VEGF Trap – aflibercept – VIEW 1 and 2 studies

Aflibercept, a VEGF Trap, is the product of a bioengineering process where extramembranous VEGFR-1 and 2 receptor fragments are fused with the IgG1 Fc fragment.

This recombinant protein is a composite decoy receptor based on VEGF receptors VEGFR-1 and VEGFR-2.

This fully soluble human VEGF-receptor fusion protein binds to all forms of VEGF-A, as well as the related placental growth factor (PlGF), constituting a specific, highly potent, long-acting blocker of these growth factors[(31)].

High-affinity fusion proteins may be used to block the biological activities of VEGF by preventing its binding to receptors.

This VEGF Trap effectively suppresses tumor growth and vascularization in vivo, resulting in stunted and almost completely avascular tumours[(32)].

The VEGF Trap may be used to treat choroidal neovascularization, alone or in combined treatment.

A global development phase III programme for VEGF Trap-Eye in wet AMD was initiated in August 2007.

Two phase III trials conducted by two pharmaceutical companies (Regeneron Pharmaceuticals, Inc. and Bayer HealthCare AG) are evaluating treatment with VEGF Trap-Eye, at doses of 0.5mg every 4 weeks, 2mg every 4 weeks, or 2mg every 8 weeks (following three monthly doses), compared with treatment with 0.5mg of ranibizumab (Lucentis®, a registered trademark of Genentech, Inc.), administered every 4 weeks, according to its U.S. label, during the first year of the studies.

PRN dosing will be evaluated during the second year of each study.

The VIEW1 study is currently enrolling patients in the United States and Canada; the VIEW2 study is currently enrolling patients in Europe, Asia-Pacific, Japan, and Latin America[(33)].

View PDF