DiGeorge syndrome is an autosomal dominantly inherited disease with an incidence of 1: 4 000. Its distinctive phenotypic manifestations are collectively referred to as CATCH 22. Its holders can cause serious clinical problems. One of the primary syndrome congenital deficits of cellular immunity from an immunological point of view. According to the severity of immunodeficiency DiGeorge syndrome can distinguish complete and partial. Patients due to improper development of thymic T cell immunity has affected. The work deals with the humoral immunity of patients with DiGeorge syndrome, which should theoretically not be affected. It is mainly focused on post-vaccination antibodies and their dynamics, and immunoglobulins A, G, E and M. Monitoring patients from the database of patients with DiGeorge syndrome examined at the Institute of Immunology, 2nd Charles University Medical Faculty and University Hospital Motol in the years 1995 - 2011 shows that post-vaccination response in DiGeorge syndrome is not significantly affected. Abnormal levels of immunoglobulins were observed fundamental observed.