



<b>Title</b>	<b>Photodynamic Treatment of Subretinal New Vessels of Choroidal Origin in Age-related Macular Degeneration – An HTA</b>
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<b>Reference</b>	DACEHTA Report 2002;2(3). Danish, English summary. ISBN 87-91093-73-2 (online): <a href="http://www.sst.dk/applikationer/cemtv/publikationer/docs/fotodynamiskbehand/148545.pdf">www.sst.dk/applikationer/cemtv/publikationer/docs/fotodynamiskbehand/148545.pdf</a>

## Aim

Age-related Macular Degeneration (AMD) is the leading cause of visual impairment and blindness in industrialized countries. Until recently, the only therapy available for AMD was the destructive photothermal coagulation of new vessels growing under the retina. A new, more lenient method for non-thermal selective closure (photodynamic therapy) of subretinal new vessels (CNV) is the subject of this HTA.

## Conclusions and results

Controlled trials demonstrate that few patients will experience an improvement in visual acuity during the course of treatment, but a significant reduction in the rate of visual loss has been documented over an observation period of 2 years. Furthermore, a beneficial effect of photodynamic therapy for CNV is found for diseases other than AMD.

A cost-effectiveness analysis demonstrates that the cost per quality-adjusted life-year is 250 000 Danish kroner (DKK). This is comparable to other moderately expensive therapies across different medical specialties. Previous epidemiological studies and recent data from Copenhagen County indicate that the total direct costs per year in Denmark for treating CNV secondary to AMD by photodynamic therapy were estimated to range between 20.7 and 38.3 million DKK in 2003, if implemented to its full potential.

## Recommendations

The assessment indicates that photodynamic therapy for CNV secondary to AMD should be continued where it has already been established as a therapeutic modality, and that this new treatment should be made equally available throughout Denmark by promoting dynamic collaboration between primary care ophthalmologists and secondary ophthalmological referral centers. Proper diagnosis and administration of therapy depends on subspecialty skills, experience, and volume. The necessary equipment is widely available, or can be installed at low

cost. The critical medical task is to distinguish treatable from untreatable conditions. The new treatment is mechanistically akin to photocoagulation, and it is likely to be incorporated gradually into the general spectrum of therapeutic modalities. However, it will remain a task for the subspecialized ophthalmologist.

## Methods

The HTA covers four basic elements, ie, technology, patients, organization, and economics. The technology part describes the photodynamic therapy of CNV and the effects of treatment according to available documentation. The economic aspects were investigated and discussed in terms of expected savings and increased expenses in healthcare and social agencies, based on how the new treatment affected patients and the health service organization.