

Distribution and ratio of Oxidized LDL, LDL, HDL and Cholesterol

Expected values

Good practice dictates that each laboratory establishes its own expected range of values.

If needed, the following results may serve as a guide until the laboratory has gathered sufficient data of its own. **Note** that the data presented in this Technical note was generated with the Oxidized LDL ELISA available before relaunch of the product the 1st of September 2021. This data was most recent presented in the Directions for Use (31-3136) version 22.0.

The concentration range of oxidized low-density lipoprotein (OxLDL), the correlation between OxLDL and total cholesterol, and the ratio between Cholesterol/high-density lipoprotein (HDL) and low-density lipoprotein (LDL)/HDL is presented in figure 1-2 and table 1-4.

The results in figure 1-2 and table 1-2 were obtained from 149 ambulatory, randomly selected individuals, and the results in table 3 and 4 from 147 individuals, in the Stockholm area, Sweden.

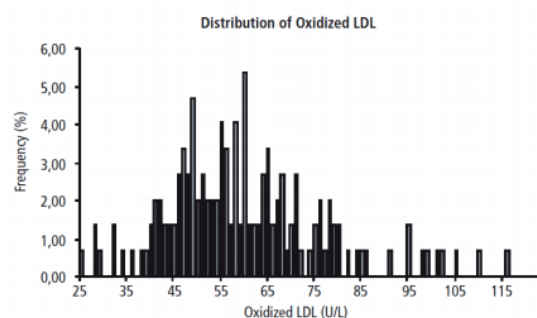


Figure 1: Distribution of Oxidized LDL.

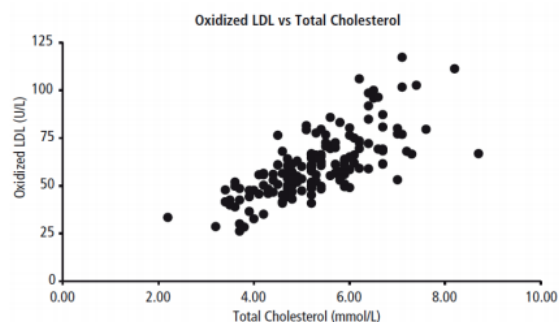


Figure 2: Oxidized LDL plotted against total cholesterol.

Table 1: The range of OxLDL and the Cholesterol/HDL ratio.

	Mean	Median	Range
Range OxLDL (U/L)*	61	59	26-117
Cholesterol/HDL ratio**	4.10	3.90	1.68-7.89

*Arbitrary units. The MercoDia Oxidized LDL ELISA is calibrated in relative arbitrary units against an in-house reference preparation.

**Measured data Cholesterol (mmol/L) and HDL (mmol/L).

Table 2: Distribution of Oxidized LDL and Cholesterol/HDL ratio.

Oxidized LDL (U/L)	Cholesterol/HDL Ratio	Patient/Total (%)	
Quartile 1			
Q1(26-49)	1.68-3.13	22/149	(14.8)
Q2(50-59)	1.68-3.13	10/149	(6.7)
Q3(60-69)	1.68-3.13	5/149	(3.4)
Q4(70-117)	1.68-3.13	0/149	(0.0)
Quartile 2			
Q1(26-49)	3.21-3.86	7/149	(4.7)
Q2(50-59)	3.21-3.86	17/149	(11.4)
Q3(60-69)	3.21-3.86	10/149	(6.7)
Q4(70-117)	3.21-3.86	3/149	(2.0)
Quartile 3			
Q1(26-49)	3.87-4.79	7/149	(4.7)
Q2(50-59)	3.87-4.79	11/149	(7.4)
Q3(60-69)	3.87-4.79	11/149	(7.4)
Q4(70-117)	3.87-4.79	9/149	(6.0)
Quartile 4			
Q1(26-49)	4.80-7.89	1/149	(0.7)
Q2(50-59)	4.80-7.89	4/149	(2.7)
Q3(60-69)	4.80-7.89	7/149	(4.7)
Q4(70-117)	4.80-7.89	25/149	(16.8)

Table 3: The range of OxLDL and the LDL/HDL ratio.

	Mean	Median	Range
Range OxLDL (U/L)*	61	59	26-117
LDL/HDL ratio**	2.51	2.36	0.55-5.56

*Arbitrary units. The MercoDia Oxidized LDL ELISA is calibrated in relative arbitrary units against an in-house reference preparation.

**Measured data LDL (mmol/L) and HDL (mmol/L).

Table 4: Distribution of Oxidized LDL and LDL/HDL ratio.

Oxidized LDL (U/L)	LDL/HDL Ratio	Patient/Total (%)	
Quartile 1			
Q1(26-49)	0.55-1.79	19/147	(13.0)
Q2(50-59)	0.55-1.79	12/147	(8.2)
Q3(60-69)	0.55-1.79	6/147	(4.1)
Q4(70-117)	0.55-1.79	0/147	(0.0)
Quartile 2			
Q1(26-49)	1.79-2.33	10/147	(6.8)
Q2(50-59)	1.79-2.33	13/147	(8.8)
Q3(60-69)	1.79-2.33	10/147	(6.8)
Q4(70-117)	1.79-2.33	3/147	(2.0)
Quartile 3			
Q1(26-49)	2.36-3.08	8/147	(5.4)
Q2(50-59)	2.36-3.08	11/147	(7.5)
Q3(60-69)	2.36-3.08	10/147	(6.8)
Q4(70-117)	2.36-3.08	8/147	(5.4)
Quartile 4			
Q1(26-49)	3.09-5.56	0/147	(0.0)
Q2(50-59)	3.09-5.56	5/147	(3.4)
Q3(60-69)	3.09-5.56	8/147	(5.4)
Q4(70-117)	3.09-5.56	24/147	(16.3)

References

Directions for Use (31-3136) version 22.0