

## Bronchial fluid sampling in Intensive Care Units using the single-use Ambu® aScope™ 4 Broncho Sampler Set™

Dr Nazril Nordin, Consultant Anaesthetist at the Critical Care Unit in Watford General Hospital, shares his experience on the common issues faced with traditional bronchial fluid sampling techniques and discusses how the aScope™ 4 Broncho Sampler Set™ offered a simple and effective sampling solution.



### Challenges faced with traditional sampling methods

Historically, Dr Nordin and his ICU colleagues used standard specimen sampling pots. The system was subject to continuous circuit breaks, and obtaining and protecting samples was a challenge. According to Dr Nordin, he and his team would often only be able to retrieve low sample volumes due to spillages or sample loss. He accredits the main reasons as fluid leakage from the specimen trap and loss of sample to negative pressure wall suction. Dr Nordin expressed an immense cause for concern, **“particularly when there is a critically ill patient at the other end of the scope, and you have very little time to obtain your specimens”**.

“**During set up, a number of my registrars had to detach and reattach sampling containers using generic suction tubing, which was fiddly and cumbersome.**”

### The ideal solution for obtaining bronchial fluid samples: aScope™ 4 Broncho Sampler Set™

Staff within the Critical Care Unit at Watford General Hospital started using the aScope™ 4 Broncho Sampler in 2019. Compared to the previous system, Dr Nordin felt the advantages were in its **“ease of set up”** and that it was **“intuitive to use”**. Dr Nordin emphasised how easy it was for his registrars to switch to the new sampling system, allowing them to **focus on the diagnostic bronchoscopy procedure instead of preventing specimen loss.**

Dr Nordin revealed the system offers a **“good return on every single suction”** during the bronchoalveolar lavage procedure, with **“good samples obtained from every lobe of the lung, with no samples lost”**. Dr Nordin also explained how most importantly, as a closed-loop sampling solution, there is **“no increased risk of infection”** or loss of samples through aerosolization, which is an increasing concern of COVID-19 infection risk for healthcare workers. Overall, using the aScope™ 4 Broncho Sampler Set™ is an efficient approach to performing diagnostic bronchoalveolar lavages in ICU.



### The all-in-one aScope™ 4 Broncho Sampler Set™

The aScope™ 4 Broncho Sampler Set™ is specifically designed for use with the aScope™ 4 Broncho. This single-use fully integrated system, together with the portable full-HD aView™ 2 Advance monitor, significantly reduces the time needed for sampling and improves the efficiency and simplicity of the sampling process. The system offers a single operator, closed-loop sampling solution, reducing the risk of sample loss and contamination and taking away the need for nurse support during the procedure.

A recent [observational study](#) found the aScope™ 4 Broncho Sampler Set™ is a **“reliable, effective, and possibly safer technique for diagnostic sampling in ICU, which may simplify bedside bronchoscopic sampling and improve safety standards during the COVID pandemic”**.<sup>1</sup>

**At Ambu, our mission is to provide our customers with innovative solutions that simplifies sampling workflow and improves patient safety.**



#### **About West Hertfordshire Hospitals NHS Trust**

West Hertfordshire Hospitals NHS Trust (WHHT) consists of three hospital sites Hemel Hempstead Hospital, St Albans City Hospital, and Watford General Hospital. The Trust provides acute healthcare services to a core catchment population of approximately half a million people living in West Hertfordshire and the surrounding area.

#### **The Critical Care Unit at Watford General Hospital**

The Critical Care Unit at Watford General Hospital is one of the biggest for its size in the country, and has a high number of specialist hospital transfers, covering a large local population. Dr Nordin has been involved in a multi-disciplinary improvement drive at WHHT's Critical Care Unit, where staff in the department has collaborated to tackle the challenges through robust staff training programmes, interhospital transfer pathway improvement programme across London's hospitals, and an outreach and follow up service.

**Watch the full interview from Dr. Nazil Nordin here:**



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**Compared to the previous techniques the aScope™ 4 BronchoSampler Set™ is just so much easier to use. It's very intuitive... I think it's a really good, efficient way of getting diagnostic lavages done.**

<sup>1</sup>Singh S, Shah PL. Safe and Efficient Practice of Bronchoscopic Sampling from Mechanically Ventilated Patients: A Structured Evaluation of the Ambu BronchoSampler aScope 4 Integrated System. Respiration. 2021;100(1):27-33. doi: [10.1159/000511982](https://doi.org/10.1159/000511982).

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