



Food and Drug Administration
1401 Rockville Pike
Rockville, MD 20852-1448

October 18 2012

To: Jill Evans/LifeSouth

From: FDA/ Office of Cellular, Tissue and Gene Therapies

(OCTGT) Re: BLA #125432

Dear Ms. Evans:

We have the following comments and requests for information for BLA #125432:

1. Please provide data for analytical specificity and analytical sensitivity for CD34 and nRBC testing.

Company will provide this data in the future addendums.

2. Please provide the narrative description of CD34/ (b)(4) enumeration protocol and nRBC protocol.

Company will provide this data in the future addendums.

3. Please clarify if CD34 enumeration is done manually? Please explain the procedure to calculate absolute viable CD34 cell/uL using the (b)(4)
(b)(4)

Company clarified that they are doing CD34 enumeration calculations manually. Company will provide an example of how the calculations are done.

4. Please explain which (b)(4) instrument was used for (b)(4) comparison with flow in CD34/ (b)(4) assay. Is the (b)(4) values include the nRBC in their TNC values? Please clarify. (b)(4) values are 19.9% lower than (b)(4)

Company will provide the answer later.

5. Please clarify if the TNC values reported on certificate of analysis (Volume D, page 139) are from (b)(4)

Company said the TNC values are from (b)(4) and the nRBC values are not excluded.

6. Please explain if the (b)(4) nRBC values are used for cord blood product?

No, they are only used for FACT and NMDP reporting. These are used to calculate WBC from TNC.

7. Which software package is used for statistical analysis.

Microsoft Excel.

8. Please verify if (b)(4) at VA Medical clinic is validated? (We do see that this lab is CLIA certified).

Yes, (b)(4) at VA is validated.

9. Please provide the data on linearity range and limit of detection for both instruments. Please include your acceptance criteria,(for example CV <20%). This should be done for both tests:

a. CD34 test validation

b. nRBC determination using (b)(4)

This data will be provided.

10. Reviewing the data provided for three lots for enumeration of CD34, the 3 CBU have (b)(4) The accuracy studies were done on (b)(4) (b)(4) cells/uL. Could you provide the data that (b)(4) flow cytometers can detect CD34 cells accurately at higher limits (around 400 cells/uL).

Company asked since there is no commercially available product available with higher (400 range) CD34 cell, could we use cord blood specimen for this validation?

FDA's response: Yes Cord blood specimens can be used and serial dilution can be made and evaluated.

11. Reviewing the data from three lots provided, out of three cords, one cord (b)(6) (b)(6) has a post processing viability of 81%. How do you deal with such cords?

Company label the cords that do not meet the acceptance criteria as non-bankable cords and stores them.