

Barco Demetra Lesion Analytics



In today's busy dermatology practices, clinicians are looking for ways to expand their insights into skin lesions and improve efficiency through streamlined clinical workflows. Barco's digital skin imaging system, Demetra, is designed to help achieve both of these goals.

As part of Demetra's Analytics Toolkit, Lesion Analytics provides and visualizes automatic segmentation of lesion contours from the digitally captured image and calculates corresponding lesion metrics directly on the device at the point of care. If a prior image of the lesion has been captured by Demetra, the tool can calculate and visualize the relative difference between the two.

This information is designed to support the medical professional in their decision-making regarding management strategies, diagnosis, treatment and follow-up of skin lesions.

Lesion Analytics

Demetra's Lesion Analytics provides a streamlined workflow to enable the automatic calculation of metrics from targeted skin lesions. This allows the clinician to provide additional clinical insights directly at the point of care, facilitating collaboration within the care team and supporting communication and education with the patient.

Automatic Segmentation and Metrics

Once the digital dermoscopic image of the pigmented melanocytic lesion is acquired by the Demetra device, the Lesion Analytics tool provides and visualizes an automatic, default segmentation (contour) and corresponding lesion metrics. If the user is not satisfied with the default segmentation, multiple alternative contour options are available for selection.



Demetra image with default segmentation and corresponding metrics

Metric Calculations

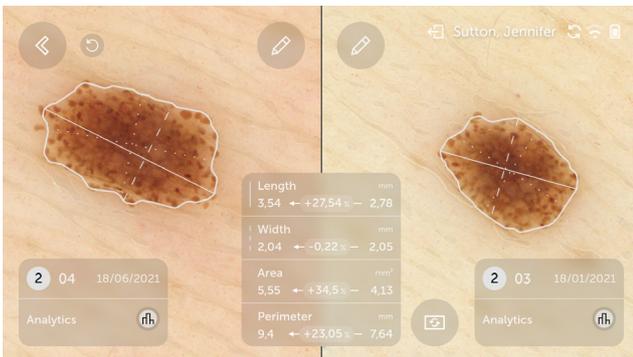
- Length
- Width
- Symmetry axes based on the lesion shape
- Area
- Perimeter



Demetra image with alternative contour options

Lesion Follow-up

Lesion Analytics allows the clinician to compare the user-selected lesion contour segmentation and their associated metrics for two images. When these dermoscopic images are from the same lesion, e.g. captured during a previous examination, the tool calculates and visualizes the relative difference between them.



Segmentation and metric comparison with a prior image

Analytics Toolkit

With Demetra's Analytics Toolkit, Barco continues to develop and integrate groundbreaking capabilities designed to support better diagnoses with deeper insights into skin lesions. In addition to Lesion Analytics, the Analytics Toolkit includes Skin Parameter Maps, which clearly visualize specific skin structures such as pigment distribution and blood vessels (vasculature). These innovations are designed to support your decisions on the management strategy, diagnosis, treatment and follow-up of those skin lesions.

About Barco Demetra

Barco Demetra® is a revolutionary skin imaging platform co-developed with leading dermatologists. It combines the best of analog and digital skin imaging in a flexible, wireless handheld device. It allows dermatologists to take any kind of picture and makes mapping, follow-up and comparison of skin images smoother and smarter.

Find out more at barco.com/Demetra.