

STN 125265 Rotarix

• MEMORANDUM

DATE: February 21, 2008

FROM: S. M. Feinstone

TO: Laraine Henschal

THROUGH: Jerry Weir

CC: Robin Levis, Loris McVittie, Phil Krause, Luba Vujcic

SUBJECT: STN 125265 Rotarix

SPONSOR: GSK

Background: GSK had always used the standard ----- assay from ----- to test for antibody to HBsAg. However, in 2002, ----- began to discontinue ----- because they had gone to ----- . GSK looked for alternatives to ----- and found that all ----- of anti-HBsAg test kits were lacking in one way or another. -----

The test was calibrated using reference standards from --- and from the -----

The limit of detection (LOD) and limit of quantitation (LOQ) and a cut off value were determined. The LOD was set at ---- mIU/mL and the LOQ at --- mIU/mL and the cut off was set at --- mIU/mL based on the best sensitivity where specificity was not compromised. The analytic range was set at ---- mIU/mL for the lower limit and ----- for the upper limit. Precision was determined by measuring the coefficient of variation (CV) on ----- and with ----- working in both ----- sample testing. The CV total was ---- for ----- sample testing and ---- for ----- testing. These are very good numbers for an ELISA.

Other parameters tested were linearity, specificity, accuracy-recovery, interferences and robustness. The assay performed well for all these characteristics.

A comparison was made with the reference method, ----- EIA in a ----- comparison.

	Anti-HBs ----- Assay		Total
-----	-	+	
-	---	---	---
+	---	---	---
Total	---	---	---

Sensitivity: -----

Specificity: -----

Agreement: -----

The specificity, sensitivity and agreement in comparison to the standard assay was reasonable.

A larger sample was tested in the --- assays in which sera from other GSK studies were evaluated. In this analysis, 1649 sample that tested positive in ---- assays were analyzed ----- . The correlation coefficient was ----- . However, it was shown that the ----- assay gave ----- antibody concentrations at the ----- and -----.

----- (mIU/mL)	Anti-HBs -- ---- (predicted mIU/mL)	Ratio -----/ ----- RIA
----	----	----
----	----	----
----	----	----
----	----	----
----	----	----
----	----	----
----	----	----

The discrepancies between the assays at the ----- of antibody are a potential problem because the cut-off value that is accepted for sero-protection is 10mIU/mL. If the new assay is giving ----- results around the level of 10 mIU, there may be the possibility to ----- the number of subjects who developed antibody at the sero-protective level.

Conclusions and recommendations: The ----- assay compares well with the standard ----- with the one problem of the potential for ----- . For use in the evaluation of the concomitant administration of Rotarix and hepatitis B vaccine in comparison to a placebo, the ----- assay should perform adequately. Based on the information presented, I recommend that the FDA accept the data from the clinical trials of the concomitant administration of Rotarix with hepatitis B vaccine
