Contact lens embedded sensor for ocular hypertension and glaucoma monitoring

Rapports

Informations projet

Savesight

N° de convention de subvention: 885407

Site Web du projet

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Projet clôturé

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€ 50 000,00

Coordonné par
GLAKOLENS BIYOMEDIKAL BIYOTEKNOLOJISANAYI VE TICARET ANONIM SIRKETI
Türkiye

Periodic Reporting for period 1 - Savesight (Contact lens embedded sensor for ocular hypertension and glaucoma monitoring)

Période du rapport: 2020-01-01 au 2020-06-30

Résumé du contexte et des objectifs généraux du projet

Glaucoma affects over 70 million people worldwide (>12 million in Europe), and it is expected to reach 111 million by 2040. It significantly reduces the quality of life and presents a heavy economic burden on healthcare systems because glaucoma is a chronic condition with no permanent cure and is a

leading cause of blindness. However, the progression of glaucoma is preventable with early diagnosis and proper management. Its most prominent and stealthy form, namely open-angle glaucoma, is mainly caused by chronic ocular hypertension (high intraocular pressure [IOP]). The conventional method used to diagnose and monitor the progression of glaucoma as well as to create treatment algorithms relies on a single IOP measurement conducted at the clinic. Due to the circadian cycle of IOP, the conventional method does not provide sufficient and reliable information to evaluate the condition of the patients accurately, as a consequence disease progresses and negative effects on patients and society become more serious.

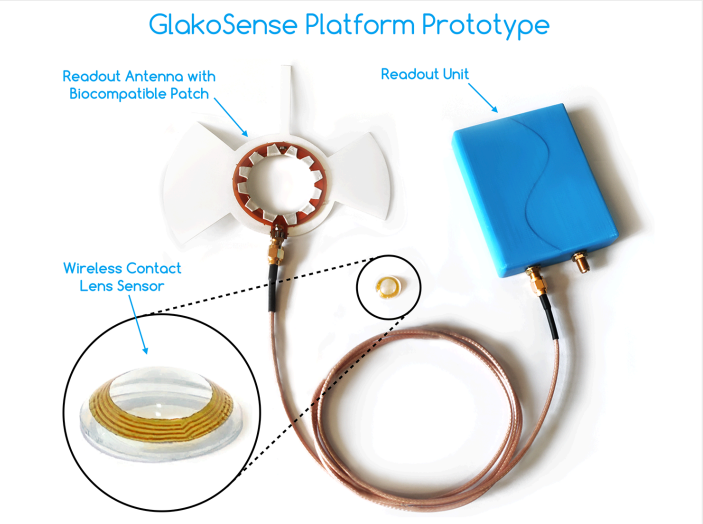
The SaveSight project aims to develop a proprietary diagnostic technology, the GlakoSense Platform, and to bring it first into the European market, and then to the global market to provide ophthalmologists with a 24-hour continuous monitoring solution that will enable early diagnosis and better management of glaucoma. The feasibility study GlakoLens conducted with the SME Instrument Phase 1 grant concluded that there is an unmet demand for such a monitoring solution, and the business model is economically feasible. Hence, GlakoLens should pursue the business idea further.

Travail effectué depuis le début du projet jusqu'à la fin de la période considérée dans le rapport et principaux résultats atteints jusqu'à présent

As part of the feasibility study, GlakoLens conducted in-vitro and in-vivo technical feasibility tests for its proprietary technology which revealed promising results and improvement opportunities. Interviews conducted with ophthalmologists, ophthalmology clinic managers, and scientists working in the field of glaucoma revealed that there is a need for a feasible 24-hour continuous IOP monitoring solution. However, getting reimbursement is vital for the economic success of the project, especially in Europe where ca. 99% of the residents have some form of health insurance. The conducted market research reveals that our competitor is focusing its efforts on USA and Japan, where 83% of the glaucoma market is located. GlakoLens has also reviewed its sales estimation and composed a financial estimation after updating its production costs and operation costs. The operation costs were updated with respect to the revised business plan of GlakoLens. During the business coaching sessions, GlakoLens improved its business, marketing and go-to-market strategy. GlakoLens exploited the project results by improving its product, its business plan and engaging with a market access & reimbursement specialists. GlakoLens disseminated the project in Hello Tomorrow Turkey Challenge in Istanbul (Runner-up Award), Hello Tomorrow Global Summit online meetings, T-DEB Showcase Event in London (an Innovate UK - Newton Project focusing on healthcare technology collaborations), InvestHorizon - BPI France presentation, by participating in the EIT Health - Healthcare Validation Lab Bootcamp, and by going through a due diligence process with an investor experienced in healthcare technologies.

Progrès au-delà de l'état des connaissances et impact potentiel prévu (y compris l'impact socio-économique et les conséquences sociétales plus larges du projet jusqu'à présent)

The SaveSight project will result in a 24-hour continuous IOP monitoring technology that is beyond the state of the art in terms of patient comfort, production costs, and performance. The product itself will provide medical doctors with previously unattainable amount of clinical information that will enable early diagnosis of glaucoma and improve the management of ocular hypertension and glaucoma by personalizing treatments. Consequently, the use of GlakoSense Platform will improve the quality of life of patients, reduce the socio-economic impact of glaucoma, which develops into blindness if treated improperly. Additionally, the project will provide employment opportunities for more than 100 highly skilled personnel directly, and contribute to the healthcare economy in Europe by generating revenues or cost reduction to all stakeholders.



GlakoSense Platform Prototype

Dernière mise à jour: 24 Septembre 2020

Permalink: https://cordis.europa.eu/project/id/885407/reporting/fr