

# Optical coherence tomography for the diagnosis, monitoring and guiding of treatment for neovascular age-related macular degeneration: a systematic review and economic evaluation

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## Plain English summary

### OCT for neovascular age-related macular degeneration

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## Plain English summary

In wet age-related macular degeneration (AMD), abnormal blood vessels develop that leak fluid and blood in the back of the eye, causing central vision to worsen rapidly (over weeks). Optical coherence tomography (OCT) is a non-invasive imaging test, widely used in the NHS, that can detect wet AMD. The more recent spectral domain OCT contains improvements over time domain OCT. OCT is usually used along with other tests, such as visual acuity. This review assessed the evidence for the usefulness of OCT in diagnosing people newly presenting with suspected wet AMD, and in determining disease activity during regular monitoring visits for those previously diagnosed with the condition. The date of the last literature searches was March 2013. Twenty-two diagnostic and eight monitoring studies were included. The evidence suggested that, for diagnosis, OCT had high sensitivity (very few people with wet AMD would be wrongly diagnosed as not having it) and moderate specificity (around one-quarter of those without wet AMD would be wrongly diagnosed as having it). For monitoring, OCT also had high sensitivity but low specificity (half of those without active disease would be wrongly diagnosed as having it). Therefore, although OCT is a sensitive test and would detect most people with wet AMD, if used as the only test to guide treatment then, potentially, a considerable number of people with inactive disease would receive treatment. However, these results should be interpreted with caution owing to the small number of studies identified and their variable quality.



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