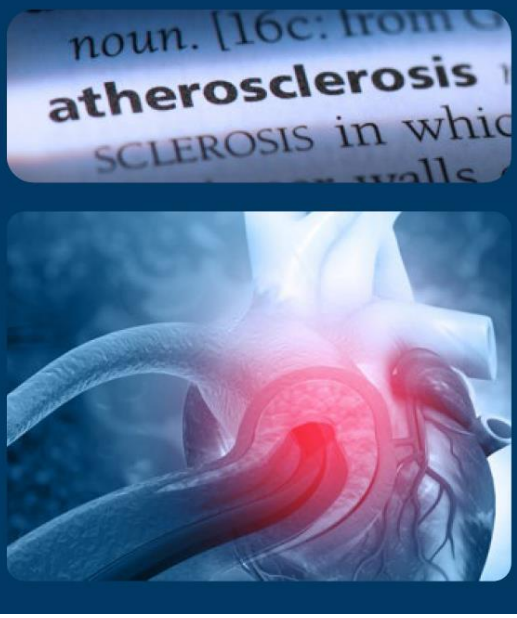

Glossary – Podcast 3

"The remnants in the room: Let's talk about residual cardiovascular disease risk."

Atherosclerotic cardiovascular disease (ASCVD): Atherosclerotic cardiovascular disease refers to cardiovascular complications/events (ie. stroke and heart attacks) caused by atherosclerosis and it is the leading cause of death worldwide. (1)

Familial hypercholesterolaemia (FH): Familial hypercholesterolaemia is an inherited cholesterol disorder characterized by mutations in genes involved in LDL-C metabolism. These genetic mutations lead to the accumulation of LDL-C ("bad cholesterol") in the blood and predisposes an individual to early onset cardiovascular disease. A person can present with either heterozygous FH (genetic mutation acquired from one parent) or homozygous FH (same genetic mutation acquired from both parents). (2,3)

Fibrinogen: A protein produced by the liver, involved in the clotting process in response to injury and inflammation. (4)

Cholesterol: Cholesterol is a naturally occurring fatty (waxy) substance produced mainly by the liver. Cholesterol is vital to the structure and function of cells within the body. However, having too much cholesterol, particular of the bad kind may increase the risk of cardiovascular disease. There are two main types of cholesterol: **HDL-C (High-density lipoprotein cholesterol, "good cholesterol")** and **LDL-C (Low-density lipoprotein cholesterol, "bad cholesterol")**. Lipoprotein is the name given to cholesterol when combined with the proteins that transport it around the body.(2)

Homocysteine: Homocysteine is an amino acid produced by the body (derived from methionine and is a homologue of cysteine). High levels of homocysteine (hyperhomocysteinemia) have been associated with an increased risk for certain diseases including neurovascular disease, dementia, developmental impairment, migraine as well as cardiovascular disease. (5)

Lipoprotein a (Lp(a)): Lipoprotein (a) is similar in structure to LDL-C, but with an additional protein component, called apolipoprotein (a). Circulating levels of Lp(a) are genetically determined (inherited). (6,7) Elevated Lp(a) is an independent risk factor for ASCVD and predisposes for aortic stenosis (narrowing of the aortic valve in the heart). International guidelines recommend considering testing Lp(a) levels at least once during the lifetime of every adult. (6,8,9)

Metabolic syndrome: A group of health conditions that increases the risk of diabetes, heart disease and stroke. A person who presents with three or more of the following risk factors; high blood pressure, high

blood glucose (sugar), low HDL-C, large waist circumference (apple shaped body) and high triglycerides is typically diagnosed with metabolic syndrome. [10]

Non-HDL: Total cholesterol – HDL-C = sum of LDL-C and remnant particles ('Bad cholesterol") [11]

Remnant particles: Non-LDL-C particles such as triglyceride-rich lipoproteins which contribute to the residual risk of ASCVD. [12]

Residual cardiovascular risk: Despite aggressive LDL-C lowering and achievement of optimal LDL-C levels, individuals may still be at risk for ASCVD due to the presence of other atherogenic particles in the blood namely, triglycerides, triglyceride-rich lipoproteins, lipoprotein (a) and inflammation. [12]

Risk marker: A habit/condition which increases a person's likelihood of developing a disease/condition. [13]

C-reactive protein (CRP): Is a particular protein made by the liver. C-reactive protein levels increase when there is inflammation in the body and correlates with waist circumference. [14]

Triglycerides (TGs): Triglycerides are another type of fat (lipid) within the blood. Triglycerides are stored in fat cells and provide the body with energy. High levels may further increase a person's risk of cardiovascular disease and is often associated with obesity and other metabolic diseases. Very high triglyceride levels can lead to pancreatitis (inflammation of the pancreas). [15]

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