



L E West Ltd

medical supplies worldwide

Tel: + 44 (0) 20 8532 7777

Fax: + 44 (0) 20 8594 0324

sales@le-west.co.uk www.le-west.co.uk

PTS Panels Direct LDL Cholesterol Test Strips
The world's first portable direct LDL cholesterol
test for the point-of-care market

CardioChek™  **P.A**

Blood Analyser

Innovative

Runs on hand-held device

Fast

Results in one to two minutes

Flexible

Suitable for multiple clinical applications

Convenient

No fasting or refrigeration

Cost Effective

No expensive lab analysis



CardioChek PA Blood Analyser

PTS Panels Direct LDL Cholesterol Test Strips

Cholesterol: the need for more screening



High cholesterol is responsible for more than half of the annual 125,000 deaths from coronary heart disease in the UK, yet only 14 percent of adults are aware that cholesterol is a risk factor(i).

The Joint British Societies Guidelines on Prevention of Cardiovascular Disease in Clinical Practice (JSB2) recommends that adults aged 40 years and over who have no history of CHD or diabetes, and who are not already being treated for raised cholesterol, should be considered for opportunistic CVD risk assessment in primary care(ii).

New JSB2 targets for cholesterol lowering in people with increased CVD risk of ≥ 20 percent include:

- Total cholesterol < 4 mmol/l
- LDL cholesterol < 2 mmol/l
- or a 25 percent reduction in total cholesterol and 30 percent reduction in LDL cholesterol

Why measure LDL?

Out of all the lipids measured, low-density lipoprotein (LDL) is critical in determining risk for cardiovascular disease, stroke or heart attack. Traditionally, LDL is calculated, rather than measured, using the Friedewald equation, which states that LDL cholesterol = total cholesterol - HDL cholesterol - triglycerides/5 (mg/dL), or LDL cholesterol = total cholesterol - (HDL cholesterol - (trig/2.18)) in mmol/L.

However, with this calculation, LDL also includes lipoprotein(a) and intermediate density lipoproteins, adding 0.13 -0.26mmol/L to the true LDL measurement. Furthermore, once triglycerides exceed 4mmol/L the accuracy of the calculated LDL is reduced. Accuracy is also affected if the patient is a diabetic.

Direct LDL

Existing direct LDL tests block or dissolve lipoproteins to isolate LDL cholesterol. However, these tests have to be run in clinical laboratories and are not yet widely available and often expensive.

CardioChek PA is a new direct LDL cholesterol test that can be run by health professionals at the point of care, giving results in just two minutes.

PTS Panels Direct LDL Cholesterol Test Strips

Designed for use with the CardioChek PA Blood Analyser – a portable, hand-held unit – the Direct LDL Cholesterol Test Strips provide a simple and immediate means of diagnosing and monitoring levels of LDL cholesterol. Since results are delivered within minutes, patients who are found to have elevated LDL levels can be shown their results on the CardioChek screen. Seeing instant results provides impact, and can help strengthen the call to action for the patient.

The measuring range of the PTS Panels Direct LDL Cholesterol Test Strips is 1.29-5.18mmol/L. A drop of a patient's blood is placed on a test strip, which has been inserted into the CardioChek analyser. In around two minutes, a numerical value appears on the analyser. This value, when compared to standard guidelines, can determine whether or not the patient is within recommended limits or they require management of their lipid profile.



An end to fasting

There is a further significant advantage of using the PTS Panels Direct LDL Cholesterol Test Strips. With traditional cholesterol testing, patients ideally must fast for nine to twelve hours beforehand. However, since the test strips are not affected by serum triglycerides and LDL cholesterol does not change during the post-prandial state, fasting is no longer required.

Accurate results

The US-based Centre for Disease Control's Cholesterol Reference Method Laboratory Network (CRMLN) was established to certify manufacturers of clinical diagnostic products that measure total cholesterol, HDL cholesterol or LDL cholesterol, with certification providing evidence of traceability to the National Reference System for Cholesterol (NRS/Chol).

In tests carried out at a CRMLN laboratory, the CardioChek PA System exhibited excellent performance and precision compared to CRMLN.

CRMLN CHOLESTEROL CERTIFICATION CRITERIA

Parameter	LDL Cholesterol
R ²	0.9633
Bias at medical decision points	-0.4% at 100 mg/dl (2.59 mmol/L) -0.1% at 130 mg/dl (3.37 mmol/L) -0.1% at 160 mg/dl (4.14 mmol/L)
Average % bias	-0.1%
Among-run CV	2.6%
Total Error	5.3%

THE CARDIOCHEK PA TESTS 11 DIFFERENT PARAMETER OR PARAMETERS GROUPS STRATEGICALLY CHOSEN BY PHYSICIANS.

Individual Tests	Panel Tests
Total cholesterol	Lipid Panel
HDL cholesterol	• Total cholesterol • HDL cholesterol
Direct LDL cholesterol	• Triglycerides • LDL cholesterol (calculated)
Triglycerides	Total cholesterol + glucose
Glucose	Total cholesterol + HDL cholesterol
Ketone	Metabolic Chemistry Panel
Creatinine	• HDL cholesterol • Glucose • Triglycerides

Benefits

INNOVATIVE • World first

FAST • Results in one to two minutes

FLEXIBLE • Suitable for multiple clinical applications

ACCURATE • CE marked • FDA cleared • CLIA waived

EASY TO USE • Hand-held portability

CONVENIENT • No fasting • No refrigeration • No laboratory

EFFECTIVE • No follow-up consultation delay

