

GLIMS Genomics

The Power of GLIMS Genomics

Create integrated, digital workflows
for the entire genomic spectrum



GLIMS Genomics

GLIMS Genomics combines the strengths of a mature Laboratory Information Management System (LIMS) with specialist genomic requirements to provide an efficient, interoperable workflow that directly meets your needs.



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Software designed with you in mind

Genomics is the most rapidly changing and complex area in healthcare. That's why we've developed a workflow software solution tailored specifically for this discipline. GLIMS Genomics covers the entire genomic spectrum including the latest methods such as next-generation sequencing, and its flexibility allows you to edit and develop your own workflows to provide a truly bespoke solution for your laboratory.

Our software creates integrated, digital workflows for:

- Conventional and molecular cytogenetics
- Molecular genetics
- Tumour genetics
- Array CGH, MLPA, PCR, and Sanger sequencing.
- Next-generation sequencing
- and more – future technologies can be readily accommodated



GLIMS Genomics delivers:



High-level automation to minimise risk of errors



Automated decision making



Complete genomics workflow tailored to this rapidly developing specialism



Flexible configuration for small laboratories or large, multi-site networked laboratories



Family management with a comprehensive drawing pedigree solution for clear analysis



Clinical Genetics module, with patient management and appointment tools

Keeping Pace with innovation

Genomics has seen more scientific and technological advancements in the last five years than any other healthcare sector.

CliniSys is working in partnership with international clinical genomics laboratories to ensure our vanguard solutions remain at the forefront of innovation, to anticipate and keep pace with new and emerging requirements of the clinical genomics laboratory.

Scalable solution for multi-site deployments

GLIMS Genomics can be used as a standalone solution with a gene panel and variant results management, interconnected with other laboratory information systems and essential interfaces to all common expert systems.

GLIMS Genomics can also be configured as part of a complete Diagnostics LIMS such as WinPath Enterprise, with all the advantages of a powerful, modern laboratory information system, covering:



The module can also be connected to order entry and results reporting systems such as ICE, providing a seamless, end-to-end solution for the entire specimen journey.

GLIMS Genomics also has the flexibility to run a single instance of the LIMS across multiple sites

in a network supporting the emerging Genomic Laboratory Hubs and networked workflows.

Standardisation, communication and sample routing challenges are all addressed, giving you an efficient, automated and interoperable system.

Key Features



Integrated Pedigree drawing application

An intuitive, comprehensive pedigree drawing tool for family management, displays the results and genetic history of the family or selected patient.

This simple to use extension of the family tree is capable of showing multiple phenotypes and complex relationships.

Support for Comprehensive Genomic Workflows

GLIMS Genomics provides a dedicated screen for genetic examination where the entire work process (PCR, PT-PCR, Sanger sequencing, NGS, FISH, Karyotype, MicroArray, etc.) is detailed.

All common genomic technologies are fully supported and new technologies can readily be incorporated.

Simple workflow configuration

The integrated graphic tool enables you to display, change, and expand the entire workflow yourself, which provides you with the flexibility to design workflows as simple or as detailed as required. The amount of user interaction with a workflow can be as minimal or as extensive as required, to gain a balance between maximising efficiency, facilitating standardisation throughout a procedure, and generating an appropriate amount of data about the status of samples.

Equipment interfacing to maximise automation

The workflows can interface with any laboratory equipment that has an appropriate API (e.g. liquid handlers, fluorimeters, sequencers, cytogenetic imaging systems, etc) to enable export of sample details for test set-up, and import of results, thereby minimizing transcription errors and maximising automation and efficiency in the laboratory.

Integral rules base

An integral rules base allows the user to incorporate automated decision making steps into workflows, to further improve efficiency and reduce the risks of human error. This means for simple high throughput tests, such as a single locus genotyping assay, the LIMS can receive the results directly from the analyser and automatically generate and issue reports according to user-defined rules.

Clear and concise reporting

Generate individual reports for every test, or combine any or all results on a sample or patient in a single integrated report with an overall summary or MDT conclusion.

Reports can be rapidly created to incorporate images, graphs, tables, or content from any of the thousands of available fields into pre-configured text strings.



Configured to suit your needs

When you invest in GLIMS Genomics, you're investing in continuous innovation. We've developed a feature-rich system that supports all the key genomics and genetics disciplines. Our software will enhance your workflow, minimise manual tasks and support patient care.

Integrated Reporting

Allows the creation of user controlled integrated reports from the requests present in WinPath Enterprise.

The inclusion of results from GLIMS Genomics is achieved through the transfer of reportable results from Genomics into WinPath Enterprise using HL7. This will then make the Genomics results available for selection and inclusion into the Integrated Report.

Stock Management

A complete Stock management tool enables all reagents and consumables to be logged, with facilities for: alerting the need to replenish an item; generating new orders; receiving deliveries; recording lot numbers; documenting validation results on lots; and even storing photographs to help users quickly locate items.

Audit Trail

Audit trails are accessible for all procedures carried out, so you can readily identify what actions were performed by whom and when. The shielding process associated with the system login enables system administrators to assign tasks to groups of staff, or even to individuals, giving the laboratory management complete control over the permissions available to themselves and their staff.

Genomics Counselling

GLIMS Genomics Counselling is the clinical counterpart of Genomics allowing the genomics department to cover the entire process from a genetic consultation with the patient and his family to the requested tests (genetic or other) integrating the results (from GLIMS Genomics) in a single database.

GLIMS Genomics Counselling is the perfect tool to manage your consultations and your genetic records while being connected to the hospital patient record.

Key benefits include:

- Integration of hospital consultations via HL7 interface
- Personalisation of clinical forms
- Ordering of examinations during the consultation
- Management of the family's clinical file
- Family tree management
- Management of phenotypes via an interface with HPO

Most importantly, GLIMS Genomics offers proven interoperable connectivity with electronic ordering and messaging systems; pathology, EPR, laboratory robotics and analysers, as well as variant interpretation tools and resources.

Key benefits include:

- **Customisation** – Configure user access according to laboratory site, role and individual. Limit access to defined procedures, or enable access to the complete functionality of the LIMS. User-specific menus and toolbars provide rapid access to commonly used functions for all staff members.
- **Attachments** – Access scanned referral forms, documents, images, etc. stored on your IT network via hyperlinks linked to patients or samples.
- **Sample storage and management** – Easily retrieve stored samples via automatic assignment of freezer storage locations and monitoring of remaining sample volumes.
- **Sequence variant management** – Integrate with clinical interpretation tools; store variants with full HGMD nomenclature, ACMG classification, and hyperlinks to external variant database resources (ClinVar, dbSNP, HGMD etc). Instant highlighting of pathogenic variants; readily identify patients with variants that have been reclassified.

- **Prenatal tests** – Manage prenatal samples within the maternal record; manage samples from twin pregnancies; prenatal results assigned to the infant after birth.
- **Reagent management** – Reagent usage links directly to update stock reagent database; be notified when reagents need ordering; simplify your stocktaking.

Business Intelligence and reporting

Performance Dashboard

A highly visible graphical display shows all current laboratory activity and performance against KPIs. This enables you to quickly identify process bottlenecks and reduce turnaround times to optimise productivity.

Statistical Analysis

GLIMS Genomics business intelligence tools enable users to interrogate and extract any data from the LIMS in various graphical formats. Scheduled, automatic data extracts for patient level contract monitoring include the possibility to share output via automated email.

These tools help you to deliver cost savings by providing reporting information at a glance, reducing time spent gathering data and enabling you to spot opportunities to improve your workflow.

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