

Breath Biopsy[®] Kit

(Mask)

User Guide



For use with Breath Biopsy Kit part numbers:

00-0130 00-0134



OW-015662-TM V8

Symbol Key

Description	Symbol	Description	Symbol	
Caution, Consult Accompanying Documents	\triangle	Manufacturer	~~~	
Catalogue or Reference Number	REF	Date of Manufacture	\sim	
Serial Number	SN	Do Not Reuse	2	
Lot Number	LOT	Do not use if packaging is damaged		
Consult instructions for use	i	This mark indicates approval for use in the European Union countries	CE	
Fragile, handle with care		Use-by date		
Storage Temperature Limit	-20°C 50°C	Humidity Limit	0-10%	
This mark indicates approval for use in the United Kingdom	UK CA	DO NOT dispose of in household waste (WEEE Directive)		

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1 General Information

1.1 Introduction

The Breath Biopsy[®] Kit contains the consumable items required for the ReCIVA[®] Breath Sampler to collect samples of Volatile Organic Compounds that are present in breath for subsequent laboratory analysis. It is supplied only on a professional business-to-business basis for the purpose of research and development.

The Breath Biopsy Kit should only be used with ReCIVA. If you wish to use an alternative, please ensure you carry out your own risk assessment to prevent potential harm to the study subject.



It is essential that this instruction manual be read and understood before commencing any work with the Breath Biopsy Kit.

Read and understand the various precautionary notes and symbols contained inside this manual pertaining to the safe use and operation of this product before using it.

1.2 Safety

Safety instructions for the use of ReCIVA and the Breath Biopsy Kit are provided in the ReCIVA User Manual. It is essential that these safety instructions are read and understood before commencing any work with the Breath Biopsy Kit.

Always observe the following standard safety precautions:

- Wear clean nitrile examination gloves when handling the Breath Biopsy Cartridge as chemicals from your hands can affect the results and may lead to cross contamination.
- Wash your hands with soap and water do not use alcoholbased gels (e.g. Cutan foam) as these leave volatile chemicals behind which may affect the breath collection.
- Use a new Breath Biopsy Kit with each study subject.
- Do not use the Breath Biopsy Cartridge if it is dropped or damaged prior to the breath collection commencing.
- If you encounter any problems with the equipment or this procedure, please contact Owlstone Medical Ltd immediately using the contact details in this guide.

1.3 Recycling and Disposal

The Breath Biopsy Mask and non-return valve are single-use only items and should be disposed of as clinical waste. For disposal of packaging, please follow local recycling rules.

2 Introduction to the Breath Biopsy Kit

2.1 Intended Use

The Breath Biopsy Kit is intended for use with the ReCIVA Breath Sampler to collect samples of volatile organic compounds (VOCs) present in exhaled breath for subsequent laboratory analysis.

The ReCIVA Breath Sampler is not to be used on children who are too young to understand and act on instruction from the operator or on children too young to clearly inform the operator that the breath collection is causing them discomfort. For the avoidance of doubt, it is not to be used on children under 5 years old.

ReCIVA is supplied on a business-to-business basis for professional research and development only.

2.2 Identification of Parts

All Breath Biopsy Kits contain the following parts.

PN & Title	Part No(s).	Qty	Picture
Breath Biopsy Cartridge. (See note below).	Various	1	
Breath Biopsy Mask (Adult) (See note below)	Various	1	
Non-return valve	50-1229	1	
Cable Tie, Green Nylon, Non-Releasable, 300mm x 4.8 mm	50-1357	1	
Bubble wrap bag, 130mm x 185mm	50-1358	1	n/a
Clear Ziplock Bags, 230mm x 150mm (GL11)	50-1376	1	n/a

NOTE: There are different types of Breath Biopsy Cartridge and Breath Biopsy Mask but this User Guide is applicable to all of them.

Depending on the intended application, some Breath Biopsy Kits may contain additional items not listed above. Please refer to your Study Reference Guide for instructions on how to use any items not covered in this User Guide and for instructions on how to package and return samples to Owlstone Medical for analysis.

3 Setup of the Breath Biopsy Kit



Always wear clean nitrile examination gloves when assembling, operating and disassembling the ReCIVA Breath Sampler and ALL associated components. These gloves must be disposed of between study subjects.

3.1 Fitting the Non-return Valve, Breath Biopsy Mask and Breath Biopsy Cartridge



Ensure that work surfaces are clean, free from particulates and free from chemical contamination.

The non-return valve ensures that the study subject breathes air supplied by the CASPER[™] Portable Air Supply and excess exhaled air not collected onto the Breath Biopsy Cartridges is exhausted into the room. This minimizes contamination of breath samples from VOCs present in ambient room air.

To reduce the risk of cross-contamination, a new non-return valve should be fitted for each test subject.

The valves are shipped in cardboard tube packaging, which must be disposed of before the valve is fitted.



When inserting the valve into ReCIVA, ensure that the clear film in the valve is on the outside so that it can open outwards.



Remove the Breath Biopsy Mask from the vacuum packaging, taking care not to damage the mask when opening the packaging.



Inspect the packaging of the Breath Biopsy Mask to ensure that it is not damaged prior to use.



DO NOT USE if the packaging is damaged. Quarantine the Breath Biopsy Mask and contact Owlstone Medical.

Ensure that the filter in the Breath Biopsy Mask is correctly fitted prior to proceeding. The filter should be securely seated and not wobble.

When you are ready for the breath collection cut the tie wrap (if applied) holding the travel end caps on the Breath Biopsy Cartridge and then remove the travel end caps.





Inspect the end caps to ensure that they have not become dislodged before use.

DO NOT USE if the packaging is damaged or the end caps are dislodged. Quarantine the Breath Biopsy Cartridge and contact Owlstone Medical.

Do not leave the sorbent tubes uncapped for more than two minutes before or after the test as they will absorb chemicals from the air in the room. Push the Breath Biopsy Cartridge into the Breath Biopsy Mask as shown (do not stop at the ridges in the sorbent tubes), ensuring the barcode (if used) is at the front.



Next, put the assembled cartridge and mask into the ReCIVA Breath Sampler, first inserting loosely into ReCIVA.



Using fingers on either side of the tube clamp, push the Breath Biopsy Cartridge firmly into the ReCIVA Breath Sampler.



Do NOT push the tubes in by touching the top of the tubes as this will contaminate them and the sample



Finally, gently push the Breath Biopsy Mask into position ensuring it is fully seated.

4 Instructions for Breath Collection

Follow the ReCIVA Breath Sampler User Manual or Study Reference Guide (if supplied) to collect the breath sample.



5 After a Breath Collection



Always wear clean nitrile examination gloves when assembling, operating and disassembling the ReCIVA Breath Sampler and all associated components. These gloves must be disposed of between study subjects.



Ensure that work surfaces are clean, free from particulates and free from chemical contamination.



The following components are single use and must not be re-used between collections:

- Breath Biopsy Mask
- Breath Biopsy Cartridge
- Non-return Valve

Remove the Breath Biopsy Mask with the Breath Biopsy Cartridge by gripping ReCIVA with your thumbs along the top edge, while using your fingers to pull up on the white tube clamp. This can be quite stiff.



Now pull the cartridge and mask (with cartridge still inserted) forwards out of ReCIVA. They should come out easily.



Now remove the Breath Biopsy Cartridge from the Breath Biopsy Mask by pulling the sorbent tubes back through the holes in the mask.



Fit the end caps to the Breath Biopsy Cartridge. Note that they only fit on in one orientation.

When BOTH end caps have been pushed on, at least partially, push them between your palms with fingers interlocked for more force if needed. This will ensure that they are fully home.



Check that the end caps are on correctly by placing the Breath Biopsy Cartridge flat on the desk and making sure that the jig (supplied with ReCIVA) goes over it. If the end caps are not on correctly, then reseat the end caps and try again.



Fit the cable tie to avoid the end caps being removed by accident or during transportation.



Place the Breath Biopsy Cartridge into the supplied bubble wrap bag to protect it.



Place the bubble wrap bag containing the Breath Biopsy Cartridge into the supplied zip lock bag.



Handle the Breath Biopsy Cartridge with care; the sorbent material inside the tubes is fragile and test performance can be affected if dropped or handled roughly

If the sample is not being analysed on the same day, place the Breath Biopsy Cartridge in a refrigerator at a temperature between +4 and $+8^{\circ}C$.



Owlstone does not recommend storing breath samples in a freezer.

Remove and dispose of the mask and the yellow non-return valve as soon as possible after completing the breath collection in accordance with local guidelines for disposing of clinical waste.

Please refer to your Study Reference Guide for instructions on how to use any items not covered in this User Guide and for instructions on how to package and return samples to Owlstone Medical for analysis.



6 Troubleshooting

Please follow the troubleshooting guides in the ReCIVA and the CASPER User Manuals.

7 Contacts and Support

The Owlstone Medical Ltd team is dedicated to providing excellent support. For all technical and safe use questions relating to this manual, contact us at:



Owlstone Medical Ltd. 183 Cambridge Science Park Milton Road Cambridge CB4 0GJ United Kingdom

Tel: +44 (0) 1223 428200

Or email support@owlstone.com