

**Supplemental online material:**

ITEM 1: The porcine airway model is helpful in learning how to perform:															
Participant	1	2	3	4	5	6	7	8	9	10	11	Median	IQR	Mean	SD
Airway inspection	5	4	5	5	5	5	5	5	5	5	5	5	4-5	4.91	0.30
Endobronchial brushing	5	5	5	5	5	5	4	5	5	4	4	5	4-5	4.73	0.47
Endobronchial biopsy	5	5	5	5	5	4	5	5	5	4	4	5	4-5	4.73	0.47
Foreign body retrieval	5	5	5	5	5	5	5	5	5	5	4	5	4-5	4.91	0.30
Valve implantation	5	5	5	5	4	5	4	5	4	Nil	4	5	4-5	4.60	0.52

  

ITEM 2: The porcine airway model is helpful to learn how to interact with an assistant while performing:															
Participant	1	2	3	4	5	6	7	8	9	10	11	Median	IQR	Mean	SD
Airway inspection	5	5	5	5	4	5	4	4	5	4	4	5	4-5	4.55	0.52
Endobronchial brushing	5	5	5	5	5	5	4	4	5	5	4	5	4-5	4.73	0.47
Endobronchial biopsy	5	5	5	5	5	5	5	4	5	5	4	5	4-5	4.82	0.40
Foreign body retrieval	5	5	5	5	5	5	5	4	5	5	4	5	4-5	4.82	0.40
Valve implantation	5	5	5	5	4	5	4	4	5	Nil	4	5	4-5	4.60	0.52

  

ITEM 3: The porcine airway model is helpful to demonstrate safety issues associated with:															
Participant	1	2	3	4	5	6	7	8	9	10	11	Median	IQR	Mean	SD
Airway inspection	5	5	5	5	4	4	4	4	5	4	3	5	3-5	4.45	0.69
Endobronchial brushing	5	5	5	5	4	5	4	5	5	4	3	5	3-5	4.55	0.69
Endobronchial biopsy	5	5	5	5	4	4	5	5	5	4	3	5	3-5	4.55	0.69
Foreign body retrieval	5	5	5	5	4	4	4	5	5	4	3	5	3-5	4.45	0.69
Valve implantation	5	5	5	5	4	4	4	5	5	Nil	3	5	3-5	4.50	0.71

  

ITEM 4: The porcine airway model compares favourably with the computer simulator for learning how to perform:															
Participant	1	2	3	4	5	6	7	8	9	10	11	Median	IQR	Mean	SD
Airway inspection	5	5	5	5	5	4	4	5	4	5	5	5	4-5	4.73	0.47
Endobronchial brushing	5	5	5	5	5	5	5	5	5	5	5	5	5	5.00	0.00
Endobronchial biopsy	5	5	5	5	5	5	5	5	5	5	5	5	5	5.00	0.00
Foreign body retrieval	5	5	5	5	5	5	5	5	5	5	5	5	5	5.00	0.00
Valve implantation	5	5	5	5	5	5	4	5	5	Nil	5	5	4-5	4.90	0.32

  

ITEM 5: After this experience, I feel more confident performing:																
Participant	1	2	3	4	5	6	7	8	9	10	11	Median	IQR	Mean	SD	
Airway inspection	5	3	5	5	4	4	4	4	5	3	1	3	4	1-5	3.82	1.25
Endobronchial brushing	5	3	5	5	4	5	4	5	4	1	3	4	1-5	4.00	1.26	
Endobronchial biopsy	5	3	5	5	4	5	5	5	4	1	3	5	1-5	4.09	1.30	
Foreign body retrieval	5	3	5	5	4	5	5	5	4	1	3	5	1-5	4.09	1.30	
Valve implantation	5	3	5	5	4	5	4	4	4	Nil	3	4	3-5	4.20	0.79	

  

ITEM 6: Base on my past experiences with bronchoscopy, the porcine airway model is realistic:															
Participant	1	2	3	4	5	6	7	8	9	10	11	Median	IQR	Mean	SD
Realism	5	4	5	5	4	5	4	5	5	4	4	5	4-5	4.55	0.52

  

ITEM 7: The porcine airway model is easy to use:															
Participant	1	2	3	4	5	6	7	8	9	10	11	Median	IQR	Mean	SD
Ease of use	5	5	5	5	5	5	4	5	5	5	4	5	4-5	4.82	0.40

**Table S1.**

Table S1 legend: Experienced bronchoscopists' feedback presented as median with interquartile range (IQR) and mean ± standard deviation (SD).

**Supplemental online material:**

ITEM 1: The porcine airway model is helpful in learning how to perform:																			
Participant	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Median	IQR	Mean	SD
Airway inspection	5	5	5	5	5	5	5	5	4	5	5	5	5	5	5	5	4-5	4.93	0.26
Endobronchial brushing	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	4-5	4.93	0.26
Endobronchial biopsy	5	5	5	5	3	5	5	5	5	5	5	5	5	5	5	5	3-5	4.87	0.52
Foreign body retrieval	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5.00	0.00
Valve implantation	5	5	5	5	4	5	5	5	4	5	5	5	5	3	5	5	3-5	4.73	0.59
ITEM 2: The porcine airway model is helpful to learn how to interact with an assistant while performing:																			
Participant	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Median	IQR	Mean	SD
Airway inspection	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	3-5	4.87	0.52
Endobronchial brushing	5	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	4-5	4.93	0.26
Endobronchial biopsy	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5.00	0.00
Foreign body retrieval	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5.00	0.00
Valve implantation	5	5	5	5	5	5	5	5	5	5	5	5	5	4	5	5	4-5	4.93	0.26
ITEM 3: The porcine airway model is helpful to demonstrate safety issues associated with:																			
Participant	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Median	IQR	Mean	SD
Airway inspection	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	3-5	4.87	0.52
Endobronchial brushing	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	3-5	4.87	0.52
Endobronchial biopsy	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	3-5	4.87	0.52
Foreign body retrieval	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	3-5	4.87	0.52
Valve implantation	5	5	5	5	5	4	5	5	3	5	5	5	5	4	5	5	3-5	4.73	0.59
ITEM 4: The porcine airway model compares favourably with the computer simulator for learning how to perform:																			
Participant	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Median	IQR	Mean	SD
Airway inspection	4	5	4	5	5	5	5	5	2	5	5	5	5	5	5	5	2-5	4.67	0.82
Endobronchial brushing	5	5	4	5	4	5	5	5	4	5	5	5	5	5	5	5	4-5	4.80	0.41
Endobronchial biopsy	5	5	4	5	4	5	5	5	4	5	5	5	5	5	5	5	4-5	4.80	0.41
Foreign body retrieval	5	5	4	5	4	5	5	5	4	5	5	5	5	5	5	5	4-5	4.80	0.41
Valve implantation	5	5	4	5	5	5	5	5	4	5	5	5	5	4	5	5	4-5	4.80	0.41
ITEM 5: After this experience, I feel more confident performing:																			
Participant	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Median	IQR	Mean	SD
Airway inspection	5	5	5	5	5	5	5	5	5	4	4	5	5	5	5	5	4-5	4.87	0.35
Endobronchial brushing	5	5	5	5	5	5	5	5	5	4	4	5	5	5	5	5	4-5	4.86	0.36
Endobronchial biopsy	5	5	5	5	5	5	5	5	5	4	4	4	5	5	5	5	4-5	4.80	0.41
Foreign body retrieval	5	5	5	4	5	5	5	5	5	4	4	5	5	Nil	5	5	4-5	4.79	0.43
Valve implantation	5	5	5	4	5	5	5	5	5	4	4	5	5	3	5	5	3-5	4.67	0.62
ITEM 6: Base on my past experiences with bronchoscopy, the porcine airway model is realistic:																			
Participant	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Median	IQR	Mean	SD
Realism	5	5	5	5	5	5	Nil	5	4	5	5	5	4	4	4	5	4-5	4.71	0.47
ITEM 7: The porcine airway model is easy to use:																			
Participant	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Median	IQR	Mean	SD
Ease of use	5	5	5	5	5	5	5	5	5	5	4	5	5	5	5	5	4-5	4.93	0.26

**Table S2.**

Table S2 legend: Trainee bronchoscopists' feedback presented as median with interquartile range (IQR) and mean ± standard deviation (SD).

**Supplemental online material:**

Video 1: Bronchoscopy BioSim used with an Olympus flexible bronchoscope demonstrating airway inspection, endobronchial brushing, endobronchial biopsy, foreign body retrieval, and endobronchial valve implantation.

Video 2: Bronchoscopy BioSim used with an Ambu® aScope™ 4 bronchoscope connected to aView™ monitor demonstrating endobronchial appearances during manual ventilation of the porcine lung.