Open Peer Review on Qeios

Lenzilumab

National Cancer Institute

Source

National Cancer Institute. Lenzilumab. NCI Thesaurus. Code C125081.

A recombinant monoclonal antibody against the cytokine granulocyte macrophage colony-stimulating factor (GM-CSF), with potential immunomodulating activity. Upon administration, lenzilumab binds to and neutralizes GM-CSF. This prevents GM-CSF binding to the GM-CSF receptor, which is a heterodimeric protein expressed on myeloid progenitor cells, and prevents GM-CSF-mediated signaling. This may induce apoptosis in and inhibit proliferation of cancer cells that overproduce GM-CSF. GM-CSF plays a key role in the differentiation and proliferation of monocytes, macrophages and granulocytes; elevated levels of GM-CSF are associated with certain autoimmune diseases, inflammatory diseases, and cancers.