CheckCells

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FDA CLEARED FDA CLEARED 510(k)

SEAMAN PRO™ BY CHECKCELLS NOVEL AI MICROSCOPE

IMPROVING THE PERFORMANCE AND PRODUCTIVITY OF ROUTINE SEMEN ANALYSIS.

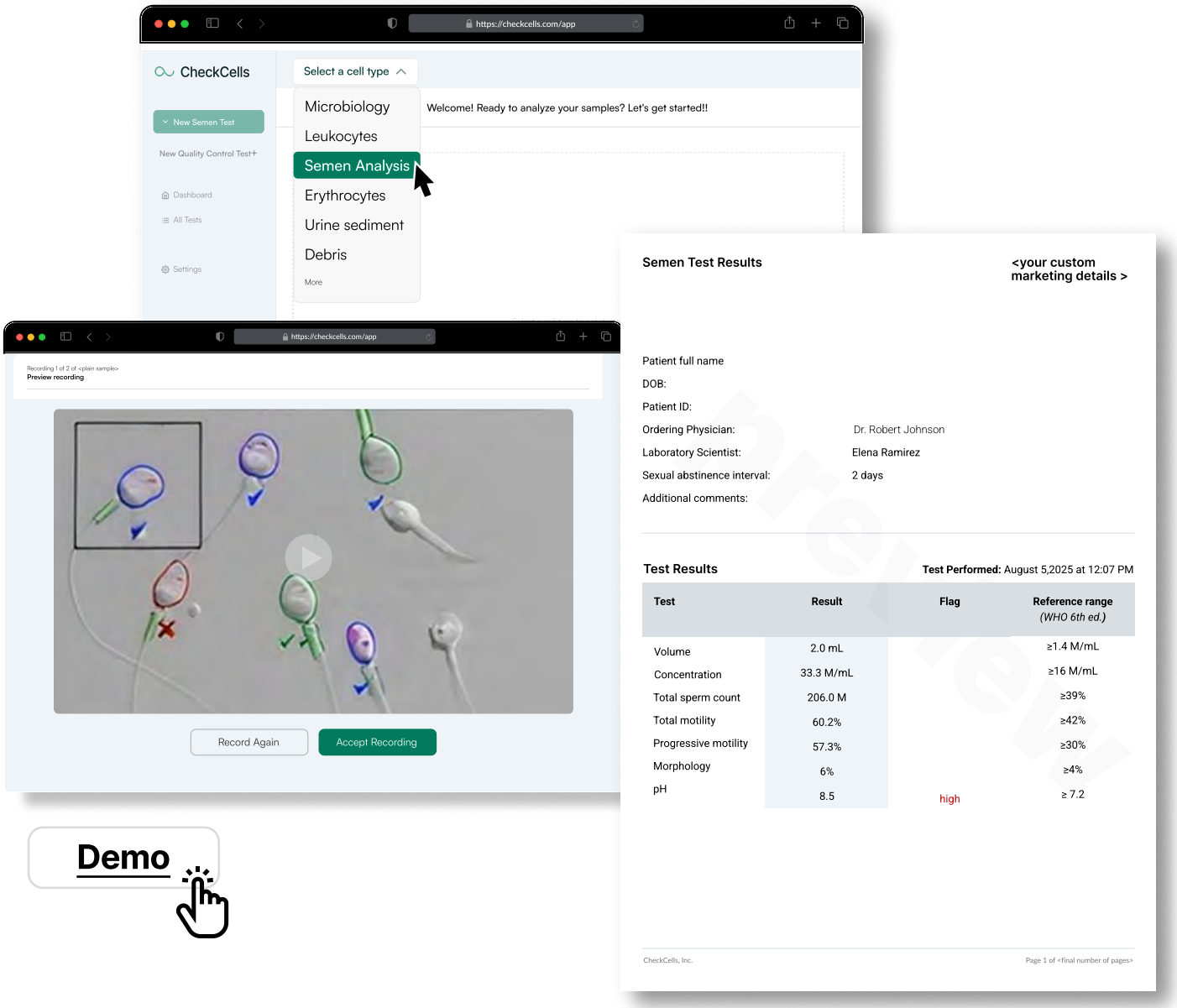
TRUSTED BY: Cedars Sinai · Tower Urology at CEDARS-SINAI Office Tower · ALAB · Marshfield Clinic Health System · University of California Santa Cruz · Sanford Health

WE INCREASE LABORATORY THROUGHPUT

CheckCells solution addresses one of the biggest problems in todays laboratory workflows. We specialize in helping lab technicians achieve productivity, through improved detection and classification of semen parameters, while reducing interpretation and reporting time.

The **Seaman PRO™ - AI Microscope** is an intuitive, fully automated semen analysis system that produces high quality and consistent results, especially in oligospermia samples.

Experience the future of cell testing with CheckCells, where an easy-to-use device and intelligent software streamline laboratory workflows and **generates standardizable, traceable, customizable reports.**



CHECKCELLS SEAMAN PRO™ - AI MICROSCOPE

Seaman PRO™ - AI Microscope is optimized to detect abnormalities in sperm motility, concentration, and morphology that may go undetected with manual methods. When undetected, these evaluations may lead to misclassification of male factor infertility, treatment strategies, and impact conception goals.

Seaman PRO™ utilizes AI-driven image analysis and strict compliance with WHO 6th edition reference values, which enables diagnostic precision across a wide range of sample qualities regardless of operator skill.

The accuracy of the **Seaman PRO™** reduces the risk of inaccurate results, ensuring reliable data for clinical decision-making. This makes **Seaman PRO™ - AI Microscope** a superior alternative to manual microscopy in both accuracy and workflow efficiency.

TABLE Correlation coefficients and P values comparing sperm concentration assessment with CASA systems and manual method.

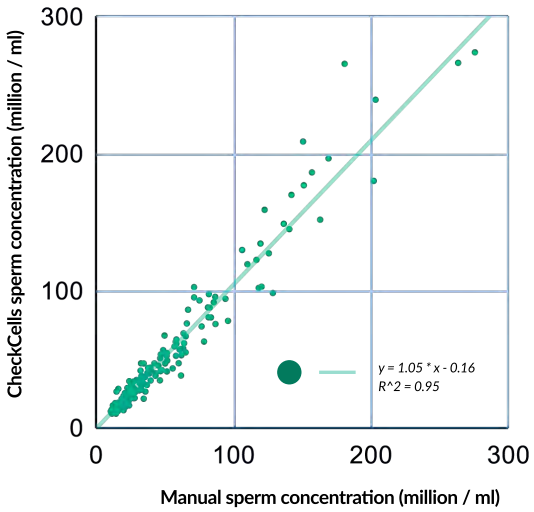
Reference	CASA System	Correlation Coefficient	P value
Package Insert	**Seaman PRO™ - AI Microscope**	**0.97**	**<0.0001**
Engel *et al.*, 2019	SQA Vision	0.84	<0.001
Akashi *et al.*, 2010	CellSoft	0.80	<0.0001
	SMAS	0.87	
Tomlinson *et al.*, 2010	Novel CASA system	0.94	<0.001
Agarwal *et al.*, 2019	LensHooke X1 PRO	0.97	Not reported
Baig *et al.*, 2019	BIOVIS 2000	0.99	<0.0001
Cheon *et al.*, 2019	Smartphone-based CASA System (SEEM) (Recruit Lifestyle Co., Ltd., Tokyo, Japan)	0.38	0.04
	Laboratory based CASA System (SAIS plus) (Medical Supply, Seoul, Korea)	0.99	<0.001

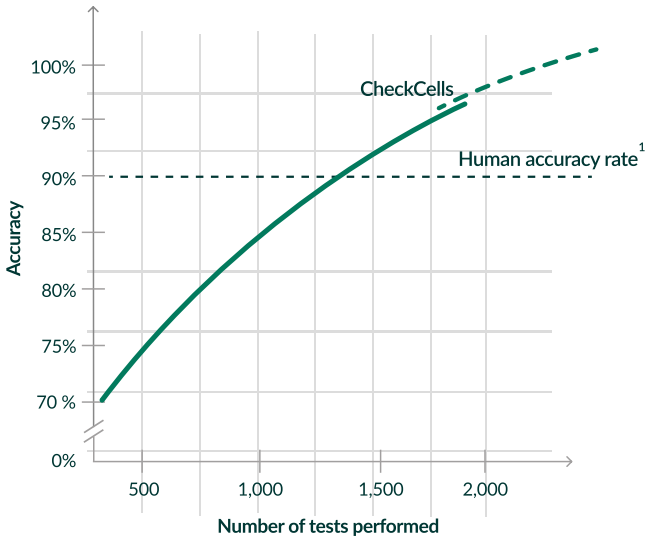
CASA, computer - aided sperm analyzers; SAIS, Sperm Analysis Imaging System; SEEM, Sperm self check kit & smartphone app; SCA, Sperm Class Analyzer; SMAS, Sperm Motility Analyzer System; SQA, Sperm Quality Analyzer.

ASSESS 6 KEY SPERM PARAMETERS

Concentration, Total Motility, Progressive Motility, Morphology, pH and Viability -
with the ability to further explore sperm cell motion using advanced 3D reconstruction analysis.

CheckCells vs. manual lab analysis

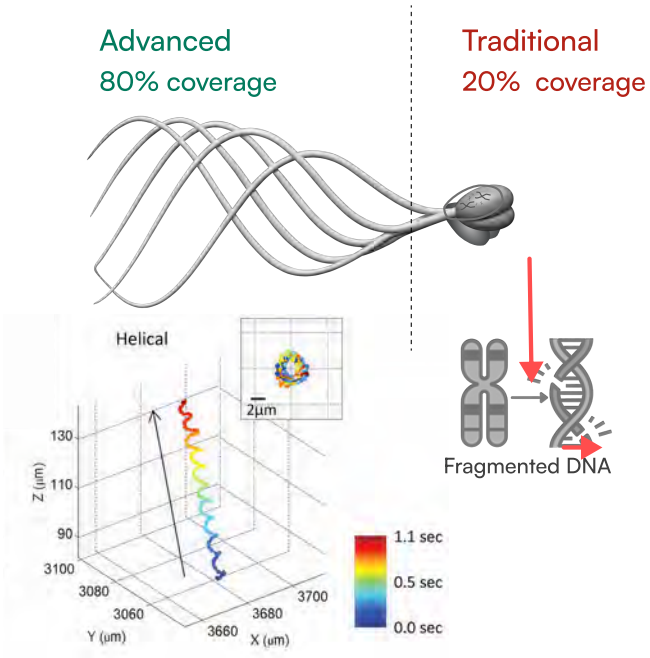




[1] Plebani, M., & Piva, E. (2012). Review of Medical Errors in Laboratory Diagnostics and Where We Are Today. Laboratory Medicine, 43(2), 41-44.

ADVANCING FERTILITY ASSESSMENT THROUGH 2D-TO-3D RECONSTRUCTION

With advanced 2D-to-3D analysis and integrated telemetry analysis, **our system captures up to 80% of sperm tail movement,** far beyond the 20% seen with traditional methods. The addition of telemetry provides continuous, high-resolution monitoring of motility parameters over time, enabling detection of subtle variations and long-term behavioral trends. This expanded view uncovers subtle motility patterns and abnormalities, offering more precise and reliable fertility assessments.



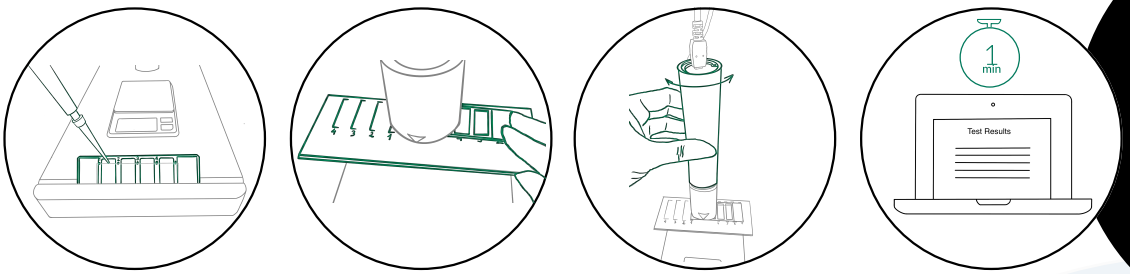
IMPROVE THE STANDARDIZATION OF YOUR SEMEN ANALYSIS PERFORMANCE

- Traditional Semen Analysis performance **varies from lab to lab**[1], even with optimal technique.
- **The best sample repeatability** due to superior field of view capability.
- **Seaman PRO™ - AI Microscope reliably detects concentration samples** unlike other CASA systems.

System	Average CV (%)
SEAMAN PRO™ - AI Microscope	5.00
Other AI	14.03

DECREASED TURNAROUND TIME VERSUS TRADITIONAL SEMEN ANALYSIS

Expedite management and treatment earlier for fertility success, especially in IUI scenarios.



Results in less than 5 minutes

DEFINITIVE ANSWERS, CONFIDENT RESULTS

Seaman PRO™ - AI Microscope provides definitive answers needed to ensure patients receive the **appropriate management and therapy as soon as possible**

Product	Description	Catalog #
Seaman PRO	System	#S-001
Sperm Chambers	Fifty (50) Sperm Counting Slides	#CS-001

Reference:
1. Lemmens, Louise et al. "External quality control and training of semen analysis in the Netherlands: starting point for further reduction of outcome variability." Asian journal of andrology vol. 24,1 (2022): 15-20

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