Dr Lane took a global view from the donor to the patients. He quoted the incidence of HBs Ag in new donors in England and Wales (1 in 500) compared with old donors (1 in over 13,000). The latter figure may just about be neutralised by the protective anti-HBs Ag in the pools.

He pointed out that accreditation of plasmapheresis donors (eg using ALT) is very important but also pointed out that because plasmapheresis donors contribute so much more to the volumes of a pool, any donor 'slipping the net' carry much more potential of contamination.

On the NANB front, he noted that there is no evidence that the normal immunoglobulin protects against NANB either from within the blood or if put into the blood process. Also cone fraction 2 (immunoglobulin) has a safety record 'second to none'. However if the freeze drying phase is cut out the NANB survives. (This may be as an immune complex is inactivated and partitioned up by fractionation). There is no positive evidence that intravenous immunoglobulin will easily freed of HTLV 3 etc.

He pointed out the complications of sterilisation procedures, emphasising the need to avoid toxicity either external such as BPL (which breaks down anyway) or internal eg pre kallikrein contamination because of change of fractionation process. He also mentioned the phenomenon of neoantigens and of immune suppression eg by neoseif antigens.

He recommended the following general policies:

1. Try to exclude infections in the source materials.
2. Exclude virus by fractionation (chemical or affinity chromatography).
3. Inactivate the virus by physical agents:
   a) Heat. One wet. Two dry.
   b) Freeze drying; or chemical (BPLUV, oxidation reduction, pH and enzyme proteolysis, viricides such as tween ether and radiation - 1 rad. apparently has good efficacy but 2 rad. kills proteins. Also combination of physical and chemical methods.

He warned that preserving factor VIII molecule may also preserve the virus.

The Blood Products Laboratory have a dry product which is available for trial in the Midlands and North England and he pointed out that factor VIII may need to be much purer before it can be safely heat-treated.