



SKINLABS  
INNOVATIVE SOLUTIONS

# Skinlabs Insight

JULY  
2026

## Welcome to Skinlabs!

*Curious about who we are and what drives us?*

In this issue, meet **Miravex** & discover the **Antera 3D<sup>®</sup>** platform: An innovative skin characterization solution that combines **patented 3D reconstruction & multispectral imaging** to deliver objective insights into skin structure and biology.

Explore how this globally recognized technology is empowering clinicians, researchers, and industry leaders to advance skin science with confidence.



**Partnership Spotlight:  
Miravex Joins Skinlabs**

**Skin Analysis  
As It Should Be**



## Skinlabs welcomes Miravex:

### Introducing the Antera 3D<sup>®</sup> Platform for Advanced Skin Characterization

#### Bringing Quantitative Skin Analysis to Cosmetic Research, Clinical Studies, Dermatology, and Aesthetic Medicine

At **Skinlabs**, our mission has always been to provide researchers, clinicians, and industry professionals with innovative technologies that help advance skin science through objective measurements and

today, we are proud to announce our new partnership with **Miravex**, an internationally recognized innovator in quantitative skin imaging and analysis.

This collaboration expands our portfolio with one of the most widely published and scientifically respected skin imaging platforms available today:

## Antera 3D<sup>®</sup>



## From Academic Research to Global Recognition

Founded in 2009 as a spin-off from Trinity College Dublin's Department of Physics, **Miravex** was established by three visionary scientists and innovators: Dr. Guido Mariotto, actual CEO, Dr. Roman Kantor, currently **Miravex's** Chief Technology Officer, and Professor Igor Shvets, a distinguished physicist at Trinity College Dublin who continues to serve as a Non-Executive Director.

**Miravex** was created with a clear vision: transform advanced optical research into practical tools capable of delivering objective and reproducible skin measurements.

What makes **Miravex** particularly unique is not only its technology, but also the people behind it.

The company brings together a highly specialized team of physicists, optical engineers, software developers,

and image analysis experts whose combined expertise continues to drive innovation in skin imaging.

This strong scientific foundation has allowed **Miravex** to develop a technology trusted today by cosmetic scientists, pharmaceutical companies, CROs, academic institutions, dermatologists, and aesthetic professionals around the world.

## The Science Behind Antera 3D®

As the demand for evidence-based pharmaceuticals, aesthetic treatments, and dermatological research continues to grow, accurate skin analysis has become essential.

**Miravex** empowers professionals to move beyond subjective visual assessments by providing quantitative, reproducible, and scientifically validated measurements.

At the heart of **Miravex's** technology is the **Antera 3D®** platform, a powerful skin imaging solution designed to objectively visualize, quantify, and monitor skin characteristics within seconds.

What makes the platform particularly distinctive is its unique combination of two complementary technologies:

## Patented 3D Reconstruction

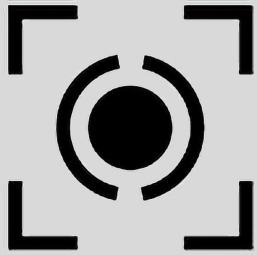


**Antera 3D®** generates quantitative three-dimensional representations of the skin surface, allowing users to measure wrinkles, texture, pores, scars, volume changes, and surface irregularities with exceptional precision and reproducibility.

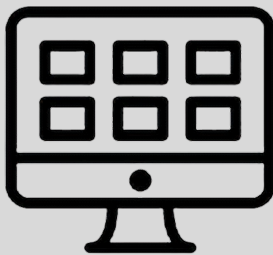
## What Makes Miravex's 3D Reconstruction Patented Method Different?

Not all "3D imaging" technologies are the same.

The 3D reconstruction used in the **Miravex Antera 3D®** platform is patented because it goes beyond conventional depth mapping or standard stereoscopic imaging.



Point & Shoot



Simultaneously Analyze



CSV File With 1 Click

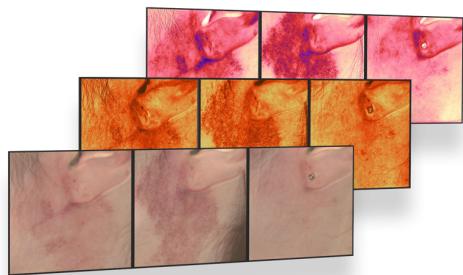
It is specifically designed for **quantitative skin surface analysis**, combining controlled illumination and computational reconstruction to generate a real 3D representation of the skin's topography.

It provides **true quantitative surface measurements** rather than purely visual rendering, enabling precise mapping of skin features such as wrinkles, pores, texture, and volume variations.

Each point on the reconstructed surface corresponds to measurable geometric data, allowing objective analysis of small but clinically relevant changes over time.

The system is engineered for **high sensitivity to subtle surface variations and strong reproducibility across sessions, operators, and study conditions**, making it particularly suitable for longitudinal research, clinical trials, and aesthetic outcome evaluation where consistency and repeatability are critical.

## Multispectral Imaging



Multispectral imaging in the **Miravex Antera 3D® platform** uses multiple narrow-band wavelengths of light to analyze how skin absorbs and reflects specific parts of the spectrum.

Each wavelength interacts differently with key chromophores such as melanin and hemoglobin, allowing the system to isolate and quantify distinct optical signatures associated with pigmentation and vascular structures. This enables an objective, repeatable assessment of skin color-related parameters beyond what is visible in standard RGB imaging.

By separating and analyzing these wavelength-dependent responses, the technology provides detailed mapping of pigmentation distribution, erythema (redness), vascular patterns, and overall skin tone heterogeneity.

Subtle variations in skin condition, such as early pigmentation changes, diffuse redness, or uneven tone can be detected and monitored over time with high sensitivity.

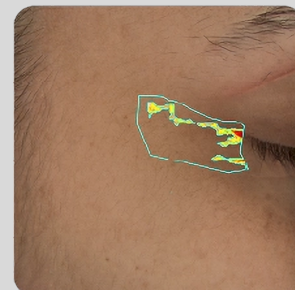
This makes multispectral imaging particularly valuable for longitudinal studies, treatment evaluation, and clinical research where consistent, quantitative measurements of skin condition are essential.

### Why Combining Both Technologies Matters?

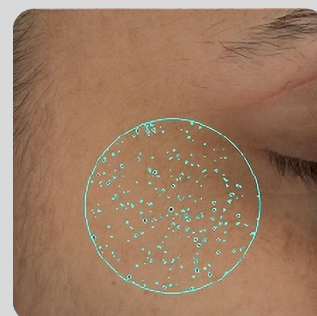
In Miravex's Antera 3D® platform, 3D reconstruction patented method and multispectral imaging are combined into a single integrated platform.

This dual-technology approach enables simultaneous evaluation of both:

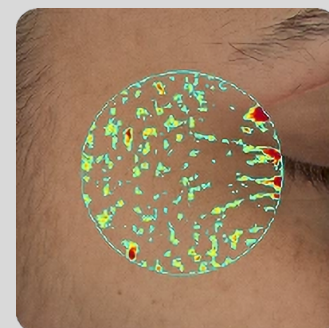
- **Skin structure** (via true 3D surface geometry)
- **Skin optical and chromophore-related properties** (via multispectral analysis)



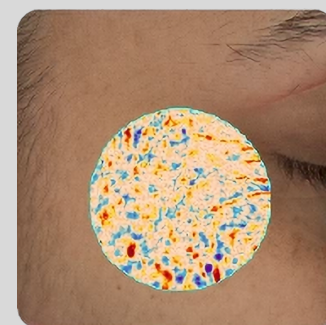
Wrinkle Analysis



Pores Analysis



Volume Analysis



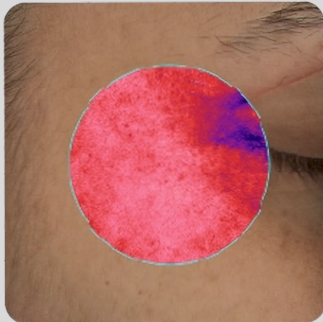
Texture Analysis



By combining structural and biological information within a single acquisition, **Antera 3D<sup>®</sup>** platform provides a more comprehensive understanding of skin condition than technologies focusing on only one aspect of skin analysis.



**3D**  
**Precise**  
**Versatile**  
**Easy to use**



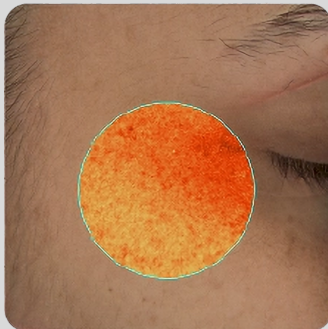
Redness Analysis

The result is objective data that can be used to evaluate treatment outcomes, support efficacy claims, monitor skin changes over time, and strengthen scientific studies.

## ONE PLATFORM. 2 SPECIALIZED SOLUTIONS

To address the needs of different users, the **Antera 3D<sup>®</sup>** platform is available in two dedicated configurations.

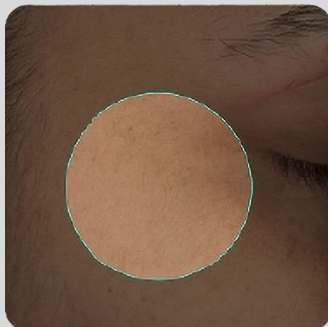
- **ANTERA 3D<sup>®</sup> CS**
- **ANTERA 3D<sup>®</sup> PRO**



Pigmentation Analysis

**Antera 3D<sup>®</sup> CS** provides the analytical depth, reproducibility, and data accessibility required by modern clinical research.

**Antera 3D<sup>®</sup> PRO** delivers the perfect balance of scientific precision, ease of use, and clinical efficiency.



Color Analysis

It delivers objective measurements, advanced skin characterization, and robust efficacy endpoints while simplifying study workflows.

It provides objective skin analysis and visual treatment documentation while remaining accessible to everyday clinical practice.

## Cost-Effective Research Solution

By replacing multiple specialized instruments with a single integrated platform, Antera 3D® CS reduces equipment complexity while expanding analytical capabilities.

Researchers benefit from:

- Lower overall instrumentation costs
- Simplified training requirements
- Standardized measurements
- Reduced study complexity
- Improved operational efficiency



## ANTERA 3D® CS (Clinical Studies)

Developed specifically for pharmaceutical companies, cosmetic manufacturers, CROs, biotechnology organizations, & academic researchers, Antera 3D® CS offers advanced quantitative analysis & comprehensive data extraction capabilities.

### Comprehensive Quantitative Analysis

The Clinical Studies version provides advanced measurement endpoints that support detailed statistical evaluation and scientific reporting.

### Analyze

- Wrinkle depth, volume, area, and morphology
- Skin texture and roughness parameters
- Pore size, density, volume, & distribution
- Surface topography
- Pigmentation concentration & variability
- Redness concentration and distribution
- Skin color metrics and color variation
- Volumetric treatment outcomes

### Support Scientific and Regulatory Claims

Antera 3D® CS generates objective data that can support claims related to:

- Anti-aging efficacy
- Wrinkle reduction
- Skin smoothing
- Texture improvement
- Pore minimization
- Pigmentation correction
- Brightening effects
- Redness reduction
- Scar improvement
- Treatment performance validation

Antera 3D® CS is ideally suited for generating evidence-based data required for scientific publications, product development, and efficacy substantiation.

### Designed for Clinical Studies

Advanced features support the demanding requirements of research environments, including:

- Extensive quantitative endpoints
- CSV, PDF, PNG data export
- Advanced reporting capabilities

- Longitudinal analysis
- Multi-visit comparison
- Large dataset management
- Reproducible study workflows

These capabilities allow researchers to perform robust statistical analyses and generate high-quality datasets suitable for publication and regulatory review.

### Portable, Fast, and Efficient

Despite its advanced analytical capabilities, Antera 3D® CS remains highly portable and easy to deploy across research sites.

Benefits include:

- Rapid image acquisition
- User-friendly software
- Standardized imaging protocols
- Minimal subject burden
- Fast data collection
- Efficient study execution



## ANTERA 3D® PRO

Designed for dermatologists, aesthetic practitioners, plastic surgeons, and skincare professionals, **Antera 3D® PRO** delivers fast, intuitive, and clinically relevant skin analysis.

### — Designed for Clinical Practice

The PRO version focuses on delivering clinically relevant information quickly and efficiently, allowing practitioners to spend less time analyzing data and more time caring for patients.

### Measure and Monitor

- Wrinkles and fine lines
- Skin texture and roughness
- Pore characteristics
- Pigmentation irregularities
- Redness and vascular appearance
- Skin color variations
- Treatment-induced improvements

### Support Treatment Claims and — Patient Communication

**Antera 3D® PRO** helps practitioners objectively document treatment outcomes for:

- Anti-aging procedures
- Injectable treatments
- Laser therapies
- Energy-based devices
- Skin rejuvenation treatments
- Hyperpigmentation treatments
- Redness reduction therapies
- Scar improvement procedures

High-quality before-&-after comparisons help increase patient understanding and confidence while providing visual evidence of treatment effectiveness.

### — Portable and Easy to Use

Designed for busy clinical environments, **Antera 3D® PRO** offers:

- Compact and portable operation
- Rapid image acquisition in seconds
- Intuitive software interface
- Minimal operator training requirements
- Immediate results and reporting

The system can be easily integrated into routine consultations and treatment follow-up visits without disrupting workflow.

### — Cost-Effective Skin Imaging

By combining multiple analytical technologies into a single device, **Antera 3D® PRO** provides a cost-effective alternative to purchasing and maintaining several separate instruments.

Benefits include:

- Reduced equipment investment
- Simplified staff training
- Faster patient throughput
- Standardized measurements
- Improved practice efficiency



## Scientifically Validated Through Peer-Reviewed Research

Over the years, **Antera 3D®** has been utilized in numerous peer-reviewed publications across dermatology, aesthetic medicine, cosmetic science, and skin research.

This growing body of independent scientific evidence has contributed to the platform's worldwide reputation for reliability, reproducibility, and technical excellence.

For researchers and study sponsors, this extensive publication history provides additional confidence that the technology is capable of generating meaningful and scientifically credible data.

*Antera 3D® has been scientifically recognized for its high sensitivity, specificity, and repeatability in comparative studies versus established skin measurement devices, while offering the additional advantages of portability ease of use, and the ability to analyze larger skin areas.\**

\*Matias, A.R., Ferreira, M., Costa, P. and Neto, P. (2015), Skin colour, skin redness and melanin biometric measurements: comparison study between Antera® 3D, Mexameter® and Colorimeter®. *Skin Res Technol*, 21: 346-362. <https://doi.org/10.1111/srt.12199>

## ANTERA SOFTWARE

### — Turning Images Into Insights

Behind every Antera 3D® acquisition is the powerful Antera Software.

More than simply displaying images, the software transforms captured data into quantitative measurements, visual maps, comparative analyses, & comprehensive reports.

Move beyond subjective visual assessments with precise measurements of:

- Wrinkles, folds and fine lines
- Pore size and density
- Skin texture and roughness
- Pigmentation & melanin distribution
- Redness and vascularity
- Color spaces and measurements

Its intuitive design allows users to quickly visualize changes over time, compare treatment outcomes, and extract objective metrics that support both clinical decision-making and scientific research.

### Designed for Research and Clinical Applications

- **Cosmetic Research**  
Support product development & efficacy testing with objective skin measurements.
- **Clinical Trials**  
Generate reproducible endpoints for dermatological, pharmaceutical, and cosmetic studies.

- **Dermatology**  
Monitor skin conditions and treatment responses with quantitative data.
- **Aesthetic Medicine**  
Document outcomes from injectables, laser treatments, energy-based devices, and skincare procedures.

Whether used in a busy dermatology practice or a large-scale clinical study, the software helps make advanced skin analysis accessible, efficient, and actionable.

## ANTERA 3D® CAMERA STAND

### — Enhancing Standardization

For applications requiring the highest level of reproducibility, the Antera 3D® Camera Stand provides a standardized imaging environment that minimizes positioning variability and operator-dependent differences.

By maintaining consistent imaging geometry across visits and time points, the Camera Stand helps improve measurement consistency, supports longitudinal studies, and strengthens confidence in treatment evaluations and clinical research outcomes.

Unlike general imaging setups or ad-hoc positioning systems, the Camera Stand is specifically designed for skin imaging applications. It ensures that the full potential of the Antera 3D® system is realized by maintaining strict control over acquisition conditions.

