

A photograph of a laboratory setting. A person wearing blue nitrile gloves is operating a piece of laboratory equipment, possibly a biospecimen storage unit. The person's hand is on a control panel with a small screen and several buttons. In the foreground, a microscope with a yellow magnifying glass is visible on a white surface. The background shows a clean, white laboratory environment.

# Multi-omics Grade Biospecimens

## Overview

Multi-omics grade biospecimens capture the molecular reality and allow a holistic view of the tumor landscape of the patient's disease state at the highest level of clinical relevance. These high-quality samples enable you to excel in your research and development of personalized medicine from target identification to drug discovery, and for biomarker exploration and validation. This approach accelerates your time to market while maintaining the highest standards of quality and clinical data integrity.

A unique high-quality human cancer tissue and fluids biobank has been established, collecting and processing all biospecimen products using a completely standardized, ISO-certified protocol. Quality assessment performed by our certified in-house pathologists guarantees that the risk factors often associated with tissue samples, such as poor tissue or block quality, insufficient tumor cell content, or high levels of necrosis, are reduced. Simultaneously, our clinical data team and study nurses ensure completeness and accuracy of the clinical data before final data storage.

For our Multi-omics Grade biospecimens, tissue and blood are collected immediately after surgical resection by our study nurses who are present in the operating room and who then preserve the tissues in approx. 10 minutes, thus ensuring the biological sample closely mimics the molecular reality of the patient's cancer status. In addition, this process is fully controlled over the entire workflow, from the time of resection to biospecimen collection, clinical data verification, and storage.



## Your Benefits

- Complete cancer biospecimen set including matched normal adjacent tissue
- Comprehensive clinical data and follow-up data (over 300 data points)
- Large biospecimen repository
- Custom prospective collections through our global clinical network
- Lowest usability failure rate (<1%) of quality controlled biospecimens performed by in-house pathologists
- Mean ischemia time of tissue ~10 minutes
- Informed patient consent available
- Biomarker analyzed tissue for a variety of mutation characterized cancers (e.g. MSI, MSS, KRAS, BRAF, BRCA1/2, ALK, PDL-1, EGFR, ROS1, HER2, ER, PR, etc.)





## Biospecimen Types



### Tissue

- Tumor and matched normal adjacent
- Formalin-fixed paraffin-embedded
- Fresh frozen
- Fresh tissue
- Tissue microarray
- Core needle like biopsies
- Fine needle aspirates



### Fluids

- Plasma
- Serum
- Whole blood collection
- Peripheral blood mononuclear cells (PBMCs)
- Urine-supernatant and sediment

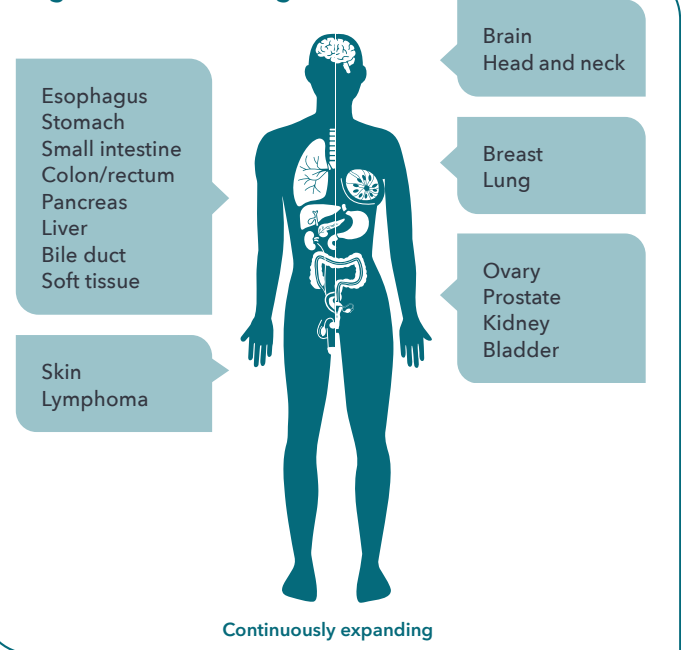
## Clinical Data

Extensive clinical data is collected from fully consenting and informed patients, including their medical records, notes taken during surgical tumor resection, and comprehensive interviews with both the patient's physician and the patient themselves. Follow-up data is collected beginning at six months post-surgery and then annually for up to five years. Clinical data is thoroughly cross-checked for completeness and accuracy prior to final storage in our database.

### We offer various data packages:

- Basic: general patient information, current disease, surgical findings, tumor size, cold ischemia time, histological type, stage, TNM, grade, neoadjuvant therapies
- Comprehensive: includes basic clinical data and current medications, drugs (intolerances, addictive), previous disease, previous surgeries or cancer, family history, presurgical diagnostics
- Follow-up: includes detailed follow-up records on remission, relapse, and outcome including surgery and other therapies
- Biomarker data (e.g. biomarker status): Biomarkers - e.g. MSI, MSS, KRAS, BRAF, BRCA1/2, ALK, PDL-1, EGFR, ROS1, HER2, ER, PR, etc. for selected cancers. Breast cancer, colorectal cancer, ovarian cancer, stomach cancer, and lung cancer are analyzed using Illumina's AmpliSeq Focus Panel (52 cancer-related genes)

## Organs of Tumor Origin



## Custom Prospective Collections

Customized biospecimen collection services are offered, utilizing standard operating procedures under the guidance of a trained collection specialist. We can collect and process the biospecimens according to custom designed protocols to match the requirements of your research. Additionally, we ensure short delivery times (up to 48 hours) for time-sensitive collections and worldwide logistics for sample delivery.

## Get in touch



US: +1 858 622 2900  
UK: +44 (0)1530 234871

busdev@biospecimenservices.com  
www.biospecimenservices.com

