

## GLOSSARY

The following abbreviations and expressions have the following meanings when used in this report:

**abbreviated new drug application (ANDA)**

A marketing approval application for a generic drug submitted to the US Food and Drug Administration.

**ACE inhibitors** A class of drugs that is used to treat hypertension and other cardiovascular diseases, which work by blocking the production of a hormone called angiotensin II.

**acute coronary syndrome (ACS)** An umbrella term used to cover any group of clinical symptoms compatible with acute myocardial ischaemia.

**adenosine diphosphate (ADP)** A molecule that plays an important role in energy transfer in cells.

**adjuvant** An agent that modifies the effect of other agents (for example drugs and vaccines) while having few if any direct effects when given by itself; it operates like a catalyst in chemical reactions.

**adjuvant therapy** Treatment given as an adjunct to another medical intervention, for example surgery.

**ADR** American Depositary Receipt evidencing title to an ADS.

**ADS** American Depositary Share representing one underlying Ordinary Share.

**adverse reaction** An unwanted, negative consequence associated with the use of a medicine.

**agonist** A substance capable of binding to a molecular target to trigger a response.

**allergic rhinitis** An allergic reaction to airborne substances such as pollen or dust.

**Alzheimer's disease** A group of disorders causing deterioration of the brain, which affects one's memory and reasoning capabilities.

**anaesthesia** The total or partial loss of sensation, especially in relation to pain.

**analgesia** The inability to feel pain whilst conscious.

**angina** Chest pain/discomfort caused by lack of oxygen to the heart muscles through reduced blood flow in the coronary arteries.

**angiogenesis** A physiological process in which new blood vessels grow from pre-existing vessels.

**angiotensin II** A hormone that causes blood vessels to narrow and thereby raises blood pressure.

**angiotensin converting enzyme (ACE)** Converts a hormone called angiotensin to its activated form called angiotensin II, enabling it to function. Angiotensin II acts by narrowing the diameter of the blood vessels and thereby raises blood pressure.

**ankylosing spondylitis (AS)** A degenerative inflammatory disease affecting the spine and causing chronic pain.

**antagonist** A substance capable of binding to a molecular target to neutralise or counteract a reaction.

**anti-androgen** A drug that blocks the action of testosterone on the prostate gland and is used in the treatment of prostate cancer.

**anti-psychotic drug** A drug for the treatment of depression or mania.

**aromatase inhibitor** A drug that inhibits the enzyme, aromatase, which is involved in the production of the female sex hormone, oestrogen and therefore is used in the treatment of breast cancer.

**AstraZeneca** AstraZeneca PLC and its subsidiaries.

**atherosclerosis** The progressive narrowing or hardening of the arteries linked to the build-up of lipids (fats) in the arterial walls and the formation of atheromatous plaque.

**atherosclerotic plaque** A build up of cholesterol and fatty material in the walls of blood vessels as a consequence of atherosclerosis.

**atrial fibrillation (AF)** Abnormal irregular heart rhythm.

**beta-agonist** A medicine that relaxes the muscles around the airways and thereby eases restricted breathing during an asthma attack or in chronic obstructive pulmonary disease.

**beta-blocker** A medicine used to treat various cardiovascular diseases that acts by blocking receptors at nerve endings.

**biomarker** A characteristic that can be measured objectively and evaluated as an indicator of normal biological, or pathogenic processes, or pharmacological responses to a therapeutic intervention.

**biopharmaceuticals/biologics** A class of medicines derived from proteins usually produced naturally by living organisms in response to disease, for example antibodies.

**biosimilars** Follow-on biopharmaceuticals that are biologically similar to an existing medicine.

**bipolar disorder** Any of several mood disorders, usually characterised by alternating episodes of depression and mania or by episodes of depression alternating with mild, non-psychotic excitement.

**Board** The Board of Directors of AstraZeneca PLC.

**BRCA-mutated breast cancer** A form of breast cancer caused by the mutation of the gene that normally acts to restrain the growth of cells in the breast.

**bronchodilator** A drug that causes the widening of air passages of the lungs.

**CAD/CAM** Computer aided design/computer aided manufacturing.

**carbapenem** A class of antibiotic drugs.

**cardiovascular (CV)** Relating to the heart and blood vessels.

**CAT** Cambridge Antibody Technology Group plc.

**CEE** Central and Eastern Europe.

**CER** Constant exchange rates.

**cerebrovascular disease** Disease affecting the arteries in the brain or those that supply blood to the brain.

**chloro-fluorocarbons (CFCs)** Gaseous compounds of carbon, chlorine, fluorine and hydrogen.

**chronic obstructive pulmonary disease (COPD)** Any disorder that persistently obstructs bronchial airflow, for example emphysema.

**cognitive disorders** Disorders with progressive or chronic impairment of cognition or memory.

**colorectal cancer (CRC)** Also called colon cancer or bowel cancer.

**Company** AstraZeneca PLC.

**congestive heart failure (CHF)** Impairment of the heart muscle leading to deterioration of the heart's ability to function as a pump to circulate blood throughout the body.

**connected person** This is defined by sections 252 – 256 Companies Act 2006 and includes a person's spouse, civil partner, child(ren) and step-child(ren).

**corticosteroid** Any of the steroid hormones made by the cortex (outer layer) of the adrenal gland.

**cost growth rates** Percentage growth of a particular cost category over the comparable cost category for the previous year.

**CR** Corporate responsibility.

**C-reactive protein (CRP)** Produced by the liver. The level of CRP rises when there is body-wide (systemic) inflammation.

**CRO** A contract research organisation to which pharmaceutical companies can sub-contract activities, for example clinical trial work.

**Crohn's disease** A chronic inflammatory disorder of the bowel.

**depository** JPMorgan Chase Bank, as depository under the deposit agreement pursuant to which the ADRs are issued.

**diabetes** A metabolic disorder caused by inadequate production or utilisation of insulin, characterised by hyperglycaemia (high glucose blood sugar).

**Director** A director of the Company.

**diuretic** A drug that causes the increased production of urine.

**deoxyribonucleic acid (DNA)** A molecule that carries the key genetic instructions for living organisms.

**dopamine partial agonists** Drugs that mimic the effects of dopamine in the brain by stimulating dopamine receptors.

**double-blind study** A clinical study in which none of the participants (subject, investigator nor research team), knows what treatment the subject is receiving until the end of the study.

**drug metabolism** The biochemical modification or degradation of drugs, usually through specialised enzymatic systems.

**dyslipidaemia** Abnormal concentrations of lipids or lipoproteins in the blood.

**earnings per share (EPS)** Profit for the year after tax and minority interests, divided by the weighted average number of Ordinary Shares in issue during the year.

**EEA** The European Economic Area.

**efficacy** The beneficial effect of a drug.

**EFPIA** The European Federation for Pharmaceutical Industries and Associations.

**EMA** The European Medicines Agency.

**epidermal growth factor (EGF) receptor** A protein found on the surface of some cells and to which epidermal growth factor binds, causing the cells to divide. It is found at abnormally high levels on the surface of many types of cancer cells, so these cells may divide excessively in the presence of epidermal growth factor.

**epidemiological** Relating to the study of incidences, distribution, control and prevention of diseases in populations.

**EU** European Union.

**exceptional items** Significantly large items that are distinct in nature from items normally occurring during ordinary business activities.

**excipient** An inactive substance that serves as the vehicle or medium for a drug or other active substance.

**extrapyramidal** Relating to nerve pathways that link nerve nuclei in the surface of the cerebrum (main mass of the brain), basal ganglia (deep within the brain) and parts of the brain stem.

**finance income and expense** Includes interest earned and payable, and similar items.

**first good laboratory practice (FGLP)** The point at which a compound undergoes the first pre-clinical study that is required for regulatory approval, which marks entry into the development pipeline.

**first-line therapy** Treatment given to a newly diagnosed patient, who has therefore not yet been treated.

**first time in man** The first time that an experimental compound is administered to a human. It implies that the compound has passed ethical review bodies and passed formal regulatory toxicology studies.

**Food and Drug Administration (FDA)** Part of the US Department of Health and Human Services Agency, which is the regulatory authority for all pharmaceuticals (including biologics and vaccines) and medical devices in the US.

**free cash flow** Represents net cash flows before financing activities, and is calculated as net cash inflow before financing activities, adjusted for acquisitions of businesses, movements in short term investments and fixed deposits and disposal of intangible assets.

**gastrointestinal (GI)** Relating to the stomach and intestines.

**gastrointestinal stromal tumours** A rare tumour of the gastrointestinal tract.

**gastro-oesophageal reflux disease (GERD)**

A condition where gastric juices, containing acid, travel back from the stomach into the oesophagus.

**generalised anxiety disorder (GAD)** A neurotic illness characterised by chronic and persistent apprehension and tension.

**GIA** Group Internal Audit, our internal audit function.

**glioblastoma** A type of primary brain tumour.

**gross margin** The margin, as a percentage, by which sales exceed the cost of sales, calculated by dividing the difference between the two by the sales figure.

**Group** AstraZeneca PLC and its subsidiaries.

**head-to-head study** A clinical trial in which two different treatments are directly compared with each other. (For drugs under development, this is often a comparison with a marketed drug that is seen to be the gold standard).

**high-density lipoprotein cholesterol (HDL-C)** Cholesterol carried in the blood by HDL back to the liver, sometimes referred to as 'good' cholesterol.

**high-throughput screening** The process of using automated tests to search quickly through large numbers of substances for desired binding or activity characteristics.

**HKAPI** Hong Kong Association of the Pharmaceutical Industry.

**hormone** A chemical messenger carried in the blood which produces a biological effect at its site of action.

**human papilloma virus (HPV)** A group of viruses that can cause cervical cancer.

**hydrochlorothiazide (HCTZ)** A water pill (thiazide diuretic) that helps prevent the body from absorbing too much salt, which can cause fluid retention.

**hydrofluoroalkanes (HFAs)** New propellants for metered-dose inhalers that are more environmentally friendly than the current CFC-based inhalers.

**hyperglycaemic** The condition of abnormally high levels of glucose in the blood.

**hypertension** High blood pressure.

**IAS** International Accounting Standards.

**ICH** The International Conference on Harmonisation of Technical Requirements for Registration of Pharmaceuticals for Human Use, which brings together regulators and pharmaceutical industry experts from the three ICH regions (Europe, the US and Japan) to discuss scientific and technical aspects of drug registration.

**IFRS** International Financial Reporting Standards.

**immunosuppressed** A condition in which the response of the immune system is reduced.

**IMS Health Inc.** Provider of global pharmaceutical market data.

**inside information** Precise, confidential, share-price sensitive information which relates to the Group.

**IR** Immediate release.

**ischaemic heart disease** A chronic disease caused by insufficient blood supply to the heart muscles via the coronary arteries.

**KPI** Key performance indicator.

**large molecule** A general term used to describe pharmaceutical R&D using biology and biological methods and materials to discover and develop new medicines. Biological molecules are large compared with chemical molecules.

**Lean Sigma™** A business improvement methodology.

**leukotriene receptor antagonist** A non-steroidal asthma medication taken over the long term and shown to reduce use of inhalers etc. and may also allow the asthmatic to reduce high doses of inhaled steroids.

**LIBID** London Interbank Bid Rate.

**LIBOR** London Interbank Offered Rate.

**line extension** A new formulation, indication or presentation of a marketed product.

**Lipid** Another word for fat. Lipids are one of the main constituents of plant and animal cells.

**low-density lipoprotein cholesterol (LDL-C)** Cholesterol that is carried in the blood by LDL, sometimes referred to as 'bad' cholesterol.

**LSE** London Stock Exchange plc.

**lutinising hormone-releasing hormone (LHRH)** A naturally occurring hormone that controls sex hormones in both men and women.

**LHRH agonist** A drug that mimics the effect of LHRH.

**major depressive disorder (MDD)** Depression where five or more symptoms of depression are present for at least two weeks.

**Markman hearing** A pre-trial hearing in the US in which judges hear from both parties as to the appropriate meaning of relevant key words used in the claims of a patent.

**marketing authorisation application (MAA)**

An application for authorisation to place medical products on the market. This is a specific term for the EU/EEA markets.

**Medicaid** A US health insurance programme for individuals and families with low incomes and resources. It is jointly funded by the states and federal government, and is managed by the states.

**Medical and Healthcare Products Regulatory Agency (MHRA)** The UK regulatory authority, a government agency, for medicines and medical devices.

**Medicare** A US health insurance programme for US citizens aged 65 or older, US citizens under age 65 with certain disabilities, and US citizens of all ages with permanent kidney failure requiring dialysis or a kidney transplant. Recently, Medicare began offering prescription drug coverage under Part D of the Medicare Prescription Drug Benefit.

**metabolic syndrome** A combination of medical disorders that increase one's risk of cardiovascular disease.

**metastatic disease** Disease that has spread from one part of the body to another.

**MHLW** The Japanese Ministry of Health, Labour and Welfare.

**minority interests** Share of profits that belong to non-AstraZeneca shareholders in partially-owned subsidiaries.

**monoclonal antibodies (MAbs)** An antibody derived from a single clone of cells; all antibodies derived from such a group of cells have the same sequence of DNA.

**monotherapy** Treatment where only one agent is given.

**moving annual total (MAT)** A figure that represents the financial value of a variable for 12 months.

**multiple sclerosis (MS)** Progressive deterioration of the nervous system.

**multiple unit pellet system (MUPS)** A formulation in which each dose is subdivided into hundreds or thousands of smaller units with modified release properties.

**myocardial infarction (MI)** A heart attack.

**myocardial ischaemia** See ischaemic heart disease.

**nasal polyp** A growth attached to the lining of the nose.

**National Council on Aging (NCOA)** A US non-profit organisation that helps older people to, amongst other things, stay healthy.

**NCI** US National Cancer Institute.

**nebulised corticosteroid** A steroid drug administered as tiny droplets in water vapour.

**neurology** The scientific study of the structure and function of the nervous system and brain.

**new chemical entity (NCE)** A new, pharmacologically-active chemical substance. The term is used to differentiate from line extensions and existing drug products.

**new drug application (NDA)** An application to the US Food and Drug Administration for approval to market a new medicine in the US.

**non-Hodgkin's lymphoma** Cancer arising from a type of white blood cell called lymphocytes. The disease can develop in organs related to the lymphatic system.

**non-small cell lung cancer (NSCLC)** A term covering three distinct types of lung cancer.

**non-steroidal anti-inflammatory drugs (NSAIDs)** Medicines that relieve pain and reduce inflammation when used over a period of time.

**normotensive** Indicating a normal arterial blood pressure.

**NYSE** New York Stock Exchange.

**odontology** A science dealing with the teeth, their structure, development and diseases.

**oncology** The study of cancer.

**operating costs** Distribution costs; research and development costs; and selling, general and administrative costs.

**operating profit** Sales, less cost of sales, less operating costs, plus operating income.

**Orange Book** A publication of the US Food and Drug Administration that lists the patents relating to drugs approved for marketing and sale in the US, including patents which protect active ingredients.

**Ordinary Shares** Ordinary Shares of \$0.25 each in the capital of the Company.

**osteoarthritis (OA)** A joint disease which causes degeneration of the cartilage that lines the joints.

**outcomes study** A clinical trial (usually large) assessing the effect of a drug in preventing or delaying a specific and important medical event (for example the occurrence of a heart attack).

**over the counter (OTC)** A term used for medicines that can be purchased without a prescription.

**palliative** Treatment that has no curative intent but is given to maintain quality of life and to relieve suffering.

**parenteral** Administered by injection (for example intravenous, sub-cutaneous and intramuscular).

**Parkinson's disease** A neurological disorder caused by degeneration of or damage to nerve cells in the brain.

**perennial rhinitis** A year round inflammatory nasal disorder.

**Peripheral or cutaneous T-cell lymphoma (PCTL/CTCL)** Both are specific types of non-Hodgkin's lymphoma.

**phage** The abbreviation for bacteriophage, a virus that infects bacteria.

**phage display** A test to screen for protein interactions using multiple gene sequences and bacteriophages.

**Pharmaceutical and Medical Devices Agency (PMDA)** The Japanese regulatory authority for medicines and medical devices, part of the MHLW.

**Pharmaceutical Research and Manufacturers of America (PhRMA)** The principal US pharmaceutical industry association.

**pharmacogenomics** A biotechnological science that combines the techniques of medicine, pharmacology and genomics and is concerned with developing drug therapies to compensate for genetic differences in patients which cause varied responses to a single therapeutic regimen.

**pharmacokinetics** The study of what the body does to a drug.

**pharmacology** The study of how drugs affect a living organism.