Minutes of

Anti-HBc Screening Project Study Group meeting
Wednesday, 17th January 1996

Present:	Chris Parkhouse	Abbott Laboratories
	Dr John Barbara	North London Blood Transfusion Centre
	Professor Jean-Pierre Allain	Division of Transfusion Medicine
	Dr Pat Hewitt	North London Blood Transfusion Centre
	Professor R Tedder	University College London Medical School
	Barbara Cant	South Thames Blood Transfusion Centre
	Dr Lorna Williamson	EABC/Division of Transfusion Medicine
	David Wenham	East Anglian Blood Centre
	Ian Reeves	East Anglian Blood Centre
	Joanna Griffiths	Research Nurse, East Anglian Blood Centre
	Una Whichelow	Research Nurse, South Thames Blood Transfusion Centre

ACTION

1. Minutes of Last Meeting

The minutes of the meeting held on 1st November 1995 were accepted as a correct record.

2. Matters Arising

5. **The inclusion of children** - LW reported that no Ethics Committees in East Anglia had objected. PH confirmed that children would be included unless hospital Ethics Committees specifically objected.

3. Screening Update

Accrual of previously untested donors was falling off, since most regular donors had already been tested. Only new and lapsed donors were being tested who had few or no previous donations. Since nearly 74,000 donations had now been tested at South Thames, and a total of 70 `anti-HBc only` donors had been identified between Cambridge and South Thames, it was agreed that donor screening may stop at this point. **BC**

IR presented corrected figures for Cambridge, showing that the relative percentages in each of the three categories are now closer to those of South Thames, even although the absolute numbers are higher (see attached report).

Samples from South Thames showing anti-HBs of <0.1 iu/ml had been re-checked at EABC and correlated closely.

Supplementary testing with IgM anti-HBc and anti-HBe had been performed on Cambridge samples. All were negative for IgM anti-HBc, with none of 12 anti-HBc only positive for anti-HBe, and 5 of 20 `anti-HBc plus low level anti-HBs` also positive for anti-HBe.

RST commented that he would have expected the figure for anti-HBe positivity to be higher.

This led to a general discussion on specificity of the anti-HBc assay and the potential problem of confirming Corzyme with IMX, although in the previous study there had been a good correlation between IMX positivity and a high OD/CO ratio on Corzyme. It was agreed that samples would also be re-tested on Ortho anti-HBc, as Corcell was not currently available. Anti-HBe should also be performed on samples showing high levels of anti-HBs **DW/IR**

RST also expressed concern regarding the use of IMX to measure anti-HBs and therefore permit donor reinstatement, since this assay used recombinant proteins and therefore may be detecting non-protective antibody. It was agreed that a range of samples from South Thames should therefore go to EABC to be re-tested on AusAb. There would be no need to test samples at the top of the range on IMX. **BC/DW**

4. DNA Testing

RST provided a protocol for a modified PCR methodology, increasing sensitivity by 2-3 logs. He hoped to obtain Eurohep standards by the next week, and would thereafter be in a position to test samples from the study at £25 per sample.

All 173 samples in categories 4 or 5 would have HBV DNA performed. **DW/BC to send samples**

5. Look-back

LW reported that all Ethics Committees in East Anglia had approved, either in principle or by final notification. All components had been identified, and hospital blood banks were currently identifying recipients.

RST queried whether the patient numbers were sufficient for statistical value. While it was recognised that the number of donors tested was approaching the margin of significance, the study was considered large enough to provide useful information. On average each donor would have seven potential recipients.

RST pointed out that using a control group consisting of anti-HBc plus high level anti-HBs positive donors, one was potentially providing passive protection against surgical or other hospital acquired hepatitis B. It may be argued that a more correct control group would be donors

with no markers of hepatitis B at all. A figure for HBV in recipients of such donations will eventually become available from the NLTC prospective TTI study.

6. Any Other Business

6.1 BC reported some difficulties in searching South Thames database. (Further information after meeting from BC reported that these had been resolved and searching would begin `in house`.)

6.2 LW had discussed with CP the possibility of borrowing an extra PC to allow JG to progress setting up the look-back database. CP confirmed that the computer currently based in the laboratory at South Thames will be made available. **CP**

6.3 JB gave an update on his planned protocol for recipient testing. This would be HBsAg by Murex overnight, and by PRISM. Anti-HBc would be performed by Corzyme, IMX and Ortho (in post meeting discussions PH/LW and JB also recognised the need for anti-HBs testing in patients with a history of HBV immunisation). It was agreed that where transmission appeared to have occurred, donor archive samples could be retrieved for further testing, although they were only available for the last two or three years. It was also agreed that there was no value in reporting positive cases actively back to the hospitals, but that CDSC would be interested in receiving reports.

7. Date of Next Meeting

Wednesday, 28th February 1996, 09.30, at East Anglian Blood Centre.

Attach.

Copy to: Dr John Barbara, North Thames Blood Transfusion Centre
Barbara Cant, South Thames Blood Transfusion Centre
Dr Sue Knowles, North London Blood Transfusion Centre
Mr Chris Parkhouse (+3), Abbott Laboratories Limited
Prof R S Tedder, University College & Middlesex School of Medicine
Dr Patricia Hewitt, North London Blood Transfusion Centre
Professor J-P Allain, Dr Lorna Williamson, Cambridge University Division of Transfusion Medicine
Mr David Wenham, Mr Ian Reeves, Joanna Griffiths, East Anglian Blood Centre
Una Whichelow, Research Nurse, South Thames Blood Transfusion Centre

LW/cmh
22nd January 1996

UPDATE ON CAMBRIDGE/S THAMES ANTI-HEPATITIS B CORE STUDY.

1. DONOR TESTING - final results of screening.

	Cambridge	S Thames	TOTAL
No. tested	29,970	73,899	103,869
Initial reactives (Abbott Corzyme)	1,103 (1.49%)	284 (0.95%)	1,387 (1.33%)
Confirmed reactives (IMX x 2)	441 (0.60%)	139 (0.48%)	580 (0.56%)
Of the confirmed reactives:			
Anti-HBs (IMX) > 0.1 iu/ml	107 (0.36%)	306 (0.41%)	413 (0.40%)
Anti-HBs < 0.1 iu/ml	20 (0.067%)	83 (0.11%)	103 (0.10%)
Anti-HBs negative	12 (0.040%)	58 (0.08%)	70 (0.07%)

Further assays to be performed:

Anti-HBc (Ortho, Corecell not currently available)
Anti-HBc IgM
Anti-HBe
HBV DNA (RSTedder)

2. LOOKBACK

To be done for the last 5 years only for all recipients of components of donations from 'isolated anti-HBc' and 'anti-HBc + low level anti-HBs' donors. Age/sex matched controls will be selected from the 'anti-HBc + high level anti-HBs group.

Research nurses appointed at each centre. HCV lookback model will broadly be followed.

Cambridge - all 9 Ethics Committees have approved.

- 230 components issued within region, blood banks currently identifying recipients.

S.Thames - 50+ Ethics Committees submissions placed - 3 approved so far.

- database being searched for fate of components.

Patients to be tested for HBsAg and anti-HBc (anti-HBs only if vaccination history) at NLTC.

J-P Allain, Lorna Williamson.
Cambridge January 1996.