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Leronlimab

National Cancer Institute

Source

National Cancer Institute. *Leronlimab*. NCI Thesaurus. Code C137824.

A humanized immunoglobulin (Ig) G4 monoclonal antibody against CC chemokine receptor 5 (CCR5; CD195), with potential activity as a human immunodeficiency virus (HIV) entry blocker and potential protective activity against graft-versus-host disease (GvHD). Upon administration, leronlimab targets and binds to CCR5 expressed on T-cells. This blocks HIV cell entry, which prevents HIV infection and/or reduces HIV viral load. In addition, blocking CCR5 by PRO 140 decreases CCR5-mediated signaling and the CCR5-induced migration of donor cells into tissues after an allogeneic hematopoietic cell transplantation (HCT). Blocking CCR5 may therefore prevent or reduce GvHD. CCR5, a co-receptor needed for HIV cell entry, plays a key role in immunomodulation. Expressed on monocytes, activated T-cells and dendritic cells (DCs), CCR5 can regulate chemotaxis. Lymphocyte trafficking via chemokine receptors, such as CCR5, and recruitment to target organs, plays a critical role in alloreactive responses.