February 7, 2005

Re: Request for Review by 45 CFR 46.407 Panel

The Washington University Medical Center IRB finds that the following protocol presents a reasonable opportunity to understand, prevent or alleviate a serious problem affecting the health or welfare of children but cannot be approved under 46.404, 405, or 406 for the following reasons:

- The Committee did not find that the protocol met the conditions of **46.404** because it was determined that this research was greater than minimal risk based on the rare risk of a bloodstream infection from the 24-hour isotope infusion and the extra blood draws.
- The protocol did not meet the conditions stated in **46.405** because the research does not present the prospect of direct benefit to the participants.
- The Committee determined that the protocol did not meet the conditions stated in **46.406** because (1) the procedure is not an experience that is reasonably commensurate with those inherent in the expected medical situations for the control group, and (2) the control group does not have a "disorder or condition" and, therefore, the research cannot meet the criteria stated in 46.406(c).

However, the Committee was supportive of the proposed amendment to enroll a control group (infants without lung disease) based on the need to provide comparison data for the data collected on infants with lung disease. Please see the attached letter from the investigator (dated January 28, 2005) for additional information related to the scientific value of the control group in this research.

Purpose of Study: To evaluate pulmonary surfactant metabolism and the effect of interventions on surfactant metabolism with stable, non-radioactive isotopes in preterm neonates with respiratory dysfunction and to compare these findings with a control group of 10 intubated full-term infants in the NICU with normal lungs (no evidence of lung disease, normal chest x-ray, and not requiring much extra oxygen to breath comfortably).

Participation of Infants with Normal Lungs:

- 24 hour infusion through existing IV of sterile, non-radioactive, stable isotopes [For research only]
- 5 blood samples (collected from an existing tube) of 1/10 of a teaspoon each for a total of ½ teaspoon in 27 hours. If no indwelling catheter 2-3 samples will be collected at clinically indicated times. If extra sticks are needed for research purposes only we will limit these to 1-2 and only with consent of the parents [additional blood for research only]
- Lung fluid obtained from clinically required suctioning will be saved for 2 weeks. [analysis of fluid for research only]

Note: Study may be repeated if parents give permission and infant is still on a respirator with intravascular access in place.

Deemed Greater than Minimal Risk for the Following Reasons (as stated above): The Committee determined that this research was greater than minimal risk based on the rare risk of a bloodstream infection from the 24-hour isotope infusion and the extra blood draws.

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IRB:	03 Continuing Review Committee

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Title: Precursor Preference in Surfactant Synthesis of Newborns

Principal Investigator:	Kimberly Spence, M.D.
Grant Number/Funding Agency:	F32 HL074601/NIH
Grant Application:	Attachment 1
IRB Protocol Application:	Attachment 2
Permission Document:	Attachment 3
Relevant IRB Minutes and Correspondence:	Attachment 4