

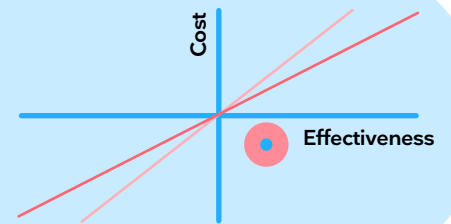


Health economics,
environmental impact, and
organisational impact

SCIENTIFIC EVIDENCE RELATED TO SINGLE-USE FLEXIBLE BRONCHOSCOPES

[Mærkedahl et al. \(2020\)](#)

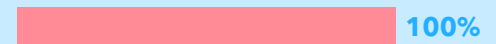
This cost-utility analysis demonstrates that single-use flexible bronchoscopes are cost-effective in comparison with reusable flexible bronchoscopes and are associated with a cost saving of £211.12 and a small gain in quality-adjusted life years (0.0105).



[Châteauvieux et al. \(2018\)](#)

Organisational impact should be considered when assessing medical devices. This study shows that, from an organisational viewpoint, there are many advantages in using single-use flexible bronchoscopes, including work process or health-care production and safety, patient pathways, logistics, and training requirements.

Patient flows



Logistics

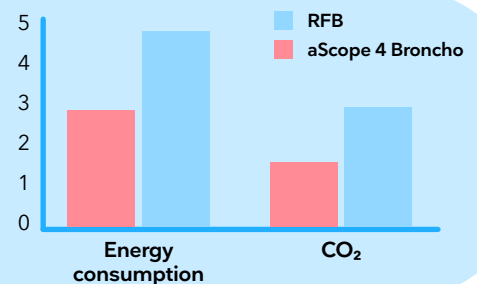


Work process or health-care production



[Sørensen et al. \(2018\)](#)

Using one set of personal protective equipment per reprocessing, along with the materials for cleaning and disinfection, determines that reusable flexible bronchoscopes have comparable or higher material and energy consumption, as well as higher emissions of CO₂ equivalents.



[Barron & Kennedy \(2021\)](#)

Most of the studies on single-use flexible bronchoscopes efficacy and cost-effectiveness have been in an anesthetic setting. They outline the benefits of single-use flexible bronchoscopes during the COVID-19 pandemic and provide a rationale for their more frequent use in the pulmonology suite. Single-use flexible bronchoscopy allows for parallel as opposed to linear use in the respiratory suite, which can decrease delays between procedures and increase the number of bronchoscopies that can be performed.

Bronchoscopy is associated with an increased risk of the spread of COVID-19

