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CD40 Ligand Deficiency

National Cancer Institute

Source

National Cancer Institute. *CD40 Ligand Deficiency*. NCI Thesaurus. Code C61244.

Patients with the X-linked hyper IgM syndrome have a deficiency of a protein, CD40 ligand that is found on the surface of T-lymphocytes. As a consequence of the deficiency of this protein, their T-lymphocytes are unable to instruct B-lymphocytes to switch their production of gamma globulins from IgM to IgG and IgA. As a result, patients have decreased levels of IgG and IgA and normal or elevated levels of IgM. In addition, since CD40 ligand is important to other functions of T-lymphocytes, they also have a defect in some of the protective functions of their T-lymphocytes.