



Major UK study confirms effectiveness of ground-breaking RETMARKER Diabetic Retinopathy screening technology

British researchers involved in an observational study consisting of 20,258 patients from the NHS' (National Health Service) Diabetic Eye Screening Programme have announced their first set of results at the Annual Meeting of the Association for Research in Vision and Ophthalmology (ARVO) in Seattle, USA.

Coimbra, Portugal, 26th May 2016 – Retmarker, a European automated retinal image analysis technology developed over 10 years, has just received independent scientific confirmation of its huge global potential in the fight against Diabetic Retinopathy (DR) from a large-scale, UK study led by researchers from the prestigious Moorfields Eye Hospital in London.

The study's team of researchers qualified all of the available technologies that met their eligibility criteria before submitting them for independent evaluation. Retmarker was the only European technology to be approved by the study based on its adequate sensitivity for detecting referable retinopathy in a high-volume clinical setting when compared with existing quality-assured, real-world methods that rely on human graders. Additionally, Retmarker showed adequate specificity that qualifies it as a more cost-effective alternative.

Adnan Tufail, MD FRCOphth, from Moorfields Eye Hospital, London, the Principal Investigator in the study, said: "This first large-scale, independent study of automated DR screening technologies showed that automation, such as that provided by

Retmarker, not only increases screening capabilities, but does so with very high levels of sensitivity. Our comprehensive health economic analysis further showed that this type of novel technology can be a cost-effective alternative to purely manual grading”.

DR is a complication of diabetes that threatens individuals’ sight and is the main cause of vision loss across the western world’s working-age population. Diabetes is a medical condition with epidemic proportions affecting more than 400 million people worldwide, with the number of people affected growing each year. The recommended best practice for diabetics to avoid blindness is to perform yearly eye examinations. Screening programmes are a cost-effective way to address this but, with an ever-increasing number of diabetics, performing and evaluating these yearly exams is becoming an unsustainable burden for health systems across the globe.

Retmarker analyses colour fundus photographs (a non-invasive exam) and safely identifies diabetics that do not need medical attention, reducing the burden of DR screening programs. Retmarker, developed by the company that shares its name, has been publishing solid research results with its clinical partners over the last ten years, demonstrating the potential its technology has to reduce the costs of DR screening programs in diverse populations around the world.

Professor José Cunha-Vaz, MD, Ph.D, and Founder and President of AIBILI (www.aibili.pt), one of Retmarker’s scientific advisors, said: “Since 2009, we have been using Retmarker technology in our reading centre to increase assessment consistency and reduce the costs of our DR grading activities. In the DR screening area alone, we have graded more than 75,000 diabetics. Our institution has been presenting and publishing the outcomes of this experience over many years at all of the major ophthalmology events”.

João Diogo Ramos, Retmarker’s CEO, said: “Our company was a pioneer in launching a biomarker for the progression of DR, which involved comparing examinations taken at different moments in time, and has evolved the technology to address the challenges

presented by DR screening programmes. We are extremely satisfied to have further independent confirmation that Retmarker's technology has the potential to enable accurate mass screening, benefiting diabetics worldwide. Since this study began, we have continued developing the technology and we look forward to evaluating Retmarker's current version that will further increase the potential to improve lives".

For more information, visit www.retmarker.com

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Note to Editors

Retmarker provides affordable software solutions for screening and progression monitoring of retinal diseases (such as Diabetic Retinopathy and AMD).

RetmarkerDR is an innovative clinical research product that allows users to track the activity of micro-aneurysms, namely the Micro-Aneurysms Formation Rate (MAFR).

Retmarker Screening is a product used daily since 2011 in Diabetic Retinopathy screening programs, that allows the implementation of highly reliable and efficient programs at an extremely low cost.

Further information on Retmarker Screening and RetmarkerDR is available [here](#) and [here](#) respectively.

The ARVO oral communication abstract is available [here](#).

This study involved researchers from several leading British institutions - Moorfields Eye Hospital, University College London, St. George's University, London School of Economics and Political Science and Homerton University Hospital (all from London, United Kingdom); Bristol Eye Hospital (Bristol, United Kingdom) – and the University of Washington (Seattle, USA), and was funded by the National Institute for Health Research HTA programme, a Fight for Sight Hirsch grant award and the Department of Health's NIHR Biomedical Research Centre for Ophthalmology at Moorfields Eye Hospital and UCL Institute of Ophthalmology.

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