**PRESS RELEASE**

**Needle-free eye drop treatment: Icelandic researchers selected as finalists at the European Inventor Award 2023**

* **Thorsteinn Loftsson and Einar Stefánsson invented a non-invasive treatment to treat Diabetic Macular Edema (DME) and improve the quality of life of patients suffering from retinal diseases**
* **The technology focuses on delivering drugs from the surface of the eye to the back of the eye through drops rather than injections**

**Munich, 9 May 2023** – Worldwide, 37 million people suffer from Diabetic Macular Edema (DME) the leading cause of blindness in diabetic patients, according to the International Diabetes Federation (IDF). Treating this eye disease, and many others, involves administering injections or lengthy and often costly medical procedures. The Icelandic team of Thorsteinn Loftsson and Einar Stefánsson developed a novel technology which penetrates natural defences and delivers drugs to the back of the eye. The medication is enclosed in water-soluble complexes delivered by a conventional eyedrop to target sites deep within the eye. This makes treatment accessible to a larger number of patients. **Loftsson and Stefánsson are finalists in the ‘Research’ category of the European Inventor Award 2023,** in recognition of their promising work.They were selected from over 600 candidates for this year’s edition.

**Supporting millions of people**

Loftsson and Stefánsson hope to revolutionise how eye treatments can be administered to millions of people; reaching patients earlier, even in rural areas and less developed countries. The main breakthrough of their method is with diseases in the retina and the back of the eye, where eye drops may be used in the future instead of surgical implants or injections position drug molecules that otherwise could not be delivered. This applies to many **diseases affecting the retina, including DME**. The other main application is in the front of the eye, where the OPTIREACH® eye drops can be administered once instead of several times a day.

Loftsson is optimistic about the invention's potential, particularly in recent onset diabetics and rural areas or less developed countries, *“you can treat patients early and wherever they are, with this technology you would not only get rid of the needle, but also make sure the treatment is accessible to many more patients around the world.”*

**Achieving the “impossible”**

Loftsson worked, alongside other universities, as a professor in the Faculty of Pharmaceutical Sciences at the University of Iceland for decades until 2020. In addition to his academic career, he co-founded the company Oculis in 2016. His co-founder and colleague Stefánsson is Professor Emeritus at the University of Iceland and Chair of the Landspítali University Hospital Department of Ophthalmology since 1989. The scale of their achievement after decades of investigation was underlined by Stefánsson, *“a few of our colleagues, authorities in the field if you will, have stated and written repeatedly, even within the last 10 years, that what we have done is impossible.*” **Several clinical studies** have been developed, supporting the effectiveness of the technology.

The pair has been **named as one of three finalists in the ‘Research’ category** of this year’s European Inventor Award, which recognises outstanding inventors with successful inventions patented in Europe. **The winners of the 2023 edition of the EPO’s awards will be announced at a hybrid ceremony on 4 July 2023** **in Valencia (Spain)**. This ceremony will be broadcast online This ceremony will be broadcast online [here](https://inventoraward.epo.org/?mtm_campaign=EIA2023&mtm_keyword=EIA-pressrelease&mtm_medium=press) and open to the public.

Find more information about the invention’s impact, the technology, and the inventors’ stories [here](https://new.epo.org/en/news-events/european-inventor-award/meet-the-finalists/thorsteinn-loftsson-and-einar-stefansson?mtm_campaign=EIA2023&mtm_keyword=EIA-pressrelease&mtm_medium=press&mtm_group=press).

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**About the European Inventor Award**

The European Inventor Award is one of Europe's most prestigious innovation prizes. Launched by the EPO in 2006, the award honours individuals and teams, who have come up with solutions to some of the biggest challenges of our time. The finalists and winners are selected by an independent jury comprising former Award finalists. Together, they examine the proposals for their contribution towards technical progress, social and sustainable development, and economic prosperity. All inventors must have been granted a European patent for their invention. Read more [here](https://new.epo.org/en/news-events/european-inventor-award?mtm_campaign=EIA2023&mtm_keyword=EIA-pressrelease&mtm_medium=press) on the various categories, prizes, selection criteria and livestream ceremony to be held on 4 July 2023.

**About the EPO**

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