haesophilic Clobulin Cryoprecipitate	
 Regional Transfusion Centre: (Note: if the space for answers to any questions is insufficient, please use continuation sheets) 	
 <u>Amount prepared</u> in <u>terms of normal donations of blood</u> a) 1966 b) 1967 (first 6 months) donations c) 1968 (estimate) donations 2) <u>Method of preparation</u>: give reference if possible and note briefly any modifications of published method that have been adopted and type of equipment used - e.g. Fermal double pack. 	
3) Potency:	
 <u>Potency</u>: What is range of potency (expressed in terms of ml. normal 	
fresh plasma) of preparations?	
Method by which assayed (give reference if possible)	
Where assayed	
No. of separate preparations assayed:	
1.	



		da											
•													
	Circulation		MRC 67	/1138									
	Members of Working F	arty				67/6							
		D TRANSFUSION RESEA y on the Cryoprecipitate				ER 6							
	Cr	voprecipitate and Fresh I	roze	n Plasma									
1	The information Paper 5, which was co	n in Papers 1, 2, 3 and 4 mpleted by Directors of t	was the R	gathered by the quer egional Transfusion	tionnai) Centres	re,							
	Paper 1 summa	rises the amounts of cry	opred	vipitate being prepa	red and	the							
	estimated amounts nee	ded in 1968, in terms of	norm	al blood donations,	and the	method							
	of issue. It also summarises information received about fresh frozen plasma.												
	Paper 2 summa	rises information receiv	ed ab	out the method of pr	reparing								
	the replies. The rathe	e was considerable varia r fuller detail received f	tion i	n the amount of deta Dr. Cleghorn Nort	ail given	in							
	Regional Transfusion C	entre, is reproduced in :	Pape	r 3, and the general	assess	ment							
	of the needs for a popul	lation of 1.0 million rece	ived	from Edinburgh is a	shown in	Paper	4.						
	With the exception of RTC's Leeds and Sutton, the answer to question 6 of the												
	questionnaire was "NII	with the exception of RTC's Leeds and Sutton, the answer to question 6 of the questionnaire was "NIL", and in one case no answer was given. The following											
	hospitals prepare cryoprecipitate in the Leeds and Sutton Regions:												
	Leeds Region:	St. James' Hospital		1966	280 4	onation							
				11	8								
	Sutton Region:	Portsmouth Hospital		1966	275								
				1967 (1st 6 mos)	82								
		Lewisham Hospital		began May 1967	30	"	/						
							to di						
		St. George's Hospital		began Jan. 1967	50	" (
	Dr. Cleghorn m												
2.	prepare cryoprecipitate	St. George's Hospital otes that he believes mos a for teaching purposes.	t Lon	don teaching hospit:	als prob	ably							
2.	prepare cryoprecipitate	St. George's Hospital otes that he believes mos a for teaching purposes. he approximate number o	t Lon	don teaching hospit:	als prob	ably							
2.	A summary of t	St. George's Hospital otes that he believes mos a for teaching purposes. he approximate number o	t Lon	don teaching hospit:	als prob	ably	te						
2.	prepare cryoprecipitate A summary of t haemophilia may be use Cryoprecipitate	St. George's Hospital otes that he believes mos a for teaching purposes. he approximate number o sful. <u>1966</u> 4, 909	t Lon	don teaching hospit: ations devoted to the	als prob	ably ent of Estimat	te						
2.	prepare cryoprecipitate A summary of t haemophilia may be use Cryoprecipitate Fresh Frozen Plasma	St. George's Hospital otes that he believes mos s for teaching purposes. he approximate number o ful. <u>1966</u> 4, 909 23, 063	t Lon	don teaching hospits ations devoted to the <u>1967 1st 6 mos.</u> 18,875 12,927	als prob e treatm <u>1968</u>	ably ent of Estimat	<u>te</u>						
2.	prepare cryoprecipitate A summary of t haemophilia may be use Cryoprecipitate Fresh Frozen Plasma Edinburgh	St. George's Hospital otes that he believes mos a for teaching purposes. he approximate number o stul. <u>1966</u> 4,909 23,063 4,942	t Lon	don teaching hospits ations devoted to the <u>1967 1st 6 mos.</u> 18,875 12,927 2,646	als prob e treatm <u>1968</u>	ably ent of Estimat	te						
2.	prepare cryoprecipitate A summary of t haemophilia may be use Cryoprecipitate Fresh Frozen Plasma	St. George's Hospital otes that he believes mos s for teaching purposes. he approximate number o ful. <u>1966</u> 4, 909 23, 063	t Lon	don teaching hospit: ations devoted to the <u>1967 1st 6 mos.</u> 18,875 12,927 2,646 <u>3,176</u>	als prob e treatm <u>1968</u>	ably ent of Estimat	te						
2.	prepare cryoprecipitate A summary of t haemophilia may be use Cryoprecipitate Fresh Frozen Plasma Edinburgh	St. George's Hospital otes that he believes mos for teaching purposes. he approximate number o oful. <u>1966</u> 4,909 23,063 4,942 5,100	t Lon	don teaching hospits ations devoted to the <u>1967 1st 6 mos.</u> 18,875 12,927 2,646	als prob e treatm <u>1968</u>	ably ent of Estimat	te						
2.	prepare cryoprecipitate A summary of t haemophilia may be use Cryoprecipitate Fresh Frozen Plasma Edinburgh HAHG, BPL Note: No information	St. George's Hospital otes that he believes mos for teaching purposes. he approximate number o oful. <u>1966</u> 4,909 23,063 4,942 <u>5,100</u> <u>38,014</u> yet received from Dundee	t Lon f don	don teaching hospit: ations devoted to the <u>1967 1st 6 mos.</u> 18,875 12,927 2,646 3,176 37,624	als prob e treatm <u>1968 -</u> 78,84 - -	ably ent of <u>Estimat</u> 5							
2.	prepare cryoprecipitate A summary of t haemophilia may be use Cryoprecipitate Fresh Frozen Plasma Edinburgh HAHG, BPL Note: No information	St. George's Hospital otes that he believes mos for teaching purposes. he approximate number o oful. <u>1966</u> 4,909 23,063 4,942 5,100	t Lon f don	don teaching hospit: ations devoted to the <u>1967 1st 6 mos.</u> 18,875 12,927 2,646 3,176 37,624	als prob e treatm <u>1968 -</u> 78,84 - -	ably ent of <u>Estimat</u> 5							

MEDICAL RESEAR	сн соц	INCIL
)	
₩.		
		PAPER 4
Circulation: Members of Working Party		MRC. 67/1140 CMP. 67/5
	THE DOLL OCH	INTER
BLOOD TRANSFUSION RE WORKING PARTY ON THE CRYOPRECIP		
S, E. REGIONAL TRANSFUSIO	N CENTRE, ED	INBURGH
FRESH BLOOD 1 (figures refer to		
	1966*	1967 (6 months)
Fresh blood processed (donations) primari	ly	
for Haemophilia	4, 942	2,646
Distribution		
Used as fresh frozen plasma (or d		
fresh plasma)	988	554
Processed to Fraction I		
(a) from frozen plasma	1,310	1,438
(b) from fresh liquid plasma	2, 644	654
*1966 was a bad year; production being below	average	
and year, production deing below	u.e.ugo.	
These quantities represent approxin requirement for <u>our own Region</u> (pop, 1m.) part of the fraction 1 production was distribut	but you will ap	
part of the macroar production was distribut	ieu elsewnere,	



		Leeds	Sheff.	camp.	Edgware	prent.	Sucton	Dxford	Dristor	Cardiff	D. trorm	II CHESCON			Glasgow	C GALLON V V			
Population	3.07	3.18	4.54	1+63	4-20	3.36	8.58	1-78	3-01	2.70	5.00	4+52	2+23	Contraction of the local division of the loc					
1966	Nil	Nil	Nil	Nil	1,563	212	307	1,200	293	338	Nil	Nil	896	See Note	100		Nil	Nil	4,909
1967 (1st 6 mos)	580	60	16	Nil	6,645	114	729	3,600	401	934	3,400	Nil	1,340	-	1,000		Nil	56	18,875
	2,840	1,000-	300+	?	31,200	600 '	2,500	10,000	5,200	3,120-	13,000	Nil	3,000	-	5,000		250	250- 400	78,845
Centre	2.454	016		Nell	1	1	1	100 m 100 m 1	erms of	donatio		olood	807	988	1,223		Nil	94	23,063
1966	1,454	815	1 350	Nil	1,906	959	4,300	5,882	100000000000000000000000000000000000000		1,672		807	988	1,223	1264	Nil	94	23,063
1967	333	680	535	Nil	636	442	2,750	4,333	202	403	1,165	?	140	554	734		Nil	20	12,927
No. of	N.T.	N.T.	93% normal 7		N.T.	N.T.	1 ml = 0.5ml normal 18	1 ml : 0.77m normal 1,000	lml = 0.75ml normal 2	1 ml = 0.62ml normal 23	N.T.		N.T.	60- 70% of normal 81				N.T.	
tests Method	-	1	TGT1		1.1		TGT2	TGT	12	P&R	1			TGT1	Douglas				

Members of Wor	king Party		CRYOPRECI	PITATE :	method of p	reparation	, etc.			PAPER 2		<u>CMP67/3</u>
	Newcastle	Leeds	Sheffield	Edgware	Brentwood	Sutton	Oxford	Cardiff	Birmingham	Liverpool	Glasgow	Inverness
Method	P&S ⁵	-		See	P&S	P & S	Own	P&S	P&S	P&S	P&S	P & S
Age of blood				extract from letter			i.	2 hrs.				
Centrifuge 1	-	-	3000 30 mins.	-			-	-			-	2000 for 1 hr.
Thaw	8°C	4°C	4°C or 6°-8°C		-	4°C	4°C or 12°C	8°C	-	8°C		
Centrifuge 2			3000/30' 4000/10'	•		-	-			-	-	
Final volume	10 ml	-	20 ml	-	10-15ml		-	1	-			10 ml
Storage		-20°C	-40°C	1		#1c CO2	-30°C	-		-	-	
Equipment	JD2	JD2 or F2278	JD2 or Tuta		JD2	-30°C Tuta	F2278	JD2	JD2	JD2	JD2	JD2
Potency	20-45% recovery	No data yet	300-530ml (475)	•	45-180ml (117)	150ml	1m1= 4-8m1	11 to 300 units(85)	No data yet	Slow thaw 8-12 x conc. Fast thaw	concn.	x No data yet
Method	TOT	HMcP ⁶	TGT		Bergna ⁷	One-stage	TGT1	P&R ³	P&R ⁹	18-30 x cond H&McP ⁶	Douglas	Douglas
No. of tests	6	-	8	-	8	Hany	250	357	v.few	?	373	?
Where done	R.V.T.	RTC	R.S.I.	-	RTC	St.T.	0.H.C.	R.C.I.	Q.E.	R.T.C.	G.R.I.	IRI & GRI
Infected	0/40	NT	NT		IT	0/6	0/49		Random Nil	NT	0/250	NT
	2. Biggs 3. Kekwi	, Lancet : ck and Wa	arlane 1966 1957, <u>2</u> , 311 lton Brit.J. lished) one	Haem. 1			6. Hau 7. Ben 8. Inj	rdisty and M rgna. Blood gram <u>et al</u> J	CPherson. 1960, <u>15</u> , . Clin. Pat	g.Med. J. 1965 Thromb. Diatz 637 th. 1967, <u>20</u> , J. Haem. 1955	No. 4.	

<text><text><text><text><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></text></text></text></text>	•	RESEARCH LABORATORY, OXFORD HAEMOPHILIA CENTRE, CHURCHILL HOSPITAL, HEADINGTON, OXFORD, 35
<page-header><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></page-header>	MEDICAL AREARCH COUNCY.	Telephone: Oxford 64841, Ext.
<page-header><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></page-header>		
<page-header><text><text><text><text><text><text><text><text></text></text></text></text></text></text></text></text></page-header>		
<text><text><text><text><text><text></text></text></text></text></text></text>		
<text><text><text><text><text><text></text></text></text></text></text></text>		10 box way
Br. Sheila Howarth, Medical Research Council. Dr. Sheila Howarth, Medical R	Dear Dr. Howarth,	
GRO-C Rosemary Biggs Dr. Sheila Howarth, Medical Research Council, 20, Park Crescent, London, W.1. Dr. Sheila Howarth, 20, Park Crescent, 20, Park Crescen	are excellent. I have conform with technical e preparations other than a the reason for including that those taking part und the incidence of joundia cryoprecipitate and some be attributed to the other rise to difficulties in ass figures for all heavily the idea of the problem and r	added one piece and made very minor alterations to xactness. The addition concerns the inclusion of ryoprecipitate in the joundice trial. I don't think that these came out in the discussion all that clearly but I think derstood. The reason is simply that if one tries to determine e after cryoprecipitate alone, all those cases who receive other preparation are excluded since the joundice could preparation. The exclusive approach has already given tessing joundice after the human AHG. If we callect eated patients, I feel that we may get a more veracious maybe if the trial is well planned it may be possible to see
Rosemary Biggs Dr. Sheila Howarth, Medical Research Council, 20, Park Crescent, London, W.1.		Yours sincerely,
Rosemary Biggs Dr. Sheila Howarth, Medical Research Council, reference to red cell 20, Park Crescent, London, W.1. To don't vecidlest reference to these K.G as The weeking have I may have		
Dr. Sheila Howarth, Medical Research Council, reference to red cell 20, Park Crescent, London, W.1.		GRO-C
Dr. Sheila Howarth, Medical Research Council, reference to red cell 20, Park Crescent, London, W.1.		B
Medical Research Council, reference to red cell 20, Park Crescent, London, W.1.		
Juig-sur,	Medical Research Counci 20, Park Crescent,	it reference to red cell antibodes on p3. I have crossed this out in pencil. I don't vecillat reference to there to the may have

34 D. 216/34 5th December, 1967. Dear Dr. Biggs, I am sending you for comments and amendments the draft minutes on the first meeting of the Cryoprecipitate Working Farty. If you will give them your approval, I will arrange for them to be duplicated and circulated. I have had a word with Professor Mollison who agrees that Dr. C. Rizza should be invited to serve as secretary to the Working Party and I will write to him formally when the minutes are available, sending him a copy. Similarly I will make formal approaches to the director of the Statistical Research Unit, to see whether Dr. Boyd can be brited to help the Working Farty with statistical advice. If he agrees to do this then I will put him in touch with you directly. I hope that your trip to the United States was a success. With kind regards, Yours sincerely, GRO-Ci Sheila Howarth Miss Rosenary Biggs, M.D., Ph.D., Oxford Haemophilis Centre, MRC Laboratory, Churchill Hospital, Headington, OXFORD. Enc.

