

Standard operating procedure: Administering microbiota inoculation

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Purpose: This procedure describes the instructions for giving a defined microbiota to SCID pigs within 48 hours of life.

Procedure:

1. Once the microbiota aliquot has been thawed according to instructions, please proceed to the animal room, donning appropriate PPE.
2. A polypropylene catheter may be used as a stylet for the red rubber tube. The stylet will be put into the red rubber tube to stiffen the tube for insertion and then removed before administration.
3. A red rubber tube will be passed orally into the esophagus/stomach. The tube must be passed far enough to avoid any risk of aspiration.
4. Once the tube is sufficiently inserted, the microbiota will be administered, and the tube will be flushed with sufficient fluid (such as a milk replacer or water) to remove any further microbiota.
5. The tube must be pinched off prior to withdrawal to avoid the risk of aspiration of any remaining fluid
6. The piglets should be monitored during and immediately after administration for any signs of distress, including coughing or gasping. It should be discontinued immediately if signs of distress are noted during administration.
7. Another dose should be given 24 hours after the first administration and repeated around weaning age.
8. Sampling of microbiota using fecal swabs is used as follows:
 - Testing should be done periodically to determine the microbiota found
 - Fecal swabs will be collected for testing as follows:
 - Before first administration
 - 24 hours after second administration
 - 3 days after the second administration
 - 7 days after the second administration
 - Weekly thereafter