

# Perseus

specular microscope



**fully automated, non-contact endothelium analysis,  
comfortable touchscreen operation and wide measurement range**

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## **Minimum light, maximum comfort**

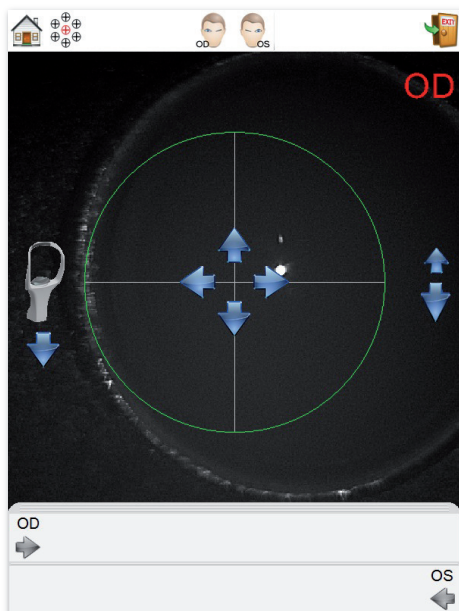
Perseus ensures maximum patient comfort due to the low intensity the light source.

## **Friendly user interface**

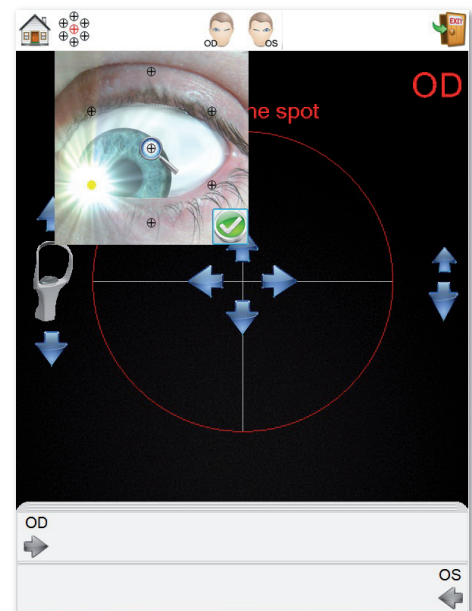
The examination is controlled easily by very user-friendly touch screen alignment.

## **Fast and accurate**

Non-contact examination, auto-alignment and automatic vertices-based analysis of the endothelium layer within a few seconds, makes working with the Perseus smart, professional and accurate.



△ centering



△ peripheral measurement

## Latest technologies

The latest hardware and software technologies have been used to develop this new instrument. An excellent CCD camera is used to get bright and high contrast endothelium pictures; a software algorithm is used to get the best focused image. An advanced editing tool is available for pictures acquired from high-damaged eyes.

## Wide measurement area

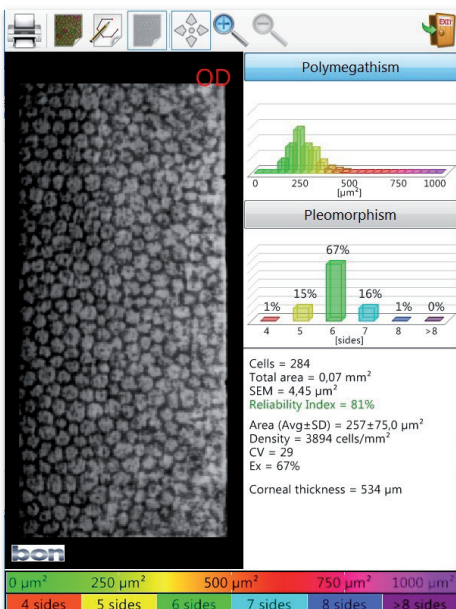
The wide measurement area makes it possible to count up to 300 cells (average value on normal eyes) and enables the analysis software to get a reliable cell density along with the analysis of cell size and shape.

## Seven measurement areas

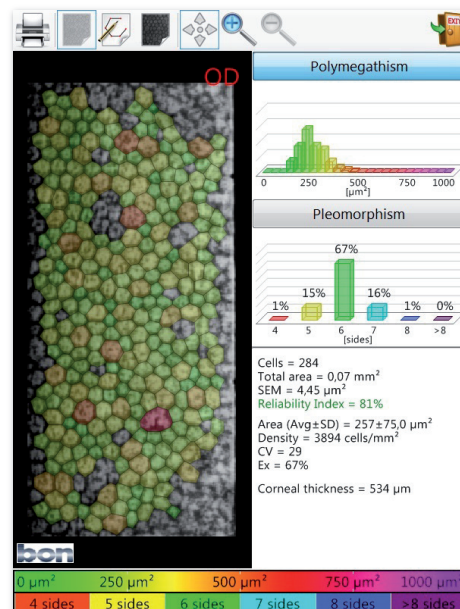
images can be taken at 7 positions (single centre position and six peripheral points).

## High magnification

during analysis makes it possible to zoom into the image seeing the limit of each cell in detail. This enables the user, via touch screen navigation, to edit individual cells.



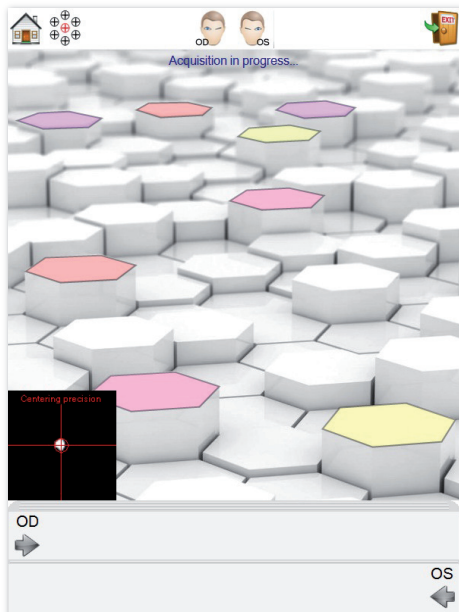
△ analysis



△ analysis with marked cells

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△ acquisition screen

## Pachymetry

non-contact pachymetry is performed on every picture acquisition.

## Software features

the intuitive software evaluates all relevant endothelium data such as:

- Number of counted cells
- Cell density (number of cells per 1 mm<sup>2</sup>)
- Average dimension of analysed cells
- Standard deviation of analysed cell dimension
- Coefficient of variation
- Statistical distribution of sizes (polymegathism) and shapes (pleomorphism)

## Data management

is integrated stand-alone in Perseus software on via network to share the data management with existing **b o n** archives.

Data can also be transferred – via network connection – to a dicom (Digital Imaging and Communications in Medicine) compatible server.