

IVFID
WITNESS SYSTEM

TANK
CONTROLS

Smart. Secure. Traceable.

Next-Generation Cryo Tank
Management & Electronic
Witnessing for IVF
Laboratories.



RFID Verification
wireless drop shadow

RFID Control
Cryo Drop Region

Explore Tank Control

Request Demo

Purpose-built for IVF safety

There are specific safety features and controls on the IVF equipment
that are not found on other cryo storage equipment.



THE ENVIRONMENT

In IVF, the margin for error is absolute zero. Managing cryo tanks manually relies on human perfection, which is fragile, time-consuming, and carries inherent risks of mix-ups.



THE SOLUTION

Tank Controls introduces a foolproof digital safety net over your physical inventory.



Ensures 100% Traceability



Maximizes Physical Tank Capacity



Automates Critical Compliance Tasks

Delivering absolute certainty without disrupting laboratory workflows.

The Tank Controls Ecosystem



Pillar 1: Smart Labeling

Automated, liquid-nitrogen-safe RFID tags replacing handwritten vulnerability.



Pillar 2: Electronic Witnessing

Contactless, mobile validation and legally compliant logging at every physical touchpoint.



Pillar 3: Centralized Management

Real-time 2D tank mapping, automated capacity tracking, and comprehensive patient integration.

The 4-Step Secure Workflow

Translating cutting-edge technology into a tangible, foolproof Standard Operating Procedure.

1. Label



Each straw or vial receives a unique, unalterable digital identity via an automated RFID tag.

2. Address



Cryo tanks are digitally mapped; the system assigns an exact physical location (Tank, Canister, Cane) before the tank is even opened.

3. Verify



Mobile RFID readers confirm the sample identity, patient match, and location in seconds.

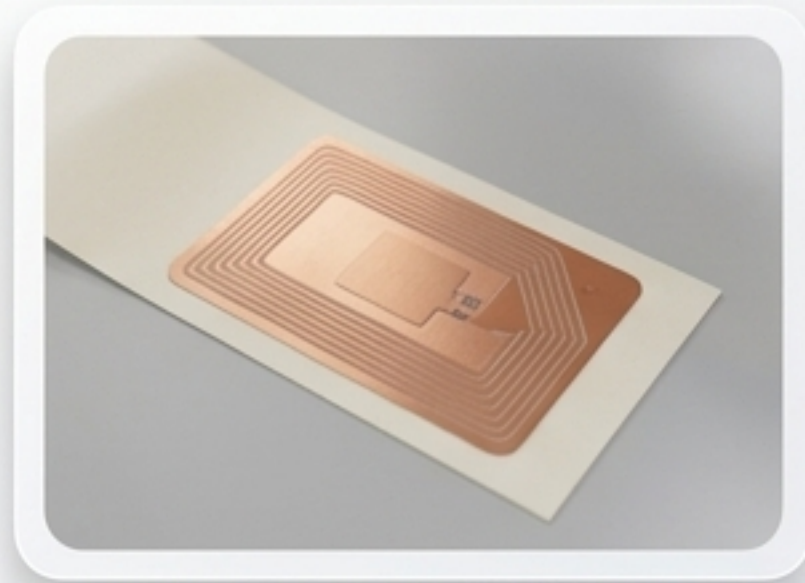
4. Secure



All actions are permanently logged as legally compliant electronic witnessing, ensuring total traceability.

Anatomy of a Smart Sample

Hardware innovation engineered for the extremes of cryopreservation.



Extreme Durability

Engineered specifically for cryogenics. Labels and embedded RFID chips withstand total liquid nitrogen submersion at -196°C without degradation.

Universal Compatibility

Architected to seamlessly fit all standard global market brands and models of IVF straws and vials.

Automated Precision

Eliminates handwritten vulnerability. Automatically prints Patient Name, Protocol No, Sample Quality, and exact Tank Address directly on the resilient label.

Electronic Witnessing in the Palm of Your Hand

Instant Verification

Contactless RFID reading immediately displays patient identity, photo, and granular biological details upon scanning.

Active Mix-Up Prevention

The system actively blocks mismatching samples and triggers instant visual and audible alerts during Cryo and Thaw procedures.

Operator Logging

Every scan captures the exact Date, Time, and specific Personnel ID, ensuring unquestionable point-of-care accountability.

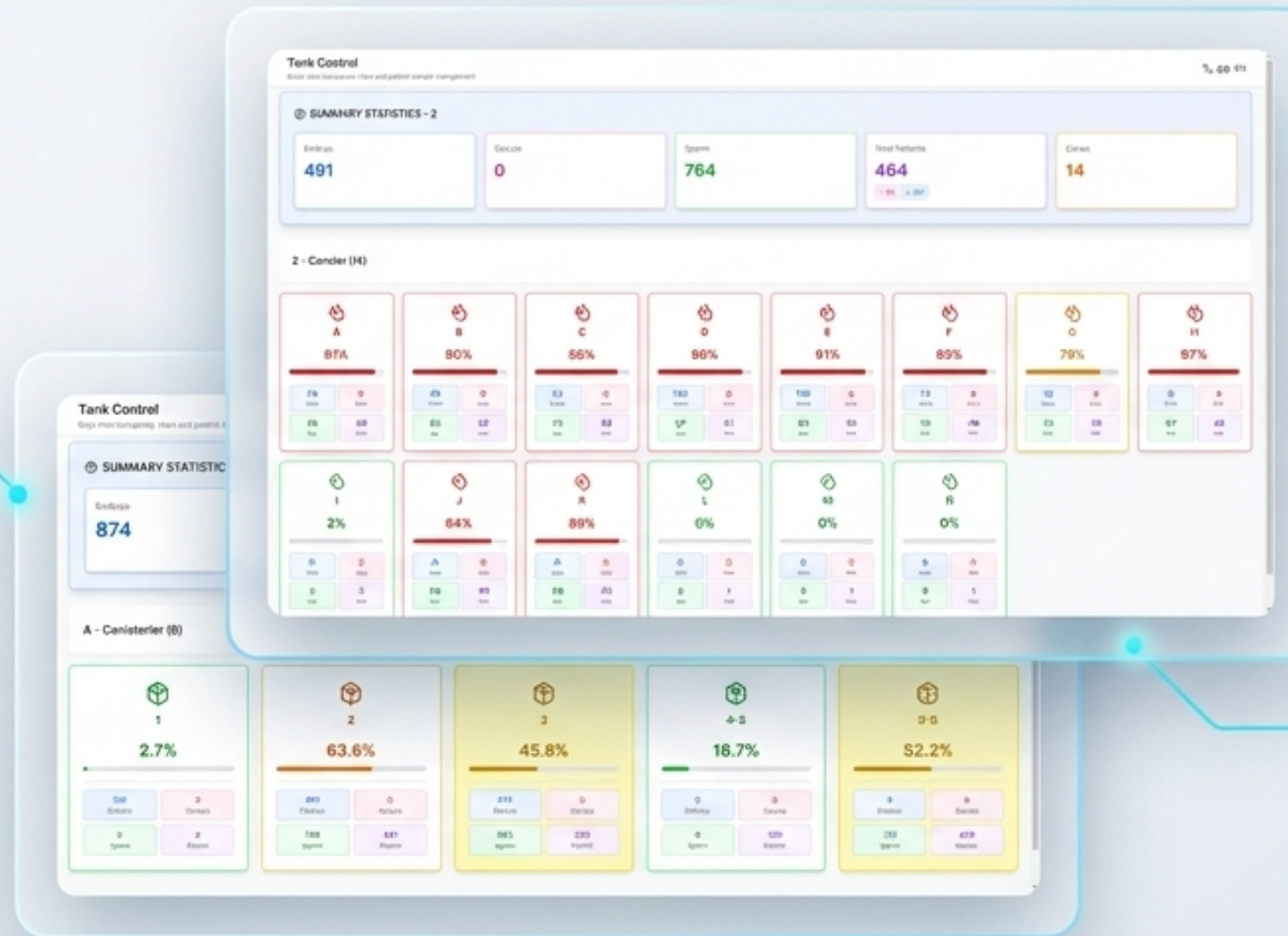


2D Tank Mapping & Capacity Optimization



Custom Visual Architecture

Fully customizable 2D mapping adapts to any tank model, internal structural layout, and clinic naming convention (letters, numbers, or color-coding).



Pre-Planning Protocol

Embryologists instantly identify which goblet has available capacity, planning the exact storage location before exposing the physical tank to room temperature.



Maximum Yield

Eliminates 'lost' samples and inefficiently utilized space, allowing clinics to safely maximize their hardware storage investments.

Comprehensive Real-Time KPIs

High-level operational visibility for Clinic Managers and Laboratory Directors.



Live Inventory
Instant, clinic-wide aggregated counts of stored Embryos, Oocytes, and Sperm. Never guess your clinical output.

Occupancy Rates
Visual indicators provide at-a-glance understanding of total tank capacity and spatial availability across the facility.

Patient Aggregation
Tracks exactly how many distinct patients currently have active biological materials in storage, drastically simplifying auditing.

Deep Dive: Micro-Tracking Architecture

No detail is lost when moving from physical records to the digital database.

Complete Patient Profiles

Connects the unique sample ID directly to the master patient file, spouse name, and clinical protocol numbers.

Biological Detail

Tracks granular origin data, including sample type (Sperm, Embryo, Oocyte), day of development, and extraction method (e.g., Ejaculate, TESA).

Real-Time Status

Live status monitoring automatically clears the tank address when a sample is fully thawed, permanently preventing ghost records.

Tank Control
End user operating view and patient sample management

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SUMMARY STATISTICS

Embryo: 40, Oocyte: 0, Total Sperm/Val: 100, Total Patients: 0

8 - Children List (100)

ID	Pk.2.40	TEST/GENE ID	FNCTD	PATIENT SURNAME	SAMPLE TYPE	Day	PERSONNEL	CRYO DATE	STATUS
1	4031	-	04	DEMO	Sperm	-	CEMRE .	02.12.2022	5. Full
2	1230	-	-	DEMO	Sperm	-	SİSTEM YÖNETİCİSİ	18.08.2016	3. Full
3	3590	-	-	EVİNE	Embryo	3. Day	ERDİ .	08.10.2018	3. Full
4	2590	-	-	DEMO	Sperm	-	ERDİ .	09.10.2018	3. Full
5	41802	-	-	DEMO	Sperm	-	FIARET .	11.01.2022	3. Full
6	44281	-	MS	DEMO	Sperm	-	CEMRE .	02.12.2022	3. Full
7	44030	-	MS	DEMO	Sperm	-	Göçülte CEMRE .	08.07.2021	3. Full
7	8800	-	HAZAN	DEMO	Sperm	-	Göçülte REZZAN .	16.05.2016	2. Full
8	10000	-	Marla	DEMO	Sperm	-	SİSTEM YÖNETİCİSİ	08.07.2016	2. Full
9	30000	-	MOĞSOĞUT	DEMO	Sperm	5. Day	TESA REZZAN .	08.07.2016	2. Full
10	30000	-	MOĞSOĞUT	DEMO	Sperm	-	TESA REZZAN .	08.07.2016	2. Full

Automated Cryo Duration Tracking & Renewals

Cryo Duration Tracking

Start Date: 01/01/2025 End Date: 17/05/2026 Sample Type: All [List](#) [Excel Aktar \(252\)](#)

Expired: 552 Extension Req.: 107 Disposal Req.: 73 Disposed: 0 Unreachable: 53 Undecided: 31

#	Sample Type	File No	Patient Name	Phone	Spouse Name	Freeze Date	Expiry Date +	Remaining/Expired	Straw/Vial	Sample Count	Status	Note
1	Embriyo	37576	BUŞRA DEMO	+90	MEHMET DEMO	01.01.2024	01.01.2026	137g geçti	1	1	<input type="checkbox"/> Extension Req. <input type="checkbox"/> Undecided	
2	Embriyo	54774	SEMRA DEMO	+90	ENGIN DEMO	01.01.2025	01.01.2026	137g geçti	6	15	<input type="checkbox"/> Extension Req. <input checked="" type="checkbox"/> Disposal Req. <input type="checkbox"/> Disposed <input type="checkbox"/> Unreachable <input type="checkbox"/> Undecided	
3	Embriyo	41447	MEHTAP DEMO	+90	AKIN DEMO	12.12.2020	02.01.2026	136g geçti	6	14	<input type="checkbox"/> Extension Req. <input type="checkbox"/> Disposal Req. <input type="checkbox"/> Expired <input type="checkbox"/> Disposed <input type="checkbox"/> Unreachable <input type="checkbox"/> Undecided	
4	Embriyo	35817	BAHAR DEMO	+90	ENGIN DEMO	01.01.2019	02.01.2026	136g geçti	1	1	<input checked="" type="checkbox"/> Extension Req. <input type="checkbox"/> Disposal Req. <input type="checkbox"/> Extension Req.	

Automated Audits

The system continuously tracks the legal and clinical storage duration of every individual sample against internal clinic policies.

Patient SMS Integration

Automatically triggers and sends reminder SMS messages to patients a configurable number of days before their storage term expires.

Actionable Workflows

Consolidates operational tasks by cleanly listing samples that require extension billing, disposal authorization, or unreachable patient follow-up.

The Upgrade Imperative

Comparing the fragility of the status quo against the Tank Controls ecosystem.

	Manual Cryo Management	Tank Controls Automated System
Labeling	<p>✗ Handwritten labels Prone to fading, misreading, and human transcription error.</p>	<p>✓ Automated RFID Printing Indestructible, -196°C safe, unalterable digital identity.</p>
Witnessing	<p>✗ Secondary human witnessing High labor cost, vulnerable to operational distraction.</p>	<p>✓ Electronic RFID Witnessing Instant, automated, infallible point-of-care validation.</p>
Space Management	<p>✗ Spreadsheets and physical logs Often outdated, requires constant manual syncing.</p>	<p>✓ Real-Time 2D Digital Mapping Live capacity tracking, dynamic updating, zero lost space.</p>
Renewals	<p>✗ Manual file audits Labor-intensive, high risk of missed billing cycles.</p>	<p>✓ Automated Dashboards & SMS Zero-touch compliance, optimized revenue capture.</p>

Seamless Implementation & Infrastructure

Zero Hardware Friction

Designed for immediate deployment. Requires no complex, proprietary external hardware servers to initiate tracking.

Flexible Hosting

Adapts to clinic IT policies. Deploy via ultra-secure Cloud Servers for instant access, or execute a local on-premise installation for absolute internal data control.

Infinite Scalability

Built to grow. Centralized management natively supports an unlimited number of tanks, making it the ideal standard for single-site boutiques and multi-site hospital networks.

Uncompromising Security & Global Standards

Enterprise-grade protection for your most sensitive biological assets.



Data Security

Advanced, localized encryption protocols protect highly sensitive patient biological data and operational records from unauthorized access.



Global Legal Compliance

Comprehensive, unalterable audit trails automatically meet and exceed international IVF electronic witnessing and traceability standards.



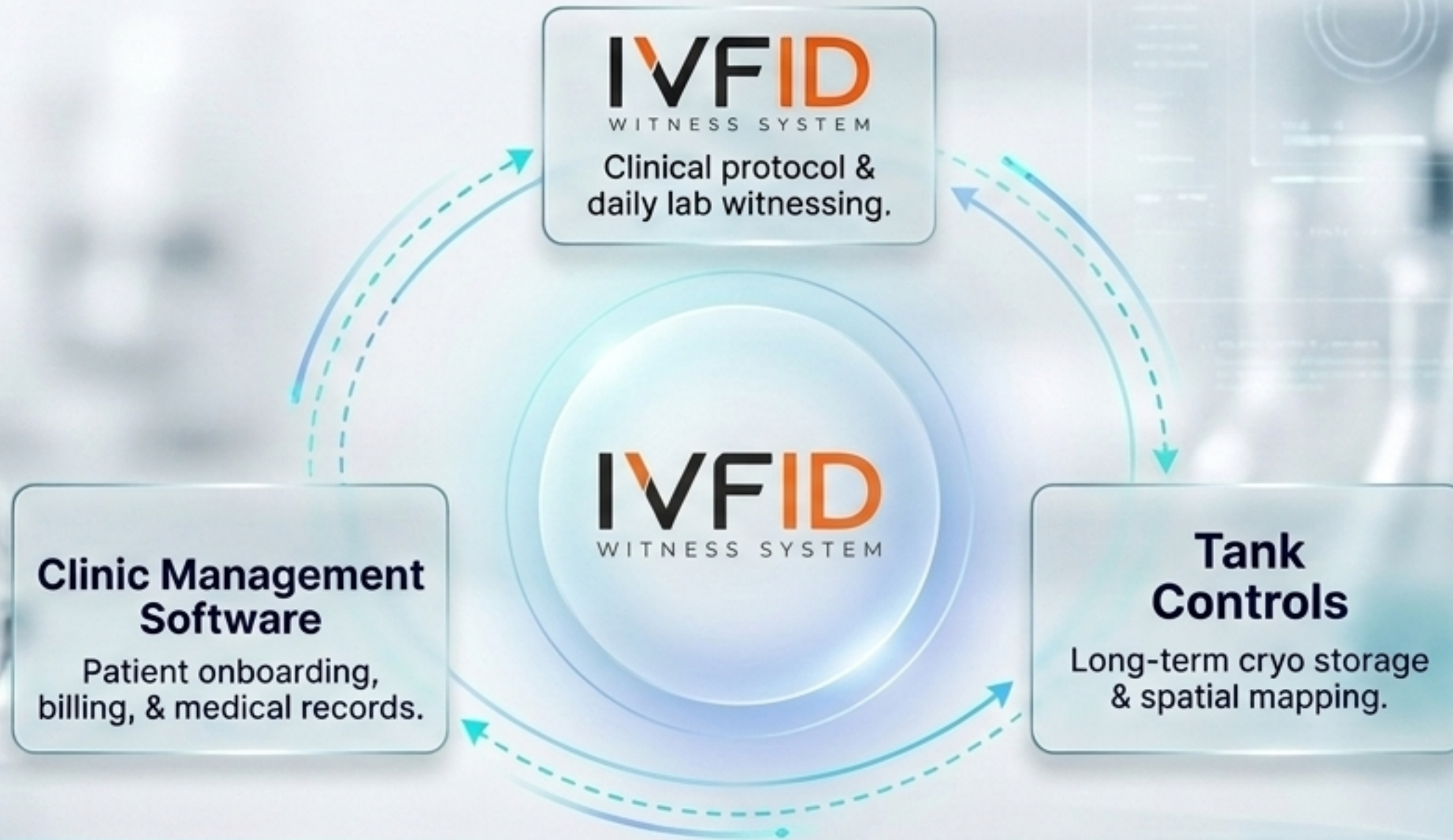
Human Error Eradication

The architecture actively restricts and alerts against the catastrophic risk of sample mix-ups, fundamentally protecting patients' futures and the clinic's reputation.

Part of the **IVFID** Ecosystem

IVFID
WITNESS SYSTEM

Tank Controls is not an isolated utility—it is a deeply integrated module within a comprehensive clinical operating system.



End-to-End Continuity: One unified database powering the entire patient journey—from initial onboarding to long-term preservation.

Secure Every Sample. Every Step. Every Time.

Transition from manual risk to digital certainty. Request a comprehensive system demonstration today.



Contact Us



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