

# **Vascular endothelial growth factor receptor (VEGFR) family - Class V**

Vascular endothelial growth factor (VEGF) is one of the main inducers of endothelial cell proliferation and permeability of blood vessels.

Two RTKs bind to VEGF at the cell surface, VEGFR-1 (Flt-1) and VEGFR-2 (KDR/Flk-1)[\(19\)](#).

The VEGF receptors have an extracellular portion consisting of seven Ig-like domains so, like FGFRs, belong to the immunoglobulin superfamily.

VEGFR-2 is the major mediator of endothelial cell proliferation, migration, survival, and permeability.

The function of VEGFR-1 is less well defined, although it is thought to modulate VEGFR-2 signaling.

The therapeutic strategy is the blockade of VEGF effects by inhibition of the tyrosine kinase cascade downstream from the VEGF receptor.

The concept of disrupted signaling appears to be effective in the pharmacological treatment of neovascularization[\(20\)](#).

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