

## PID GLOSSARY

Acquired immune deficiency	An immune deficiency acquired during a person's lifetime. Can be caused by e.g.: an infection, medication or radiation.
Acquired Immune Deficiency Syndrome	AIDS. An acquired immune deficiency, caused by HIV
Acute	Description of a disease, which is usually shorttermed and of recent onset.
Adenosine Deaminase(ADA)	An enzyme, which is important for the development of the immune system
Agammaglobulinemia	Total (almost) lack of immunoglobulins
Amniocentesis	Extraction of amniotic fluid in order to perform prenatal genetic testing
Anemia	Deficiency of red blood cells, haemoglobin or blood volume
Antibody	Protein molecules produced and secreted by some B cells in response to stimulation by an antigen.
Antigen	Any foreign substance that activates the immune system
Aspergillus	A kind of fungi including many common molds
Ataxia	Unsteady walk caused by neurological abnormalities
Autoantibody	An immunoglobulin, which reacts against the person's own tissue
Autoimmune Disease	A disease in which a persons immune system reacts against the persons own tissue.
Autosomal recessive inheritance	Non X - linked inheritance. The trait or disease is inherited from both parents
Autosomes	Every chromosome except the sex chromosome
B – lymphocytes (B cells)	White blood cells originating from the bone marrow. Involved in the production of immunoglobulins
Bacteria	Single cell organisms (microorganisms).
Bone marrow	Soft tissue located in the hollow bones
Bone marrow transplantation (BMT)	A treatment by the means of whichbone marrow from one person is transplanted to another person
Bronchiectasis	A dilation of the bronchi. Can be caused by recurrent infections
Carrier detection	Detection of a genetic defect, which does not express itself in the carrier
CD 40 Ligand	A protein located on the surface of the T cells

Cellular immunity	Immune protection provided by the direct action of the immune cells
Chemokine	Polypeptides(chains of aminoacids) controlling the activities of the leucocytes
Chorionic villus sampling	Extraction of a sample from the placenta during pregnancy with the purpose to perform a genetic test
Chromosomes	Structures in the cellular nucleus carrying the genes. Each human cell has 23 pairs of chromosomes
Chronic	Description of a recurrent or continuous infection or disease.
Combined immune deficiency	An immune deficiency involving both B and T cells
Complement	About 28 proteins circulating in the blood. They act in a definite sequence to affect the destruction of bacteria, viruses and fungi
Congenital	An inborn disease or deformity
Cord blood	Blood from the placenta or the umbilical cord
Consanguineous	Related by blood
Cryptosporidium	A microbe that can cause stomach problems and liver disease. May be present in drinking water
Cytokine	A signalling protein. Regulates the activity of other cells. Interleukins and interferons are examples of cytokines
Deoxyribonucleic acid(DNA)	The carrier of genetic information in the chromosomes
Eczema	Inflammation of the skin with redness, itching and squamation
Endocrine system	A number of glands in the body. Produces hormones.
Eosinophilia	An increase in the number of eosinophil granular white blood cells
Enzyme	A protein facilitating chemical reactions
Fungus	Member of a family of relative primitive microorganisms (mushrooms, yeast and molds)
Gamma interferon	A cytokine primarily produced by the T cells. Improves bacterial killing by phagocytes
Gamma globulin	The protein fraction of blood containing immunoglobulins
Gene	A unit of genetic material (DNA)
Gene therapy	Treatment of genetic diseases. A normal gene is inserted into the patient
Genetic testing	Test performed to confirm if a person has a special gene
Graft rejection	Immune reaction in the recipient leading to rejection of the

	transplanted organ or tissue
Graft-versus-host disease	A reaction by means of which transplanted immune cells attack the tissue of the recipient
Granulocyte	A white blood cell, which is able to ingest foreign microbes
Granulocyte colony-stimulating factor(G-CSF)	A cytokine which stimulates proliferation, development and function of granulocytes
Granulocyte-macrophage colony-stimulating factor (GM-CSF)	A cytokine stimulating proliferation, development and function of granulocytes and macrophages.
Haplotype	A series of gene clusters on the sixth chromosome that determines histocompatibility antigens
Helper lymphocytes(helper T cells)	A subset of T cells, which support the function of B cells and T cells
Histocompatibility antigens	Chemicals on the surface of most body cells. Rather unique to each person. Determine the tissue type of a person
Human immune deficiency virus (HIV)	A virus infecting and destroying cells of the immune system. Causes AIDS
Humoral immunity	Immune protection provided by soluble factors circulating in the blood.
Hypo-	Under normal
Hypogammaglobulinaemia	Too low levels of immunoglobulins in the blood
Hypoplasia	Insufficient development of an organ or part of the body
IgA	Immunoglobulin, class A. Available in the blood and tears and on the mucous membranes in the body. Is secreted in the breast milk.
IgD	Immunoglobulin, class D. Its function is not well understood
IgE	Immunoglobulin, class E. Only very small amounts in the blood. Responsible for allergic reactions
IgG	Immunoglobulin, class G. The most abundant and common immunoglobulin. Reacts against bacteria and viruses. Able to cross the placenta.
IgM	Immunoglobulin, class M. Circulates with the blood. Activates the complement system. Is the first immunoglobulin to be produced
Immune deficiency	A congenital or acquired abnormal function of the immune system
Immune response	The reaction of the immune system against foreign microbes
Immunocompetent	The ability to initiate an immune reaction

Immunoglobulins (Ig)	The same as antibodies. Five different classes: IgA, IgD, IgE, IgG, IgM.
Immunoglobulin replacement therapy	Subcutaneous (SCIG) or intravenous injection (IVIg) of immunoglobulin
Incubation	The time span between the infection and the manifestation of the disease
In vitro	Experiment done in laboratory outside a living environment
In vivo	Experiment done in a living environment
Infection	Disease caused by a pathogen
Inflammation	Heat of a part of the body, with pain, redness and swelling
Interleukin	Signalling protein. Mainly produced by the T cells and macrophages
IVIg	Intravenous injection immunoglobulin
Killer lymphocytes	Cytotoxic T cells, kill microbes, or cells infected by them directly
Leukaemia	Type of cancer affecting the cells of the immune system
Leukocyte(white blood cell)	Small colorless blood cells playing an important role in the immune system. Five basic types: Monocytes, lymphocytes, neutrophils, eosinophils and basophil cells
Live vaccines	Live viruses used in vaccines. In immunocompromised persons they can transmit that disease which they were originally designed to prevent
Lymph	Fluid made up of various components of the immune system. Flows throughout tissues of the body
Lymph node	Small bean-sized organs of the immune system, distributed widely in the body. Each lymph node contains special compartments for T cells, B cells and macrophages
Lymphocytes	Small white cells in the blood and lymphoid tissue, Two major forms: B cells and T cells
Lymphoma	Type of cancer of the lymphocytes
Macrophage	A phagocytic tissue cell. Destroys foreign antigens and present them to T and B cells
Major Histocompatibility Complex (MHC)	A series of genes on chromosome number six. Determines a persons tissue type
Malignancy	Cancer
Metabolism	The chemical process in the cells or the body as a whole,

	whether it is building up or breaking down of living material
Microbes	Very small living organisms. Normally single cells. Includes bacteria, protozoa and fungi
Molecules	Subunits of matter, element or compound. The molecules themselves are composed of atoms.
Monocyte	Phagocytic cell in the blood. Acts as scavenger. Develops into a macrophage in the tissue
Monokines	Chemical messengers produced by monocytes and macrophages
Mucosal surfaces	Surfaces that come in close contact with the environment (eyes, mouth, nose, gastrointestinal tract, etc.)
NK cell	Natural killer cell
Neutropenia	A lower than normal number of neutrophils in the blood
Neutrophils	A type of granulocytes in the blood and tissues. Able to ingest microbes
Opportunistic infection	An infection, which only occurs under special circumstances.
Opsonin	Antibodies, which bind microbes to phagocytes
Organism	An individual living thing
Osteomyelitis	Infection of a bone
Parasite	A plant or animal, which lives within another living organism
Parathyroid gland	Small glands in the neck near to thyroid. Control the metabolism and levels of calcium in the blood
Petechiae	Very small red spots in the skin caused by punctiform bleedings in the skin
Phagocyte	A class of white blood cells, which ingest microbes, other cells and foreign particles
Plasma cells	Cells, descending from B cells, producing immunoglobulin
Platelets	The smallest and most fragile blood cells. Function: blood clotting
Polyethylene glycol-adenosine deaminase (PEG-ADA)	A replacement enzyme, which is able to normalise certain immune functions
Polymerase Chain Reaction (PCR)	A sensitive and fast method to identify a microbes
Polypeptides	Chains of aminoacids
Polysaccharides	Complex sugars
Primary immunodeficiency	Disease, intrinsic to the cells and tissues of the immune system

Prophylactic	Medical therapy initiated to prevent a disease or infection
Protein	Organic chemicals made up of chains of amino acids
Protozoa	A small parasite
Secondary immune deficiency	Immune deficiency due to another illness or treatment.
Sepsis	Infection of the blood
Sex chromosomes	Two chromosomes: X and Y. XX for female and XY for male
Spleen	Organ in the abdominal cavity. Contains B cells, T cells and macrophages
Stem cells	Cells from which all blood cells and immune cells are derived
Subcutaneous infusion	Injection of immunoglobulin directly under the skin with a small pump
T cell	A lymphocyte. Processed in the thymus
Telangiectasia	Dilation of the blood vessels
Thrombocytopenia	Low number of the platelets
Thrush	Fungal disease of mucous membranes in the mouth, caused by Candida
Thymus gland	Lymphoid organ located behind the upper portion of the breast bone. The chief educator of T cells. Increases in size from infancy to adolescence. Hereupon it gradually shrinks.
Vaccine	A substance that contains components from an infectious organism. Stimulates the immune system and protects the body from subsequent attacks
Vector	Modified viruses with normal genes. Are used in gene therapy
Virus	A submicroscopic microbe causing infections. Is only able to reproduce in living cells
White blood cells	See leukocyte
X - linked inheritance	Inheritance when the disease is inherited via the X - chromosome