Multi-lumen glaucoma surgery stent

The multi-lumen glaucoma surgery stent is a minimally invasive glaucoma surgery (MIGS) device designed to improve intraocular pressure management in glaucoma patients. This advanced MIGS device features multiple channels for enhanced drainage of intraocular fluid, allowing for tailored pressure reduction without additional surgeries.

Business Opportunity

Primary open-angle glaucoma (POAG) is the most common form of glaucoma, accounting for at least 90% of all glaucoma cases[1]. This condition is caused by progressive clogging of the trabecular meshwork in the eye, which results in increased resistance to efflux of aqueous humour, increasing the intraocular pressure. Commercially, glaucoma represents a large unmet need, with a global POAG prevalence of about 2.2%: 57.5 million people worldwide and 7.8 million people in Europe[2]. Norway has about 77,000 people with a glaucoma diagnosis[3].

Technology Description

Our aim is to develop and test a novel MIGS device that allows for improved effect on IOP, without increasing the risk of the procedure. This is achieved through incorporating multiple channels in the novel MIGS device (as opposed to just one), for which only one is open by default. The pressure-lowering effect of the MIGS device may be up-titrated according to need by opening one or more additional channels after insertion.

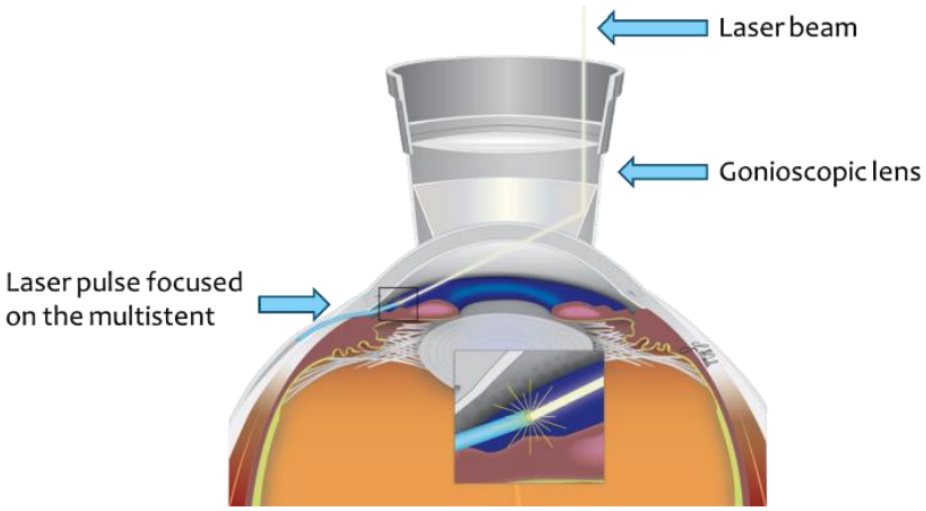

Fig. 1: Procedure for opening channels in the multichannel MIGS-device, using a gonioscope and surgical laser.

Intellectual Property

The intellectual property generated by the project includes the prosecution of existing patents, with efforts directed at pursuing patent applications in significant markets such as the EU and the US. This strategic move aims to secure protection for the multi-lumen glaucoma surgery

Category

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stent technology in regions accounting for a major portion of the MIGS market.

References

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