NEXT-GEN LABORATORY INFORMATION MANAGEMENT SYSTEM

The Architecture of Future Clinical Laboratories.

Complete clinical mastery in one unified platform—from sample reception and Atellica & TLA analyzer integration to specialist validation and QR-verified official patient reports.



TLA & 150+ Auto-Analyzers Bi-Directional HL7 / ASTM



GLOBAL STANDARD

25+ Yrs
Clinical Engineering

4 Langs
Full RTL & Global UI

Proven Clinical Engineering at International Standards.

MedLIMS unifies every diagnostic workflow—from boutique clinical laboratories to multi-center university hospitals—into a lean, ultra-fast, and error-free software architecture.



25+

Years of Clinical Expertise

Field-proven mastery across biochemistry, hematology, microbiology, coagulation, and molecular diagnostics.

150+

Analyzer Integrations

Seamless bi-directional communication with Siemens Atellica, Roche cobas, Abbott Alinity, Beckman, Sysmex, and Mindray.

4 Langs

Multilingual & Full RTL

Instant interface and patient report switching across Turkish, English, Arabic (native RTL), and Georgian.

99.98%

Mission-Critical Uptime

High-availability Oracle database engine with Cloud, On-Premise, and Hybrid enterprise deployment.

END-TO-END UNIFIED CLINICAL WORKFLOW

01
Pre-Analytical
Rapid Registration, ZPL Barcode, Tube Sorting

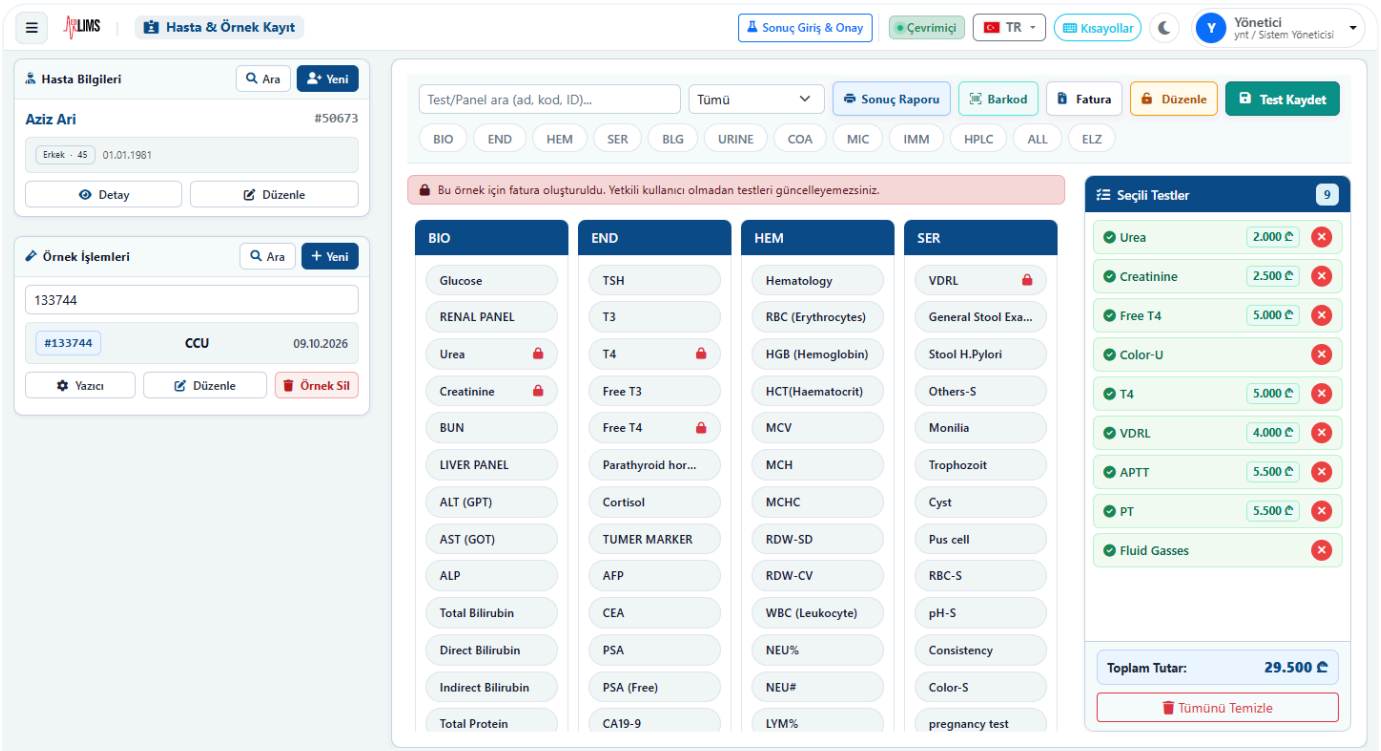
02
Analytical (TLA)
Bi-Directional LisDriver, Auto Worklist, Westgard QC

03
Post-Analytical
Specialist Validation, Delta-Check, Panic Alerts

04
Digital Delivery
Online Patient Portal & Cryptographic QR Verification

Patient, Sample Registration & Smart Institutional Pricing.

Zero waiting time at reception: Patient history, dynamic clinic/physician assignment, color-coded test panels, and automated thermal barcoding on a single screen.



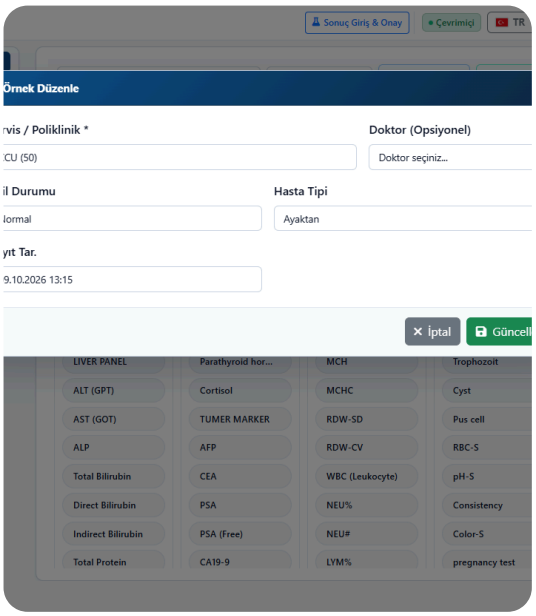
PRE-ANALYTICAL ENGINE

Single-Screen Test Panels & Real-Time Tariff Calculation

- ✓ Color-coded rapid test selection across Biochemistry, Hormone, Hematology, Coagulation, Urine, and ELISA panels
- ✓ Instant unit price badges and automatic total cost calculation based on insurance, state tariff, or private lists
- ✓ Automated specimen splitting by vacutainer cap color with instant ZPL thermal barcode label printing

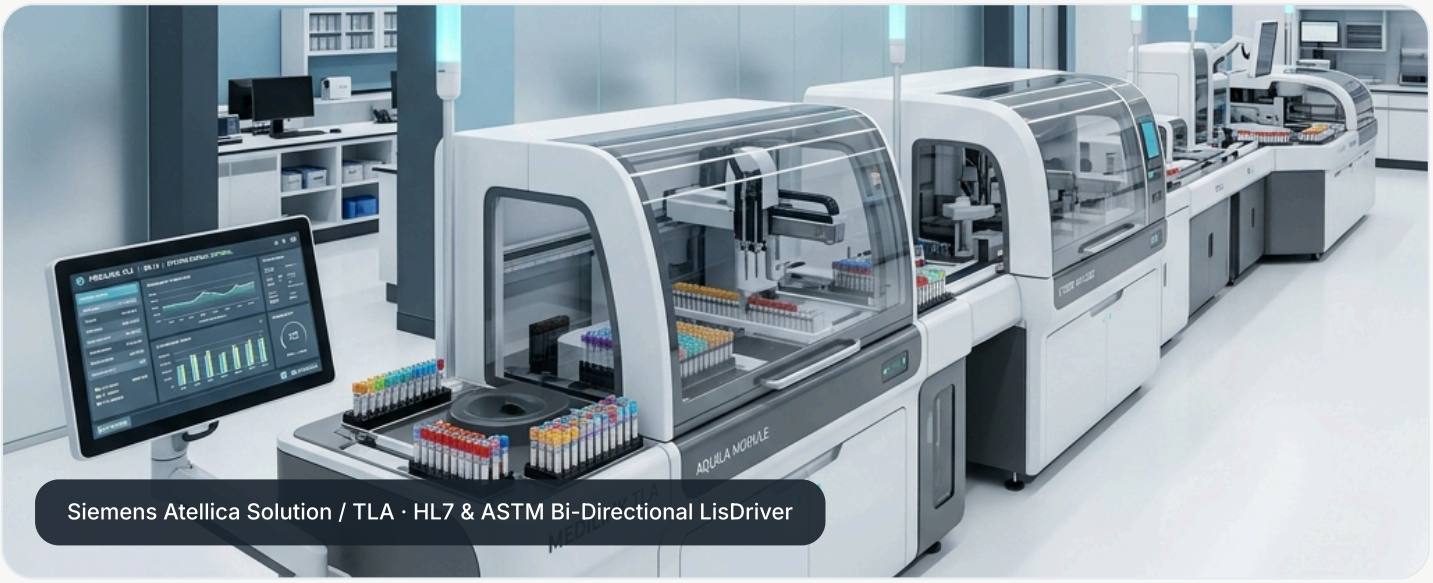
Dynamic Specimen & Clinic/Physician Management

Seamlessly edit collection timestamps, ordering clinics (ICU, ER, Outpatient), and attending physicians without losing specimen integrity.



Full Integration with Atellica Modular, TLA & 150+ Analyzers.

Our vendor-neutral LisDriver engine communicates bi-directionally with all laboratory analyzers over ASTM, HL7, and TCP/IP protocols with zero manual intervention.



Siemens Atellica Solution / TLA · HL7 & ASTM Bi-Directional LisDriver

Bi-Directional Host Query

As soon as a barcoded tube is scanned on the analyzer track, test orders are downloaded in milliseconds.

Westgard Quality Control (QC)

Continuous analytical assurance via automated 1-2s, 1-3s, 2-2s, R-4s rules and Levey-Jennings charts.

Instrument Flags & Calibration Alerts

Hemolysis, lipemia, icterus, and hardware flags from analyzers are automatically mapped to result rows.

Zero Data Loss (Auto-Buffer)

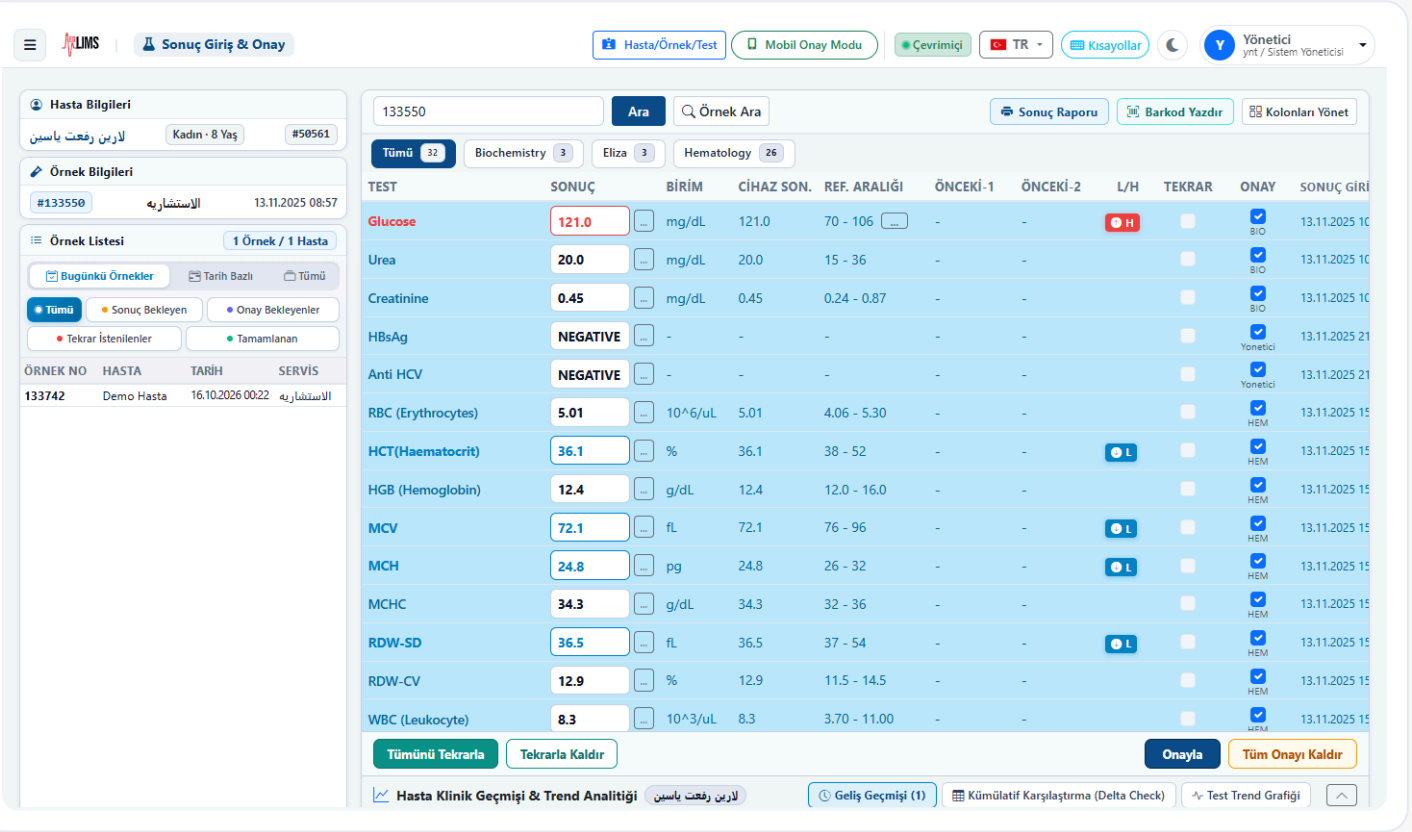
Local fault-tolerant buffering guarantees zero lost results even during hospital network interruptions.

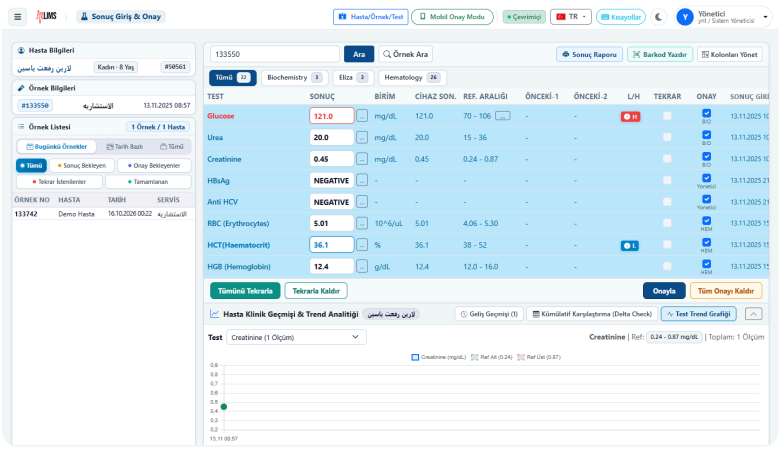
SUPPORTED MAJOR AUTOMATION & ANALYZER FAMILIES

Siemens Healthineers (Atellica Solution, Advia, Immulite) · Roche Diagnostics (cobas pro, cobas pure, e411, c311) · Abbott (Alinity ci, Architect) · Sysmex (XN-Series, CS-Series) · Beckman Coulter (AU, DxI) · Mindray · Snibe Maglumi · Bio-Rad

Result Entry, Panic Values & Cumulative Delta-Check.

A high-density, zero-clutter validation cockpit engineered for laboratory specialists: All tests, historical results, and graphical trends at a single glance.





01 · Smart Color Coding & Panic Alerts

Out-of-range results are automatically flagged with L (Low) and H (High) badges, highlighting critical panic values immediately.

02 · Patient Clinical History & Trend Analytics

Integrated bottom drawer displays past visits, cumulative Delta-Check comparisons, and interactive time-series trend charts.

03 · One-Click Barcode & Official Report

Print ZPL specimen barcodes or official QR-verified patient reports directly from the top toolbar without switching screens.

24/7 Mobile Specialist Validation & Slide-Over Drawer UI.

With standardized slide-over drawer navigation across all 9 core modules and a responsive mobile layout, your laboratory is always at your fingertips.





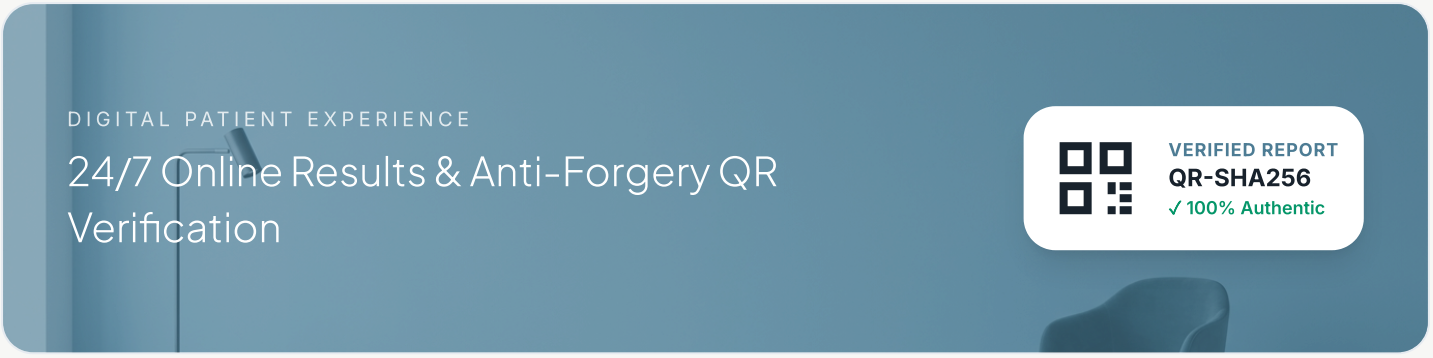
MOBILE & BI ANALYTICS

Complete Clinical Control on Smartphones & Tablets

- ✓ Dedicated Mobile Validation Mode enables specialists to review and approve critical results remotely during on-call hours
- ✓ Slide-over navigation drawer maximizes horizontal screen real estate across desktop and mobile viewports
- ✓ Real-time Turnaround Time (TAT) analytics, test group distribution, and instrument throughput reporting
- ✓ Light / Dark theme support and customizable grid column visibility per specialist profile

Online Result Inquiry & Official QR Report Verification.

Patients and referring physicians can securely access results in seconds, compare historical visits, and download official signed PDF reports directly from the web.



01

Online Result & Visit History Portal

- HIPAA / GDPR compliant two-factor inquiry using Specimen (Barcode) ID and Phone / National ID / File Number
- Complete chronological visit history allowing patients to switch between current and past laboratory episodes
- Clear presentation of validated test results, reference intervals, and L/H status indicators

KVKK / GDPR / HIPAA — **SSL / TLS 1.3**

02

Camera & Code Official QR Report Verification

- Every printed or digital PDF report embeds a unique cryptographic verification hash and QR code
- Instant authenticity check via live device camera scanning or manual verification code entry
- 100% protection against forged or tampered clinical laboratory reports

CAMERA & HASH VERIFICATION — **ZERO FORGERY**

Ready to Transform Your Clinical Laboratory.

Contact our clinical engineering team for a tailored live demonstration, analyzer integration assessment, and turnkey deployment plan.

TECHNICAL ARCHITECTURE SUMMARY	
Database & Backend	Oracle RDBMS / High-Concurrency Node.js REST API Architecture
Analyzer Interface	LisDriver (HL7, ASTM E1381/E1394, RS-232 Serial & TCP/IP Socket)
Deployment Models	Cloud SaaS, On-Premise Hospital Data Center, or Hybrid Cluster
Security & Compliance	JWT Auth, Role-Based Access Control, GDPR/KVKK & QR Cryptography
Supported Languages	Turkish (TR), English (EN), Arabic (AR - Native RTL), Georgian (KA)

GLOBAL HEADQUARTERS & CONTACT

www.medlims.com | **info@medlims.com**

Aziz Ari / MedLIMS Software Coordinator
ariaziz@medlims.com

TR EN AR KA

MEDLIMS PORTAL

© 2026 MedLIMS Laboratory Information Management Systems. All rights reserved.