



Simplifying real-time blood testing for everyone, everywhere.

Simple

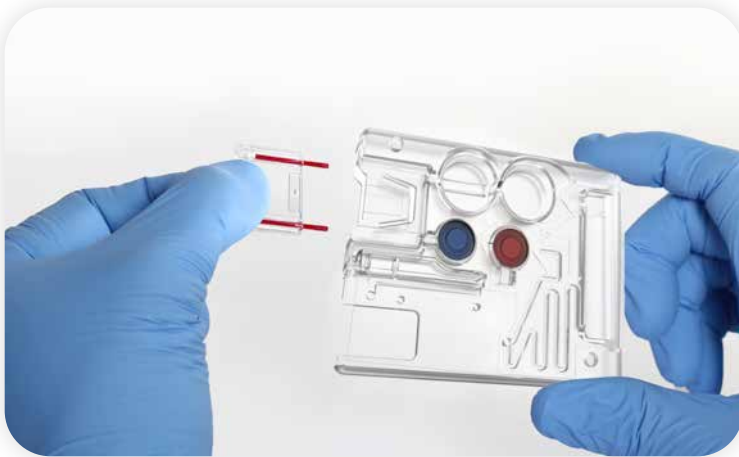
The HemoScreen™ makes blood testing exceptionally simple, using a disposable cartridge that includes all necessary reagents and requires no maintenance or calibration.

So simple, it takes just 3 easy steps:



1

Draw Blood Sample



2

Insert Sample into Cartridge

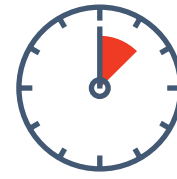


3

Insert Cartridge into Analyzer

Rapid

The HemoScreen™ shortens turnaround time significantly by providing CBC results within 6 minutes, in the doctor's office, ER, ICU or expert clinics – no need for centralized labs. Physicians can diagnose and make substantiated treatment decisions for patients during a single office visit.



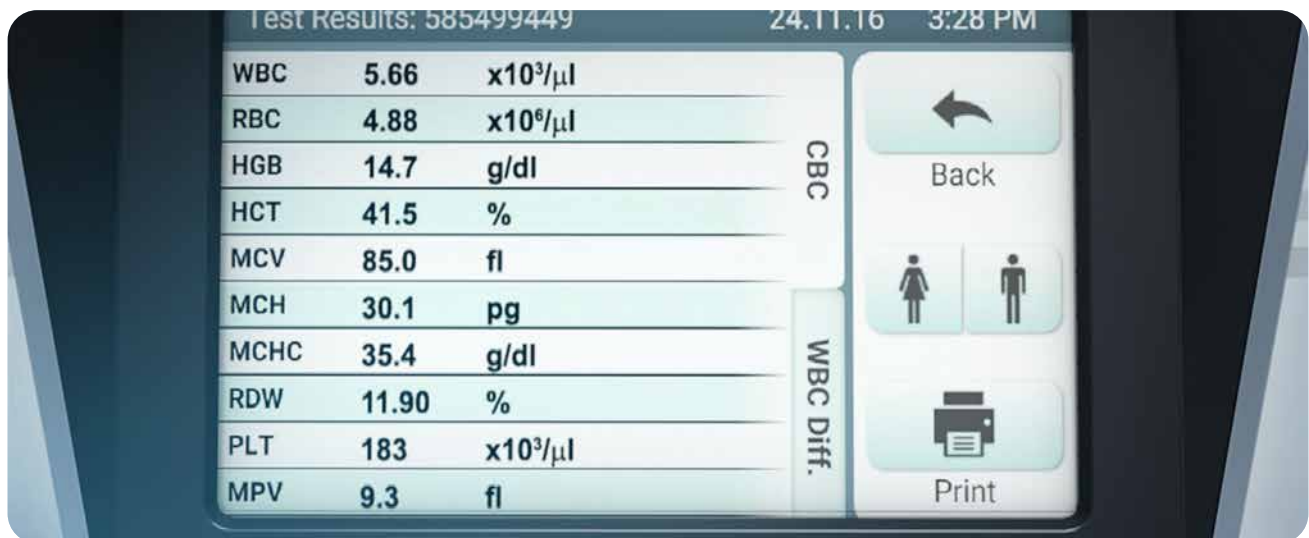
6 minutes
from test
to results

Accurate

The HemoScreen™ measures 20 standard CBC parameters, including the 5-part leukocyte differential, with the accuracy and precision of the most advanced central lab analyzers.

Its performance has been validated in multiple scientific peer-reviewed studies*, and the analyzer is FDA-cleared and CE-marked for both venous and capillary blood samples. The HemoScreen™ also offers a comprehensive flagging panel for the presence of WBC, RBC, and PLT distributional and morphological abnormalities.

*see www.pixcell-medical.com/evidence



Test Results: 585499449			24.11.16	3:28 PM
WBC	5.66	$\times 10^3/\mu\text{l}$	CBC	Back
RBC	4.88	$\times 10^6/\mu\text{l}$		
HGB	14.7	g/dl		
HCT	41.5	%		
MCV	85.0	fl		
MCH	30.1	pg		
MCHC	35.4	g/dl		
RDW	11.90	%		
PLT	183	$\times 10^3/\mu\text{l}$		
MPV	9.3	fl		
			WBC Diff.	Print

Robust

The HemoScreen™ has been specifically designed to withstand the demanding point-of-care environment and maintain performance no matter the operator's experience level.

Manufactured according to the highest quality standards, the HemoScreen™ uses the most durable components. No maintenance and minimal downtime is guaranteed due to the analyzer's liquid-free design, as liquid reagents and blood samples reside in the cartridge throughout the process and do not come in contact with the analyzer.

Physical Specification

Analyzer dimensions & weight

Height	Width	Depth	Weight
30 cm	17.5 cm	26 cm	5.5 kg
11.8 in	6.9 in	10.2 in	12.1 lb

Throughput: ≈ 10 samples/hour

Operating temperature & humidity:

+17°C (+63°F) to +27°C (+81°F) - relative humidity of 10%-90% maximum, without condensation

Specimen volume:

CBC mode: 20µl | Diff mode: 20µl

Power requirements:

Power supply: 100–240VAC, 2–4A, 50/60Hz

Power consumption: Approx. 60W

Software Specifications

Data Processing

- LCD display and touch panel
- Operating System: Windows 10
- Connection: Ethernet, USB
- Connectivity to LIS: HL7 & POCTIA
- Options: bar code reader, printer

Quality Control

- PIX002 PIX-CBC 3-levels liquid control (R&D Systems, MN, USA, a Bio-Techne company)
- Target values download (USB, 2D barcode reader)

Parameters & Performance Data

20 Parameters:

WBC	RBC	PLT
NEU# & NEU%	HGB	MPV
LYM# & LYM%	HCT	
MON# & MON%	MCV	
EOS# & EOS%	MCH	
BAS# & BAS%	MCHC	
	RDW-CV	

Including flagging for immature granulocytes (IG), nucleated RBC and blasts

Linearity:

Parameter	Units	Linearity Limits
WBC	10 ³ /µL	0.5-300
RBC	10 ⁶ /µL	1.0-8.8
HGB	g/dL	3.0-25.0
HCT	%	9.0-78.0
PLT	10 ³ /µL	20-800

Precision (repeatability):

Parameter	Unit	Measuring Ranges	CV (%)
WBC	10 ³ /µL	WBC >4.0 x 10 ³ /µL	≤5.0
RBC	10 ⁶ /µL	RBC >3.5 x 10 ⁶ /µL	≤2.5
HGB	g/dL	3.0-25.0	≤2.5
HCT	%	10-70	≤2.5
PLT	10 ³ /µL	PLT >150 x 10 ³ /µL	≤5.0

Measurement Principles

The HemoScreen™ uses a patented technique called viscoelastic focusing, which causes the cells to perfectly align into a single plane. High resolution microscopic images are taken of the flowing cells. Each image is then analyzed using machine vision and AI algorithms, and the various cell types are differentiated and counted. WBCs are stained prior to analysis to enable differentiation between their subtypes and abnormal cells. HGB is calculated based on the optical density measured on individual intact cells.

The HemoScreen analyzer is factory calibrated. No further calibration is required.

Standards

- IVDD 98/79/EC
- EN ISO 13485
- IEC 61010
- IEC 61010-2-101:2019
- EN 60601

Approvals

- CE (IVDD Directive 98/79/EC Annex III)
- FDA Clearance Number: K180020
- ETL Mark (US & Canada): Listing Number 5012972
- TGA Approval (Australia)
- AMAR Certificate (Israel)



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