Novel Eye Implant Automatically Releases Drugs

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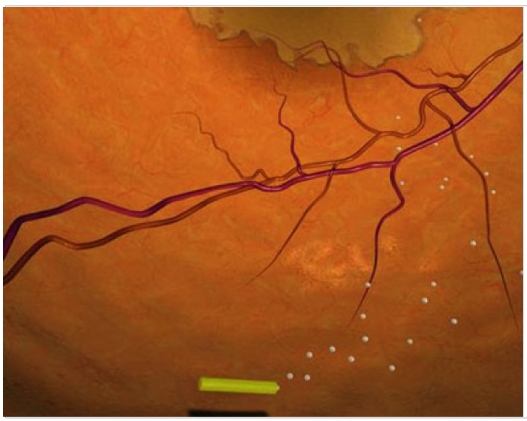

Source: Alimera Sciences

Alimera Sciences has developed a drug-delivery system that can be implantedin the eye to treat diabetic macular oedema.

Diabetes is a multifaceted disease with many associated problems, including retinal degeneration of the eye. Diabetic macular oedema (DMO) causes the blood vessels in the retina to leak into the macular of the eye, which can affect the functionality of the eye by causing macular thickening and may even eventually lead to loss of central vision.

UK- and U.S.-based **Alimera Sciences** has designed an implant that automatically delivers steroid-based drugs for the treatment of DMO, however. The tiny device, Iluvien, is injected into the vitreous humour of the eye and remains in situ permanently. The cylindrical polyimide tube has demonstrated sustained release of flucinolone acetone, a generic corticosteroid that is well established in the treatment of ocular diseases.

The sustained-release effect of the cylindrical polyimide tube means that the drug is delivered at therapeutic levels for a period of up to 36 months. As a result, repeated injections—previously a necessity for successful treatment—could now be a thing of the past. The applicator device is a single-use disposable product that facilitates the insertion of the device via a simple aseptic injection.

Historically, treatment of DMO has been via the use of topical or injected steroids; if not effective, then laser photocoagulation therapy is used to coagulate the blood vessels to prevent further leakage and alleviate symptoms. The use of injectable steroids requires regular reapplication, which is not ideal. Laser therapy can also have side effects, which can further affect vision.

Iluvien has been licenced for use in DMO in 6 European countries, including the UK, Germany, Portugal, Spain, Austria and France. A resubmission has also been processed to the FDA for approval in the United States.

By Adele Graham-King