CD166 as a Therapeutic Target in Autoimmune Diseases

Pouya Ghaderi*, Mokhtar Ahmadi, Hossein Feyzi, Fatemeh Shahbeigi

Islamic Azad University, Mashhad Branch, Mashhad, Iran

Published: 11 April, 2017

Abstract

About 3 decades ago CD6 identified as one of the first antigens expresses on the majority of T cells and a subset of B cells. CD6 regulates cellular adhesion migration across the endothelial and epithelial cells. In recent years researches indicate its role in pathogenesis of autoimmune diseases. Many researches have been done in recent years to block CD6 by CD6 mono clonal antibodies, IOR-T1 and Tu¯33, but most blockers had short time effects and didn’t effect for over a month. Nowadays CD166 has been identified as the ligand of CD6. CD166 expresses in many tissues such as spleen, kidney, skin and brain. It is supposed that interaction between CD6 and CD166 has an important role in pathogenesis of autoimmune diseases. Few researches have done on CD166 and its blockers but it seems CD 166 targeted therapy in autoimmune diseases such as MS shows better results rather than CD6 blockage. So targeting CD166 by mono clonal antibodies in future researches is needed and helpful.

Keyword: CD6, CD166, Autoimmune disease

*Corresponding Author: Pouya Ghaderi
E-mail: pouyaghaderi73@gmail.com