



breasts



# seeing is believing

AXISTHREE 3D SCANNING TECHNOLOGY FROM BIOMETRIX MEDICAL TAKES THE GUESSWORK OUT OF COSMETIC SURGERY OUTCOMES AND CAN EASE NERVES PRE-SURGERY. **JENNI GILBERT** REPORTS.

Cosmetic surgery can have a profound psychological as well as physical impact, no matter how much a patient might want a procedure. Proposed enhancements to faces and breasts, for instance, may lead to some level of anxiety surrounding the outcome, even when in the hands of the best, most trusted and experienced surgeons.

AxisThree 3D scanning technology, which is distributed by Biometrix Medical, is set to revolutionise the way consultations are performed prior to surgery – taking the guesswork out of the equation for both surgeon and patient.

AxisThree uses actual clinical data to generate a series of anatomically accurate images of a patient's face or body in a three-dimensional matrix. This allows the surgeon and patient to view the patient's body as a figure in space.

The surgeon then alters those views to simulate the effect of various surgical interventions, to show patients how they could look post-surgery. By visualising the desired

outcome, the patient can be assured and empowered, becoming more confident in their own decision-making and gaining a better understanding of what the results will physically look like.

'I have been using AxisThree since November 2010,' says Canberra plastic surgeon Dr Vlad Milovic. 'It was new on the market at this time and I bought the machine without hesitation after seeing it at a conference. I believed it would be an excellent risk management as well as diagnostic tool.'

'My patients have benefitted by receiving an enhanced, interactive consultation experience. He or she is completely involved in their decision-making and are able to visualise their decision. The scan becomes a visual discussion tool and something that patients are excited about when they hear about the possibilities offered by the technology.'

In Dr Milovic's experience, this interactive visualisation has increased the conversion rate of people considering and then actually deciding to proceed with surgery.

'I use AxisThree particularly for breast augmentation, assessment for congenital breast deformity and breast reconstructive surgery after mastectomy,' says Dr Milovic. 'After surgery I have found that patient satisfaction is very high; I have yet to experience patient dissatisfaction regarding the chosen volume and shape.'

The accuracy of the Biometrix AxisThree system comes down to the Siemen's scanning technology, which uses Colour Coded Triangulation (CCT) to capture precise images of the patient's body. Paired with the latest Tissue Behaviour Simulation software, it provides a clear interface for surgeons and patients to communicate with each other.

In terms of cosmetic breast surgery, surgeons can use the technology to 'play' with the size and shape of implants and their position under or above the muscle until the patient is happy with how the implants sit.

Sometimes the implants won't appear as the patients thought they would, so AxisThree provides the patient with a platform to convey exactly what she wants. In addition, the surgeon is given a platform to explain the steps required to achieve this.

3D visualisation is particularly beneficial for breast reconstruction patients who have had a mastectomy and thus have no existing breast tissue. Patients can be scanned with a bra or bikini top and see how different breast sizes complement their figure and lifestyle, allowing the surgeon to tailor the operation to their needs.

AxisThree uses four three-dimensional cameras, which simultaneously take an image of the patient and reconstruct it to depict the patient's measurements. The patient's existing volume in each breast is measured, which helps prevent discrepancies and makes planning much easier and more accurate.

With different modules, AxisThree can also be used for the nose and face for cheek and chin augmentation. The patient's facial skeleton is simulated so that the projected volumisation is suited specifically to their facial structure.



For Dr Milovic, AxisThree has not only provided his patients with a virtual image of their desired end result but also with a sense of confidence that they may not otherwise have. 'I am now considering other modules to add to this technology. I consider it to be an excellent investment and it has paid for itself in my view,' he concludes. **csbm**

