

## Public Health Laboratory Service

Central Public Health Laboratory Virus Reference Laboratory 61 Colindale Avenue London NW9 5HT Telex 8953942 (DEFEND G) Telephone 01-200 4400

Our ref

Your ref

Dr. V James Consultant Haemotologist National Blood Transfusion Service Regional Transfusion Centre Longley Lane SHEFFIELD S5 7JN

1st April 1987

Dear Dr. James,

Thank you for your letter of March 25 which raises a very interesting issue: namely what should be done about people who react in one kind of assay (usually Dupont, Abbott, Pasteur type and not in others. There seems to me to be 3 possible reasons for this:

- (1) it is a weak anti HIV reaction which only Dupont, etc can detect.
- (2) It is an antibody response to another retrovirus which shares some determinants with HIV, eg LAV 2.
- (3) There is an antibody or other factor irrelevant to retrovirus infection interfering with the test.

From what experience we have I think that (1) can only be dealt with by following up the donor. He/she can be expected to produce a higher titred, broader response within 6 months if HIV infected. This will be detectable by other assays. The exception might be the sick HIV infectious individual who would in any case probably be unfit to donate.

The solution to (2) is to develop specific tests for other retroviruses so that donors implicated by Dupont, etc can be tested by them. We are investigating anti LAV 2 tests here though I am not yet sure what the results mean. Ultimately, when we have found more retroviruses we may have to subject donors like the one you refer to several such tests.

(3) is the situation in which we would like if possible, to restore the donor to the panel. It would be revealed by lack of change of result after 6 months and negative tests in (2), though of course one would have to test specimens in parallel and know about the interval between the specimens collected.

cont'd....

As I think you know, guidelines are expected from DHSS shortly on how to manage donors implicated by a single anti HIV test system as yours has been, and until we have yet more sensitive anti HIV tests and a range of tests for the other retroviruses I think they offer the best advice as to what should be done.

I agree that in a sense we are ignoring this problem when Wellcome is used. However, I do not know of any donors who were like yours initially but subsequently became strongly anti HIV positive. So I do not know what Wellcome reactions in the first and subsequent specimens from such people would be. If Dupont, etc were more widely used in BTS it might be possible to find donors like this and I wish that Wellcome and Dupont style tests were being used in the Transfusion Service more equally. If as a result of your example at Sheffield that gradually came about we may get a real answer to the question that you have raised about the accuracy of Wellcozyme.

GRO-C
Philip P. Mortimer

c.c. H H Gunson