



Instant skin analysis simplified
for clinical trial applications

See up to 2mm beneath the skin with SIAscopy™





Instant skin analysis simplified for clinical trial applications

SIAMETRICS™ allows pharmaceutical formulators and active ingredient manufacturers to accurately measure and quantify the concentrations of melanin, haemoglobin and collagen in living human skin.

SIAMETRICS is powered by SIAscopy™, a unique patented skin visualisation and measurement technology which gives an accurate, clinically proven* view up to 2mm under the surface of the skin - in vivo.

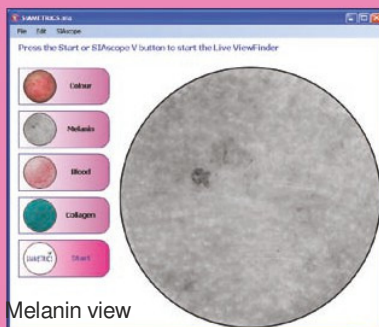
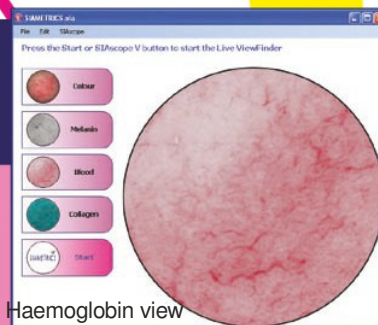
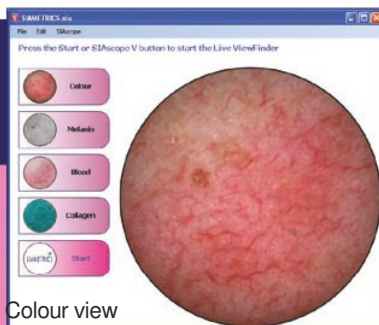
Data for SIAMETRICS is quickly gathered using the SIAScope, a clinically proven* handheld scanning device. A live view ensures that repeatability of the scan area is achievable, making it possible to build up accurate, valuable data about the structure of the skin, enabling any changes in haemoglobin, melanin or collagen to be quantified.

SIAMETRICS is a standalone application that builds up data over time omitting the need for a database. To help save time and manage your trial effectively SIAMETRICS automatically defines unique file names to SIAscans enabling these to be retrieved and viewed at any time. In conjunction with this SIAMETRICS has the ability to export selected data in a platform independent form for analysis using other tools. Preview greyscale or colour SIAscan images can also be exported for use in promotional materials.

SIAMETRICS brings this scientific analysis together with a package to alleviate product trial timescales, making the whole process much easier to manage. With the enhanced information captured in each SIAscan, the whole trial becomes much more valuable, giving a true scientific base to support product claims.

SIAMETRICS is a powerful skin imaging and measurement system which enables:

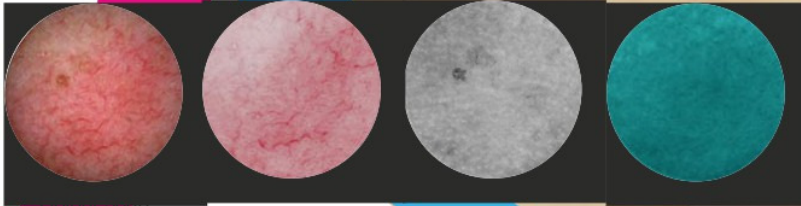
- In-Vivo measurement of concentrations of melanin, haemoglobin and collagen recording change over time.
- Accurate measurement of melanin chromophore. This eliminates the problem of overlap caused by other skin chromophores found in less sophisticated systems.**
- Captures images and concentrations of all three chromophores in 10 seconds, making trials faster and therefore saving money.
- Export captured images as JPEGs or other image files. This allows interrogation of SIAscans by sophisticated image analysis software.
- Intuitive software makes SIAMETRICS simple and quick to use.
- A live view is provided to ensure repeatable positioning on the skin between iterations.



* Clinical papers are available at molematesimsys.com

** Reference by Paul J. Matts Ph.D, Jeremy Carey Ph.D & Symon D. Cotton Ph.D (2005) *Chromophore Mapping: a New Technique to Characterize Aging Human Skin, In Vivo*. American Academy of Dermatology 2005. Paper available to view on molematesimsys.com

See up to
2mm
beneath
the skin



SIAscopy™ EXPLAINED

SIAscopy understands the way that light interacts with the skin; the manner in which it scatters or bounces, the amount absorbed by cells and other structures along with the different changes in wavelength or colour. By understanding these interactions and comparing the light sent into skin, with light that comes back out, SIAscopy is able to determine the nature and position of many of the different components of the skin.

SIAscopy measures key chromophores within the skin, in particular haemoglobin, melanin and collagen. SIAscopy is also able to determine whether melanin is in the top layer of the skin, or whether it has moved lower down into the papillary dermis (dermal melanin).

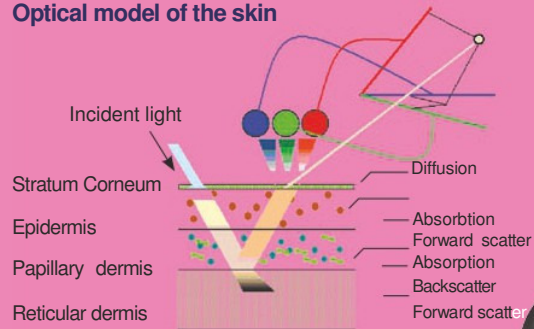
SIAMETRICS uses the SIAscope handheld scanner. When the scanner illuminates the skin, some of the light is reflected scattered from the surface. The remainder is transmitted into the top layers of the skin.

Varying fractions of the incoming light are absorbed by the melanin in the epidermis before entering the dermis where they are absorbed by the haemoglobin in the blood vessels.

Scattering also occurs in the dermis when the light interacts with the collagen resulting in a portion of the light being remitted back to the surface.

By interpreting the combination of wavelengths that are received back by the SIAscope, SIAscopy is then able to produce SIAscans; these are generated by referring to inbuilt proprietary mathematical models of skin optics.

Optical model of the skin



SIAMETRICS product package contains:

- SIAScope handheld scanner
- SIAMETRICS software
- SIAMETRICS user documentation
- USB License key
- USB 2.0 cable
- Matching fluid

Minimum PC Specification for SIAMETRICS

- 1GHz Processor
- 32 bit or 64 bit Windows 7/8/10
- 1Gb RAM
- 32Mb graphics memory (DirectX 9 compatible)
- 1024 x 768 Minimum Screen Resolution
- 2 x USB connections USB 2.0 or 3.0

SIAMETRICS by:

MedX Health Corp.
1495 Bonhill Road, Unit 1
Mississauga ON L5T 1M2, Canada
Telephone: + 1 905 670 4428
Fax: + 1 905 670 4749
email: sales@medxhealth.com
www.medxhealth.com and molematesimsys.com

SIAMETRICS is based on the Microsoft .NET Framework™ Windows™ and DirectX™.
MedX Health Corp., SIAMETRICS, SIA, SIAScopy, SIAScanner, SIAScan and SIAScope are trademarks of MedX Health Corp.
MedX Health Corp. products and technology are protected by Patents and Patents pending in the UK, Europe, Australia, USA and other countries worldwide. A list of the Patent and Patent applications owned by MedX Health Corp. is available on request.

© Copyright MedX Health 2009

Revised: August 2016 / 795.00SS-0003

