MGI | MGI·ZLIMS

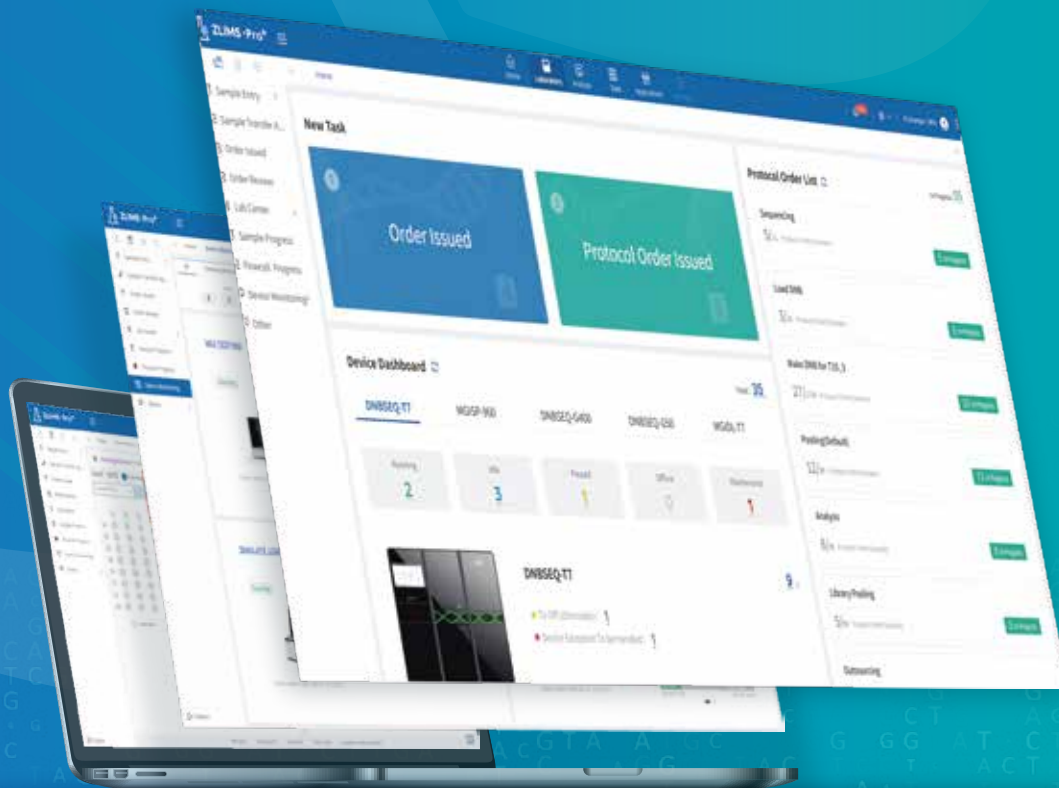# Gene Sequencing Lab Management System

Establishing an Advanced Digital Lab for Streamlined and Effective Operations

ISO13485 **ISO27001** **GDPR** **CMMI3**

Flexible workflow configuration to support multiple applications

Interconnected equipment to reduce manual work

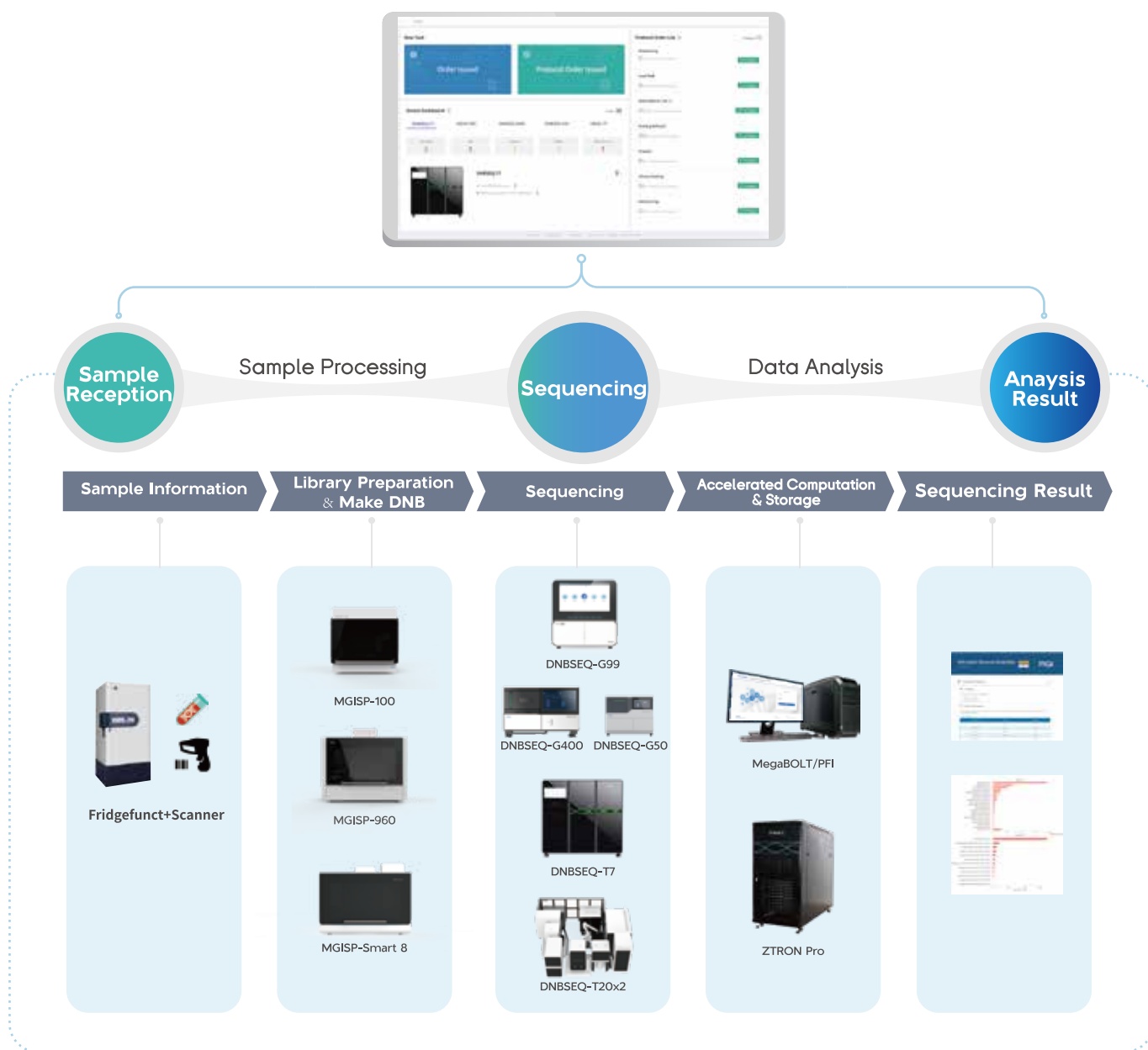Intelligent computation and analysis to improve efficiency

Comprehensive quality-control management to ensure the quality of testing

ZLIMS Product Profile

MGI ZLIMS is a cutting-edge laboratory information management system designed for large and medium-sized laboratories. It features seven core functions including project management, sample reception management, experimental-process management, laboratory-process management, equipment monitoring, quality-control management, and exception handling. MGI ZLIMS offers a complete solution for end-to-end management of your laboratory workflows. In addition, MGI ZLIMS provides optional features such as open equipment integration, material management and environmental monitoring. MGI ZLIMS empowers your laboratory with seamless and streamlined management processes making it an invaluable tool for modern laboratories.

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Comprehensive Lifecycle Management from Sample to Experiment Result

Sample Reception	Sample Processing	Sequencing	Data Analysis	Anaysis Result
Sample Information	Library Preparation & Make DNB	Sequencing	Accelerated Computation & Storage	Sequencing Result
Fridgefunct+Scanner	MGISP-100 / MGISP-960 / MGISP-Smart 8	DNBSEQ-G99 / DNBSEQ-G400 / DNBSEQ-G50 / DNBSEQ-T7 / DNBSEQ-T20x2	MegaBOLT/PFI / ZTRON Pro	

ZLIMS Lite

Task Dashboard	Sample Reception	Task Management	Sequencing Management
Bioinformatics Analysis Scheduling	Message Center	Equipment Monitoring	

Basic Edition

Sequencing Lab Management Primary Tool (on MGI BIT Server)

Functions: **7+**

ZLIMS Pro

Task Dashboard	Sample Reception	Task Management	Sequencing Management
Bioinformatics Analysis Scheduling	Message Center	Equipment Monitoring	Email Notification
Inventory Management	Exception Management	Progress Tracking	Workflow Configuration

Advanced Edition

Sequencing Lab Management One-stop Platform

Functions: **12+**

ZLIMS Pro +

Task Dashboard	Sample Reception	Task Management	Sequencing Management
Bioinformatics Analysis Scheduling	Message Center	Equipment Monitoring	Email Notification
Inventory Management	Exception Management	Progress Tracking	Workflow Configuration
Project Management	Task Review	Integrated Scheduling	QC Management
Sequencing/Analysis QC	Multi-Production Area Management	Environmental Monitoring 🔒	Material Management 🔒
Device Management 🔒			

Premium Edition

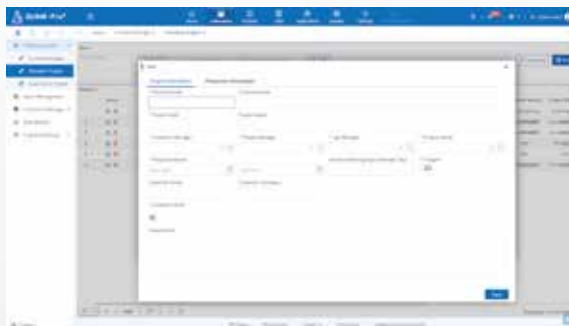Expandable application interface and customization based on ZLIMS Pro
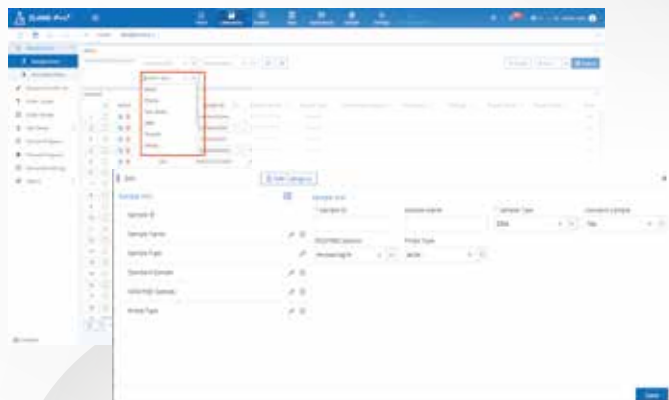
Functions: **21+**

Project management*

- Encompassing project initiation, project progress tracking, project completion and data delivery management, with support for customizable project alerts.
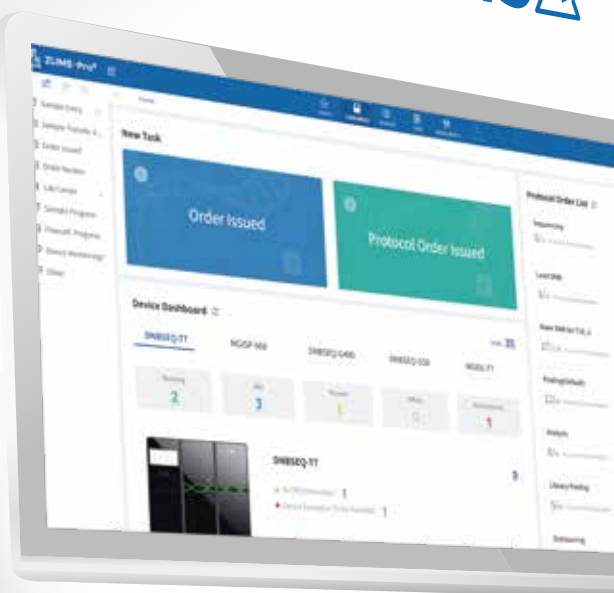
Sample-reception management

- Supports diverse sample type entries, including original samples and intermediate products, with customizable sample field templates.

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QC management*

- Supports QC for sequencing data output and analysis, allowing customization of QC rules, with alerts for abnormal QC indicators.
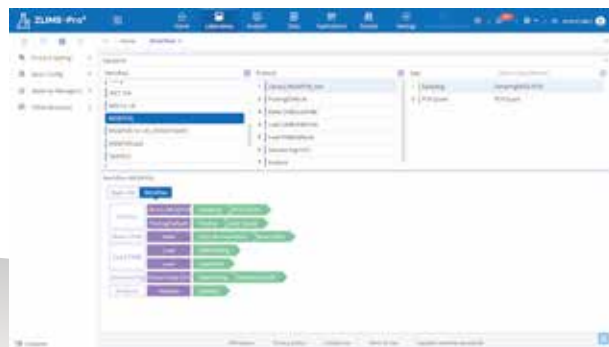
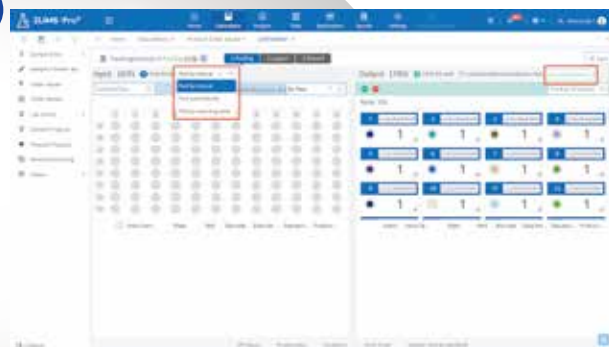*** ZLIMS Pro+ Premium Edition features**

Workflow management

- Pre-sets multiple experiment workflows, while also allowing rapid customization of new workflows for immediate use.
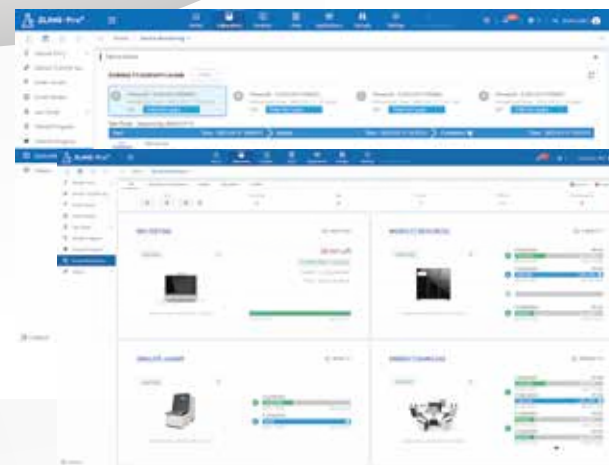
Experimental-process management

- Supports the insertion of different barcode protocols, with online maintenance of barcode sequences, to facilitate accurate demultiplexing of barcoded samples after sequencing.

- Incorporates various automated pooling and base balancing algorithms and supports parameter calculations such as sample volume and concentration.
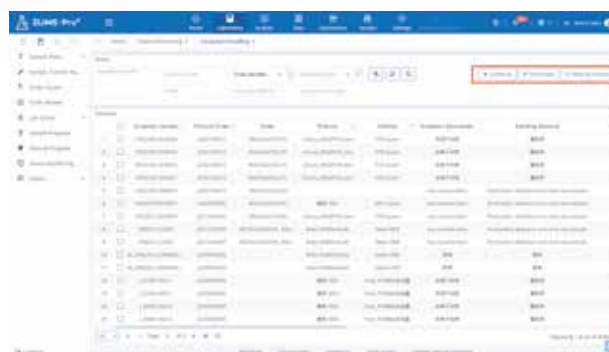
Equipment monitoring

- Real-time monitoring of the operational status, error messages, and experiment progress of sequencing-related equipment throughout the entire sequencing workflow, including library preparation and sequencing.

- Automatic capture of experiment process data.

Exception handling

- Supports exception handling in all steps of the sequencing process.

- Provides exception handling management such as resubmission, continuation and termination.

Application Scenarios

MGI ZLIMS system has provided comprehensive laboratory management capabilities to over 200 users worldwide, helping them address the challenges of information management associated with large-scale sample reception and experiment management with ease.

Large and medium-sized sequencing centers

In combination with client's hardware requirements, MGI ZLIMS system can be seamlessly integrated with a fully automated sequencing platform. This enables continuous operation 24/7, leading to substantial reductions in production cycles.

Technology Service Platform

With the ZLIMS system as the core, the technology service platform integrates the entire workflow management, from customer sample submission to sample reception, library preparation, sequencing, bioinformatics analysis, and data delivery. This holistic approach enhances overall testing efficiency.

Testing Service Organization*

To meet the needs of various sequencing applications such as WGS, tumor profiling, and pathogen detection, we provide rapid, efficient, rigorous, and traceable laboratory management tools and customizable interfaces for process and results management in sequencing experiments."

*Only for scientific research

Applicable Organization

Testing Companies	CDC Customs
Universities And Colleges	Research Institutions

Applicable Sectors

Biomedical	Medicine Development
Science & Technology Services	Agricultural Research

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Comprehensively Tackles Laboratory Information Technology Challenges

Low throughput in manual experiments? NO!

- The laboratory relies heavily on manual work and throughput cannot be effectively improved.

Lack of real-time monitoring for devices? NO!

- The need for personnel to be on site to manage device and the difficulty of monitoring device operation.

Human error-prone in manual operations? NO!

- Error-prone manual data entry, which cannot be validly verified.

Lack of data interoperability? NO!

- Multiple systems for management, no data interoperability and lack of a unified platform.

Experimental records are easily lost? NO!

- Paper-based experimental records are easily lost and historical testing data are inconvenient to query.

Poor data security? NO!

- Experimental data cannot be secured and posing a risk of data leakage.

Ordering Information

Product Name	Item No.
ZLIMS Pro Laboratory Information Management System	900-000447-00
ZLIMS Pro+ Laboratory Information Management System	970-000244-00

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