

NOTES FROM THE MEETING ON  
PLASMA FRACTIONATION  
HELD IN GRONINGEN 1 - 2 NOVEMBER 1984

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1. HTLV VIII (by Dr. Jason, CDC, p25 in abstract book)

There are now 55 AIDS cases in USA haemophiliacs, this includes one VW patient treated with cryoprecipitate only.

Forty-nine of these haemophiliacs have been tested for anti-HTLVIII and 43 were +ve.

Results of anti-LAV tests on various recipients of blood products were given:-

<u>GROUP</u>	<u>N</u>	<u>% LAV +ve</u>
FVIII recipients (USA/Austria)	234	74
FIX "	36	39
Thalassaemia	43	7
Non-transfused, medical patients	29	4
Non-transfused, lab staff	18	0

In Vienna the incidence of seroconversion is:-

FVIII recipients	62%
FIX "	50%

There is some correlation with dosage i.e.

<u>Severity of Haemophilia</u>	<u>% LAV +ve</u>	
	<u>FVIII</u>	<u>FIX</u>
Mild	29	0
Moderate	63	70
Severe	78	83

Those who were anti-LAV +ve had the following characteristics.

Lymphocyte count	Reduced
Th cells	Reduced (but 2 populations for FIX recipients)
Ts	No difference
Th/Ts	Reduced (not sig. for FIX)
IgG, IgA	Raised
Immune complexes	Present for FVIII (but not for FIX)

Household contacts

of 17 AIDS cases only 2 household contacts found LAV +ve

Animal studies suggest that seroconversion may take place 3 months after receipt of virus.

Heat inactivation studies (probably by Cutter)

Starting level of virus  $10^5$  particles/ml (LAV)



<u>Conditions</u>	<u>Comment</u>
68°C wet heating (German method)	Complete inactivation in 4 minutes.
68°C dry heating	<10 <sup>1</sup> particle/ml after 1 hour, complete inactivation at 24 - 78 hr.

2. REMOVAL OF VIRUS INFECTIVITY (R. Gerety, OOB, abstr p. 23)

NANB is a retrovirus.

May be cross-reactivity with HTLVIII in haemophiliacs. Every +ve HTLVIII test (ELISA) should be confirmed by another method (eg Western blot could be used because of MW differences).

Clinical trial of heat treated FVIII in virgin haemophiliacs (Mannucci) has shown NANB, but no sign of HTLVIII after 1 year (suggests that Hyland method, 60°C, 72 hrs, dry heat, will inactivate HTLVIII).

Fractionation of retroviruses:-

	<u>Distribution</u>
Reverse transcriptase (Rouse Sarcoma)	30% to Cryo 0 in FII

NOTE: The safety of FII was queried by Dr. Gunson in light of the BPL experience. Dr. Gerety said that he believed the BPL situation was due to cross-contamination of FII in the gel filtration column.

