

SCIENTIFIC EVIDENCE RELATED TO SINGLE-USE BRONCHOSCOPES

Ambu



CLINICAL PERFORMANCE

Ambu® aScope™ 4 Broncho scored well for ease of use, imaging, and aspiration. Portability and immediacy of use were key advantages. The quality of aScope Broncho was assessed in 21 Spanish hospitals. The ease of intubation and maneuvering was rated “very easy” and the image and aspiration quality as “optimal”.

[Flandes et al. \(2020\)](#)



CONTAMINATION STUDY

A total of 620 samples were obtained from reusable flexible bronchoscopes, 56 samples (9%) tested positive for at least one specimen. Of the 56 positive samples, 37 (6.0%) corresponded to alert level 1, 10 (1.6%) corresponded to alert level 2 and 9 (1.4%) corresponded to alert level 3.

[Gavaldà et al. \(2015\)](#)



ORGANISATIONAL IMPACT

From an organizational impact viewpoint, multiple advantages are associated with single-use bronchoscopes. Among 12 types of organizational impact themes, (SFB) scored better than reusable flexible bronchoscopes in 75% of cases. SFB improved the overall workflow processes.

[Châteauvieux et al. \(2018\)](#)



INFECTION STUDY

Out of 482 patients, 90 patients showed symptoms of infection (18.7%) following bronchoscopy with a reusable flexible bronchoscope. Most of the infections were linked directly to a bronchoscope which in most cases caused pneumonia.

[Kovaleva et al. \(2013\)](#)



COST-EFFECTIVENESS

Reusable flexible bronchoscopes (RFBs) entail a risk of patient contamination of 15.3% and results in additional per procedure costs. aScope 4 Broncho costs €332 less per procedure than RFB. Taking the patient contamination risk into consideration, aScope 4 Broncho is cost-effective compared to RFBs.

[Mouritsen et al. \(2019\)](#)