



## Glossary of Terms<sup>1</sup>

### **ACE (Angiotensin Converting Enzyme) Inhibitors**

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.

### **ADVANCE**

ADVANCE (Action in Diabetes and Vascular Disease Preterax and Diamicron MR Controlled Evaluation) will provide information about the effects of intensive blood glucose control in type 2 diabetic patients. Results for another arm of the trial, which evaluated routine blood pressure lowering in patients with type 2 diabetes, were published in 2007.

### **Albumin**

A protein found in animal and plant tissues.

### **Albuminuria**

The presence of albumin in the urine that is usually a symptom of disease of the kidneys.

### **Atherosclerosis**

A condition in which plaque builds up on the inside of arteries. The plaque is made up of fat, cholesterol, calcium and other substances found in the blood and, over time, hardens and narrows the arteries. This reduces the flow of oxygen-rich blood to the body's organs and can lead to serious problems, including heart attack, stroke or even death.

### **Beta Cells**

A type of cell in the pancreas found in areas called the islets of Langerhans. Beta cells make and release insulin.

### **Blood Glucose**

The main sugar found in the blood providing the body with its main source of energy. Also called blood sugar.

### **Blood Pressure**

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).

### **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.

### **Cerebrovascular Disease**

Damage to blood vessels in the brain where vessels burst and bleed or become clogged with fatty deposits. When blood flow is interrupted, brain cells die or are damaged, resulting in a stroke.

### **Coronary Heart Disease**

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

### **Diabetes Mellitus**

A condition characterized by high blood glucose resulting from the body's inability to use blood glucose for energy. In type 1 diabetes, the pancreas no longer makes insulin and therefore blood glucose cannot enter the cells to be used for energy. In type 2 diabetes, either the pancreas does not make enough insulin or the body is unable to use insulin correctly.

### **Diamicron MR**

An oral antidiabetic agent containing a modified-release formulation of the active ingredient gliclazide. Diamicron MR belongs to a class of drug known as sulfonylureas and is used to help control blood glucose levels in patients with type 2 diabetes.

### **Diastolic Pressure**

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

### **Diuretics**

A class of drugs that lower blood pressure by increasing the excretion of water and sodium through urine.

### **Factorial Design**

A factorial design is a type of study design used to evaluate two or more factors simultaneously. The advantage of factorial designs over one-factor-at-a-time experiments is that they are more efficient and allow interactions between factors to be detected.

### **Glibenclamide**

An antidiabetic drug belonging to the sulfonylurea class of drugs used in the treatment of type 2 diabetes. Glibenclamide is one of the older sulfonylureas.

### **Gliclazide**

An oral hypoglycaemic medication used to control blood glucose in people with type 2 diabetes and belonging to the sulfonylurea class of drugs.

### **Glipizide**

An oral medium-to-long acting antidiabetic drug from the sulfonylurea class. Glipizide is classified as a second-generation sulfonylurea.

### **Glycaemic**

Related to blood glucose levels.

## **GUIDE**

The GUIDE (GLUcose control in type 2 diabetes: Diamicron MR versus glimEpiride) trial was one of the key clinical efficacy studies of Diamicron MR.

## **HbA1c**

A measure of the degree of blood glucose control. When glucose sticks to the haemoglobin in red blood cells it makes a glycosylated haemoglobin molecule, also called HbA1c. The more glucose in the blood, the more HbA1C will be present in the blood so HbA1c levels act as a good guide to blood glucose levels.

## **Heart Attack**

See myocardial infarction.

## **Hemorrhagic Stroke**

A stroke caused by ruptured blood vessels leaking blood into the brain.

## **High Blood Pressure**

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

## **Hyperglycaemia**

An excessive level of blood glucose.

## **Hypertension**

See high blood pressure.

## **Hypoglycaemia**

A condition occurring when the body's blood glucose drops below normal. Indications include hunger, nervousness, shakiness, perspiration, dizziness or light-headedness, sleepiness, and confusion. Hypoglycaemia may be treated simply, by having the sufferer consume something that is carbohydrate rich, such as a glucose tablet or juice. Without treatment, hypoglycaemia may lead to unconsciousness.

**Hypotension**

Blood pressure low enough to cause symptoms, such as dizziness and fainting.

**Indapamide**

A diuretic agent.

**Insulin**

An important hormone secreted by the pancreas which plays a key role in regulating blood glucose levels.

**Ischemic Stroke**

A stroke that occurs when the blood flow is stopped by clotting or a blocked blood vessel.

**LDL Cholesterol**

Low density lipoprotein (LDL) cholesterol. LDL is also known as 'bad' cholesterol because it contributes to the development of atherosclerosis.

**LV Mass**

The mass of the left ventricle of the heart. High LV mass, also known as ventricular hypertrophy, is a strong indicator of the risk of morbidity and mortality from myocardial infarction, stroke and congestive heart failure.

**Macrovascular Disease**

A disease of the large blood vessels, like those found in the heart, where lipids and blood clots build up and may cause atherosclerosis, coronary heart disease, stroke or peripheral vascular disease.

**Microalbuminuria**

Defined as excretion of between 30 and 300 mg of albumin a day in the urine. Microalbuminuria can be an indicator of renal and/or cardiovascular disease in diabetes.

### **Microvascular Disease**

A disease of the smallest blood vessels, like those found in eyes, nerves, and kidneys, where the walls of the vessels become abnormally thick and weak. These walls bleed leading to a leak of protein, slowing the flow of blood to the cells.

### **Myocardial Infarction**

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.

### **Nephropathy**

Severe kidney disease that can lead patients to dialysis and death.

### **Oral Hypoglycemic Agents**

These medicines are administered orally to people with type 2 diabetes to maintain blood glucose levels at a level which is as close to normal as possible.

### **Perindopril**

An angiotensin converting enzyme (ACE) inhibitor. that is effective, well tolerated, has a long duration of action, and can be given once daily.

### **Pulse Pressure**

The pressure that represents the difference between diastolic and systolic blood pressures of the heart cycle.

### **Retinopathy**

Damage to the retina caused by complications of diabetes which can eventually lead to blindness.

### **Secondary failure**

In studies of Diamicon MR, secondary failure was defined as failure to achieve postprandial glycaemia <10 mmol/l or HbA1c <10% after a trial of hospitalization for supervision of compliance with diet and medication.

**Stroke**

A cardiovascular disease in which a blood vessel bringing oxygen and nutrients to the brain bursts or is clogged by a blood clot or some other particle. Deprived of oxygen, nerve cells in the brain cannot function and die, stopping the function of the parts of the body they control.

**Sulfonylurea (SU)**

A mainstay therapeutic class among oral medicines for type 2 diabetes. They lower blood glucose by assisting the pancreas to make more insulin and by helping the body make better use of the insulin it makes.

**Systolic pressure**

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

**Thiazides**

Any of a group of drugs used as oral diuretics, particularly for the control of high blood pressure.

**Transient Ischemic Attack (TIA)**

"Mini strokes" that produce stroke-like symptoms that last less than 24 hours and cause no lasting damage or death.

**Type 1 diabetes**

See diabetes mellitus.

**Type 2 diabetes**

See diabetes mellitus

**UKPDS**

The UKPDS (United Kingdom Prospective Diabetes Study) was a key trial carried out to assess the impact of glucose lowering and blood pressure control on outcomes in type 2 diabetes.

## References

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<sup>1</sup> Derived from the Oxford Medical Dictionary, Merriam-Webster's Medical Dictionary and Diabetes.co.uk glossary