

Glossary of Terms

Angina pectoris

Angina of the chest, is chest pain usually due to a lack of oxygen to the heart muscle.

Angiotensin

Angiotensin is a hormone produced by the body and that causes blood vessels to constrict, and drives blood pressure up.

Angiotensin-converting enzyme (ACE)

ACE catalyses the conversion of angiotensin I to angiotensin II, a potent vasoconstrictor (narrows blood vessels) and it is involved in the inactivation of bradykinin, a potent vasodilator (widens/dilates blood vessels).

Angiotensin converting enzyme inhibitor (ACE-inhibitor)

ACE inhibitors, or inhibitors of Angiotensin-converting enzyme (ACE), are a group of pharmaceuticals that are used primarily in treatment of hypertension (high blood pressure) and congestive heart failure. (See glossary for CHF).

ACE inhibitors lower blood pressure by preventing the conversion of an inactive hormone (angiotensin I) to an active one (angiotensin II). The absence of angiotensin II allows the arteries to widen and the blood pressure to drop.

Angiotensin receptor blockers (also angiotensin inhibitors) (see glossary for receptor).

Are a group of pharmaceuticals which modulate the system in which angiotensin plays an important role. (See glossary for angiotensin) Their main use is in hypertension (high blood pressure), diabetic nephropathy (kidney damage due to diabetes) and congestive heart failure. (see glossary for CHF).

Antiplatelet

See glossary for platelet.

Antithrombotics

See glossary for thrombocytes.

Arteriosclerosis

It is commonly referred to as a "hardening" or "furring" of the arteries with loss of elasticity of arterial walls.

Arrhythmia

Any variation from the normal rhythm of the heart beat. The heart beat may be too fast or too slow, and may be regular or irregular.

BEAUTIFUL

A morbidity-mortality Evaluation of the I_f inhibitor ivabradine in patients with CAD and left ventricular dysfunction) trial (see glossary for I_f current, CAD, LVD and ivabradine).

BEAUTIFUL is an international multicentre clinical study that evaluated, whether ivabradine (Procoralan), the first pure heart rate reducing treatment, reduces cardiovascular events in patients already on best optimal therapy.

Beta-blocker

Beta blockers (sometimes written as β -blocker) are a class of drugs used for various indications through cardiovascular and peripheral effects.

Blood pressure (BP)

The pressure of blood against the walls of the main arteries. Blood pressure is measured in millimeters of mercury (mm Hg) and is recorded when the ventricles of the heart are contracting (systolic pressure) and relaxing (diastolic pressure).

Bradycardia

It is defined as a slow resting heart rate (of under 50 beats per minute in adults).

Cardiovascular system

The heart, together with two networks of blood vessels, one supplying the lungs where it draws up oxygen in exchange for carbon dioxide, and the other supplying the rest of the body, transporting nutrients and oxygen to the tissues and removing waste products.

Compliance

A patient's (or doctor's) adherence to a recommended course.

Congestive heart failure (CHF)

A structural or functional cardiac disorder that impairs the ability of the heart to fill with blood or pump a sufficient amount of blood through the body. The excessive accumulation of blood may occur in the lungs or the peripheral (away from central structures) circulation or in both.

Contra-indication

The prefix suggests “against” or “opposed”, therefore “not indicated”.

Coronary circulation

Coronary circulation is the circulation of blood in the blood vessels that supply blood to and from the heart muscle itself.

Coronary artery disease (CAD)

The most common form of heart disease in which the coronary arteries become narrowed or clogged and cannot supply enough blood to the heart. Also known as coronary heart disease.

Diastolic pressure

The pressure of blood when the ventricles of the heart are relaxing and refilling. This is when blood pressure is lowest.

Double-blind

Double-blind describes an especially stringent way of conducting an experiment, usually on human subjects, in an attempt to eliminate subjective bias on the part of both experimental subjects and the experimenters. In most cases, double-blind experiments are held to achieve a higher standard of scientific rigour.

In a double-blind experiment, neither the individuals nor the researchers know who belongs to the control group and the experimental group. Only after all the data has been recorded (and in some cases, analyzed) do the researchers learn which individuals are which.

Endothelium (of blood vessels)

This is the lining inside the blood vessels.

Heart Attack

See myocardial infarction.

High blood pressure

Also called hypertension, it is defined in adults as blood pressure above the normal range expected in a particular age group.

Hypertension

See high blood pressure.

Hypotension

The opposite of high blood pressure. Blood pressure low enough to cause symptoms, such as dizziness and fainting.

I_f current

The I_f “pacemaker” (‘funny’) current was first described 30 years ago in the sinoatrial node (SAN) myocytes (see glossary for SAN and myocytes) and plays a major role in the generation of spontaneous activity and in modulation of the heart rate. It is a mixed sodium/potassium inward current.

Inotropic

Effecting the force or energy of muscular contractions.

Ischaemia

Deficiency of blood in a part of the body due to functional constriction (narrowing) or actual obstruction of a blood vessel.

Ivabradine (see Procoralan in Glossary)

Lipids

A heterogeneous group of fats and fatlike substances characterised by being water-insoluble, but extractable by solvents such as alcohol, ether, chloroform, benzene, etc. Lipids are easily stored in the body and serve as a source of fuel.

Lipid-lowering agents

See glossary for lipids.

Left ventricular dysfunction (LVD)

A condition in which the left ventricle (lower chamber) of the heart exhibit's a decreased functionality.

Morbidity

A diseased condition or state. The incidence or prevalence (see glossary for prevalence) of a disease or diseases in a population.

Mortality

The ratio of deaths that take place to expected deaths in a population.

Myocardial infarction (MI)

The medical term for heart attack, which occurs when the blood supply to part of the heart muscle itself - the myocardium - is severely reduced or stopped, resulting in the death of a segment of the heart muscle.

Placebo

Any dummy medical treatment; originally any medicinal preparation having no specific pharmacological activity against the patient's illness or complaint, given solely for the psycho-physiological effects of the treatment. A dummy treatment given to a control group in a controlled clinical trial in order that specific and non-specific effects of the experimental treatment can be distinguished.

Platelet

Platelets, or thrombocytes, are the cells circulating in the blood that are involved in the cellular mechanisms of primary haemostasis (arrest of bleeding) leading to the formation of blood clots.

Prevalence

The number of cases of a disease that are present in a population at a point in time.

Procoralan

Procoralan is the trade name for ivabradine. Procoralan is the first selective and specific inhibition of the I_f current of the sinus node. Procoralan slows the heart rate, while at the same time preserving other parameters of cardiac function, notably contraction strength. This mode of action confers on Procoralan properties that are particularly useful in coronary patients. Procoralan has powerful anti-ischemic efficacy, greatly reduces the number of angina attacks, and increases exercise capacity, thus enabling

patients to resume their usual activities without suffering pain. Procoralan is currently available in 70 countries in Europe and other parts of the world.

Prognosis

Forecast to the probable outcome of an attack or a disease; the prospect as to recovery from a disease as indicated by the nature and symptoms (subjective evidence) of the case.

Randomise

Pertaining to a chance-dependant process particularly one that occurs according to a known probability distribution. To assign experimental subjects to some known probability distribution.

Receptor

A receptor is a molecule of protein, embedded in a membrane, to which a mobile signalling (or "signal") molecule may attach.

Revascularisation

The restoration of adequate blood supply to a body part with procedures (PCI or CABG).

Sinoatrial node

Microscopic collection of atypical cardiac muscle fibres which serve as pacemaker of the heart. The cardiac rhythm normally takes its origin here.

Statins

The statins (or HMG-CoA reductase inhibitors) form a class of hypolipidemic drugs used to lower cholesterol levels in people with or at risk of cardiovascular disease.

Study population

Individuals collectively constituting a certain category and from whom a random sample can be drawn in a study.

Systolic pressure

The pressure of blood when the ventricles of the heart are contracting. This is when blood pressure is highest.

Thrombocytes

Thrombocytes or platelets, are the cells circulating in the blood that are involved in the cellular mechanisms of primary haemostasis (arrest of bleeding) leading to the formation of blood clots.

Tolerance

The ability to endure a drug.

References derived from the Dorland's Medical Dictionary (27th Edition), Oxford Medical Dictionary, Merriam-Webster's Medical Dictionary, Drugs supplement 2007 ; 67 : 1-49, Merriam Webster's Collegiate Dictionary (10th edition).