



RetmarkerC

Automatic Detection of Retinal Changes

www.retmarker.com

Advantages

Clinical Advantages

Automatic detection of retinal changes over time. The system automatically highlights the differences between current and last visit retinographies. It identifies changes difficult to detect by the human eye.

Access to information on 'Preferred Practice Patterns' with easy access to updated information and trusted sources references.

Simple and focused Indicators, through an onscreen dashboard with an overview of the most relevant data, that delivers standard reports.

Digital imaging archive, with easy access to previous pictures and processed images.

Business Advantages

Improves care quality of the diagnosis and care delivery reliability.

Improves care delivery productivity.

Provides a digital imaging archive.

Enables more and better early treatments, reducing overall healthcare spending.



Co-registered Side-by-Side visit comparison

Two leading organizations launch an innovative software solution to accurately track retinal changes.

RetmarkerC is an innovative software solution that uses image processing technology and the latest medical research to deliver a product that detects retinal changes accurately, effectively and effortlessly. RetmarkerC was developed in partnership with a leading research institute - AIBILI (Association for Biomedical Research and Innovation in Light and Image).

RetmarkerC highlights the significant differences between sequential images, allowing practitioners to focus on what is important, guiding their attention to areas that might need a closer look or additional examination. It provides ophthalmologists, optometrists and opticians with enough information to support a decision or a recommendation for further action.

RetmarkerC solution is set to become an important decision support tool for ophthalmologists, optometrists and opticians, in the early detection of retinal diseases, such as Diabetic Retinopathy (DR).

Easy and Accurate Detection of Retinal Changes



The Analysis Output shows the changes found and recommended actions

Retmarkerc provides accurate and automatic difference highlighting between sequential retinographies.

Retmarkerc uses image processing technology which detects retinal changes, either being haemorrhages, hard exudates, drusens or other lesions, symptoms of Retinal Diseases such as Diabetic Retinopathy and Age-related Macular Degeneration, whose development is not always easy to assess by the human eye.

Retmarkerc works with retinographies (colour fundus photographs), which are an essential, widespread and low-cost tool for diagnosing retinal diseases. Because retinographies are less invasive than most of other imaging

techniques (e.g. angiographies), they are favoured by patients, so there is a tendency to increase this type of low-cost exams for initial screening and monitoring, further complemented by other technologies like OCT.

Retmarkerc identifies changes over time in a set of retinographies by automatically co-registering (overlapping) different images. Each image is compared against the baseline image to identify changes, generating for each Visit a new difference Image.

Retmarkerc Image processing technology enables practitioners to detect changes accurately, effectively and effortlessly. Accurate and automatic difference highlighting between sequential images allows caregivers' to be focused on what is important and guides their attention to the areas requiring further examination.

Features

Follow-up of patients with retinal diseases.

Patient retinal disease history and data management.

Analysis and comparison of the patient retinographies (mydriatic or non mydriatic) acquired over time.

Automatic Detection of changes in the patient's retina.

Suggestion of recommended actions to the user according to a Decision Tree to fill in with the information regarding the analysis output.

Storage of structured clinical information to document the analysis, including blood test results.

Advanced tool set to manage and explore images, allowing:

- Automatic Image Enhancement;
- Co-registered Side-by-Side visit comparison , including Zoom, Pan and Magnifying Glass tools.
- Data structured in layers that can be shown/hidden.

Our Partners

AIBILI is an internationally renowned Scientific Institute, dedicated to help the development of new products for health imaging, pharmaceutical and biotechnology companies.



Minimum System Requirements

Hardware Requirements:

Intel Pentium 2.0 GHz or compatible

1Gb RAM memory (2Gb recommended)

1024x768px graphics card

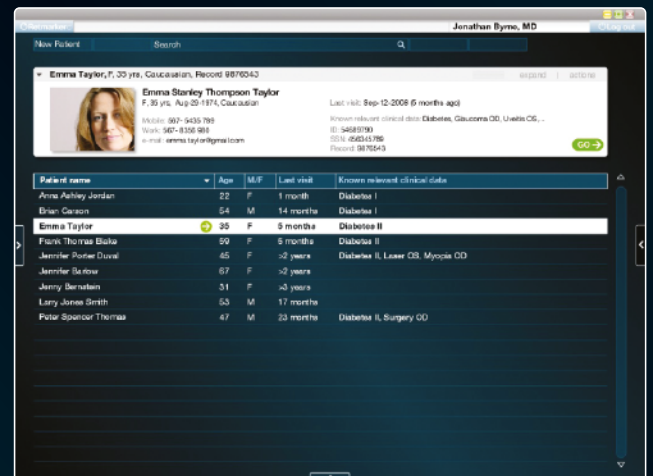
10Gb free Hard Disk space (20Gb recommended due to the image database)

Mouse and keyboard

Software Requirements:

Microsoft Windows XP with Service Pack 3

RetmarkerC was developed and fine-tuned to process 45° and 50° retinographies, centred on the posterior pole (field 2), mydriatic or non mydriatic.



Appealing and simple user interface

About Retmarker

Leading provider of innovative products that help prevent the loss of vision in an ageing population.

Retmarker is available in several product versions:

- RetmarkerC provides a quick assessment of retinal changes over time;
- RetmarkerDR, a biomarker for the progression of Diabetic Retinopathy, allowing ophthalmologists to manage diabetic retinopathy progression;
- Retmarker Screening enables the implementation of cost-effective Diabetic Retinopathy screening programs.

Retmarker innovative solutions are driven by key partnerships with prestigious universities, hospitals and scientific institutions.

For more information: info@retmarker.com