Immunosuppressive drugs are used to dampen the immune response in organ transplantation. Glucocorticoids, azathioprine, cyclosporine, tacrolimus, mycophenolate, sirolimus, and various monoclonal and polyclonal antibodies all are approved for use in transplantation. Maintenance immunosuppression consists of a calcineurin inhibitor (cyclosporine or tacrolimus), glucocorticoids, and an antimetabolite (azathioprine or mycophenolate). Synergistic effects permit use of the various agents at relatively low doses, thereby limiting specific toxicities while maximizing the immunosuppressive effect.