

Trusted Context for Life Sciences

Powered by Informatica IDMC, MuleSoft, Data 360,
and Agentforce for Life Sciences

The Challenge: AI Is Only as Trustworthy as the Data Behind It

Life sciences organizations are deploying AI agents to autonomously recruit clinical trial participants, respond to medical information requests, manage global supply chains, and accelerate regulatory submissions. But autonomous AI doesn't just make a single mistake on fragmented data, it scales that mistake across every trial, HCP interaction, and compliance filing it touches.

Up to 70% of R&D data is trapped in legacy silos (Veeva, SAP, LIMS, mainframe) without a unified view of the clinical trial participant, the prescribing HCP or the molecule. This fragmentation leads to the **Data Fragmentation Barrier**, a structural vulnerability that causes:

- Medical hallucinations where agents act on mismatched trial participant identities or stale clinical records
- GDPR, GxP, and HIPAA compliance exposure from ungoverned data access across jurisdictions
- Clinical trial delays caused by manual screening bottlenecks and identity resolution failures
- Regulatory submission risk from incomplete or inconsistent SPOR/IDMP data
- Revenue and pipeline exposure from unmastered HCP and product data across M&A integrations

The Solution: Trusted Context Architecture

Trusted Context is the strategic framework that closes the gap between fragmented backend data and front-office AI action. It transforms siloed life sciences data, including clinical trial feeds, ERP and LIMS systems, HCP engagement records, supply chain logs, and regulatory submissions, into a governed, real-time foundation that Agentforce agents can safely act upon.

The Trusted Context Solution for Life Sciences is built on four integrated layers:

- **Informatica IDMC**
The Governance Layer —
The industry's first headless AI-powered data management cloud — now part of Salesforce.
- **MuleSoft**
The Connectivity Layer —
API-led integration connecting legacy LIMS, ERP, and clinical systems to the modern AI stack.
- **Data 360**
The Activation Layer —
Unified HCP, patient, and product profiles enriched with real-time clinical and commercial signals.
- **Agentforce for Life Sciences**
The Action Layer —
Autonomous agents that execute high-stakes clinical and commercial workflows, from trial recruitment through regulatory submission, at enterprise scale and without scaling the risk.

Informatica IDMC: The Foundation of Trusted Context

Informatica IDMC is the governance engine at the heart of the Trusted Context architecture. It is the difference between moving clinical and commercial data and governing it.

As a headless architecture, IDMC operates as the invisible governance engine beneath your AI stack, processing, mastering and governing data at the infrastructure layer, without requiring a separate UI-driven workflow for every data action. AI agents and front-office applications consume trusted context without ever touching raw source data.

Four Core IDMC Pillars for Life Sciences

Pillar	What It Does	Why It Matters for Life Sciences
Data Integration & ETL	Ingests and transforms data from LIMS, ERP (Veeva, SAP), clinical trial systems, HIEs, FHIR APIs, and supply chain platforms using 10,000+ pre-built connectors	Ensures the Trust Layer has access to a comprehensive, real-time stream of clinical, regulatory, and commercial data — including the 70% typically trapped in legacy silos
Agentic Multidomain MDM	AI-powered matching, merging, and deduplication to create a Golden Record for trial participants, HCPs, molecules, and products	A single participant may exist across dozens of clinical and commercial systems with conflicting identifiers — MDM reconciles them into one trusted entity
Cloud Data Quality (CDQ)	Cleanses, standardizes, and enriches data before it reaches Agentforce	Accelerating AI consumption of ungoverned clinical data only amplifies errors — and in life sciences, errors carry regulatory and patient safety consequences
Cloud Data Governance (CDGC)	Captures lineage, relationships, and transformation from inputs to insights — with automated PII/PHI masking before data reaches the LLM	Every agent action can be traced to its source — the auditability life sciences organizations need for GxP, GDPR, FDA, and EMA compliance

The Golden HCP, Participant, and Product Record

Agentic Multidomain MDM resolves fragmented identities across all life sciences domains, unifying trial participant demographics, HCP prescribing history, and product lifecycle data across Veeva, SAP, LIMS, and clinical systems, then automatically cleansing and standardizing into a single source of truth before it reaches the AI agent.

Gilead Sciences deployed Informatica MDM on IDMC to consolidate enterprise data across clinical and commercial systems into a trusted HCP and participant 360 view. This enables AI-driven trial recruitment, regulatory submission automation and supply chain resilience across global operations.

“With Informatica, we put data at the forefront of our operations and business strategy — creating a single, trusted foundation that powers everything from HCP engagement to clinical trial execution.”

— Gilead Sciences

Gartner Recognition (Informatica IDMC)

- Leader — 2026 Magic Quadrant™ for Augmented Data Quality Solutions
- Leader — 2026 Magic Quadrant™ for Data & Analytics Governance Platforms
- Leader — 2026 Magic Quadrant™ for Master Data Management Solutions
- Leader — 2025 Magic Quadrant™ for Data Integration Tools
- Leader — 2025 Magic Quadrant™ for Metadata Management Solutions

MuleSoft: Connectivity & Compliance Enforcement

MuleSoft securely bridges legacy LIMS, ERP, and clinical systems to the modern AI stack, enforcing real-time GxP and GDPR policy controls so agents only access what they’re authorized to see. Via API-led connectivity and Model Context Protocol (MCP), MuleSoft:

- Connects Veeva, SAP, LIMS, clinical trial platforms, and HIEs without custom middleware
- Governs API access with a unified security and compliance layer across jurisdictions
- Enables Agent Fabric for multi-agent orchestration across clinical and commercial workflows
- Automates data discovery and protection of PII/PHI and intellectual property across the enterprise

Data 360: Activation at Scale

Salesforce Data 360 consumes IDMC-mastered Golden Records and synthesizes behavioral and engagement data with the golden record; this makes context available without the risk of data movement, then it can build a Unified HCP, Participant & Product Profile. That trusted context is then activated across:

- Agentforce for Life Sciences — autonomous workflows for trial recruitment, MIR response, and supply chain management
- Tableau — operational dashboards for regulatory submissions, HCP engagement, and pipeline analytics
- CRM integrations — personalized field rep and MSL workflows grounded in real-time clinical context

Informatica MDM is the upstream system of record that creates the Golden Record. Data 360 is the system of activation that turns that record into intelligent clinical and commercial action.

Key Life Sciences Use Cases

1. HCP & Trial Participant 360 for Agentic Trial Recruitment

Agentforce agents grounded in a Golden Participant Record autonomously scan unified real-world evidence and clinical data to match participants to trials in real time, removing manual screening bottlenecks and accelerating time-to-therapy, while MuleSoft enforces HIPAA and GxP-compliant data access across every clinical system.

Because IDMC is headless, the Golden Participant Record is continuously maintained and surfaced to Agentforce in real time without a manual data stewardship step required between ingestion and agent action.

What this enables:

- Agentic AI that automatically identifies and routes qualified trial participants from unified RWE and clinical data
- Real-time participant identity resolution across LIMS, clinical sites, EHR, and registry systems
- Reduced screening failure rates and improved enrollment velocity

Metrics that matter:

- Trial enrollment cycle time reduction (days)
- Participant matching accuracy rate (%)
- Screen failure rate reduction tied to trusted participant identity

2. Medical Information Requests (MIR) for Agentic HCP Engagement

Agentforce agents grounded in a Golden HCP Record provide instant, GxP-compliant responses to complex medical information inquiries, surfacing the latest research and product data directly into field rep and MSL workflows via MuleSoft, and eliminating the manual review queue between HCP inquiry and compliant response.

What this enables:

- Automated MIR response with real-time GxP compliance verification surfaced in field rep and Service Cloud workflows via MuleSoft
- Reduction in response time caused by manual review queues and outdated HCP interaction records
- HCP engagement analytics powered by accurate, current interaction history in Tableau

Metrics that matter:

- MIR response time reduction (hours)
- HCP data accuracy and deduplication rate (%)
- Compliance rate on agent-generated MIR responses (%)

3. Regulatory Submissions & Supply Chain Integrity

Agentforce agents grounded in real-time data quality scores and CLAIRE® AI-governed product records automate SPOR/IDMP regulatory submissions, predict supply shortages, and manage global inventory. This triggers automated remediation workflows before compliance gaps become regulatory findings, with Tableau dashboards surfacing root-cause analytics by region and product line.

What this enables:

- Automated SPOR/IDMP submission workflows with real-time GxP governance and audit trail — reducing manual burden by up to 40%
- Product 360 golden records enabling agents to predict shortages and manage inventory across global borders through patent cliffs and M&A integrations
- Tableau dashboards tracking submission accuracy, supply chain risk, and regulatory exposure by market

Metrics that matter:

- Regulatory submission error rate reduction (%)
- Supply chain disruption response time improvement
- Manual compliance workload reduction tied to CLAIRE® AI automation

Why Salesforce + Informatica — and Why Now

This is one platform, not a patchwork of integrations. Salesforce completed its acquisition of Informatica in November 2025, making IDMC a native part of the Salesforce Trusted Context portfolio, alongside MuleSoft, Data 360, Tableau, and Agentforce.

GDPR, the EU AI Act, GxP standards, FDA and EMA submission requirements, IDMP/SPOR mandates, and HIPAA data sovereignty requirements are converging simultaneously. Organizations that build the Trusted Context Layer now will be positioned to meet those requirements. At the same time, competitors scramble to remediate data problems after their AI agents have already scaled the mistakes.

Trust is the currency of the Agentic Enterprise. Informatica IDMC provides the Trusted Context (clean, governed, and real-time data) that allows Agentforce to move from simple chatbots to autonomous agents safely executing complex life sciences workflows.

Informatica IDMC's headless architecture is what makes this possible at enterprise scale — data governance that operates at the speed of AI, without slowing down agents or requiring human curation at every step.

For life sciences organizations evaluating AI readiness, the question is no longer whether to invest in agentic AI. It's whether your data foundation is ready to support it. Organizations that invest in the Trusted Context Layer today will be the ones whose AI agents close the loop between data and action at enterprise level: from trial recruitment through regulatory submission and the last mile of commercial excellence.

Recommended Next Steps

- 1. Discovery Workshop** — Assess current participant matching rates, HCP data accuracy, and regulatory submission error patterns
- 2. Proof of Value** — 30-day HCP & Participant 360 MDM pilot integrated into existing LIMS or Veeva environment via MuleSoft sandbox
- 3. Executive Briefing** — CDO/CIO alignment session with Tableau demo on regulatory compliance and clinical operations data quality ROI

Learn more on informatica.com/solutions/industry-solutions/life-sciences



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About Informatica

Informatica from Salesforce is a leader in AI-powered enterprise cloud data management. Its Intelligent Data Management Cloud (IDMC) platform enables organizations to connect, manage and unify AI-ready data across the enterprise. With capabilities spanning data cataloging, integration, governance, quality, privacy, metadata management and master data management, Informatica supports a broad partner ecosystem and helps customers unlock the full value of their data and AI initiatives.

About Salesforce

Salesforce is the #1 AI CRM, empowering companies to connect with their customers in a whole new way through the power of artificial intelligence, data and trust. For more information about Salesforce (NYSE: CRM), visit: www.salesforce.com.

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