Diabetic retinopathy is sometimes associated with focal or diffuse macular oedema, leading to severe loss of visual acuity (1). Few treatments are effective (1). Laser photocoagulation alone rarely improves visual acuity. When combined with laser therapy, intravitreal injections of ranibizumab, a vascular endothelial growth factor (VEGF) inhibitor, markedly improves visual acuity in about 15% of patients at 12 months (1). However, ranibizumab can have serious ocular and systemic adverse effects, particularly cardiovascular disorders. Intravitreal bevacizumab provides no noteworthy advantages (2).

**Aflibercept** (Eylea®, Bayer Pharma), another VEGF inhibitor, is authorised for intravitreal administration in this setting (3,4). How does it compare to ranibizumab?

**Two trials versus laser therapy and one versus a VEGF inhibitor.** The data analysed by the European Medicines Agency are mainly based on two randomised trials, each of which lasted 12 months. These studies compared laser therapy with intravitreal injections of aflibercept 2 mg and sham injections in a total of 872 diabetic patients with focal macular oedema (4). At 12 months, there was significantly greater improvement in visual acuity with aflibercept than with laser therapy (4).

A US publicly funded randomised trial including 660 patients compared injections of aflibercept 2 mg administered a maximum of once a month, ranibizumab 0.3 mg or bevacizumab 1.25 mg (a,b) (5). At one year, the average improvement in visual acuity was generally similar in the three groups, with a gain of about a dozen letters on the ETDRS scale (Early Treatment Diabetic Retinopathy Study scale, ranging from 10 to 90 letters). In the subgroup of 305 patients with marked loss of visual acuity, aflibercept was more effective than its competitors in patients with marked visual loss, making it the drug of choice in this setting (e).

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**Aflibercept solution for intravitreal injection**

**Eylea®**

- **4 mg** of aflibercept in 0.1 ml

**VEGF Inhibitor**

- **New indication:** “(... visual impairment due to diabetic macular oedema (…)”.

[EU centralised authorisation]

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**Selected references from Prescrire’s literature search.**

In response to our request for information, Bayer Healthcare provided us with no documentation on its product.