

Non-Invasive Breath Sample Collection

BREATH
BIOPSY

Breath Biopsy® provides a robust collection system for research into human breath biomarkers

Owlstone Medical's world-leading breath collection system supports reliable breath biomarker analysis, enabling research into early detection and precision medicine of a wide range of diseases.

Breath Biopsy Collection Station

Our Collection Station ensures consistent breath sample collection including optimized VOC capture, enhanced signal-to-noise, breath fraction selectivity and monitoring throughout. It is designed to be portable and easy to use in a range of clinical trial and academic research settings.



The key components of our Collection Station are:

ReCIVA® Breath Sampler

An award-winning handheld non-invasive device for capturing VOCs from breath during regular tidal breathing and storing them in a Breath Biopsy Cartridge containing sorbent tubes.



- Learns and monitors breathing allowing collection of selected breath fractions
- Well-tolerated by patients and suitable for use with most patient populations
- Independent pumps allow simultaneous collection of different breath fractions, or duplicate samples
- Pre-concentrates VOCs to boost sensitivity

CASPER® Portable Air Supply

A portable device for filtering inhaled air that dramatically reduces background signals and boosts signal-to-noise in breath collection.

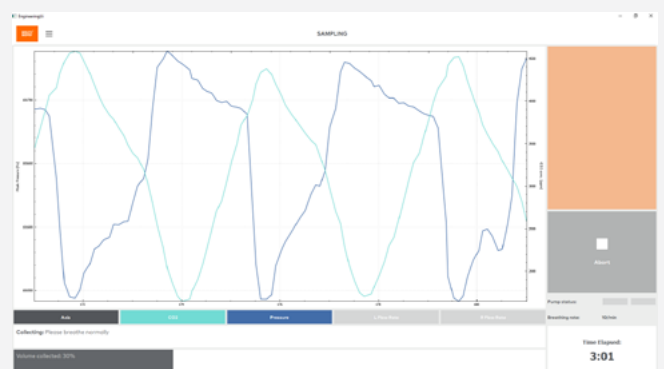


- Excludes the majority of ambient VOC contamination
- Flow rate ensures patient comfort during sampling
- A portable alternative to clean air supply lines

Breath Biopsy® Collect

Each Collection Station includes the custom Breath Biopsy Collect software, which connects to and operates ReCIVA enabling you to collect specific breath fractions, monitor patient breathing in real-time and gather patient metadata.

We also provide further peripherals to give you everything you need for easy breath collection.



Breath Collection Consumables

Each breath collection requires a single-use **Breath Biopsy Kit**, which includes a sterile mouthpiece for the ReCIVA and the Breath Biopsy Cartridge that captures VOCs. Each Kit is subject to a rigorous conditioning and quality control process to ensure subject safety and avoid additional sources of contamination.

Each Breath Biopsy Cartridge consists of four Markes sorbent tubes in our easy to use cartridge assembly that allows for fast insertion and removal from ReCIVA.



How to Analyze Your Breath Biopsy Samples

Samples collected using Breath Biopsy are captured in sorbent tubes within the Breath Biopsy Cartridge.

Releasing VOCs from tubes for analysis requires a thermal desorption device. From here, the desorbed VOCs can be analyzed using a variety of techniques. For biomarker discovery work, gas chromatography mass spectrometry (GC-MS) is the gold standard and is our recommended approach.

If you would like us to perform analysis for you, ask us about **Breath Biopsy OMNI**.

owlstonemedical.com/omni

Frequently Asked Questions

Is the Breath Biopsy Collection Station easy to use?

The Collection Station is designed to be easy to set up and use at clinical and research locations. We provide training and support for all new sites to help them get started.

What connections does the Collection Station need?

The Collection Station simply requires a mains power supply to operate CASPER and the laptop. CASPER draws air from the environment and doesn't require a specialist supply.

Can I use different sorbent tubes with ReCIVA?

Yes, you can also collect VOCs on fewer tubes if you don't want to use all four. However, ReCIVA is optimized for performance using Breath Biopsy Cartridges.

Are there any contamination risks when using Breath Biopsy?

ReCIVA provides biological filtration of exhaled air that exceeds the standard for surgical masks. The mouthpiece is disposable and should not be reused. We have also produced a thorough decontamination protocol for ReCIVA.

Contact us to find out more about breath biomarkers relevant to your area of interest and to discuss adding Breath Biopsy to your research.

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