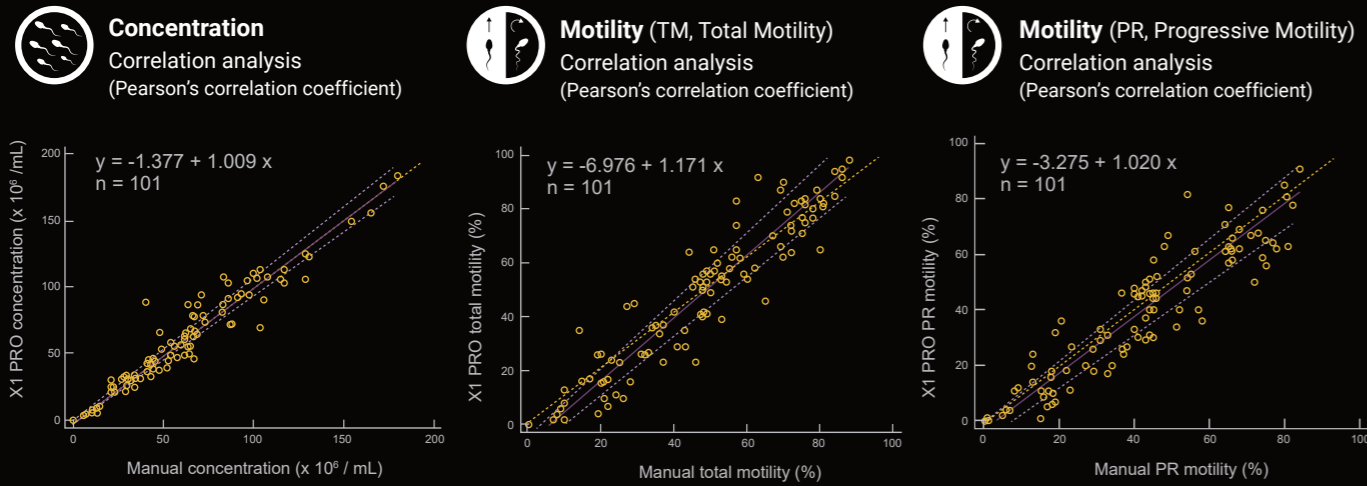


## Validation Report

### Manual Method V.S LensHooke® Semen Quality Analyzer

- Concentration, total motility and progressive motility measured using LensHooke® X1 PRO Semen Quality Analyzer had a very high correlation ( $p > 0.9$ ) with Manual Semen Analysis.



- Concentration & total motility showed correlation of inter-observer agreement ( $r > 0.9$ ) & CV% for intra-observer agreement ( $< 10\%$ ) for LensHooke® Semen Quality Analyzer.

Parameters	Correlation coefficient for the inter-observer agreement		Coefficient of variance (CV%) for the intra-observer agreement	
	Concentration	Motility	Concentration	Motility
Manual	0.9351	0.9181	8.63%	4.71%
LensHooke®	0.9485	0.9118	7.85%	9.89%

**Source** Agarwal A, Panner Selvam MK, Ambar RF. Validation of LensHooke® X1 PRO and Computer-Assisted Semen Analyzer Compared with Laboratory-Based Manual Semen Analysis. World J Mens Health. 2021 Jul;39(3):496-505.

## Product Specification

### LensHooke® X1 PRO Semen Quality Analyzer

Control Panel	3.5-in resistive touch screen
External Power Input	AC 100-240V / 50~60 Hz; Output DC 5V/2A
Battery Durability	2500 mA (embedded re-chargeable lithium polymer battery, DC3.7V/2.5Ah)
Internal Storage Capacity	30 records including data and images
Detection Time	2~5 minutes (Depends on the sample condition)
Power Adaptor	Input: 100~240 Vac, 50~60 Hz, 0.5 A; Output: 5 Vdc, 2 A Max
Size	L 140 x W 70 x H 71.2 mm

### LensHooke® CS1 Semen Test Cassette

pH	pH 6.0~8.0 (Each Scale Range: 0.2)
Concentration	$< 0.1 \sim 300$ ( $10^6$ /ml)
Motility (PR+NP,Total)	$< 1 \sim 100\%$
Normal Morphology	$< 1 \sim 100\%$

Patented NO.: US 9,959,621 B2



X1.E004  
ver.2153  
www.lenshooke.com



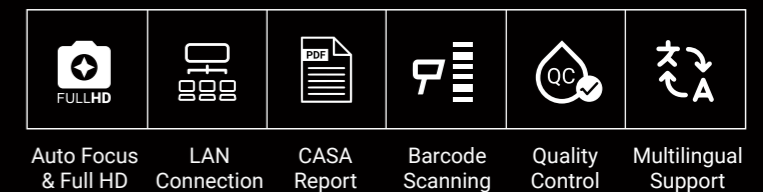
LensHooke®



EASY TO USE

Only 3 Steps, to get all of the test results!

Semen  
Quality Analyzer  
X1 PRO





# X1 PRO Semen Quality Analyzer

NEW



World Health Organization  
**WHO 6<sup>th</sup>**



## 4 Key Data for Diagnosis



pH value



Concentration



Morphology



Motility  
(NP, PR, Total Motility)

## 3 WHO Editions

WHO 4<sup>th</sup> | WHO 5<sup>th</sup> | WHO 6<sup>th</sup>



## Barcode Scanning

LensHooke® X1 PRO is able to connect with the barcode scanner by USB port to scan the patient / sample's ID or product lot number.



## Customized PDF Report

LensHooke® X1 PRO offers 4 key data for diagnosis in data format (MSC, PMSC, VAP, VSL, VCL, LIN, STR, WOB, ALH, and BCF), and allows users to choose their own logo/title and add it to the PDF report.



## Diversified Report Format

LensHooke® X1 PRO provides PDF, video reports, and CSV format data reporting to allow for easier system transfer.



## Auto Focus & Full HD

LensHooke® X1 PRO is capable of taking 1080P Full HD dynamic images to enable immediate sperm morphology examination by medical personnel.



## LAN Connection

LensHooke® X1 PRO LAN solutions can allow other computers, laptops, and iPads to connect with the analyzer to preview or download the files and videos.



## Multilingual Support

Built in Multilingual Support. Localize the LensHooke® X1 PRO in multiple languages. Support your customers in their local language.



English



繁體中文



简体中文



日本語



Português



Deutsche



Italiano



## Quality Control

By using with LensHooke® X QC Beads, X QC Reticle, and X QC Video, LensHooke® X1 PRO can do the Quality Control Test for all of the parameter.



NEW

## External Quality Control

LensHooke® X1 PRO can support the external quality assessment of CAP (College of American Pathologists).

