

UK BTS/NIBSC

WORKING GROUP ON PLASMA FRACTIONS

Minutes of meeting at NIBSC, South Mimms, London

11.00am - 4.00pm Wednesday, 17 June 1987

Present:

Dr D P Thomas	(Chairman)	NIBSC
Dr D R Bangham	(Secretary)	NIBSC
Dr T W Barrowcliffe		NIBSC
Dr B Cuthbertson		BFC Edinburgh
Dr J K Smith		BPL Elstree
Dr R Thorpe		NIBSC

Apologies for absence: Dr T J Snape

Precirculated document:

Minutes of 1st meeting UK BTS/NIBSC Liaison Group, (UK BTS/NIBSC 1/4) and annex draft brief for Chairman of Working Groups.

- 1 Dr Thomas outlined the steps in the formation of the Liaison Group and the three technical Working Groups. The UK BTS had approached NIBSC to seek help in formulating 'guidelines' for BTS activities which could be accepted as national guidelines in due course.

The nature and style of the proposed guidelines were discussed. It was suggested that they could be analogous to the WHO guidelines of 1981* (which are to be revised and updated by WHO in December 1987), or to the NIBSC guidelines for control of products made by the new biotechnology. The detailed technical specifications for several of the plasma fraction products exist in the monographs of the British Pharmacopoeia, which have legal status. (Products from the two Plasma Fractionation Laboratories, in Elstree and Edinburgh, comply with BP monograph specifications.

The terms of reference of the proposed working group will be confirmed at the Liaison Group at its next meeting, in July 1987. The membership of this working group is kept small, but the Chairman is able to co-opt, ad hoc, as necessary.

*The collection fractionation quality control and uses of blood and blood products. WHO 1981, and 'Requirements for Biological Substances No. 27. These documents are to be revised in December 1987.

- 2 In response to the requests made in the draft brief for the Working Group the following was suggested:

2.1 Products considered within the remit of the Working Group on Plasma Fractions:

Albumin	Plasma Protein Fraction Purified Albumin
Clotting Factors	Factor VIII concentrate Factors II IX X complex Factor VII Factor XI Factor XIII Antithrombin III Fibrinogen for radioactive labelling Thrombin Plasminogen
Immunoglobulins	Normal, for IM administration Normal, for IV administration Anti-D Specific for Tetanus CMV Zoster Measles Mumps Rubella Hepatitis B Rabies 'anti-gram negative bacteria'
New Products expected from industry: Monoclonal anti-D r-DNA Factor VIII Factor VIII purified with monoclonal antibody	
Crytalloids	ACD, CPD + albumin, saline, etc.

BP monographs exist for many of these products but are deficient in failing to specify heat treatment to inactivate viruses, or limits for certain metals such as aluminium and selenium. The current state of the EP monographs was not known.

2.2 Priorities suggested:

1. Albumin preparations
2. Factor VIII concentrates
3. Factors II VII IX
4. Immunoglobulins

2.3 It is anticipated that the overlap with the Working Group on blood components (fresh local products) will be considerable, and with the other Working Group mainly in respect of Anti-D immunoglobulin.

2.4 The reference materials (= 'standards') needed:

NIBSC already hold International Standards for most of the blood clotting factors, and provide British working standards for Factor VIII and anti-D, for use in Regional Transfusion Centres and in the two plasma fractionation centres. International standards for most of the anti-microbial antibodies exist: British standards for certain of them will be required.

2.5 Guidelines for manufacture of the source, bulk and final products are needed.

2.6 Clinical problems believed to be associated with the use of plasma protein products:

1. Inactivation/removal of HIV Hepatitis viruses, and others from preparations of clotting factors, and i.v. immunoglobulins.
2. Hypotensive effect of rapid i.v. infusion of albumin (PKA).
3. Immunosuppressive effect, (non viral), of Factor VIII and IX products.
4. Bacterial endotoxin contamination in products, not detected by rabbit or LAL tests.
5. Thrombogenicity of Factor IX complex
6. Reactions (? anaphylactoid) to Immunoglobulins.
7. Possible reactions to contaminant aluminium and selenium.

2.7 Possible Research Topics

Investigation of any/all the above problems.

Guidance on inactivation/removal of viruses in blood products is especially urgently needed.

3 Further Work

At the next meeting it is proposed to examine the latest current draft monographs from the BP and EP, if available, and to identify any deficiencies, and compare the specifications therein with the 1981 WHO guidelines. This will assist in compiling points for consideration in the proposed revision of the WHO text in December. Conversely, information derived from the revision help in the drafting of UK BTS/NIBSC guidelines.

A list of international and British standards for biological substances relevant for the Working Group will also be circulated to members.

It is intended to distribute to members of the Working Group copies of the minutes and conclusions of the Liaison Group, soon after its meeting in July.

4 Date of the next meeting: provisionally Wednesday, 14 October 1987 at NIBSC.