

<b>Very long-chain fatty acids (VLCFA)</b>	
<b>Description</b>	VLCFA are fatty acids with aliphatic tails longer than 22 carbons and are metabolised by peroxisomal enzymes. This test also measures pristanic and phytanic acids.
<b>Indication</b>	Used to identify patients with Adrenoleukodystrophy (ALD) or Adrenomyeloneuropathy (AMN).
<b>Additional Info</b>	<p>Adrenoleukodystrophy (ALD) is a rare, genetically determined neurological disorder that leads to progressive brain damage, failure of the adrenal glands and eventually death. An essential transporter protein is missing in ALD patients. It normally carries an enzyme which is used to break down VLCFA found in the normal diet. The build-up of VLCFA progressively damages the myelin sheath, eventually destroying it.</p> <p>Adrenomyeloneuropathy (AMN) is a less-severe form of ALD, with onset of symptoms occurring in adolescence or adulthood. Patients that experience AMN also endure demyelination; however, it most commonly restricts itself to the long tracts of the spinal column.</p>
<b>Concurrent Tests</b>	See phytanic acid, pristanic acid, plasmalogens.
<b>Dietary Requirements</b>	N/A
<b>Interpretation</b>	If not clear from the report, please contact Dr. J. Bonham (0114 271 7404) in the reference laboratory at Sheffield Children's Hospital for advice including investigation of the condition and treatment.
<b>Collection Conditions</b>	1mL lithium heparin sample. Laboratory to send plasma to Sheffield.
<b>Frequency of testing</b>	Repeat testing inappropriate