LIMFINITY BIOBANKING LIMS

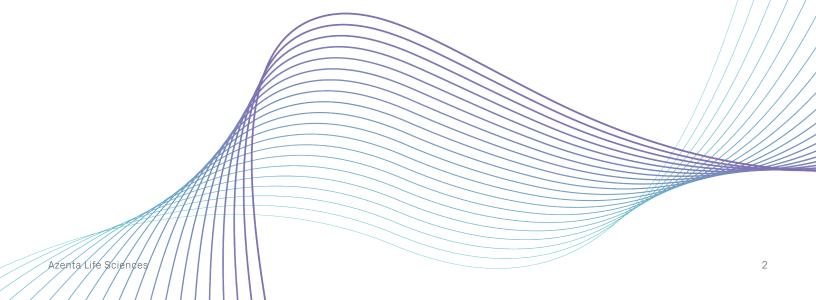
Scalable, powerful, and flexible virtual sample management solution





Samples are the heart of therapeutic and diagnostic discovery through development. Sample acquisition, however, can be time-consuming and expensive. Thus, knowing sample inventory, data, and location is critical for optimizing sample utilization, efficiency, and supporting compliance. A virtual sample management solution is a crucial partner in the digital ecosystem to capture all relevant sample data including clinical, ethical, and metadata, and enable workflows and decision-making to support effective therapeutic, drug, and diagnostic research and development.

Azenta Life Sciences, a global expert in biobanking, offers Limfinity® Biobanking LIMS – a comprehensive cloud-based laboratory information management system (LIMS) that provides full longitudinal information for samples while seamlessly integrating with the existing digital ecosystem at your organization. Limfinity is a purpose-built, scalable solution that serves as your partner in digitizing discovery. Limfinity provides a range of functionalities designed to assist you in supporting your adherence to GxP, HIPAA, CAP, ISO, GDPR, and other regulatory standards in biobanking.



Enterprise Sample Management

AGGREGATES DATA FROM VARIOUS SOURCES TO UNLOCK SAMPLE INTELLIGENCE AND STREAMLINE DISCOVERY

Data associated with the sample comes from many different sources – some arrive with the sample upon registration, more data comes from collection sites and third-party testing labs, and yet more data is generated throughout the lifecycle of the sample. These disparate sources of data can all be sent to Limfinity and directly linked to the related sample. This linking provides a full picture to further enhance sample utility and accelerate your discovery process.

- Test results
- Patient demographic data
- Patient diagnosis and outcome data
- Quality results
- Consent data*

Inventory and Freezer Management

- Manual freezers
- Automated freezers

Off-Site Storage

- Off-site inventory
- Sample data

External Partners (CRO, EMR)

- Permissions
- Consent data
- Demographic data

Internal Partners (ELN, LIMS)

- Results data
- Pre-analytical data
- Analytical data

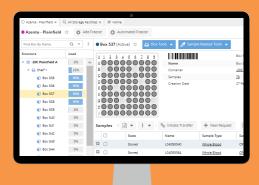
Data Marts and Others

Aggregated data

Diagnostics

- Connectivity
- Workflows

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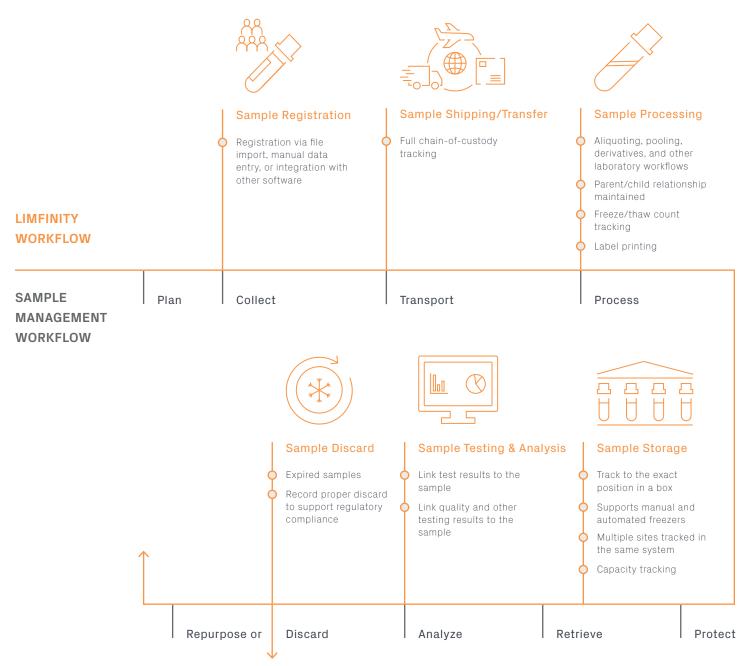


- Centralized access to all sample data
- Full longitudinal data for samples
- Sample lifecycle management workflows
- Audit trail
- Reports and analytics

^{*}Linking consent data directly to samples facilitates appropriate sample usage

Complete Sample Lifecycle Management

From collection to discard, it is critical to track information regarding the sample at every step. Limfinity provides a holistic view of your samples and associated data, regardless of where in the world the sample is stored — on-site, at a regional hub, or by a partner biorepository such as the global network of biorepositories from Azenta. This single source of truth provides a means to manage all aspects of a sample lifecycle and eliminate fragmented data management systems.



Your Partner in Workflow Management



CONSENT MANAGEMENT

As your virtual sample management partner, Limfinity manages patient consent and other sample-related data including patients' records and demographics. Linking consent to the sample facilitates sample utilization.

LAB WORKFLOW MANAGEMENT

- Configure workflows to optimize lab operations
- Standards-based integration with instruments and software to streamline information exchange across systems
- Complete sample workflow management including tracking of all steps – making sample derivatives,
 DNA extraction, sequencing, receiving, shipping, and more

DASHBOARDS AND REPORTING

- Configurable dashboards to provide business insights
- · Highly customizable reporting capabilities
- · Powerful search capabilities

KEY FEATURE:

STORAGE AND FREEZER MANAGEMENT

Know where your samples are before you open the freezer door. Quickly view the remaining capacity in a box, on a shelf, in a freezer, or in your integrated automated storage system. Limfinity Biobanking LIMS includes robust storage and freezer management, allowing users to view and search all samples regardless of physical location.

Security and Compliance Support

Biobanking, particularly for human samples, is subject to stringent regulatory oversight and security requirements that can be difficult for individual biobanks to manage. Limfinity has capabilities to support your compliance requirements for GxP, HIPAA, CAP, ISO, GDPR, and other regulatory standards in biobanking via:

- Role-based security
- Privacy controls on sensitive fields personally identifiable information (PII)/protected health information (PHI)
- Audit log capabilities to support customer compliance with Title 21 CFR Part 11
- End-to-end lifecycle tracking of the sample with transparency and reporting
- Linking informed consent to the sample to facilitate appropriate sample utilization
- Supporting adherence to ISBER and CAP inventory tracking best practices

TACKLE AUDIT PREPARATION WITH EASE The Limfinity audit log automatically tracks all data entries, data changes, and sample lifecycle activities, including the user performing each action and the date/time stamp. When the time comes to prepare for an audit, the tracked full lifecycle of the samples in your repository can be easily accessed and displayed through the Limfinity audit log.

Modern IT Architecture ————————————————————————————————————	
CLOUD-BASED, DEPLOYED IN AMAZON WEB SERVICES (AWS)	FREQUENT BACKUPS
BROWSER-BASED AND ACCESSIBLE FROM ANY COMPUTER, TABLET, AND SMARTPHONE	ON-PREMISE INSTALL OPTION
HIGH AVAILABILITY/UPTIME	

Your Partner in Workflow Management



A key advantage to a virtual sample management system such as Limfinity is a place to connect all the disparate information about a sample – availability, location, protocols, and consent management. Limfinity helps to connect all the components of data, allowing researchers to locate and use the sample and data needed to further their studies. Limfinity can create dashboards to aggregate information and visualize:

- · Capacity management
- Task/workflow management
- Reporting

Efficiency and Automation

Limfinity frees up time for you to focus on your expertise. Optimize your time by automating workflows and staff workload through standardized processes:

- Integrates with lab instruments and automated freezers like Azenta SampleStore™ and BioStore™ systems
- Integrates with other software systems in use
- Configures workflow steps to guide users through standard operating procedures (SOPs)
- Progress tracking through customized dashboards
- Functions for email templates, automatic inventory monitoring, system alerts, and label printing

