

Ophthotech Corporation – addressing Age-related Macular Degeneration (AMD)

Ophthotech is focused on developing and commercialising therapies for Age-related Macular Degeneration. AMD is an area of significant medical need and a major public health issue in a fast-growing elderly population. There are substantial opportunities for novel therapies to improve the current treatment of AMD. Novo was one of the three investors that jointly backed Ophthotech when it was founded in 2007.

What is AMD?

AMD is a disease characterised by progressive degenerative abnormalities in the macula of the eye, a small area in the central portion of the retina. AMD is typically occurring in patients aged 50 years and

older and has long been recognised as the leading cause of severe and irreversible loss of central vision in this age group in the Western world, where as many as 16 million patients are affected.

AMD is classified into two subgroups: 'dry AMD' manifested by abnormal deposits (drusen) in the retina and progressive destruction of photoreceptors leading to mild progressive vision loss. The more severe 'wet' AMD is manifested by abnormal blood vessel growth behind the retina that sometimes break and

bleed into the eye, leading to severe vision loss which may progress very quickly.

Experienced founders and management team

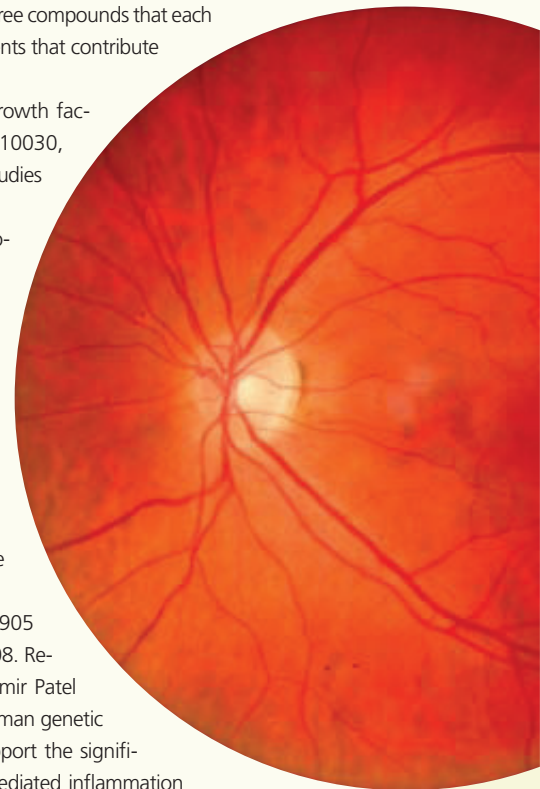
The key people behind Ophthotech are both ophthalmologists with significant clinical and corporate experience. The management team is headed by Chief Executive Officer, Samir Patel, M.D. Samir's co-founder and now chairman of the company is David Guyer, M.D.

David was previously CEO of Eyetech which the two also co-founded. Eyetech developed and commercialised Macugen®, the first anti-VEGF therapy for the eye and was successfully sold to OSI Pharmaceuticals, Inc. in 2005. By leveraging the experience and expertise in 'back of the eye' diseases, the company hopes to develop, on an accelerated timeline, novel therapies that can improve the results of the existing AMD treatments available on the market today. Using an accelerated development plan the aim is to bring these products to market quickly and in a cost effective manner.

Focused on novel therapies for AMD

Ophthotech is developing three compounds that each address major molecular events that contribute to the pathology of AMD;

- an anti-platelet-derived growth factor (anti-PDGF) aptamer, E10030, which is in phase 1 clinical studies for wet AMD
- an $\alpha 5\beta 1$ antagonist, Volo-ciximab (a monoclonal antibody), for the treatment of dry and wet forms of AMD that entered phase 1 trials late in 2008.
- an aptamer program targeting the C5 component of the complement cascade that will be aimed at the treatment of both the wet and dry forms of AMD. The lead compound ARC1905 entered phase 1 trials in 2008. Regarding this compound, Samir Patel explains, "Preclinical and human genetic linkage studies strongly support the significant role of complement-mediated inflammation in both dry and wet AMD. We believe that our anti-C5 aptamer blockade represents a potential breakthrough therapy for both wet and dry forms of AMD."



What are the risk factors for AMD?

- Aging. Increasing age is strongly associated with the presence of AMD.
- Smoking may increase the risk of AMD.
- Obesity. Research studies suggest a link between obesity and the progression of early and intermediate stage AMD to advanced AMD.
- Family history. Those with immediate family members who have AMD are at a higher risk of developing the disease.
- Gender. Women appear to be at greater risk than men.

A few facts about Ophthotech

- Headquartered in Princeton, New Jersey.
- Focused on developing ophthalmic therapies for back-of-the-eye diseases.
- Ongoing clinical trials.
- In 2008, enrolled first patient in a phase 1 complement (Anti-C5) inhibitor trial.
- Phase 1 trial ongoing for E10030, an anti-PDGF aptamer.
- A phase 1 trial with an anti-angiogenic monoclonal antibody targeting the $\alpha 5\beta 1$ integrin was started in 2008.