

## Research Areas

### Primary Immunodeficiencies in adults

While most primary immunodeficiency disorders already present during childhood, some disorders manifest preferentially later in life. The most common form is the common variable immunodeficiency (CVID). This diagnosis comprises a very heterogeneous group of idiopathic antibody deficiency syndromes. Genetic as well as environmental factors contribute to its manifestation in most patients. A much less common immunodeficiency of the adult is the idiopathic CD4 lymphopenia (ICL). The clinical picture resembles the HIV-infection. The underlying pathogenesis is not yet understood.

Projects:

- [CVID - Common variable Immunodeficiency](#)
- [ICL - Idiopathic CD4 Lymphocytopenia](#)

### Secondary Immunodeficiency in adults

With increasingly powerful therapeutic options for autoimmune as well as malignant diseases, secondary immunodeficiency leading to failure of vaccination and increased susceptibility to infections becomes more and more evident. The susceptibility to infection can be generalized or more specific. Severe leukopenia or lymphopenia due to immunosuppressive therapy cause a broad spectrum of infectious diseases, while the re-activation of tuberculosis under anti TNF $\alpha$  therapy for example is the expression of a rather selective immunodeficiency. Currently, we are still lacking good surrogate markers for the susceptibility and manifestation of secondary immunodeficiency in many instances. This, however, is important information for the planning and surveillance of immunosuppressive therapies. Therefore one focus of the research group is the characterization of the immune system under various immunosuppressive regimens.

Projects:

- [Secondary Immunodeficiency due to immunosuppressive therapy](#)