# Treatments for Macular Degeneration (AMD)

**Treatment for Wet AMD**

The treatment of macular degeneration began with thermal lasers almost 20 years ago. This therapy destroys the abnormal blood vessels growing under the retina to stop progression of this disease. The side effects of this therapy include destruction of the overlying healthy retina in addition to the abnormal blood vessels lying beneath it. This can lead to visual loss from the treatment itself. The recurrence rate of the disease with this therapy is approximately 50%.

Photodynamic therapy (PDT) was FDA-approved 5 years ago to improve upon the existing treatment for AMD. This therapy is based upon specific medicine that absorbs light. This medication is injected into a patient's vein and allowed to accumulate in the abnormal vessels in the retina. Once accumulated, light is used to selectively close these abnormal vessels. This therapy is effective only 60% of the time in delaying the progression of disease and almost never increases vision for the patient.

A year ago, the FDA approved a new form of therapy for AMD that destroyed abnormal blood vessels by stopping a growth promoter for these vessels known as VEGF. This therapy now includes a group of drugs including- pegaptanib (Macugen, Eyetech), ranibizumab (Lucentis, Genentech), and bevacizumab (Avastin, Genetech). Macugen has been found to stop progression of the disease but has not been found to be effective in regaining sight. Lucentis is not yet FDA approved for use in macular degeneration but shows promise for the future. Avastin is available only as a last resort therapy, as it is not FDA-approved for use in macular degeneration. Other therapies currently under investigation include anti-MRNA therapy and gene therapy.

**Treatment for Dry AMD**

Current Treatment for Dry Macular degeneration includes only one drug called anecortave acetate (Retaane, Alcon), which has been designed to prevent the conversion from wet to dry macular degeneration. This therapy is based on this drug's ability to inhibit blood vessel growth. It is investigational at this date and is used only in clinical trials.