Atellica Data Manager

Standardize testing. Streamline result management.

siemens-healthineers.com/atellica-dm

SIEMENS
Healthineers

Digitalizing best practices has never been easier

Proven by labs around the world

Atellica® Data Manager leverages decades of Siemens Healthineers experience implementing advanced data management to standardize testing, enhance quality control (QC), and streamline result management. Since 1998, more than 1900* labs in 60+ countries have trusted successive generations of this robust software to reduce unwarranted variation, optimize clinical operations, and increase workforce productivity. More open and scalable than ever before, this virtual solution enhances visibility and centralizes management across multiple labs, LIS, automation systems and multidisciplinary instruments for greater efficiency and lower costs.

"We love Atellica Data Manager. It includes all the functionality, power, and reliability of CentraLink® [system] but with very modern and easy-to-use software."

Dr. Gustavo Dip
Technical Director, Lab Turner, Argentina

With Atellica Data Manager, you can:

- Standardize the review process and reduce errors with powerful result autoverification.
- Increase the speed and accuracy of manual result reviews with an innovative user interface.
- Streamline and strengthen QC management.
- Enhance clinical decisions using data-driven rules to accommodate patient-specific scenarios for personalized care.
- Avoid compliance issues and enable audit readiness.

Customer list on file as of September 2018.

↓93%

Reduced diagnostic testing errors
Standardize testing with automated workflows that reduce tube touches and manual tasks. Apply powerful QC, autoverification, and result-management rules to help prevent improper reporting of patient results.

↑77%

Improved turnaround time
Avoid unnecessary repeat testing with data-driven, automated testing protocols. Quickly identify, prioritize, and resolve issues that need staff attention with customized alerts and fast paths to action.

↑85%

Increased employee satisfaction
Apply the powerful features and sleek user interface of this next-generation software to reduce workloads, simplify operations, and centralize management. Tailor data and functionality to user-specific needs.

"Atellica Data Manager has provided us with simplicity, helped with quality, made us more efficient, and enabled us to meet our customer needs in a way that we have never been able to before."

Susan Dawson
Lab Director, Swedish Covenant Hospital, USA

**Atellica®
Diagnostics IT**

20 years of automation and IT leadership, partnership, and support packaged in a comprehensive suite of IT products to increase laboratory efficiency

Dig deeper into your operations by integrating process, sample, result, QC, and inventory data. Gain greater insight into what's driving performance and how to improve it.

Make IT simple.

Integrate and unify data.

Maximize performance and optimize workflows.

Real-time dashboard

Simplify operations with an at-a-glance view of your lab's workload

"The new Home screen really gives an immediate overview of where your attention is needed and provides immediate access to quick action."

Dr. Gustavo Dip
Technical Director, Lab Turner, Argentina

How quickly can you identify, prioritize, and address issues that need attention?

Spot problems and gain immediate access to integrated information from the Home screen. Easy-to-understand visuals, color codes, alert flags, and quick-click navigation keep you focused on what matters most.

Status display
Monitor the number and status of STAT samples and all samples being processed in your lab. Click any color band to access that subset of samples and/or results.

QC alerts
Identify QC exceptions and initiate immediate action to reduce the cost, effort, and impact of QC issues. The dedicated QC Alert display features a prioritized summary of Westguard rule violations, patient-based moving averages, and other QC flags.

My Counters
Help your staff manage panic values, time-sensitive results, and other KPIs with one-click access to scenario-specific results (i.e., by user, discipline, or site). Alert flags make it easy to see when new issues arise.

Wizards
Quickly view and modify configuration settings for autoverification rules.

Custom shortcuts
Get direct access to reports, sample query screens, and other information you access frequently.

Efficient result management

Reduce the risk of human error with powerful autoverification tools and a well-designed Review and Edit screen

How can you reduce reporting errors while maximizing efficiency?
Help ensure that results are evaluated consistently with easy-to-set-up autoverification rules. Enable your staff to quickly and efficiently review and release all results held for manual review.

Review by exception
Quickly see which results have been held, understand why, and prioritize action based on severity.
Color codes and numerical values in four columns (NS, DS, QS, or IS) indicate if normal ranges or delta checks were violated, if there were QC issues, and/or if certain instrument flags were received.

Everything you need on a single screen
Quickly assess a situation and disposition a sample, test, or result without extensive clicking and scrolling. Customize information displayed and screen layout to see comments, flags, and even images to suppport informed decisions.

Multitasking made easy
Manage simultaneous sample review sessions. Multiple tabs enable you to quickly investigate issues without losing your place.

Empower employees
Configure the iExpert button to outline next steps or suggest actions to users. Through one-click access to your lab's preferred processes, iExpert enables you to confidently assign personnel, even new hires, to unfamiliar work areas.

"It's a combination of these four features—customizable review ranges, delta checking, QC, and instrument flagging—that makes autoverification all the more powerful, and the way to make sure results pass all of the criteria you've established."

Susan Dawson
Lab Director, Swedish Covenant Hospital, USA

Simplified QC management

Reduce the costs and complexity of QC management while ensuring you satisfy compliance requirements
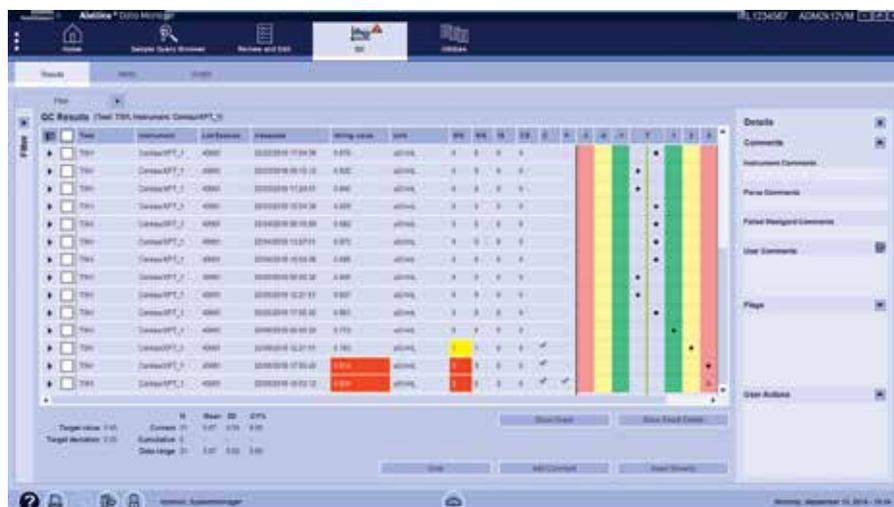
How can you strengthen your QC program?
In addition to supporting integration with third-party providers for peer-to-peer comparison, Atellica Data Manager offers robust tools to overcome common QC challenges and reduces the cost, effort, and impact of QC issues.

Automate QC management to reduce reporting errors
Immediately identify QC exceptions in real time and automatically disable/re-enable sample testing and reporting for affected instruments. After a QC exception, quickly identify all affected patient samples since the last valid QC and efficiently process any required reruns with just a few clicks.

Supplement QC testing with patient moving averages
Proactively identify potential problems before they happen. Set up patient-based moving averages by assay with unique batch sizes and flexible criteria to exclude outlier patient results.

"The improvement in QC capabilities and tracking allow users to review QC with just one click."

Susan Dawson
Lab Director, Swedish Covenant Hospital, USA

A vertical Levey-Jennings chart makes it easy to review QC, quickly see trends, identify QC exceptions, and efficiently manage them.
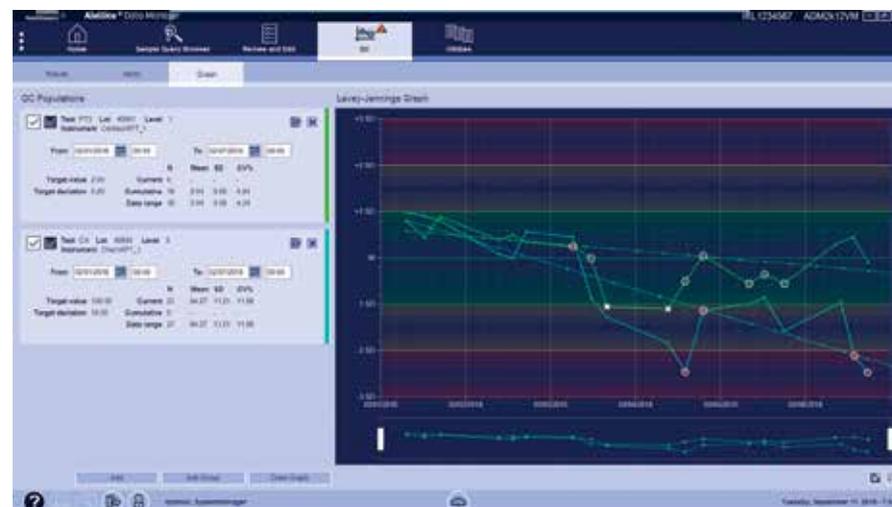
Investigate and confirm the root cause of QC issues by plotting and comparing multiple lots, levels, and instruments on a single chart across instruments and sites.

Advanced workflows

Use data to drive simple and complex workflows in stand-alone and automated labs

How can you use powerful rules to automate tasks and reduce errors?
Automate your lab's standard operating procedures to ensure that you are following established protocols across shifts, instruments, and sites. We've helped labs of all sizes implement a wide variety of workflow scenarios, effectively digitalizing best practices at more than 1900* installations worldwide.

Leverage a powerful rules engine and a library of lab-tested best practices
Tap into patient-sample, result, QC, and instrument data as it flows to/from the LIS. Implement dynamic scripts or use complex filters and queries to orchestrate complex multisite/multi-LIS workflows. We've built an extensive library of rules you can use directly or tailor to help you automatically:

- Perform calculated tests
- Drive repeat and reflex testing
- Execute absolute or percentage-based delta checks based on demographics
- Flag and manage processing for HIL
- Manage quantitative and qualitative results
- Automate workflows through custom rules
- Capture comments and document compliance
- Translate bar codes and manage patient IDs
- Coordinate pre-test dilution processing and instrument targeting
- Schedule reporting
- Print bar codes
- Implement algorithm-driven testing
- Facilitate ISLH hematology guidelines

Customer list on file as of September 2018.

Clinical decision support capabilities
Algorithm-driven testing can reduce the likelihood of human error, standardize testing, and improve TAT. Leverage our advanced algorithms to comply with guidelines for infectious disease testing algorithms and ISLH consensus rules for hematology.

Siemens Healthineers can also help you craft rules for processes not yet included in our continuously expanding library.

HBsAgII assay algorithm
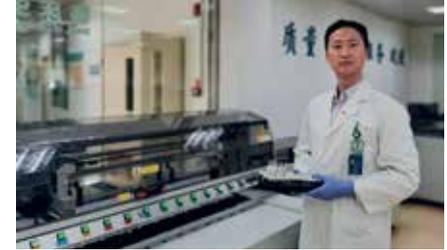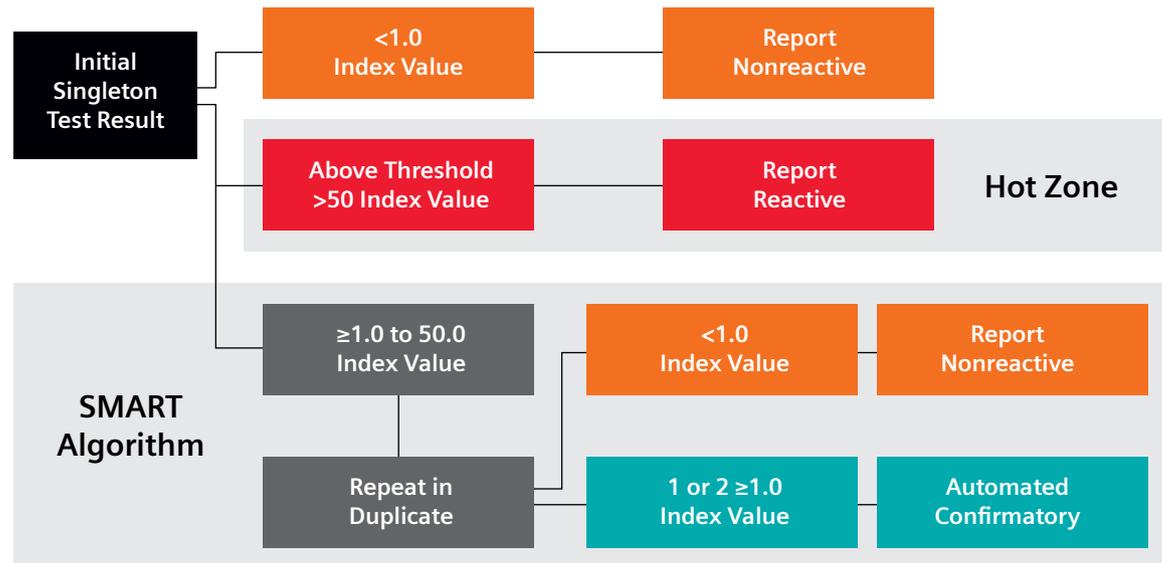
"Siemens Healthineers has proven to be a committed and collaborative partner. They have helped us to capitalize on the innovative technical capabilities of Atellica Data Manager in groundbreaking ways."

Dr. Weijia Wang
Director of Lab Medicine,
Zhongshan People's Hospital, Zhongshan, China

Magnify the power of total lab automation

As part of an Aptio® Automation solution, Atellica Data Manager drives automated next steps to further increase productivity:

- If a QC failure occurs, Atellica Data Manager can automatically disable assay-specific testing on the instrument in question and immediately reroute samples to perform the required testing on another instrument on the track.

- When reflex testing is triggered, or when orders for add-on tests are received from the LIS, samples connected to the track can be automatically retrieved and processed.

- Data from connected instruments and automation such as time of collection, time of centrifugation, storage time, etc., can be used to determine if add-on tests will be clinically significant. If not, the middleware can alert the operator that a new sample draw may be required.

Open, multidisciplinary connectivity

Consolidate on one robust platform to streamline workflows and simplify training

Are you looking for a single solution to standardize testing across disciplines and sites?

Whether you have a modern automation track and need to support stand-alone instruments spread across several labs or are seeking to streamline discipline-specific testing and reviews, you can leverage the benefits of advanced data management and specialized functionality for chemistry, immunoassay, hematology, hemostasis, urinalysis, and molecular disciplines.

Improve testing with paperless workflow and fewer manual interventions
With access to a growing library of more than 700 device drivers,[*] Atellica Data Manager is a completely open solution able to connect both Siemens Healthineers and third-party systems. Visit **siemens.com/atellica-data-manager-connectivity** for a list of instrument interfaces from the following manufacturers:

- Abbott
- Adaltys
- Alifax
- Beckman Coulter
- bioMérieux
- Bio-Rad
- CellaVision
- COPAN
- Diagnostica Stago
- DIESSE Diagnostica Senese
- DiaSorin

- Dynex Technologies
- Fujirebio
- Grifols
- Helena Laboratories
- IDS
- Inova Diagnostics
- Instrument Laboratories
- JEOL
- Ortho Clinical Diagnostics
- Roche

- RR Mechatronics
- Sebia
- Siemens Healthineers
- Snibe Diagnostic
- Sysmex
- TECAN
- Thermo Fisher Scientific
- Tosoh Bioscience
- Trinity Biotech

Customer list on file as of September 2018.

Streamlined hematology testing and reviews

Improve testing with paperless workflow and fewer manual steps

How can you simplify your hematology workflow?

Hematology-specific capabilities include:

- View and manage current and historical results and cytograms all in one place.
- Organize results into groups to individually manage CBC, RTC, and differentials.
- Automatically order or reflex slides based on lab protocols.
- Perform manual differentials or integrate automated digital morphology systems.
- Apply ISLH consensus rules to hold results, automate actions, and/or display guidance via the iExpert feature.
- Standardize autoverification of results and cytograms based on normal ranges, delta checks, QC, and instrument flags.

Built-in functionality allows users to perform and compare current and previously run manual differentials of slides using a microscope.
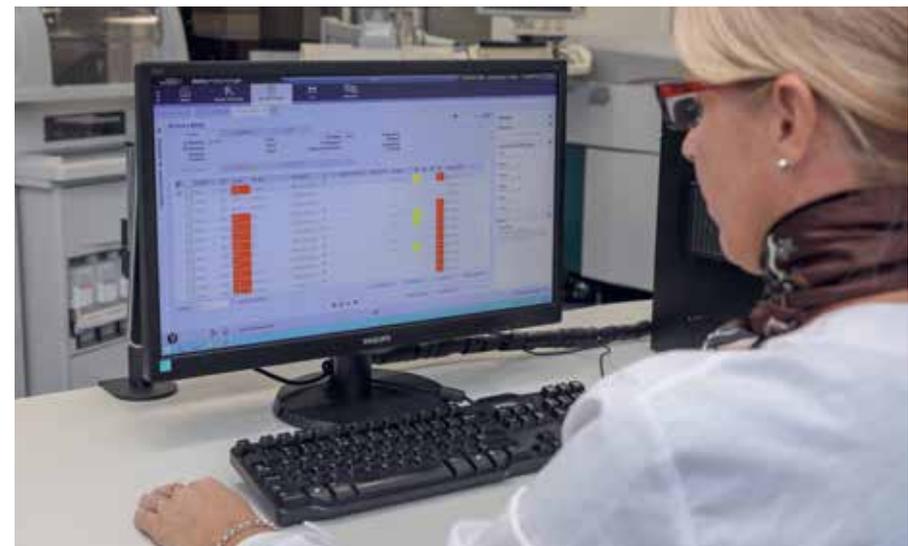
Technical specifications

Performance Metrics[†]

	Low Volume	Mid Volume	High Volume	Mega Volume
Users	Unlimited			
Instruments	6	75	125	125
Tests per hour	Up to 150,000 tests per hour			
Total samples	180,000	2,250,000	2,250,000	6,000,000
Total QC results	180,000	2,250,000	2,250,000	6,000,000
Concurrent sessions	6	15	50	50
Windows RDP clients	6	15	Unlimited	Unlimited
Automation systems	0	Multiple	Multiple	Multiple
LIS connections	Multiple			

Communication

LIS protocols	ASTM, Spec 79, HL7, LMX
Supported languages	English, Chinese (simplified),[§] French, German, Italian, Brazilian Portuguese, Spanish

Supported Instrument Interfaces

Atellica Data Manager is a completely open solution with access to a library of more than 700 device drivers. In addition to supporting instruments available from Siemens Healthineers, the system supports connectivity to analyzers manufactured by third-party providers as described in the Open Connectivity section. Please visit **siemens.com/atellica-data-manager-connectivity** for a current list of instrument interfaces. Availability of all products varies by country. Ask your local Siemens Healthineers representative for a list of instruments available in your local market.

Dashboard

Home Screen
- Unique views configurable by user, discipline, or site
- Shortcut creation for quick access to common tasks
- Custom counters to monitor specific scenarios
- Alerting options to identify exceptions and drive action
- Communication monitoring with alert/email notification

Review/Edit

Customizable Review
- Easy-to-set-up autoverification and review by exception
- Ranges (definable by age, sex, species, location, etc.)
- Delta checking (percentage and absolute basis)
- QC violations
- Instrument flags

Dispositioning Options
- Result entry and validation
- Rerunning, omitting, or editing results
- Manually entering differential results
- Automatically or manually adding comments

Display Options
- Order of results
- Viewing hematology graphics
- Color designations for exception management and sample prioritization
- Customizable display and layout

Quality Control

Key Capabilities
- By method, instrument, species, lot, moving average
- Data display as results or Levey-Jennings plots
- Westgard rules (1-2s, 1-3s, 10-x, 2-2s, 4-1s, R-4s)
- Automatically disable/re-enable by test
- Add comments during review
- Support for comparators (<,>) and qualitative results
- Omit data from statistical calculations
- Configurable interval for automatic QC exports
- Real-time upload to Bio-Rad UNITY solutions
- QC lot auto-creation
- Ability to find all patient results between QC runs
- Customizable QC reports

Query/Search

Search by
- Sample ID, physician name or ID, patient name or ID
- Instrument or instrument group
- Test or test group
- Sample status, location, date and time
- Customizable/complex user-definable queries
- Configurable shortcuts

Security

Key Capabilities
- User specific access to data and functionality
- Set multiple standard and user-defined access levels
- Define menu options for each access level
- Configurable options for strong passwords

Scalability and multisite support

Other Key Features	
Order Entry	• Simplified order entry for LIS backup
Reporting	• Default and customizable reporting • Automated report generation
Commands	• Ability to create and automate customized commands automatically performed based on task schedulers
Site Attributes	• Custom variable creation for display and use in rules
Backup	• Configurable/automated backup, optional Hot Backup

System Requirements				
Virtualization	Supports both physical server installations and virtualization using any Type 1 hypervisor (with local disks and SAN storage architectures)			
Operating System	Windows Server 2012R2; Windows Server 2016**			
Database	Progress OpenEdge v11.7.2††			
NW Bandwidth	128 Kb minimum per RDP client			
NW Latency	Recommendation of 1 ms average			
	Low Volume††	**Mid Volume**††	**High Volume**§§	**Mega Volume**§§
CPU (multi core)	4@3.3GHz	8@2.6GHz	12@2.6GHz	20@2.6GHz
RAM	8GB	24GB	24GB	64GB
Other	See release notes and white paper for additional system requirements			

‡Performance claims are validated with 125 connected instruments and a throughput of 150,000 tests per hour.
§Reports are not available in Chinese.
**Under development with planned support for Standard Edition or DataCenter Edition.
††The Progress OpenEdge database software is included with the Atellica DM software.
‡‡Low and mid volume specifications are for physical server configurations.
§§High and mega volume specifications are for virtual server configurations.

Product availability may vary from country to country and is subject to varying regulatory requirements.
Please contact your local representative for availability.
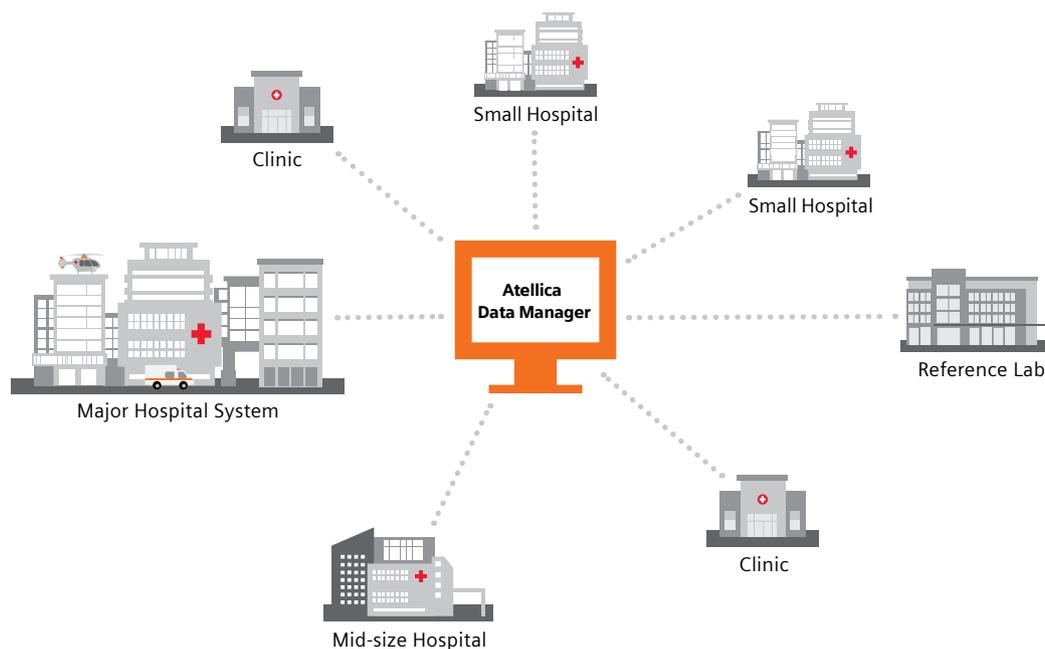
From small community hospitals to the world's largest megalabs processing hundreds of thousands of samples per day, Atellica Data Manager is a trusted and proven solution used around the world. Whether you are a standalone lab or part of a large health network, the software can be easily configured to support:

• Multiple LIS systems
• Multiple laboratory automation systems
• Multiple sites spanning large geographic areas
• Unlimited instrument connections‡
• Unlimited users‡
• Up to 50 concurrent sessions

Tap further into the potential of your multi-site diagnostics network by combining advanced data management with Atellica Connectivity, Process, and Inventory Manager solutions. Maximize instrument performance. Centralize oversight. Evaluate and optimize processes with built-in business analytics. Automate reagent and consumable management.

At Siemens Healthineers, our purpose is to enable healthcare providers to increase value by empowering them on their journey toward expanding precision medicine, transforming care delivery, and improving patient experience, all made possible by digitalizing healthcare.

An estimated 5 million patients globally benefit every day from our innovative technologies and services in the areas of diagnostic and therapeutic imaging, laboratory diagnostics, and molecular medicine, as well as digital health and enterprise services.

We are a leading medical technology company with over 120 years of experience and 18,000 patents globally. Through the dedication of more than 50,000 colleagues in 75 countries, we will continue to innovate and shape the future of healthcare.

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