

List of Service Deliverables

Cholesterol (mmol/l)

- C (Cholesterol)
- VLDL-C (VLDL cholesterol)
- Remnant-C ((non-HDL, non-LDL)-cholesterol)
- LDL-C (LDL cholesterol)
- HDL-C (HDL cholesterol)
- HDL2-C (HDL2 cholesterol, particle density 1.063-1.125 g/mL)
- HDL3-C (HDL3 cholesterol, particle density 1.125-1.210 g/mL)
- EstC (Esterified cholesterol)
- FreeC (Free cholesterol)

Glycerides and phospholipids

- TG (Triglycerides, mmol/l)
- VLDL-TG (Triglycerides in VLDL, mmol/l)
- LDL-TG (Triglycerides in LDL, mmol/l)
- HDL-TG (Triglycerides in HDL, mmol/l)
- PG (Phosphoglycerides, mmol/l)
- TG/PG (Ratio of triglycerides to phosphoglycerides)
- PC (Phosphatidylcholine and other cholines, mmol/l)
- SM (Sphingomyelins, mmol/l)
- TotCho (Total cholines, mmol/l)

Apolipoproteins

- ApoA1 (Apolipoprotein A-I, g/l)
- ApoB (Apolipoprotein B, g/l)
- ApoB/ApoA1 (Ratio of Apolipoprotein B to Apolipoprotein A-I)

Total fatty acids and saturation measures

- TotFA (Total fatty acids, mmol/l)
- UnSat (Estimated degree of unsaturation)

Fatty acids (mmol/l)

- DHA (22:6, docosahexaenoic acid)
- LA (18:2, linoleic acid)
- FAw3 (Omega-3 fatty acids)
- FAw6 (Omega-6 fatty acids)
- PUFA (Polyunsaturated fatty acids)
- MUFA (Monounsaturated fatty acids; 16:1, 18:1)
- SFA (Saturated fatty acids)

Fatty acids (%)

- DHA/FA (DHA to total FAs ratio)
- LA/FA (LA to total FAs ratio)
- FAw3/FA (Omega-3 to total FAs ratio)
- FAw6/FA (Omega-6 to total FAs ratio)
- PUFA/FA (PUFAs to total FAs ratio)
- MUFA/FA (MUFAs to total FAs ratio)
- SFA/FA (SFAs to total FAs ratio)

Glycolysis related metabolites (mmol/l)

- Glc (Glucose)
- Lac (Lactate)
- Pyr (Pyruvate)*
- Cit (Citrate)
- Glol (Glycerol)*

Amino acids (mmol/l)

- Ala (Alanine)
- Gln (Glutamine)
- Gly (Glycine)*
- His (Histidine)

Branched-chain amino acids

- Ile (Isoleucine)
- Leu (Leucine)
- Val (Valine)

Aromatic amino acids

- Phe (Phenylalanine)
- Tyr (Tyrosine)

Ketone bodies (mmol/l)

- Ace (Acetate)
- AcAce (Acetoacetate)
- bOHBut (3-hydroxybutyrate)

Fluid balance

- Crea (Creatinine, mmol/l)
- Alb (Albumin, signal area)

Inflammation (mmol/l)

- Gp (Glycoprotein acetyls, mainly alpha-1-acid glycoprotein)

Lipoprotein subclasses

Chylomicrons and extremely large VLDL particles (particle diameters from 75 nm upwards)

- XXL-VLDL-P (particle concentration, mol/l)
- XXL-VLDL-L (total lipids, mmol/l)
- XXL-VLDL-PL (phospholipids, mmol/l)
- XXL-VLDL-C (total cholesterol, mmol/l)
- XXL-VLDL-CE (cholesterol esters, mmol/l)
- XXL-VLDL-FC (free cholesterol, mmol/l)
- XXL-VLDL-TG (triglycerides, mmol/l)
- XXL-VLDL-PL_% (Phospholipids to total lipids ratio, %)
- XXL-VLDL-C_% (Total cholesterol to total lipids ratio, %)
- XXL-VLDL-CE_% (Cholesterol esters to total lipids ratio, %)
- XXL-VLDL-FC_% (Free cholesterol to total lipids ratio, %)
- XXL-VLDL-TG_% (Triglycerides to total lipids ratio, %)

Very large VLDL particles (average particle diameter of 64 nm)

- XL-VLDL-P (particle concentration, mol/l)
- XL-VLDL-L (total lipids, mmol/l)
- XL-VLDL-PL (phospholipids, mmol/l)
- XL-VLDL-C (total cholesterol, mmol/l)
- XL-VLDL-CE (cholesterol esters, mmol/l)
- XL-VLDL-FC (free cholesterol, mmol/l)
- XL-VLDL-TG (triglycerides, mmol/l)
- XL-VLDL-PL_% (Phospholipids to total lipids ratio, %)
- XL-VLDL-C_% (Total cholesterol to total lipids ratio, %)
- XL-VLDL-CE_% (Cholesterol esters to total lipids ratio, %)
- XL-VLDL-FC_% (Free cholesterol to total lipids ratio, %)
- XL-VLDL-TG_% (Triglycerides to total lipids ratio, %)

Large VLDL particles (53.6 nm)

- L-VLDL-P (particle concentration, mol/l)
- L-VLDL-L (total lipids, mmol/l)
- L-VLDL-PL (phospholipids, mmol/l)
- L-VLDL-C (total cholesterol, mmol/l)
- L-VLDL-CE (cholesterol esters, mmol/l)
- L-VLDL-FC (free cholesterol, mmol/l)
- L-VLDL-TG (triglycerides, mmol/l)

- L-VLDL-PL_% (Phospholipids to total lipids ratio, %)
- L-VLDL-C_% (Total cholesterol to total lipids ratio, %)
- L-VLDL-CE_% (Cholesterol esters to total lipids ratio, %)
- L-VLDL-FC_% (Free cholesterol to total lipids ratio, %)
- L-VLDL-TG_% (Triglycerides to total lipids ratio, %)

Medium VLDL particles (44.5 nm)

- M-VLDL-P (particle concentration, mol/l)
- M-VLDL-L (total lipids, mmol/l)
- M-VLDL-PL (phospholipids, mmol/l)
- M-VLDL-C (total cholesterol, mmol/l)
- M-VLDL-CE (cholesterol esters, mmol/l)
- M-VLDL-FC (free cholesterol, mmol/l)
- M-VLDL-TG (triglycerides, mmol/l)
- M-VLDL-PL_% (Phospholipids to total lipids ratio, %)
- M-VLDL-C_% (Total cholesterol to total lipids ratio, %)
- M-VLDL-CE_% (Cholesterol esters to total lipids ratio, %)
- M-VLDL-FC_% (Free cholesterol to total lipids ratio, %)
- M-VLDL-TG_% (Triglycerides to total lipids ratio, %)

Small VLDL particles (36.8 nm)

- S-VLDL-P (particle concentration, mol/l)
- S-VLDL-L (total lipids, mmol/l)
- S-VLDL-PL (phospholipids, mmol/l)
- S-VLDL-C (total cholesterol, mmol/l)
- S-VLDL-CE (cholesterol esters, mmol/l)
- S-VLDL-FC (free cholesterol, mmol/l)
- S-VLDL-TG (triglycerides, mmol/l)
- S-VLDL-PL_% (Phospholipids to total lipids ratio, %)
- S-VLDL-C_% (Total cholesterol to total lipids ratio, %)
- S-VLDL-CE_% (Cholesterol esters to total lipids ratio, %)
- S-VLDL-FC_% (Free cholesterol to total lipids ratio, %)
- S-VLDL-TG_% (Triglycerides to total lipids ratio, %)

Very small VLDL particles (31.3 nm)

- XS-VLDL-P (particle concentration, mol/l)
- XS-VLDL-L (total lipids, mmol/l)
- XS-VLDL-PL (phospholipids, mmol/l)
- XS-VLDL-C (total cholesterol, mmol/l)
- XS-VLDL-CE (cholesterol esters, mmol/l)
- XS-VLDL-FC (free cholesterol, mmol/l)
- XS-VLDL-TG (triglycerides, mmol/l)
- XS-VLDL-PL_% (Phospholipids to total lipids ratio, %)
- XS-VLDL-C_% (Total cholesterol to total lipids ratio, %)
- XS-VLDL-CE_% (Cholesterol esters to total lipids ratio, %)
- XS-VLDL-FC_% (Free cholesterol to total lipids ratio, %)
- XS-VLDL-TG_% (Triglycerides to total lipids ratio, %)

IDL particles (28.6 nm)

- DL-P (particle concentration, mol/l)
- IDL-L (total lipids, mmol/l)
- IDL-PL (phospholipids, mmol/l)
- IDL-C (total cholesterol, mmol/l)
- IDL-CE (cholesterol esters, mmol/l)
- IDL-FC (free cholesterol, mmol/l)
- IDL-TG (triglycerides, mmol/l)
- IDL-PL_% (Phospholipids to total lipids ratio, %)
- IDL-C_% (Total cholesterol to total lipids ratio, %)
- IDL-CE_% (Cholesterol esters to total lipids ratio, %)
- IDL-FC_% (Free cholesterol to total lipids ratio, %)
- IDL-TG_% (Triglycerides to total lipids ratio, %)

Large LDL particles (25.5 nm)

- L-LDL-P (particle concentration, mol/l)
- L-LDL-L (total lipids, mmol/l)
- L-LDL-PL (phospholipids, mmol/l)
- L-LDL-C (total cholesterol, mmol/l)
- L-LDL-CE (cholesterol esters, mmol/l)
- L-LDL-FC (free cholesterol, mmol/l)
- L-LDL-TG (triglycerides, mmol/l)
- L-LDL-PL_% (Phospholipids to total lipids ratio, %)
- L-LDL-C_% (Total cholesterol to total lipids ratio, %)
- L-LDL-CE_% (Cholesterol esters to total lipids ratio, %)
- L-LDL-FC_% (Free cholesterol to total lipids ratio, %)
- L-LDL-TG_% (Triglycerides to total lipids ratio, %)

Medium LDL particles (23.0 nm)

- M-LDL-P (particle concentration, mol/l)
- M-LDL-L (total lipids, mmol/l)
- M-LDL-PL (phospholipids, mmol/l)
- M-LDL-C (total cholesterol, mmol/l)

- M-LDL-CE (cholesterol esters, mmol/l)
- M-LDL-FC (free cholesterol, mmol/l)
- M-LDL-TG (triglycerides, mmol/l)
- M-LDL-PL_% (Phospholipids to total lipids ratio, %)
- M-LDL-C_% (Total cholesterol to total lipids ratio, %)
- M-LDL-CE_% (Cholesterol esters to total lipids ratio, %)
- M-LDL-FC_% (Free cholesterol to total lipids ratio, %)
- M-LDL-TG_% (Triglycerides to total lipids ratio, %)

Small LDL particles (18.7 nm)

- S-LDL-P (particle concentration, mol/l)
- S-LDL-L (total lipids, mmol/l)
- S-LDL-PL (phospholipids, mmol/l)
- S-LDL-C (total cholesterol, mmol/l)
- S-LDL-CE (cholesterol esters, mmol/l)
- S-LDL-FC (free cholesterol, mmol/l)
- S-LDL-TG (triglycerides, mmol/l)
- S-LDL-PL_% (Phospholipids to total lipids ratio, %)
- S-LDL-C_% (Total cholesterol to total lipids ratio, %)
- S-LDL-CE_% (Cholesterol esters to total lipids ratio, %)
- S-LDL-FC_% (Free cholesterol to total lipids ratio, %)
- S-LDL-TG_% (Triglycerides to total lipids ratio, %)

Very large HDL particles (14.3 nm)

- XL-HDL-P (particle concentration, mol/l)
- XL-HDL-L (total lipids, mmol/l)
- XL-HDL-PL (phospholipids, mmol/l)
- XL-HDL-C (total cholesterol, mmol/l)
- XL-HDL-CE (cholesterol esters, mmol/l)
- XL-HDL-FC (free cholesterol, mmol/l)
- XL-HDL-TG (triglycerides, mmol/l)
- XL-HDL-PL_% (Phospholipids to total lipids ratio, %)
- XL-HDL-C_% (Total cholesterol to total lipids ratio, %)
- XL-HDL-CE_% (Cholesterol esters to total lipids ratio, %)
- XL-HDL-FC_% (Free cholesterol to total lipids ratio, %)
- XL-HDL-TG_% (Triglycerides to total lipids ratio, %)

Large HDL particles (12.1 nm)

- L-HDL-P (particle concentration, mol/l)
- L-HDL-L (total lipids, mmol/l)
- L-HDL-PL (phospholipids, mmol/l)
- L-HDL-C (total cholesterol, mmol/l)
- L-HDL-CE (cholesterol esters, mmol/l)
- L-HDL-FC (free cholesterol, mmol/l)
- L-HDL-TG (triglycerides, mmol/l)
- L-HDL-PL_% (Phospholipids to total lipids ratio, %)
- L-HDL-C_% (Total cholesterol to total lipids ratio, %)
- L-HDL-CE_% (Cholesterol esters to total lipids ratio, %)
- L-HDL-FC_% (Free cholesterol to total lipids ratio, %)
- L-HDL-TG_% (Triglycerides to total lipids ratio, %)

Medium HDL particles (10.9 nm)

- M-HDL-P (particle concentration, mol/l)
- M-HDL-L (total lipids, mmol/l)
- M-HDL-PL (phospholipids, mmol/l)
- M-HDL-C (total cholesterol, mmol/l)
- M-HDL-CE (cholesterol esters, mmol/l)
- M-HDL-FC (free cholesterol, mmol/l)
- M-HDL-TG (triglycerides, mmol/l)
- M-HDL-PL_% (Phospholipids to total lipids ratio, %)
- M-HDL-C_% (Total cholesterol to total lipids ratio, %)
- M-HDL-CE_% (Cholesterol esters to total lipids ratio, %)
- M-HDL-FC_% (Free cholesterol to total lipids ratio, %)
- M-HDL-TG_% (Triglycerides to total lipids ratio, %)

Small HDL particles (8.7 nm)

- S-HDL-P (particle concentration, mol/l)
- S-HDL-L (total lipids, mmol/l)
- S-HDL-PL (phospholipids, mmol/l)
- S-HDL-C (total cholesterol, mmol/l)
- S-HDL-CE (cholesterol esters, mmol/l)
- S-HDL-FC (free cholesterol, mmol/l)
- S-HDL-TG (triglycerides, mmol/l)
- S-HDL-PL_% (Phospholipids to total lipids ratio, %)
- S-HDL-C_% (Total cholesterol to total lipids ratio, %)
- S-HDL-CE_% (Cholesterol esters to total lipids ratio, %)
- S-HDL-FC_% (Free cholesterol to total lipids ratio, %)
- S-HDL-TG_% (Triglycerides to total lipids ratio, %)

Lipoprotein particle size (nm)

- VLDL-D (Mean diameter of VLDL particles)
- LDL-D (Mean diameter of LDL particles)
- HDL-D (Mean diameter of HDL particles)