SOP 2.10 Bronchoalveolar Lavage Collection using Bronchoscopy

SOP Number: 2.10
Version Number 1.0

	Name	Title	Date
Author			
Authoriser			

Effective Date	
Version Number	

Purpose

This SOP describes the procedure for the collection of a bronchoalveolar lavage sample using bronchoscopy.

Responsibility

It is the responsibility of all medical and research personnel carrying out this procedure to ensure that all steps are completed both competently and safely.

Procedure:

1. Explain and discuss the procedure with the participant and obtain written informed consent.

2. The participant's bronchoscopy is booked with the Endoscopy Dept. / Theatre in accordance with local policy and procedures.

3. The staff should ensure the Endoscopy Dept. / Theatre is informed, in advance, of any transferable infections the participant may have (e.g. MRSA, Hepatitis, TB, HIV).

4. The participant must have a legible armband and/or ankle band with their identifiers.

5. The participant ideally should fast (nothing to eat or drink) for at least 4-6 hours.

6. A doctor should insert an intravenous cannula prior to the procedure.

7. Suitable premedication prescribed by the medical team will be given as per local protocol prior to procedure.
8. Bronchoalveolar lavage (BAL) should be performed after general inspection of all the brochopulmonary segments and prior to any biopsies or brushing of the airway.

9. Advance the bronchoscope until it is wedged into a subsegment of the middle lobe or the anterior segment of a lower lobe.

10. Maintaining wedge position, apply gentle suction (50-80mmHg), collecting the lavage. The suction is turned down or off to prevent collapse of the airways during suctioning.

11. Infuse 50mL of sterile 0.9% saline with a syringe, wait a few seconds to dwell and apply constant suction for several seconds (20 seconds typically) until return of the frothy surfactant-rich fluid stops. The next aliquot is instilled and suction applied, repeat for all three aliquots.

12. Collected fluid is placed in a sterile container and stored preferably on ice until processing. The trash trap or hook up directly to the wall suction is then reapplied and bronchoscopy is performed as needed for biopsies and other procedures.

13. Return on BAL is quite variable (usually 40-60% recovery of total volume instilled), ideally in excess of 30mL of BAL fluid should returned for interpretation of results.

14. Record the date and time the BAL sample was collected on the collection tube and /or study specific documentation

15. The specimen should be stored in the refrigerator at 4°C and transferred to the processing laboratory on ice as soon as is practicable.

16. Once the procedure is complete the participant is returned to the recovery area accompanied by the Endoscopy or Theatre nurse and porter as appropriate.

17. The participant’s airway, respirations, pulse oximetry, pulse and blood pressure should be observed. One set of vital signs are required unless otherwise directed by the medical research team or clinically indicated, and recorded in the participants nursing notes.

18. Any abnormalities are immediately reported to the medical research team looking after the participant.

19. The participant remains fasting until the gag reflex returns and is alert and orientated; this normally takes 2-3 hours.

20. Once fully awake and deemed fit for discharge by the medical research team, the participant should be made aware of any instructions they need to follow on discharge and advised when and if they are to return for results.

21. The participant should not be discharged home unaccompanied and should be supervised for 10 hours. He/she should be advised not to operate machinery, drive or make any legal or binding decisions for 24 hours.

Change History

SOP Number	Effective Date	Significant Change	Previous SOP No.