EVOptica

OPHTHALMIC INSTRUMENTS / ENGLISH EDITION

HERON

Manual Cell-Processing Guide

TECHNICAL REVIEW EDITION



Full English translation of the supplied manual. Source inconsistencies are identified for technical review. This document is not a released clinical IFU for a new US configuration.

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About this English edition

This edition translates the supplied original instructions and updates the corporate identity and contact details to EVOptica. It does not change instrument operation, calibration values, treatment parameters or the documented software behavior.

TECHNICAL REVIEW EDITION - NOT A RELEASED CLINICAL IFU

The supplied originals contain unresolved configuration differences, malformed values and, in places, text apparently copied from other instruments. These differences have been identified without guessing a correction. Manufacturer engineering and clinical review is required before releasing instructions for a specific product configuration.

Navigation and original references

Source section numbers below refer to pages in the supplied original. The English layout has its own footer page numbers. The linked section list and PDF bookmarks navigate this edition; original figure, table and contents references retain their source context.

Screenshots and interface labels

Illustrations document the original software interface. Portuguese button labels are retained where needed and paired with English descriptions. This translation does not imply that the underlying software has been localized or that obsolete operating systems and network settings are a new configuration recommendation.

The full configuration and source-review notes appear after the translated instructions. Resolve those notes before releasing this document for a specific instrument configuration.

Linked source-section contents

1 / HERON® - Research and Development
2 / Introduction
3 / Software Interface
4 / Starting Selection
5 / Marking Neighboring Cells
6 / Shape and Size Identified Automatically
7 / Completing the Process
8 / Historical Development Plan - Target: End of July 2011

SOURCE SECTION 1

HERON® - Research and Development

Manual Processing

EVOptica. The new wave in eye-care technology.

SOURCE SECTION 2

Introduction

“Manual processing” in the EVOptica HERON specular microscope allows the physician to use their experience in identifying cells to determine which cells should be included in calculating endothelial mosaic density, polymegathism and polymorphism.

SOURCE SECTION 3

Software Interface

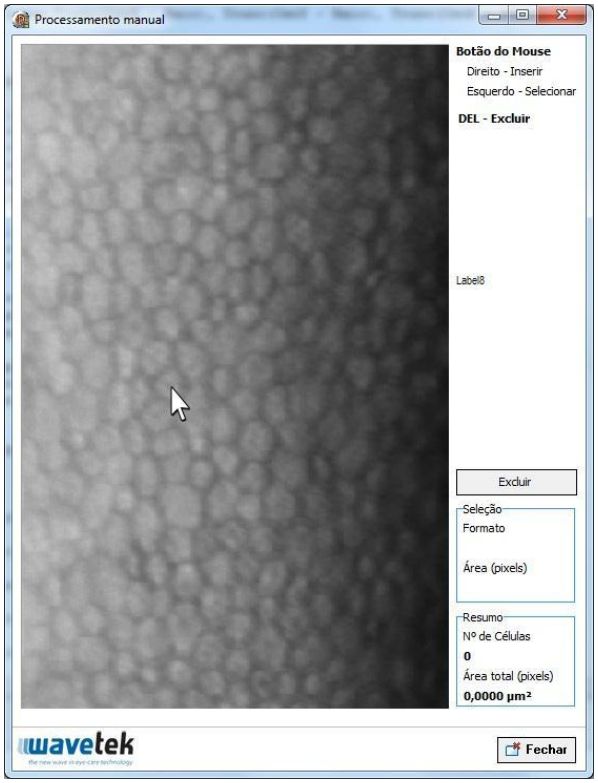
The screenshot shows the original Manual Processing interface. The English glossary below identifies its controls and fields.

Original interface label	English meaning
Processamento manual	Manual processing
Botão do Mouse	Mouse button
Direito - Inserir	Right button - Insert
Esquerdo - Selecionar	Left button - Select
DEL - Excluir	DEL key - Delete
Excluir	Delete
Seleção	Selection
Formato	Shape
Área (pixels)	Area (pixels)
Resumo	Summary
Nº de Células	Number of cells
Área total (pixels)	Total area (pixels)
Fechar	Close
Label8	Literal placeholder label shown in the original interface

Example field	Displayed value
Number of cells	0
Total area	0.0000 µm²

The original labels say “pixels,” while the displayed numerical area uses µm²; both source forms are retained.

Illustrations - source section 3



Original instrument or software illustration. See the English instructions and interface labels in this section.

SOURCE SECTION 4

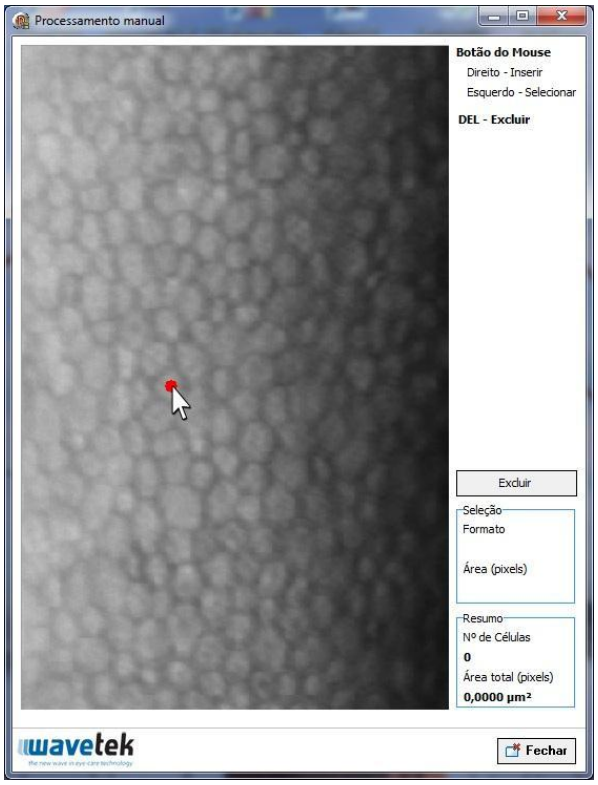
Starting Selection

Click in the center of one of the chosen cells.

Original interface label	English meaning
Processamento manual	Manual processing
Botão do Mouse	Mouse button
Direito - Inserir	Right button - Insert
Esquerdo - Selecionar	Left button - Select
DEL - Excluir	DEL key - Delete
Excluir	Delete
Seleção	Selection
Formato	Shape
Área (pixels)	Area (pixels)
Resumo	Summary
Nº de Células	Number of cells
Área total (pixels)	Total area (pixels)
Fechar	Close
Label8	Literal placeholder label shown in the original interface

Example field	Displayed value
Number of cells	0
Total area	0.0000 µm²

Illustrations - source section 4



Original instrument or software illustration. See the English instructions and interface labels in this section.

SOURCE SECTION 5

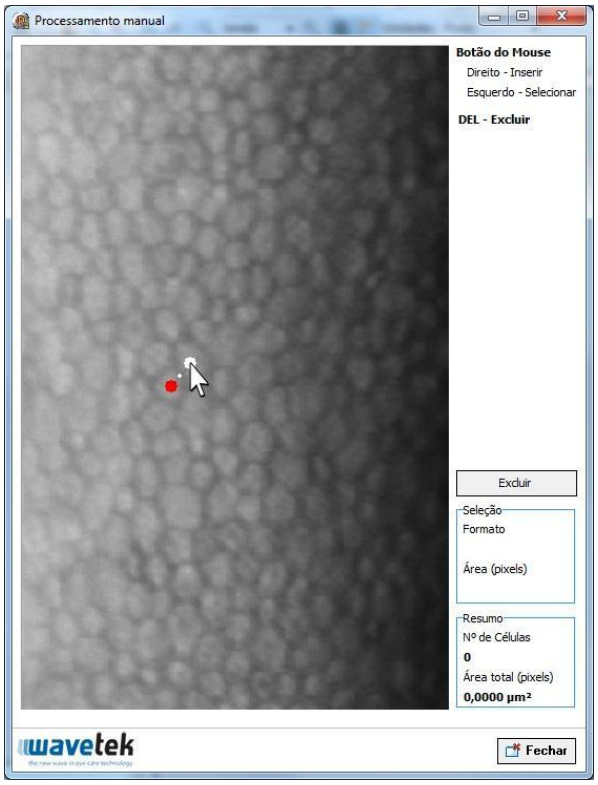
Marking Neighboring Cells

After selecting the first cell, mark its neighboring cells.

Original interface label	English meaning
Processamento manual	Manual processing
Botão do Mouse	Mouse button
Direito - Inserir	Right button - Insert
Esquerdo - Selecionar	Left button - Select
DEL - Excluir	DEL key - Delete
Excluir	Delete
Seleção	Selection
Formato	Shape
Área (pixels)	Area (pixels)
Resumo	Summary
Nº de Células	Number of cells
Área total (pixels)	Total area (pixels)
Fechar	Close
Label8	Literal placeholder label shown in the original interface

Example field	Displayed value
Number of cells	0
Total area	0.0000 µm²

Illustrations - source section 5



Original instrument or software illustration. See the English instructions and interface labels in this section.

SOURCE SECTION 6

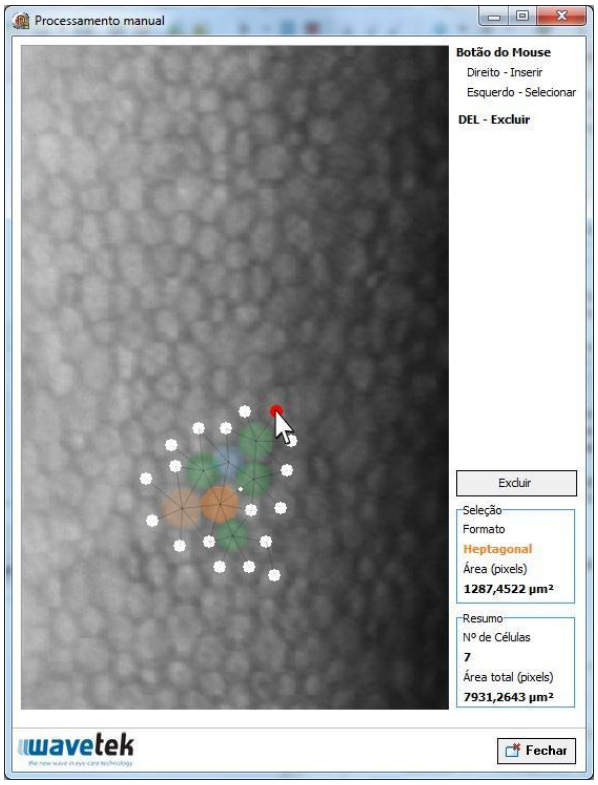
Shape and Size Identified Automatically

The software automatically identifies cell shape - square, pentagonal, hexagonal, heptagonal or octagonal - based on the number of selected neighbors, and size from the distances between cells.

Original interface label	English meaning
Processamento manual	Manual processing
Botão do Mouse	Mouse button
Direito - Inserir	Right button - Insert
Esquerdo - Selecionar	Left button - Select
DEL - Excluir	DEL key - Delete
Excluir	Delete
Seleção	Selection
Formato	Shape
Área (pixels)	Area (pixels)
Resumo	Summary
Nº de Células	Number of cells
Área total (pixels)	Total area (pixels)
Fechar	Close
Label8	Literal placeholder label shown in the original interface

Example field	Displayed value
Shape (Formato)	Heptagonal
Area (Área (pixels))	1287.4522 µm²
Number of cells	7
Total area (Área total (pixels))	7931.2643 µm²

Illustrations - source section 6



Original instrument or software illustration. See the English instructions and interface labels in this section.

SOURCE SECTION 7

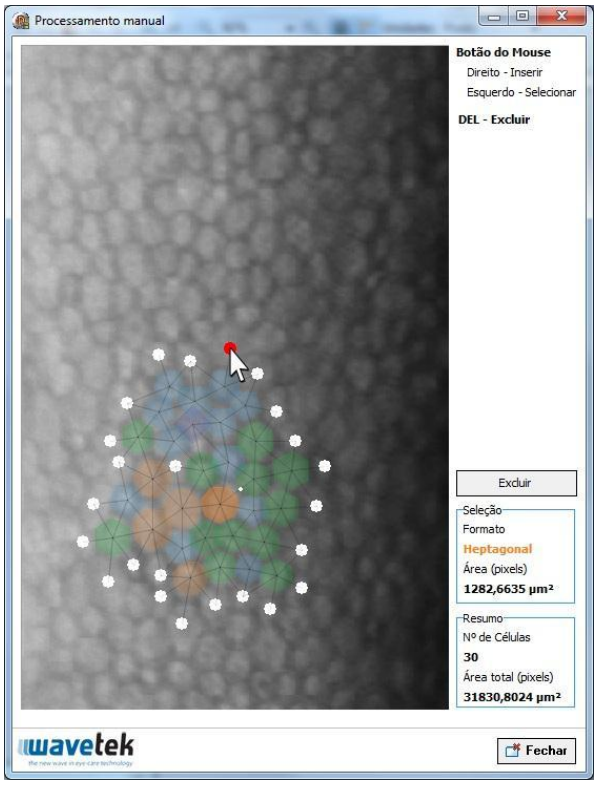
Completing the Process

Once a substantial number of cells has been identified: in the example shown, 30 cells were identified.

Original interface label	English meaning
Processamento manual	Manual processing
Botão do Mouse	Mouse button
Direito - Inserir	Right button - Insert
Esquerdo - Selecionar	Left button - Select
DEL - Excluir	DEL key - Delete
Excluir	Delete
Seleção	Selection
Formato	Shape
Área (pixels)	Area (pixels)
Resumo	Summary
Nº de Células	Number of cells
Área total (pixels)	Total area (pixels)
Fechar	Close
Label8	Literal placeholder label shown in the original interface

Example field	Displayed value
Shape (Formato)	Heptagonal
Area (Área (pixels))	1282.6635 μm^2
Number of cells	30
Total area (Área total (pixels))	31830.8024 μm^2

Illustrations - source section 7



Original instrument or software illustration. See the English instructions and interface labels in this section.

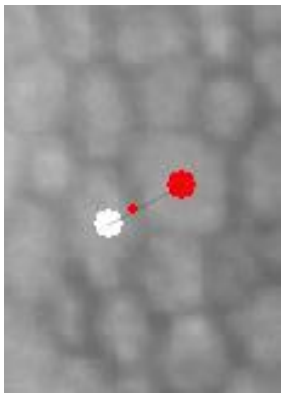
SOURCE SECTION 8

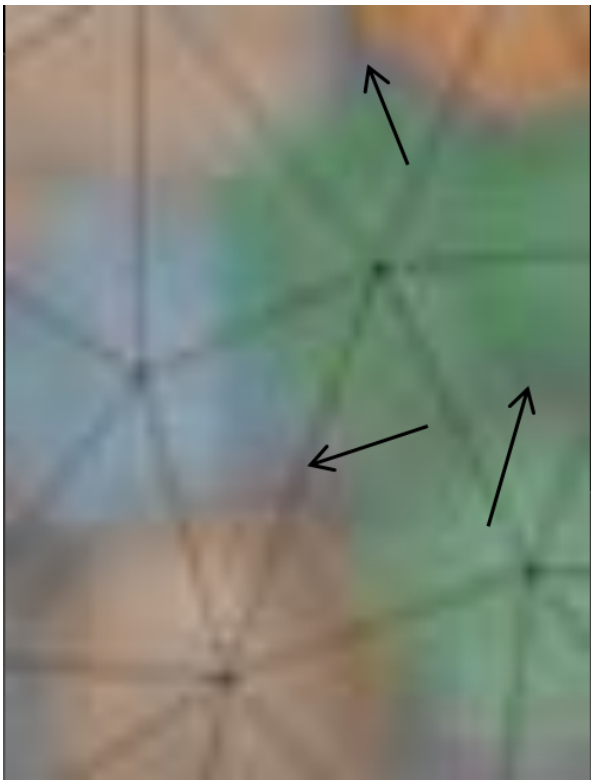
Historical Development Plan - Target: End of July 2011

The original source described the following as in development, with a target of the end of July 2011: a routine to detect cell borders to determine exact cell size. This is a historical planned feature, not a claim about availability in the current release.

Original image caption	English caption
Células sem a detecção de bordas	Cells without border detection
Processo de detecção de bordas	Border detection process

Illustrations - source section 8





Original 2011 development illustration: colored cell overlay. See the source-status note in this section.

Configuration and source-review notes

Source limitations requiring technical review

Source section 3: Original interface labels area in pixels but displays values in μm^2. Both source forms retained; displayed area totals are example data, not independently validated calibration.

Source section 8: Cell-border detection is described as future development with a July 2011 target. Translation qualifies it as a historical planned feature, not current release availability.

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Explore HERON resources

Request a demonstration or quotation

Configuration and market information

US regulatory clearance is in progress. The original ophthalmic product line held clearances in South American markets. Contact EVOptica for the product configuration, documentation and availability relevant to your destination market.

This is a full English technical-review edition of the supplied source document. It preserves source procedures, warnings, values and unresolved source differences. It is not a manufacturer-released clinical IFU for a new US product configuration.

Document information

English EVOptica edition: 05 November 2026.

Source revision: Undated source; historical development target July 2011

Original technical illustrations are retained for traceability. Some legacy interface screenshots show Portuguese controls; English instructions and label glossaries accompany them. Product and software names are retained. Third-party marks identify their respective owners.