

Primary Immunodeficiencies (Inborn Errors of Immunity) - Fast Facts

This document has been developed by [ASCIA](http://www.allergy.org.au), the peak professional body of clinical immunology/allergy specialists in Australia and New Zealand. ASCIA information is based on published literature and expert review, is not influenced by commercial organisations and is not intended to replace medical advice. For patient or carer support contact [AusPIPS](http://www.allergy.org.au), [HAE Australasia](http://www.allergy.org.au), [IDFA](http://www.allergy.org.au) or [IDFNZ](http://www.allergy.org.au).

1. Inborn errors of immunity (IEI) include primary immune deficiencies (PID) and are a group of more than 550 potentially serious chronic medical conditions, that can lead to frequent or severe infections, swellings, and autoimmune problems.
2. IEI/PID disorders can be caused by defects in the genes that control the immune system and may be inherited. IEI/PID disorders are different to AIDS (acquired immunodeficiency syndrome), that is due to human immunodeficiency virus (HIV).
3. Symptoms of IEI/PID disorders often appear in childhood, but some can first occur in adults. Research and advances in therapies have resulted in improved health and a longer life for people with IEI/PID disorders. Early diagnosis of IEI/PID disorders is important, since delayed treatment can result in complications, which may be life threatening.
4. IEI/PID disorders can be grouped according to what part of the immune system is affected:
 - Antibody deficiencies such as common variable immunodeficiency (CVID) and X-linked agammaglobulinaemia.
 - Combined immunodeficiencies such as severe combined immunodeficiency (SCID).
 - Phagocytic cell deficiencies such as chronic granulomatous disease (CGD).
 - Immune dysregulation and autoinflammatory disorders.
 - Complement deficiencies such as hereditary angioedema (HAE).
5. Immunoglobulin replacement therapy (IRT) is one of the most effective and commonly used treatments for some IEI/PID disorders. IRT can be given using intravenous immunoglobulin (IVIG) injected into the veins or given at home using subcutaneous immunoglobulin (SCIG) that is injected under the skin.
6. Other treatment options for IEI/PID disorders include antibiotics, immunomodulation, haematopoietic stem cell transplants (HSCT) and HAE treatments.

