

# sdLDL-C

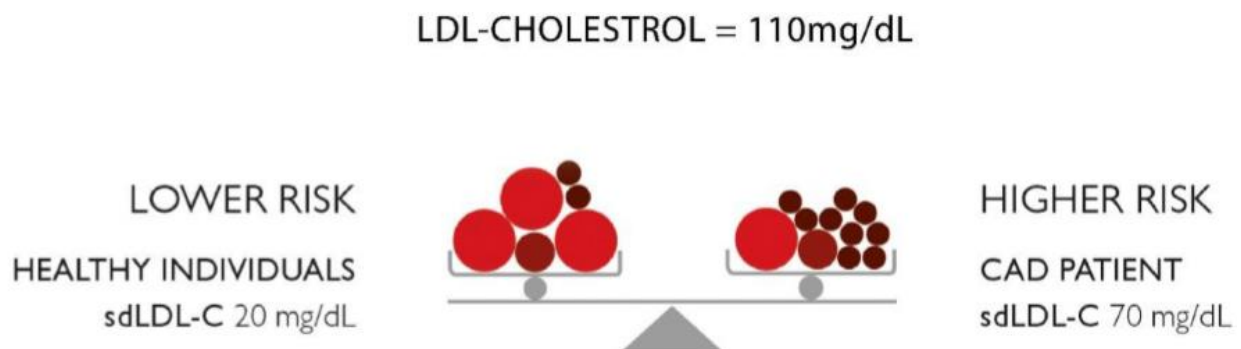
## What is sdLDL-Cholesterol

### Clinical significance of small dense LDL Cholesterol (sdLDL-C)

The LDL Particle population within LDL is heterogeneous – meaning that size, density & composition of each particle will be different. sdLDL-C is a sub fraction of low-density lipoprotein (LDL) with smaller particle size and higher density than larger more buoyant LDL. They all transport triglycerides and cholesterol to the tissues, but their atherogenesis varies according to their size. sdLDL-C will more readily permeate the inner arterial wall. It has lower affinity to the Hepatic LDL receptor, and as such circulates in the blood longer. It is more susceptible to oxidation.

### Risk assessment

As sdLDL-C is particularly atherogenic; a person with elevated sdLDL-C levels has a 3-fold increased risk of myocardial infarction (MI). sdLDL-C measurement provides a more comprehensive understanding of the risk of lipoproteins within a patient. Measurement of sdLDL-C enables the clinician to gain a comprehensive overview of lipid risk factors and to tailor treatment accordingly.



Even though the overall LDL-C mass looks the same for each patient, by measuring sdLDL-C, there are very different treatment considerations needed.

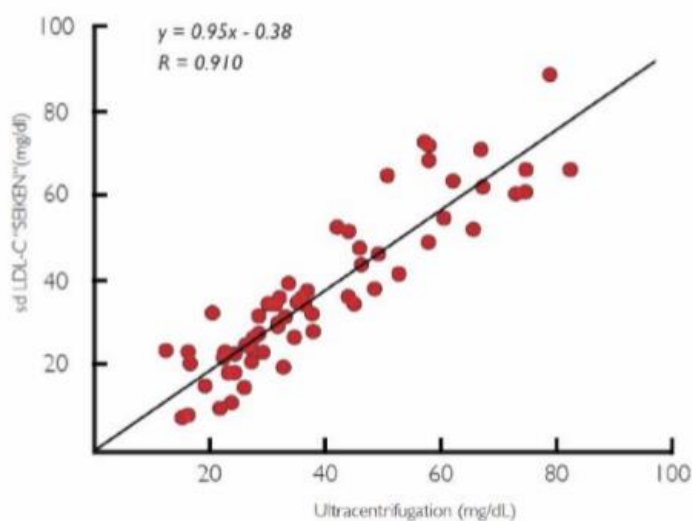
### Methods of detection

The only direct automated sdLDL-C kit on the market, The Randox sdLDL-C 'Ex-Seiken' test is a direct method for the quantitative determination of sdLDL-C using automated chemistry analysers capable of accommodating two-reagent assays. The assay consists of two steps and is based on the use of well-characterised surfactants and enzymes that selectively react with certain groups of lipoproteins.

## Key features of the Radox sdLDL-C assay

- Direct, automated test for convenience and efficiency
- Rapid analysis results can be produced in as little as ten minutes, facilitating faster patient diagnosis and treatment plan implementation
- Good correlation to the gold standard ultracentrifugation method
- Liquid ready-to-use reagents for convenience and ease of use
- Applications available detailing instrument specific settings for a wide range of analysers
- Clearance method sdLDL-C controls and calibrator available

Correlation of Ultracentrifugation & Denka Seiken methods



The Radox automated sdLDL-C assay correlates well with the gold standard method

## Useful links

[Download our Reagents Brochure](#) for information on a wide range of clinical assays from Radox.

[Contact us via our enquiry form](#)

Buy online via our Radox Store [www.store.randox.com](http://www.store.randox.com)