

# Treatments for dry age-related macular degeneration and Stargardt disease: a systematic review

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## Plain English summary

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## Plain English summary

The macula is the most sensitive part of the eye, responsible for detailed vision such as for reading. Age-related macular degeneration (AMD) is the most common cause of visual loss in older people. There are two forms of AMD: 'wet' and 'dry'. This report looks only at dry AMD.

The commonest cause of macular damage in young people is Stargardt disease (STGD). There have been no effective treatments for dry AMD or STGD, although progression in AMD can be slowed by taking the nutritional supplement used in the Age-Related Eye Disease Study (AREDS) 2 trial, containing lutein, zeaxanthin, vitamins and zinc.

Our aim was to review all the evidence on treatments for dry AMD and STGD in order to identify treatments that look most promising for research by the UK National Institute for Health Research (NIHR) programmes. We reviewed all the relevant research studies. The quality of the studies was very variable. We noted that some claims for treatments with no good evidence to support them.

There are some promising treatments for dry AMD including stem cell transplantation, new laser treatments and drugs. Research is under way on some of these, so we think that the NIHR might wish to prioritise drugs such as atorvastatin, fenretinide and levodopa.

For STGD, we think that the NIHR might wish to consider a trial of fenretinide to reduce damage to the macula and a pilot study of the nutritional supplements, lutein and zeaxanthin, to see if they protect the macula.

It could be useful for research studies to look for changes earlier in the diseases before vision is affected.

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