

Single Use or Disposable Flexible Bronchoscopes: Initial Experience with a New Device

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1. Background

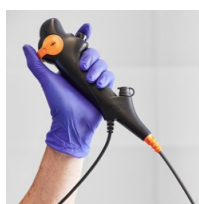
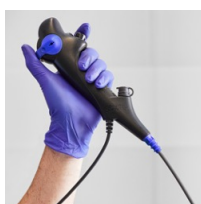
- The development of Single Use Flexible or Disposable Bronchoscopes (SUFBs) has accelerated in recent years
- SUFBs are associated with reduced risk of infectious transmission and reduced need for endoscopy staffing, particularly advantageous in the COVID-19 pandemic era

2. Aims

- The object of this study was to assess the performance of a novel Single Use Flexible Bronchoscope in an academic quaternary referral centre with an on-site interventional pulmonology program

3. SUFB assessed

- Boston Scientific® EXALT™ Model B scope 2.2mm, 2.8mm



4. Methods

Methods:

With ethical approval in a quaternary referral centre, we prospectively collected data on sequential bronchoscopy procedures using Boston Scientific® EXALT™ Model B scope

Data collection period:

SUFB use in Respiratory Department Cork University Hospital, Ireland January-July 2021

Data collected:

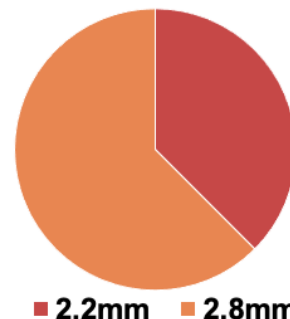
Demographics, procedure performed, SUFB performance, overall user satisfaction, and complication parameters

5. Results

5.1 Procedures performed and complications

- 24 procedures were performed by five pulmonology faculty from January to July 2021
- 15 procedures using the larger 2.8 mm channel scope, 9 using the 2.2mm channel

Scope used for procedure



- 5/24 (21%) in patients with malignancy
- 2/24 (8%) were performed in theatre through a rigid bronchoscope
- Procedures included endobronchial biopsy, transbronchial biopsy, cryobiopsy, debulking, and argon plasma coagulation
- There were no scope related complications and no case required conversion to a reusable scope

5.2 Overall Satisfaction Scale

- Users were asked to provide an overall satisfaction scale
- A likert scale was used to rate overall satisfaction from 1-5
- **The scale was rated as:**
 - Not satisfied at all
 - Not satisfied
 - Neither satisfied nor dissatisfied
 - Satisfied
 - Very satisfied
- 24/25 (96%) cases were reported as the highest score in satisfaction
- 1/25 (4%) of cases bronchoscopist reported they were unable to access the right upper lobe with forceps in situ

6. Conclusions

- In a small subset of patients in a bronchoscopy unit, the Boston Scientific® EXALT™ Model B scope was safe
- Both routine and advanced bronchoscopy procedures can be performed with high satisfaction reported

7. Disclosure of funding sources

Professor Kennedy has received speaker fees from Boston Scientific