From: Devlin, Robert
To: ~~Maryann Bassett~~; ~~Montilla, Tracey~~; ~~CN=Heidi Hiers/OU=RTP/O=USEPA/C=US@EPA~~; ~~Martha Carraway~~; Ghio, Andrew; ~~Diaz-Sanchez, David~~; ~~CN=Kelly Duncan/OU=RTP/O=USEPA/C=US@EPA~~; ~~CN=Melanie Jardim/OU=RTP/O=USEPA/C=US@EPA~~; ~~Dailey, Lisa~~
Subject: Bronchoscopy for Lamarck
Date: ~~Tuesday, July 13, 2010 11:21:49 AM~~

This morning the first bronchoscopy was performed for Lamarck. I would make the following recommendation for future Lamarck bronchs.

The protocol currently specifies that we will do a single 20 ml wash, followed by a single 30 ml wash. While this provides adequate fluid for our needs, it precludes the possibility of obtaining macrophages for in vitro work. It would be better if we had a more generic sentence in the protocol that indicated up to 4 (or 5?) washes may be performed. We do not need to specify the volume (or even location?) of the washes.

Although the protocol does not need to specify the order of brushes vs washes, I would recommend that the brushes go first. Otherwise we run the risk that we might have to stop the procedure before obtaining the required brushes and brushes are the #1 priority of this study.

If the brushes go first, then washes can be done (up to 4 or 5) until medical personnel or subject comfort dictates stopping. This will maximize the number of macrophages that can be obtained.

There is the likelihood that doing brushes first may contaminate the lavage fluid with plasma and/or epithelial cells, but I think this can be minimized by doing the brushes on one side and the lavage on the other.

Something else that doesn't need to be in the protocol but which is worth discussing is the volume of the first wash. When we and others started doing lavages for research purposes, the "standard" procedure was to do 6 50 ml washes. But about 1990 some papers from Rennard et al. showed that if only 20 mls was used for the first wash, it preferentially sampled the large airways. So we and others incorporated this modification into our standard procedure and analyzed the first wash separately from the others.

However, for this study, we don't care all that much about sampling the large airways. The primary purpose for obtaining BAL fluid is for proteomics analysis of that fluid. We don't recover enough fluid from a 20 ml first wash for proteomics so it makes more sense to me to just do 50 ml washes. Otherwise we will likely end up just throwing away that first aliquot anyway and 4-5 50 ml washes will provide a higher macrophage yield.

So... unless someone objects, I suggest that Mike talk with Martha Sue about appropriate language to put into an amendment.