Planmed Oy, part of the Finnish Planmeca Group, recently introduced a new maxillofacial imaging option to its breakthrough Planmed Verity Extremity Scanner.

**Planmed Verity—3-D extremity scanner**

The Planmed Verity extremity cone beam computed tomography (CBCT) scanner has been welcomed to the market with great enthusiasm and is already widely used in university and private hospitals and orthopaedic clinics. Orthopaedists, radiologists and extremity specialists, such as hand and foot surgeons, have been utilising Planmed Verity in challenging cases of both lower and upper extremities. It has been noted to be a superior tool in diagnosing complex wrist and elbow fractures. With its unique weight-bearing imaging capability, the scanner has also helped clinicians to gain new knowledge of the anatomy of the foot.

In addition to more traditional fracture imaging, a rising trend is the use of Planmed Verity for arthrography. In arthrography, an intra-articular contrast agent is used to enhance the visibility of the cartilage surface. Traditionally, magnetic resonance imaging (MRI) has been the main imaging method for joint space diagnosis, but recently contrast-enhanced CBCT arthrography has been found to be a competing method due to its superior resolution. If the cartilage...
A defect can be diagnosed during the first visit to the clinic, the patient will receive correct care earlier and perhaps even avoid larger surgical operations.

**Planmed Verity with MaxScan—new maxillofacial imaging option**

The new maxillofacial imaging option for Planmed Verity received CE approval in December 2013 and is already in use at several clinics in Europe. Just like in Planmed Verity orthopaedic imaging, special attention has been paid to patient comfort and image quality. Performing e.g. a sinus scan with a traditional medical CT unit can be uncomfortable for the patient. Planmed Verity solves this problem by providing a very convenient sitting position, where the open gantry design reduces anxiety. The lean-in type positioning also makes maxillofacial imaging a very fast procedure.

One of the biggest competitive assets of Planmed Verity with MaxScan is its low patient dose. It is therefore an excellent option especially for sinus imaging of small children. In addition to the low dose, the device offers superior image quality. Isotropic resolution of 200 µm, combined with advanced image enhancement algorithms, shows even the tiniest bone structures clearly. The 3-D information provided by MaxScan is far more informative than that of traditional 2-D X-ray or multi slice computed tomography (MSCT) devices with larger, non-isotropic voxels.

MaxScan is an excellent add-on feature to Planmed Verity. With this optional feature, it is easy to increase the patient flow for Planmed Verity and thus improve ROI. In addition to sinus imaging, MaxScan is a reliable tool for trauma imaging. Complex fractures are easily visualised in the 3-D data, and it also gives valuable information on the condition of the mandible, orbits, airways and temporomandibular joints (TMJ).

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**Knee arthrography.**

**Sinus image.**

**Maxillofacial bone structure.**
3Shape Implant Studio receives FDA market clearance

Digital dental solutions provider 3Shape has announced that it has been granted market clearance for the sale of its Implant Studio software in the US by the Food and Drug Administration (FDA). The software, which allows dental professionals to evaluate bone density and nerve position in patients for prosthetic implant planning and surgical guide design, will be available in the US in early 2015.

"3Shape is very excited about this FDA—510(k)—market clearance which opens the door to new service options for both clinics and laboratories in North America. Importantly, as more and more people are choosing dental implants to meet their restoration needs, Implant Studio will enable dental professionals to more effectively care for them," stated Flemming Thorup, the company’s president and CEO.

The US dental implant market is projected to reach $5 billion by 2018. This development can be attributed to technological innovations and a growing aging population worldwide. Digital technologies in general have become increasingly important in dental implantology and more people are having dental implants placed. According to the American Academy of Implant Dentistry, 3 million Americans have implants and that number is growing by 500,000 per year.

3Shape stated that Implant Studio will be available through its resellers from the first quarter of 2015. However, availability to end users will depend on the specific system configuration. The software is already available in Asia, Europe and South America.

In addition, the company announced that its digital experts will be demonstrating Implant Studio, including complete workflows using intra-oral and CBCT scans, at the 2014 Greater New York Dental Meeting (Booth 424), which will take place from November 30 to December 3._