

## **ABSTRACT**

Immunosuppressive therapy is used wherever it is necessary to inhibit unwanted immune system activity. Such clinical situations are the conditions accompanying organ transplantation and autoimmune diseases. The goal of immunosuppressive therapy is to reduce unwanted immune activity, ie to stay activated T and B lymphocytes. On the other hand, as little as possible to suppress non-specific cell immunity which mediate the immune response to various inflammatory stimuli, regardless of the specific antigen.

Application of immunosuppressants is associated with an increased risk of infections of all types, and to otherwise rare. Moreover, an increased risk of developing lymphomas and other malignancies, therefore it is necessary to consider the benefits vs. risks of therapy.

This work offers an overview of the substances used in immunosuppressive therapy. From the beginning they were non-specific cytotoxic agents (azathioprine, cyclophosphamide) and corticosteroids. Subsequently, it added ciclosporin A, tacrolimus, sirolimus and mycophenolate mofetil. Significant progress in immunosuppressive therapy has been achieved mainly by introducing polyclonal and monoclonal antibodies . Their use is generally achieved good clinical results and are well tolerated.