

MedCom to release innovate software and tools for cancer treatment

Darmstadt 09 May 2007 MedCom has launched the OncoSuite patient positioning system, completed for the Rinecker Proton Center in Munich, as well as its new release of SWIFT, a major tool against prostate cancer. In addition, the company's new panorama software is turning the health care user's U/S device to a paramount scanning tool. MedCom is also participating in the DEGRO 2007 event, to be held 7-10 June, 2007. The company will present all their new products at this conference for radio-oncology in Hannover, Germany.

Together with its long-time partners Nucletron B.V. and Pi-Medical Ltd. MedCom releases the next generation of its HDR brachy-planning tool "OncetraProstate", former named "Swift".

OncetraProstate allows fully 3D virtual treatment planning. Stepper driven acquisitions, advanced contouring, catheter placement and plan optimization routines guarantee a plan within minutes. Additionally the usage of life ultrasound imaging guidance results in a precise implantation of real needles. Easy adaptation of previous planning stages, the support of standard protocols and the direct connection to the afterloader control unit minimize the treatment time.

OncetraProstate distributed by Nucletron B.V. is built in a high portable cart including the complete planning hardware and the required external interfaces. It is compatible with all known ultrasound devices supporting standard video output. New features of v3.0 include:

- Multi modality planning supporting image fusion
- Full DICOM compatibility using Nucletron Smoothbase
- Template free catheter handling
- Inverse planning
- New advanced optimization and evaluation algorithms

MedCom has recently released an update for its successful ScanTelemed ultrasound software designed for adding 3D and panorama functionality for TELEMED's EchoBlaster series USB scanners. ScanTelemed integrates with TELEMED's EchoWave 2D ultrasound application allowing the user to perform freehand 3D scans and reconstruct panoramic images out of a cine sequence. The 3D part is designed mainly for gynaecological applications. With this software the practitioner can see for example a foetus' face or a whole body. Additionally, ScanTelemed is equipped with powerful 3D visualization tools like different visualization modes, volume cutting, oblique cut, video creation module, presets, histogram and many more.

The Panorama module is very useful for musculoskeletal, endocrinological or breast imaging and other applications. Its functionality principle is gluing a 2D sequence into one image with large anatomical field of view. Images obtained with this technique display for example both lobes of the thyroid gland on a single image providing thereby an accurate imaging representation of a variety of thyroid disorders. The newly released update features a length estimation option for panoramic images.

In 2004 MedCom has been selected as technology provider of the patient Position Certification System (PVS) for the Rinecker Proton Therapy Center (RPTC) in Munich, the first commercial centre for the treatment of cancer with protons in Europe. MedCom developed and delivered an integrated PVS operable in both rotating gantries as well as static-beam rooms, employing two X-ray sources and able to automatically correct the position of the patient within a few seconds.

MedCom's VeriSuite is operating according to the following technical principle: the patient is positioned on the treatment table and two X-ray images are acquired in-situ. In addition, the system calculates two DRRs from a high resolution CT scan of the patient at the desired (= ideal) treatment position. The acquired X-rays defining the current patient position are compared with the ideal position as given by the DRR images. A fully automated procedure calculates then within a few seconds all movements in 6 degrees of freedom (i.e. 3 shifts and 3 rotations) necessary for correcting potential patient misplacements. The resulting correction vector is communicated to a motorized table, which autonomously shifts the patient to the ideal treatment position.

MedCom has already successfully installed, calibrated and tested the VeriSuite system in the RPTC in Munich in May 2006. In the mean time Varian Medical Systems became the new owner of Accel Instruments GmbH and will provide the Proton technology to RPTC. MedCom expects therefore that patient treatment in Munich may start soon.

MedCom, being the only provider worldwide of such an advanced PVS within a rotating proton gantry, appreciates the progress in this project in order to demonstrate the superiority, clinical and technical maturity of VeriSuite, which will also be available as add-on for linear accelerators (LINACS) in the near future.

MedCom has been founded in 1997 as a spin-off of the Fraunhofer Institute of Computer Graphics (IGD), the world expert R&D Institution for Computer Graphics Technologies. Together with its co-operating institutions this builds the INI-Graphics Network, the largest R&D group in the world devoted entirely to Computer Graphics. Due to the links to the Fraunhofer IGD, MedCom capitalizes from the technology developed by one of the most advanced R&D groups in the world. MedCom has licensed the exclusive rights for commercial purposes in the area of 3D ultrasound and related fields.

MedCom offers advanced 2D, 3D, 4D/5D tools, for professional diagnostics and treatment. Its customers are clinics as well as the research sector benefiting from the company's advanced ultrasound, radiological and telemedicine applications. MedCom manufactures and markets leading edge technology for clinical imaging with emphasis on telemedicine, radiology, cardiology, cancer treatment and ultrasound. More information is available at the [MedCom](http://www.medcom.com) web site.