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– Simon Mark, Vice President
Innovation, Hexagon

PICTURE PERFECT

Aura's instant 3D facial analysis technology is changing
the face of aesthetic and skincare consults



BURKHARD BOECKEM, Chief Technology Officer, Hexagon



SIMON MARK, Vice President Innovation, Hexagon



SANDRA TOBLER, Product Manager, Hexagon

HEXAGON'S TECHNOLOGY HAS ALREADY HAD A MAJOR IMPACT on factories, farms, mines, industrial facilities, cities, and nations by combining sensors, software, and autonomous technologies to drive productivity and quality.

Now, the Swedish multinational company is set to disrupt aesthetics with the Aura 3D Imaging System.

Aura captures a photorealistic 3D digital twin of a patient's face and neck with a single shot. The system then delivers cutting-edge artificial intelligence (AI)-based insights and precise dimensions and details of a patient's face and neck to the practitioner's device for real-time, comprehensive analysis. Aura generates a full report on patients' skin, including wrinkles, pores, red areas and brown spots, and skin texture, as well as before-and-after images of the digital twin to model what is – and isn't – possible with aesthetic procedures.

This allows for a shared visual language during the consultation process and sets the stage for bespoke, tailored treatment planning.

'The aesthetics industry offers a hugely exciting opportunity for Hexagon to apply our innovative digital twin technology, most commonly applied to buildings and manufacturing, to the most complex landscape of all: the human face,' says Burkhard Boeckem, Hexagon's Chief Technology Officer.

The company worked with dermatologists, aesthetics doctors, and plastic surgeons across the globe to develop the Aura system. 'It's a product from practitioners for practitioners,' says Mr. Boeckem. 'Aura has been designed to enhance the consultation process and create a shared visual understanding between practitioners and patients.'

Aura goes global

After a successful launch at AMWC in Monaco, the company is now rolling out the Aura technology globally.

Each facial element, including wrinkles, pore size, redness, pigmentation, and skin texture receives a score across different facial areas. A customizable filter option allows practitioners to select the score they want to focus on during the consultation. Aura measures angles and distances to clarify the potential for enhanced symmetry, allowing for a more balanced and harmonious facial appearance.

The technology can analyze results from soft-tissue injections or fat grafting, highlighting volume loss or gain in easy-to-review colors. The software also calculates these variations, providing an evidence-based understanding of the actual effects of treatment.

Practitioners can effectively demonstrate the progression of their patients' skin and appearance over time with Aura, showcasing the tangible improvements resulting from their treatment plan. This bespoke approach has been shown to increase patient satisfaction with their outcomes.

'The Aura 3D Imaging system captures the patient in one instance and provides the aesthetic practitioner with a photorealistic 3D visualization with skin analysis features as well as volume comparison and vector analysis of before and after captures,' says Hexagon's Vice President Innovation Simon Mark.

In contrast, other systems may need to do 3-4 photos to capture all features, while Aura only requires one capture. The Aura 3D imaging system applies proven technology from Hexagon and successfully applies it for the face, the most demanding landscape Hexagon ever captured in 3D,' he says.

Aura in practice

Sophie Shotter, MBChB, an aesthetic doctor in London, incorporates Aura through her patients' journeys.

'It's such a useful tool during consultations, as patients never see themselves in three dimensions,' she says. 'It allows me to show patients things that they may not be able to perceive in a mirror, which shows them a two-dimensional image of themselves. As they say, a picture tells a thousand words.'

The technology also allows her to track the progress of treatments. 'It takes our >



WENDY LEWIS is Founder & President of Wendy Lewis & Co Ltd since 1997, a strategic marketing communications group in New York City. Their clients include healthcare, skincare, medical devices, dermatologic brands, start-ups, as well as aesthetic practices and medspas. A frequent speaker at conferences globally, she is the founder of the LinkedIn group, Global Aesthetics Professionals, with over 10,000 members. The second edition of her textbook, *Aesthetic Clinic Marketing in the Digital Age: From Meta to AI*, was published by CRC Press. @wendylewico.

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SOPHIE SHOTTER, MBCHB,
Aesthetic Doctor, London, UK



CLAUDIA BETTINA RÜMMELEINS, MD, PHD, CEO and Medical Director of Hautwerk AG in Zurich, Switzerland

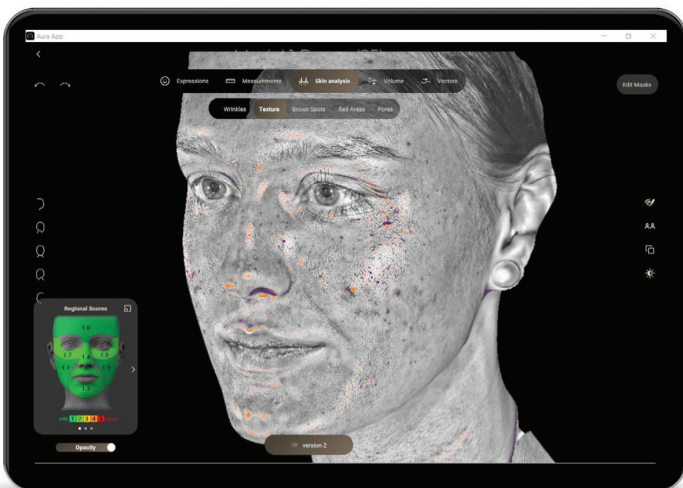


MAURIZIO CAVALLINI, MD, Plastic Surgeon, Milan, Italy



“ Aura sets a new standard with its efficient and streamlined single-capture process. ”

- Sandra Tobler, Product Manager, Hexagon



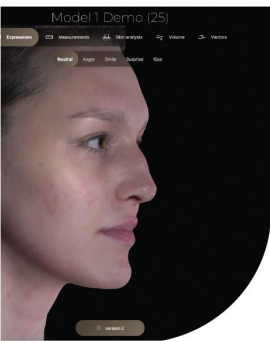


Photo-realistic 3D images

Multiple cameras and multiple lighting units capture a precise model of the face and neck.

User-friendly design

Intuitive and user-friendly software, easily integrates into the daily workflow, saving time and enhancing efficiency.

Works with any device

Seamless software integration works with macOS, iPadOS or Windows for fast and intuitive analysis.

Above left: The Aura 3D Imaging System.

Left and far left: Brown spots and skin texture images.

▷ perception of results from not just being subjective but being objective and measurable,' she says.

Claudia Bettina Rümmelein, MD, PhD, CEO and Medical Director of Hautwerk AG in Zurich, Switzerland, considers it a plus that Aura allows for an enlarged examination of the skin, and the ability to record the skin's condition both macroscopically and dermoscopically. 'They also enable me to review these images with patients, enhancing their understanding of their diagnosis and treatment.' She tells *PRIME*.

Another plus is that the images allow doctors and patients to evaluate therapy outcomes, including those from laser treatments, during follow-up visits. 'This advancement is immensely beneficial in everyday clinical

practice and is highly valued by my patients,' says Dr. Rümmelein.

She worked with Hexagon to develop and perfect the Aura technology. 'It is extremely valuable to me to contribute to the development of a system that not only enhances our diagnostic capabilities but also enriches the dialogue with the patient,' she says.

Maurizio Cavallini, MD, a plastic surgeon in Milan, Italy, consulted in the design process for the Aura 3D Imaging System. 'We show our patients... the real improvement that they have with a lot of treatments that we normally perform,' he says. The technology also allows patients and doctors more insights and to see details such as vectors.

'AURA system could give us a comparison between before and after for coloration, wrinkles, lines, and volumes,' Dr. Cavallini continues. 'It's important for aesthetic medicine to be evidence-based.'

He believes other systems can't provide the same depth and breadth of information that the AURA system does.

'Aura sets a new standard with its efficient and streamlined single-capture process,' agrees Hexagon Product Manager Sandra Tobler. 'Its 3D reconstructions are remarkably precise, capturing intricate details down to the neck. Moreover, Aura offers unparalleled skin analysis, revealing pores, wrinkles, pigmentation, red areas, and skin texture with exceptional clarity.'

Elevating aesthetic care

Practitioners report that they are finding that here's no learning curve with Aura. Only minimal training is required to operate the system, so clinic staff, assistants, associates, or technicians can operate Aura, which boosts office efficiency.

Another benefit is that Aura is portable, allowing physicians to take it from room to room or office to office seamlessly. 'The hardware itself is also completely unique, and it combines so many cameras into a single, lightweight, portable device [which] makes the Aura significantly less cumbersome than alternative devices,' Shotter says.

Marketing Aura has been easy for Shotter. 'I find having the Aura on my desk intrigues patients who ask, "Wow, what's that!" It looks so different compared with other imaging devices, and so it markets itself,' she says.

'The Aura System elevates aesthetic and dermatological care, analyzing key skin aspects with precision.' She continued. 'It's easy to use and encourages direct patient interaction, elevating our clinical communication. Practical as well as high performance, it will be a valued asset in any modern skincare practice.'

► For more information, visit aurareality.com or visit the Aura stand at the 5CC Lisbon conference.

