CONFIDENCE IN RESULTS, FAST TURN-AROUND, AND WORRY-FREE LAB WORKFLOW WITH FASTFINDER'S BUILT IN CAPABILITIES ON SENTINAT® 200

The **SENTiNAT® 200** solution from Sentinel is a platform that contains everything you need to perform a complete PCR analysis. **SENTiNAT® 200** has embedded FastFinder software from Velsera that can guide the user through the workflow. It ensures fast turn-around time, optimizes sample workflow, provides clear guidance to the lab technician, ensures accurate results without interruption, and minimizes the need for copy-paste workflows**.**

Figure 1: the SENTiNAT® 200 is a benchtop platform that contains everything you need to perform a complete PCR analysis.

Thanks to this integrated solution that leverages the strengths of both **SENTiNAT® 200** and FastFinder, the work for the user is simplified in the following ways:

Quality Management:	• Smart software guides the user through all the steps of the process, from sample in to result out.
Quality Assurance:	• Audit tracking on samples, which ensures that the user never loses track of samples, reagents, or results. • Data storage in the cloud means data are available anytime, anywhere.
Quality Control:	• Optimize the consumable usage and cost by tracking and tracing reagent validity, expiration dates, volumes, and tip usage. • Bidirectional LIMS connectivity minimizes the number of user touches between input sample and result output, thus decreasing the chances for human error. • In real-world applications, these features may often intersect and complement each other to ensure a robust quality management system. The categorization provided here is for the purpose of highlighting the primary focus of each feature.

The **SENTiNAT ® 200** solution provides users with an easy-to-navigate interface where they can choose between several possible functions, including sample preparation, assay set-up, result analysis, maintenance, and request support.
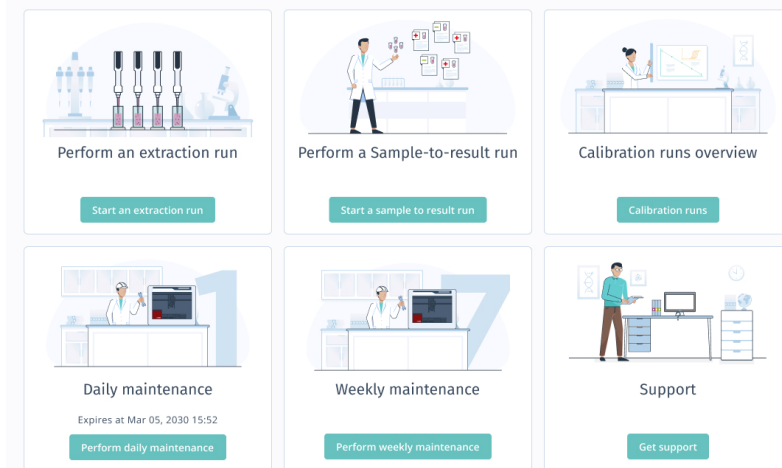

Figure 1: SENTiNAT® 200 interface

The **SENTiNAT® 200** solution has a highly visual guide, which makes it easy to track trays, plates, samples, and reservoirs. Additionally, it can help a global workforce since the graphical user interface transcends any language limitations.

The **SENTiNAT® 200** solution with embedded FastFinder software allows the user to control how the results are called. Velsera's FastFinder software includes state of the art AI curve and result calling algorithms that can automatically call positive and negative samples, which reduces hands on time and error rates, and improves turn-around time. It is also possible for the user to review these results and manually override if necessary. The QC module of the FastFinder software also enables an automated check of the validity of the positive and negative controls (NTC), as well as monitoring reagent usage, batch effects, and instrument calibration status. The use of a cloud-based workflow also allows for remote report sign out, which maximizes the flexibility for the lab director.
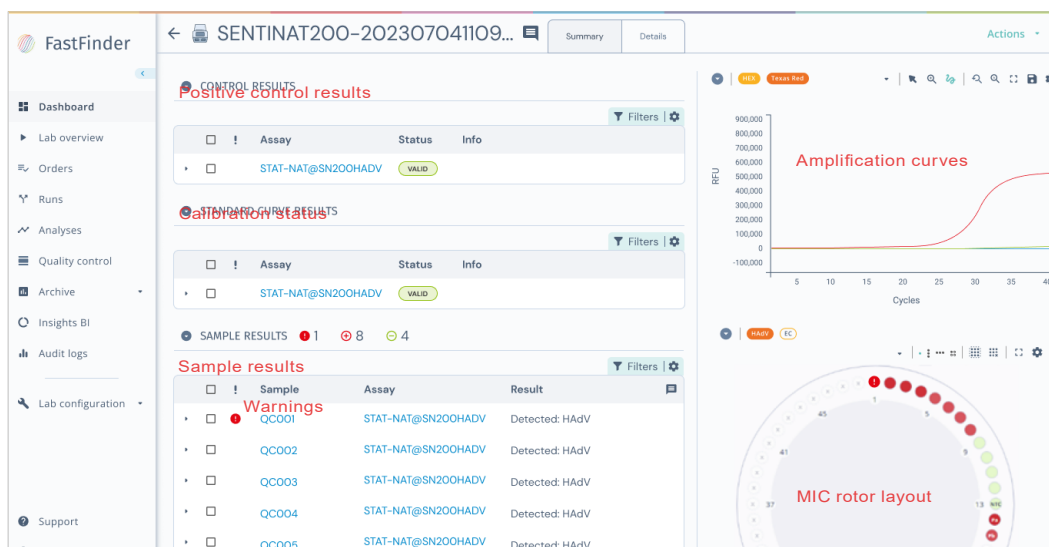

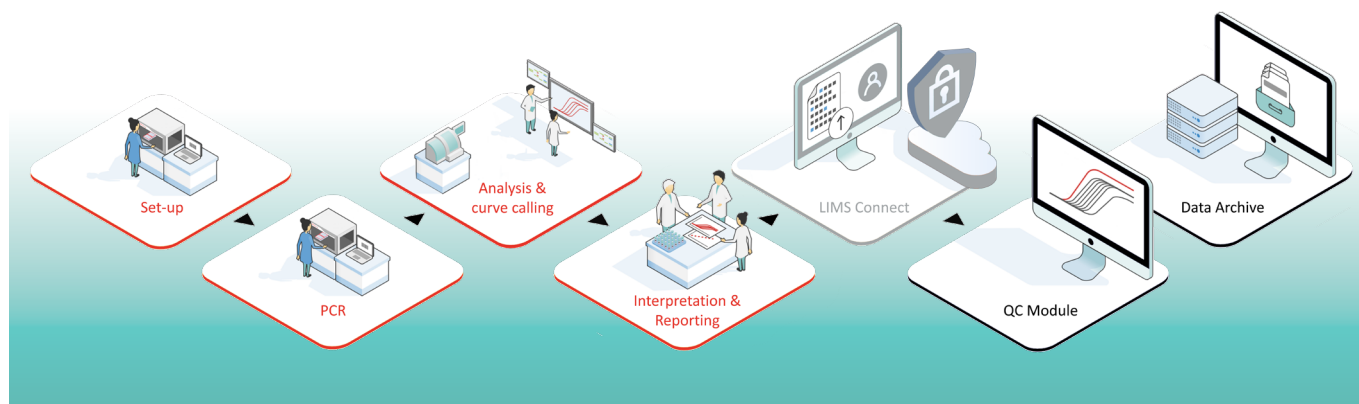**Figure 2:** the SENTiNAT® 200 interface

The **SENTiNAT® 200** solution with embedded FastFinder software contains built-in security features to protect your data from external threats. There are three layers of cybersecurity protection, data encryption, and audit procedures. FastFinder is compliant with GDPR[1], APP[2], HIPAA[3], CAP[4]/ CLIA[5], and general industry best practices.

Additionally, users benefit from the security offered by Microsoft Azure.

FASTFINDER AND VELSERA:

The FastFinder solution provides a platform to orchestrate the flow of samples through the lab from LIMS[6] orders in to reported result out. For PCR modalities, the platform additionally offers AI result calling, assay management, operational dashboards across the lab, and real-time QC. It does this through a modular web-based software-as-a-service platform that enables workflow tracking and instrument integration; building out a queryable repository of results; performing lab SOP[7] automation and complex result calling for a wide range of PCR test types; showing QC trend dashboards that flag exceptions in real time; versioning and managing the lab's entire PCR assay menu; and configurable dashboards for lab "business intelligence".

Velsera is a global molecular laboratory software provider servicing molecular labs & assay and instrument providers globally across clinical diagnostics and more.

GLOSSARY

1. The General Data Protection Regulation (GDPR) is a European piece of legislation which covers personal information and how consumers and businesses interact with it.
2. The Australian Privacy Principles (APP) are part of the Privacy Act law that governs privacy of data in Australia.
3. The Health Insurance Portability And Accountability Act (HIPAA) is a USA piece of legislation which provides security provisions and data privacy, in order to keep patients' medical information safe.
4. The College of American Pathologists (CAP) is the leading organization of board-certified pathologists, and can grant accreditation to laboratories that meet a certain set of standards.
5. The Clinical Laboratory Improvement Amendments (CLIA) are United States federal regulatory standards that apply to all clinical laboratory testing performed on humans in the United States, except clinical trials and basic research.
6. Laboratory Information Management System (LIMS), is a software application to track and manage data.
7. Standard operating procedures (SOP) provide the policies, processes and standards needed for success.