DRAFT - FOR CHAIRMAN'S COMMENTS

NOTE OF THE FOURTH MEETING OF THE AD HOC WORKING GROUP ON THE EVALUATION OF ANTI-HTLV III KITS, HELD AT DHSS ON 3 MARCH 1986

1. Present:

Dr Codd	Newcastle PHLS
Dr Follett	Runchill Hospital, Glasgow
Dr Gunson	Manchester BTS
Dr McLelland	Edinburgh BTS
Miss Rawlinson	Manchester BTS
Dr Pritchard	Welsh Office
Dr Mortimer	PHLS Virus Reference Laboratory
Mr Parry	" " " "
Dr Schild	NIBSC
Professor Knox	Birmingham
Dr Supran	PHLS, DMRQC
Mr Snell	" "
Dr Skinner	DHSS
Mr Lister	(Chairman)
Mr Kennedy	(Secretary)

The Chairman introduced Dr Supran, Mr Snell and Dr Skinner (deputising for Dr Alison Smithies). He explained that some papers, including a report ~~proposed~~ prepared by Dr Gunson, had not been sent out in advance of the meeting because of a misunderstanding and apologised for this. The Chairman distributed copies of letters from manufacturers giving information on ~~infection~~ inactivation of HLTV III.

2. Minutes of the Third Meeting held on 25 September 1985

These were agreed subject to the following amendment: Minute 8 - First sentence to read "It was reported that a BTS had looked at the Abbot kit but had opted for the Wellcome product for the time being".

3. Phase I Evaluation - 2nd Batch

Dr Mortimer introduced his composite report on the evaluation of 10 commercial kits including the latest ~~batch~~ batch (Pasteur, Behringwerk, Labsystems, Dupont and Travenol). His conclusion was tht all the kits suitable for general use with the exception of the Labsystems product. Furthermore, he concluded that a kit should not be used to test heat-treated sera unless the evaluation had demonstrated its suitability for this application. Members made some comment on the format of the report. In particular it was felt that readers would find it very useful to see a table ~~in which~~ which presented the results obtained by each kit on each serum in the panel. ~~was presented.~~ Dr Mortimer pointed out

the need to circulate the information before it became outdated but nevertheless agreed to incorporate as many comments as possible. It was hoped that the report would be ready for distribution within two weeks.

It was agreed that what remained of the aliquots of the panel of sera established by VRL should be kept for the evaluation of new anti-HTLV III kits including a confirmatory kit expected from Abbott shortly. It was agreed that if commercial Western Blotting kits are evaluated a panel of sera will have to be established specifically for this.

4. Western Blotting - Update

It was agreed that the Blotting kits from Dupont and Biorad were possibly still in a developmental stage and were probably not worth evaluating as such. The commercial kits were also very expensive. There was some discussion on the role of the method and there was a consensus that a study was needed to establish this. It was proposed that the study should involve the examination of 300 unrepeatable screen positives from blood donors. There was a need to follow Western Blotting results in a donor who, on the basis of an ELISA assay, progressed from being weekly or equivocally screen positive to unequivocally screen positive.

It was agreed that there was a need for all the confirmatory laboratories to agree test and interpretation criteria to distinguish positive and negative results. It was hoped that there would be a meeting on this subject soon.

5. Progress in Phase 2 (Blood Transfuction Centre) Evaluations

It was reported that most BTCs were using the Wellcome assay. However Organon assays were being used by six BTCs and by the Lewisham Hospital centre, although some of these were thinking of changing to Wellcome assays. If they did change it would become difficult to compare the performance of the different assays.

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Miss Rawlinson reported on the investigation of false negative results obtained by some BTCs when certain sera were tested by the Wellcome assay (see Minute 5 of the Minutes of the meeting of 25 September). The sera had been examined at the Virus Reference Laboratory and all gave positive results with the Wellcome assay. It was thought that the earlier results, including the reported ~~prozone~~ prozone effect, were due to poor mixing after ~~thawing~~ thawing or possibly an increase in pH on storage.

392 coded ~~sera~~ serum samples provided by ~~URL~~ V had been tested by the Manchester BTC using Wellcome, Organon and Pasteur assays. The overall conclusions were that some positives are being missed ~~and that~~ reliance on a single test may not detect all ~~positives~~ positives, technical errors may lead to false negative results found that Furthermore an "equivocal" zone should be allowed when deciding which tests to repeat and that there is a need to agree a definition of "positive". This last conclusion was reached in the light of the results of one blood donor's sera that was positive by all the commerical assays yet negative by the PHLS's Compria assay.

Miss Rawlinson reported that of 85,556 donor sera tested so far there had been 14 confirmed positives. If Ireland is included, the total is 882,480 sera tested with 16 positives in all.

~~The~~ Some concern was expressed ~~over~~ about the low number of controls being set up by some of the BTCs and the possibility that plates might be ~~misread~~ misread. It was hoped that a computerised read-out, such as was in the Sanguin package, would provide improvement. There was also concern over the erratic quality of Organon and Wellcome kits. The ~~other~~ latter in particular ~~should~~ showed significant batch to batch ~~had many batch~~ variation, had many batch numbers ~~and plates~~ (NB the DMRQC results showed that 43 batches of Wellcome kits were in use) and plates were some times outside the manufacturer's QA criteria. Mr Kennedy agreed to take these points up with manufacturers.

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6. Quality control and External Quality Assessment Materials for LAV/HTLV III

Dr Supron and Mr Snell outlined the NEQAS in Microbiology and reported on the results of the DMRQC performance assessment panel of 20 samples sent out in November 1985. Of the erroneous results it was felt that most were due to an assays inability to ~~defect~~ detect antibody in diluted ~~sera~~ serum samples: which may not be representative of actual weekly positive ~~clinical~~ clinical specimens. In additon some new users may have made errors due to unformiliarity with the kits.

7. Informal Report and ~~Discussion~~ Discussion of Performance of Kits in Use

Dr Hambling of Leeds PHLS had provided his views on the use of LAV/HLTV III antibody tests. He preferred the Wellcome assay because it was quick to perform, convenient and appeared ~~to be~~ to be reasonably specific and sensitive. However to be on the safe side he retested any specimen which ~~clinically~~ clinically could be positive but which gave a negative result initially. He liked to use a ~~fluorescent~~ fluorescent antibody test for confirmatory purposes. His reference procedure was to repeat the test first using the ~~sera~~ same kit then if positive he would use the Wellcome assay and either the Pasteur or Dupont assays, and a fluorescent antibody test (H9/3 cells).

8. Any other business

Dr McLelland reported on the testing of 11,200 blood donations. This produced 44 repeatable positives with the Abbott assay. Of these sera so far 10 had been tested by Western Blotting and all had ~~been~~ given negative results by this method.

None of the donations gave positive results with the Wellcome assay. There was not evidence so far that the Abbott assay would produce more confirmed positive results than the Welcome assay.

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Dr Codd said that 2,500 blood donor sera had been tested at Newcastle PHLS. There were no false negative results by the Wellcome assay. The positive results produced by the Abbott assay could not be confirmed by another ELISA and immunofluorescence assay.

It was reported that Abbott ~~were~~ was currently stressing that some ELISA antigens, for example Wellcome's, did not ~~meet~~ react with core antibody.

Virus

9. Next meeting

The Chairman announced that the next meet would be arranged when there was more information available. Members would be contacted individually about suitable dates.

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