

The Harpera™ User Guide

How to Retrieve the Microbiopsy Collector After Specimen Sampling

Introduction

Thank you for choosing the Harpera™ skin microsampling tool based on a patented microbiopsy technology for your clinical research studies! The Harpera tool is under development and currently supplied for investigational use only (IUO).

We hope this user guide will help get you started in the right direction with handling microbiopsy specimens. Our goal is to provide you the current best practices in skin microbiopsy from disciplines such as dermatology and cosmetology for applications in skin disease studies, skin care studies and cosmeceutical development.

This user guide focuses on the best methods for retrieving a microbiopsy specimen following the collection of a skin specimen using the minimally invasive Harpera tool.

Considerations Before Collecting Your First Microbiopsy Specimen

Before we outline steps and processes for the end-user, it will be helpful to provide a quick glance at the anatomy of the Harpera tool and its components. Additional technical details about the Harpera tool can be found in a separate document called the Harpera Product Specification Sheet, available on our [Harpera Resources](#) web page. For this user guide, our steps will focus primarily on the microbiopsy collector, the specimen collection component that is described in Figure 1 below.

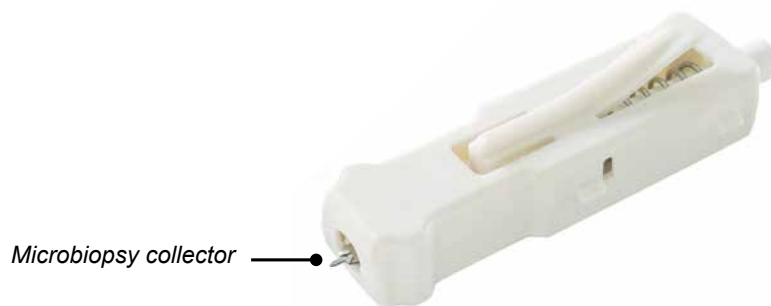


Figure 1: The Harpera skin microbiopsy tool for specimen sampling.

The microbiopsy specimen is collected onto the microbiopsy collector. After the specimen is collected, the technician or healthcare professional may process it and/or ship it to a designated laboratory for analysis.

The next section explains the steps to follow to retrieve the microbiopsy collector from within the tool.

How to Retrieve the Microbiopsy Collector from the Harpera Tool

There are several ways to retrieve the microbiopsy collector containing the microbiopsy specimen from the Harpera tool. The most appropriate retrieval process will depend on the subsequent storage and/or analytical workflow.

The two options below present the steps to follow for retrieving the microbiopsy collector from the tool for placement into a receptacle for subsequent storage and analysis of the specimen. The steps outlined below take place after the collection of a skin microbiopsy specimen from a participant and are usually performed by the technician or healthcare professional at the sampling site, or in the designated laboratory.

Before You Begin: Do not hesitate to seek help from our microsampling specialists at Trajan Scientific and Medical to discuss the most adequate protocol that suits your needs.

WARNING:



The steps below may subject the end-user to exposure to the sharp element of the microbiopsy collector and the collected specimen. Handle the microbiopsy collector with care.

Option 1: Opening the Harpera Tool to Retrieve the Microbiopsy Collector

1. **OPEN** the Harpera tool casing from the side using the notch and access the plunger (Figure 2a-b).
2. **UNLOCK** the microbiopsy collector from the plunger (Figure 2c).
3. **REMOVE** or pull away the spring from the plunger.
4. **RETRIEVE** the microbiopsy collector from the plunger and transfer it into a receptacle (e.g., a PCR tube as seen in Figure 2d, manually or using a pair of tweezers).

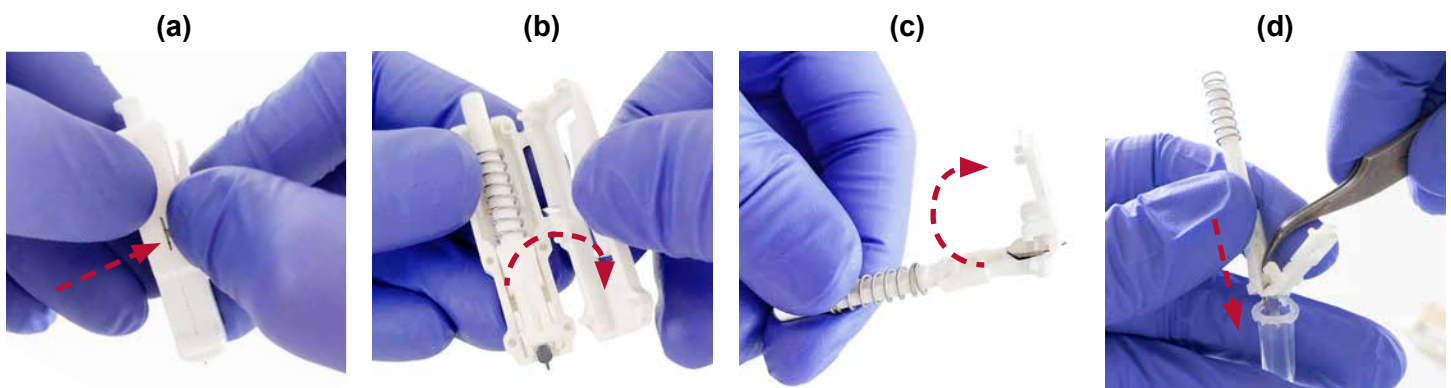


Figure 2: (a-b) **OPEN** the casing using the notch, (c) **UNLOCK** the plunger, (d) **RETRIEVE** the microbiopsy collector & transfer into a tube.

Option 2: Pulling the Microbiopsy Collector Out of the Harpera Tool

1. **PUSH** the plunger so that the microbiopsy collector is visible at the end of the Harpera tool.
2. **GRAB** the microbiopsy collector below the folded plate, ideally using curved tweezers or pointed tip tweezers (Figure 3a).
3. **PULL** the microbiopsy collector out of the plunger from the end of the Harpera tool (Figure 3b).
4. **RETRIEVE** the microbiopsy collector & transfer it into a receptacle, (e.g., a PCR tube as seen in Figure 3c).

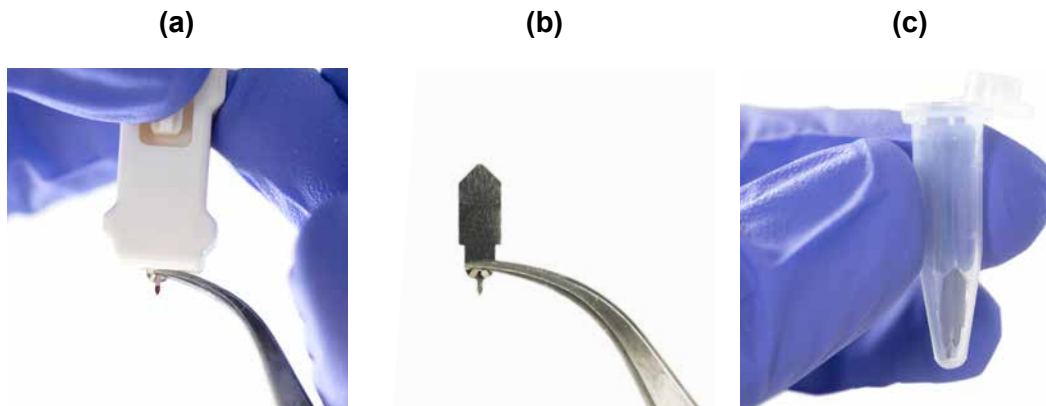


Figure 3: (a) **PUSH** the plunger and **GRAB** the microbiopsy collector below the folded plates, (b) **PULL** the microbiopsy collector out of the plunger, (c) **PLACE** the microbiopsy collector into a tube.

For more information about the retrieval processes of the microbiopsy collector, please visit the [Harpera Resources](#) web page to watch our user guide videos.

In either option for transferring the microbiopsy collector, we recommend placing it with the tip facing down toward the bottom of the tube to minimize the extraction buffer volume used.

Alternatively, the microbiopsy collector can be placed in other containers, such as glass slides for microscope analysis.

Pooling multiple microbiopsy collectors into a 0.5mL or bigger tube will enable the extraction of more microbiopsy specimen, thus leading to a greater amount of genetic material for further analysis. Some researchers have collected and pooled up to 5 microbiopsy specimens from a single collection area and a single study participant.

Microsampling Specialist Support

You can seek support from our microsampling specialists to ensure you implement the most suitable workflow that meets your analytical and institutional needs.

Thanks for Being a Skin Microsampling Innovator!

We hope you find this user guide helpful for your skin research projects. For further information on how to develop robust methods using skin microbiopsy specimens, we'd be happy to recommend several excellent resources in the literature that are worthwhile reading. Should you have questions about skin microbiopsy with the Harpera tool, please feel free to contact a microsampling specialist at Neoteryx[®], the microsampling product brand of Trajan Scientific and Medical. For assistance, please send your questions to: neo.support@trajanscimed.com

Resources

Neoteryx offers microsampling content for further guidance and resources on its website. Please use the links below to explore our other Harpera tool content.

1. [Harpera product web page](#)
2. [Harpera Resources web page](#)
3. [Microsampling resource library](#)
4. [Skin microsampling blogs](#)



For information on Trajan's Neoteryx range of microsampling solutions, visit www.neoteryx.com.

The Harpera[™] skin microbiopsy tool is currently supplied globally as an investigational use only (IUO) product available for use in clinical studies.

About Trajan Scientific and Medical

Trajan is a global developer and manufacturer of analytical and life sciences products and devices founded to enrich personal health through scientific tools and solutions. We aim to support science that benefits people. Trajan's products and solutions are used in the analysis of biological, food, and environmental samples. Trajan has a portfolio and pipeline of new technologies which support the move towards decentralized personalized data-based healthcare. Trajan has manufacturing and operational sites in multiple locations across the US, Australia, Europe and Asia. For more information visit www.trajanscimed.com