

of long-term high-dose supplementation. The Age-Related Eye Disease Study 2 (AREDS2) is re-investigating the use of different combinations and doses of the antioxidant vitamins along with other supplements including lutein, zeaxanthin and omega-3 long-chain polyunsaturated fatty acids.<sup>9</sup>

## Future therapies

Research is continuing to refine and tailor the delivery of the existing anti-VEGF therapies on an individual patient basis. This is according to the behaviour of an individual's neovascular membrane and the appearance of the retina on various imaging techniques during follow-up. Further efforts are looking into other anti-VEGF drugs, formulations with a longer half-life in the vitreous cavity, alternative means of delivery to the retina, and combination treatments. Predictors of the response to treatment are also being researched to further individualise the treatment protocols. Much effort is going into

understanding the underlying pathophysiology of age-related macular degeneration to allow interventions that prevent or delay the onset and its progression.

## Conclusion

Age-related macular degeneration is the leading cause of irreversible visual impairment in Australia, with the neovascular form of late age-related macular degeneration responsible for the large majority of cases of severe visual loss. The introduction of the anti-VEGF therapies has revolutionised the outlook for patients suffering this devastating form of the disease. When symptoms of visual distortion or central visual loss are reported, early review by an eye-care professional and referral as appropriate to specialised care remains key to improving an individual patient's prognosis. ▲

*Conflict of interest: none declared*

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Q:

## SELF-TEST QUESTIONS

*True or false?*

- Photodynamic therapy improves vision in patients with neovascular age-related macular degeneration.
- A persistent shadow in the vision after treatment with ranibizumab requires rapid referral to a specialist.

*Answers on page 103*

## Macular Degeneration Foundation

The Macular Degeneration Foundation is a national organisation based in Sydney, which aims to reduce the incidence and impact of macular degeneration in Australia.

The Macular Degeneration Foundation website contains fact sheets on macular degeneration, lifestyle advice, information for families and carers, quarterly newsletters with tips for those with low vision, and links to related websites.

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