Glossary of terms

Atherosclerosis

Atherosclerosis is the build-up of fatty deposits called **plaque** on the inside of artery walls, which narrows the arteries and makes them less flexible. It can lead to **cardiovascular disease** (CVD) and sometimes stroke.

Cardiovascular disease

Cardiovascular disease is an umbrella term for a number of conditions that affect the heart and blood vessels (arteries and veins). These include coronary heart disease, **stroke**, **high blood pressure** and **peripheral arterial disease**.

Cholesterol

Cholesterol is a type of fat produced in the liver. It is present in all human cells and forms part of the cell membrane. Cholesterol is also a precursor of various hormones in the body. There are two key types of cholesterol in the circulation: **low-density lipoprotein cholesterol** (LDL-C), known as 'bad' cholesterol and **high-density lipoprotein cholesterol** (HDL-C), known as 'good' cholesterol.

Coronary artery disease

Coronary artery disease (CAD) affects the arteries that supply the heart. Fatty deposits called **plaque** build up on the inside of the coronary arteries, causing them to narrow and become less flexible.

Co-morbidity

Co-morbidity is the presence of one or more diseases that coexist with a primary disease but which in themselves are specific diseases.

Creatine kinase

Creatine kinase (CK) is an **enzyme** found in muscle cells and can be found in high concentrations in the blood in the presence of muscle damage. High levels of CK can be an indication of myopathy associated with **statin** use.

CYP3A4

CYP3A4 is an **enzyme** involved in the metabolism of drugs.

Diabetes

Diabetes is a group of metabolic diseases in which a person has **high blood sugar**, either because the pancreas does not produce enough insulin, or because cells do not respond to the insulin that is produced. The most common form of diabetes is **type 2 diabetes**.

Dyslipidaemia

Dyslipidaemia refers to conditions in which there is an imbalance of lipids in the blood.

Enzyme

An enzyme is a protein that catalyzes chemical reactions in the body.

Heart attack

Heart attack is the common name for myocardial infarction. It occurs when the supply of blood and oxygen is restricted and cannot get to part of the heart. It is usually caused by a blockage in the coronary artery, which carries oxygen-rich blood into the heart.

Hepatotoxicity

Hepatotoxicity is the potential of a drug to damage the liver.

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High blood pressure

High blood pressure (hypertension) refers to sustained blood pressure of 140/90mmHg or above.

High-density lipoprotein cholesterol (HDL-C)

High-density lipoprotein cholesterol (HDL-C), also known as 'good' **cholesterol**, is a type of plasma protein that helps remove excess cholesterol from the blood to the liver where it is removed from the body.

HMG-CoA reductase

HMG-CoA reductase is the rate-controlling **enzyme** of the metabolic pathway responsible for the production of **cholesterol**.

HMG-CoA reductase inhibitors

HMG-CoA reductase inhibitors, commonly known as statins, inhibit the synthesis of **HMG-CoA reductase** in the liver. HMG-CoA reductase inhibitors help to reduce **low-density lipoprotein cholesterol** (LDL-C) and decrease **cholesterol** production.

Hypercholesterolaemia

Hypercholesterolaemia is the presence of high **cholesterol** levels in the blood. It is one of the most common types of **dyslipidaemia** and contributes to an increased risk of **cardiovascular disease**.

Intermediate-density lipoprotein cholesterol (IDL-C)

Intermediate-density lipoprotein cholesterol (IDL-C) is a plasma protein with a density between that of low-density (LDL-C) and very low-density lipoprotein cholesterol (VLDL-C). It is formed as a result of the degradation of VLDL-C and is one of the major groups of **lipoproteins** that enable fats and **cholesterol** to travel within blood.

Low-density lipoprotein cholesterol (LDL-C)

Low-density lipoprotein cholesterol (LDL-C), also known as 'bad' **cholesterol**, is a plasma protein containing relatively more cholesterol than proteins. High levels of LDL-C in the blood can cause **atherosclerosis** and increase the risk of **cardiovascular disease**.

Lipid

Lipids are molecules of fat or fat-like substances found in the blood, such as **cholesterol**.

Lipoprotein

A lipoprotein is any complex of fat and protein. Blood lipoproteins are classified by density; the lower the density the more **cholesterol** in the complex.

Metabolic syndrome

Metabolic syndrome is a combination of medical conditions that increase the risk of heart disease and diabetes, including some or all of the following: high blood glucose, **high blood pressure**, abdominal obesity, low **high-density lipoprotein** (HDL), elevated **cholesterol** and high **triglycerides**.

Myopathy

Myopathy is any disease associated with the muscle. It is characterised by muscle weakness and wasting. Myopathy is a side effect associated with **statins**.

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Peripheral arterial disease

Peripheral arterial disease occurs when fatty deposits called **plaque** build up in the arteries that carry oxygen rich blood to the limbs. This causes the arteries to become narrow and less flexible.

Pitavastatin

Pitavastatin is a fully synthetic, novel **HMG-CoA reductase inhibitor** (statin) developed to normalise abnormal blood **lipid** levels.

Plaque

In the context of heart disease, a plaque is the deposit and build up of fatty material (including **cholesterol**) on the inner artery walls.

Rhabdomyolysis

Rhabdomyolysis is a severe form of **myopathy**, where the breakdown of muscle fibres results in the release of myoglobin into the blood. Rhabdomyolysis can cause kidney damage and kidney failure and is an uncommon, but serious side effect of **statin** use. Symptoms include severe muscle pain throughout the body, muscle weakness and dark coloured urine.

Statin

Statin is the commonly used name for **HMG-CoA reductase inhibitors**.

Stroke

A stroke occurs when the supply of oxygen-rich blood to the brain is cut off and brain cells are damaged or die. There are two types of stroke: ischaemic strokes, when something blocks an artery carrying blood to the brain; haemorrhagic strokes, where a blood vessel bursts and bleeds into the brain.

Total cholesterol (TC)

Total cholesterol is the sum of **low-density lipoprotein cholesterol** (LDL-C), **high-density lipoprotein cholesterol** (HDL-C), **triglycerides** (TGs), **very low-density lipoprotein cholesterol** (VLDL-C) and **intermediate-density lipoprotein cholesterol** (IDL-C) in the blood.

Triglycerides (TGs)

A triglyceride is a type of fat that is carried in the blood via very **low-density lipoproteins** (VLDL). Excess calories, alcohol or sugar in the body are converted into TGs and stored in fat cells throughout the body.

Very low density lipoprotein cholesterol (VLDL-C)

Very low-density lipoprotein cholesterol (VLDL-C) is a plasma protein that transports **triglycerides** in the blood.

Xanthelasma

Xanthelasma is a yellow fatty deposit around the eyes, which may be associated with high levels of **cholesterol** in the blood.

Xanthoma

Xanthoma is a skin condition in which fat builds up under the surface of the skin. The symptoms of Xanthoma include yellow bumps on the skin and joints, and yellow lumps on the eyelid (**xanthelasma**).