

# Non-Invasive Breath Sample Collection

BREATH  
BIOPSY

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

Owlstone Medical's world-leading breath collection system supports reliable breath volatile organic compound (VOC) analysis, enabling research into early detection and precision medicine of a wide range of diseases. Measurable VOCs include a wide range of compounds from human and microbiome metabolic processes.

## 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



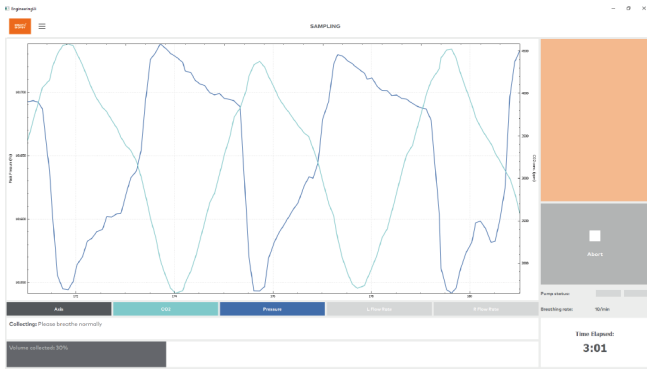
## CASPER® Portable Air Supply

A portable device for filtering inhaled air that dramatically reduces background signals and boosts signal-to-noise ratio 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. This connects to and operates ReCIVA enabling you to collect specific breath fractions, monitor patient breathing in real-time and gather patient metadata. The software also guides the user in collecting a high-quality breath sample.



## Breath Collection Consumables

Each breath collection requires a single-use Breath Biopsy Kit, which includes a sterile mouthpiece attachment 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.

The Breath Biopsy Collection Station is optimized to minimize technical variability to ensure the collection of robust and comparable breath VOC samples and maximise signal to noise ratio. It is easy to use across multiple clinical settings, with minimal training required and the non-invasive nature of breath testing ensures patient comfort during sampling.

## How to Analyze Your Breath 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®**

Contact us to find out more about collaborating with Owlstone Medical and to discuss incorporating Breath Biopsy in your research.

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