News update

Latest developments on products and services from the industry. To have your news included contact Patricia McDonnell on patricia@oncologynews.biz or T/F: + 44 (0)288 289 7023.

Elekta celebrates 10th anniversary of image guided radiation therapy

Elekta recently celebrated the 10th anniversary of the first clinical use of 3D Image Guided Radiation Therapy (IGRT) with the Elekta Synergy® system. The first commercial linear accelerator to bring 3D image guidance into the clinical workflow, Elekta Synergy combines soft issue imaging and treatment in a single system. Clinicians had at last attained the ability to visualise the treatment target, improving radiation therapy for cancer patients.

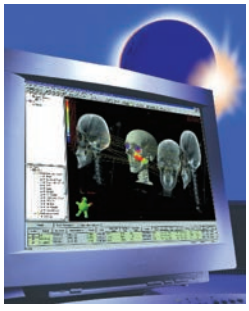
Elekta Synergy Research Group defines IGRT history

Elekta Synergy and IGRT development began in 1997 with William Beaumont Hospital, USA), with other world-class centres joining later to form the IGRT consortium. These included The Netherlands Cancer Institute-Antoni van Leeuwenhoek Hospital (NKI-AVL, Amsterdam, The Netherlands), Princess Margaret Hospital (Toronto, Canada), The Christie Hospital (Manchester, UK), Thomas Jefferson University (Philadelphia, Pa., USA) and University Hospital of Würzburg (Würzburg, Germany). The collaboration with Elekta and this research group led to the creation of protocols driven by real-life clinical experience and a suite of software tools designed to support efficient workflow in today's busy clinic.

For further information contact:
Patrick Greally, Elekta Limited,
T: +44 (0)1293 654 462,
E: Patrick.Greally@elekta.com

XVI 5.0 is not available for sale or distribution in all markets. Please contact your local representative for more details.

Varian's Eclipse System integrates with Elekta Machines for VMAT treatments



Varian's Eclipse treatment planning system.

Varian Medical Systems has successfully integrated its Eclipse™ treatment planning system with Elekta linear accelerators to deliver VMAT treatments at Kantonsspital St Gallen in Switzerland. An 83-year-old patient with non-Hodgkin's lymphoma has become the first patient in the world to be treated using this combination of software and equipment.

"We have been using Eclipse to plan other types of radiotherapy treatments for many years and have very good experience delivering those treatments on our Elekta treatment machines," says Dr Ludwig Plasswilm, the hospital's chief of radiation oncology. "We wanted to introduce faster volumetric modulated arc treatments in order to serve more patients more effectively.

"Physicists at our department worked on the development of this new approach with Varian, which has demonstrated its commitment to open architecture for clinical systems, and we have now seen successful integration of Eclipse with our treatment machines," said Dr Plasswilm. "We have now initiated more advanced volumetric treatments and our experience so far is that the integration is very good with a natural workflow."

For further information contact:
Neil Madle, Varian Medical Systems,
T: +44 (0)7786 526068,
E: neil.madle@varian.com
W: www.varian.com

Introducing the Paxman Hair & Scalp Care Range

Paxman, the leading the leading global expert in scalp cooling has recently launched a hair and scalp care range specially developed with the specific hair and scalp needs of those using scalp cooling in conjunction with chemotherapy treatment.

The uniquely formulated gentle products are available to everyone, especially benefiting those with sensitive skin and allergies and also patients undergoing chemotherapy treatment. All products are dermatologically tested, safe, thoroughly researched and use raw ingredients which represent the very latest development in hair and scalp treatment.

Paxman are delighted to be working in collaboration with leading consultant Trichologist, Iain Sallis, who has assisted in giving his expert advice for patients in how to best care for their hair when using scalp cooling with chemotherapy treatment.

As a family business borne out of the Chairman's wife losing her hair whilst receiving chemotherapy for breast cancer, Paxman know first-hand that this is often devastating. We also know that the fear of hair loss has even been known to cause refusal of treatment by 8% of applicable patients.

For more information about Paxman haircare please visit paxmanhaircare.com or call +44 (0)1484 349444.

Swiss cancer centre delivers higher doses to treat patients

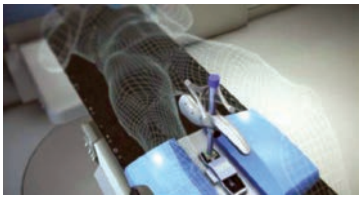
Clinicians at a leading cancer centre in Switzerland have commenced advanced lung and liver radiotherapy treatments by delivering higher doses using a Varian Clinac® medical linear accelerator. Flattening filter free (FFF) treatments which enable fast dose delivery capabilities are allowing doctors at Genolier Clinic to shorten treatment times and deliver stereotactic body radiotherapy and stereotactic radiosurgery for hard to treat tumours.

"Irradiation time is critically important for patients because shortening the time taken to deliver the dose may help to significantly improve the level of patient comfort," says Dr Jacques Bernier, head of radiation oncology at Genolier Clinic. "Through using such FFF treatments and delivering the beam faster, we also see greater precision as there is less opportunity for patient motion. Our objective is always to treat patients with maximum precision and in the best conditions possible for them."

Dr Bernier says faster treatment times also mean greater throughput, as each linear accelerator is able to treat more patients each day. "This helps us to avoid long waiting lists of patients as demand for cancer treatments increase," says Dr Bernier.

For further information contact: Neil Madle,
Varian Medical Systems,
T: +44 (0)7786 526068,
E: neil.madle@varian.com
W: www.varian.com

Elekta receives CE marking for Clarity 4D Monitoring



Elekta has received CE marking for its Clarity® 4D Monitoring system permitting European clinics to implement this new way of reducing the uncertainty caused by prostate motion during radiation treatment. Physicians will be able to monitor the motion of the prostate with sub millimeter accuracy during the delivery of therapeutic radiation beams.

The ability to continuously visualise the prostate and surrounding anatomy during treatment is especially important for clinicians pursuing advanced prostate protocols, such as reduced margin hypofractionated therapy or advanced stereotactic ablative body radiotherapy.

Continuous target visualisation

4D monitoring of the prostate with Clarity during treatment offers continuous tracking of the target and imaging of the surrounding anatomy, including the bladder, rectum and penile bulb. Clinicians are keen to avoid this surrounding anatomy to minimise the chance of side effects of treatment such as erectile dysfunction, incontinence or rectal bleeding. Being able to visualise these structures during treatment could potentially enable clinicians to create plans with tighter margins around intended targets, thereby minimising radiation exposure to healthy tissue.

Clarity 4D Monitoring uses Autoscan acquisition technology to robotically acquire live transperineal ultrasound images of soft tissue anatomy. This comfortable, non-invasive imaging procedure does not involve any extra radiation dose to the patient and does not require the use of implanted markers.

Learn more at www.elekta.com/clarity.

Major technology evolution set for Medipass Mes in Leeds

Medipass Healthcare, a leading provider of Managed Equipment Services (MES), announced this week that two of the recently launched Versa HD™ radiotherapy systems from Elekta will be installed as part of its MES in Leeds, making the Leeds Cancer Centre a world reference site for this innovative technology.

Cancer patients referred to the £220M Leeds Cancer Centre, situated on the campus of St James's University Hospital, will soon benefit from the streamlined acquisition within the Medipass MES of one of the most advanced linear accelerators in the world. Versa HD, featuring a revolutionary combination of speed and accuracy, is designed to improve patient care and treat a broader spectrum of cancers. It is expected that the radiotherapy department at the Leeds Cancer Centre will begin treating patients on Versa HD this July.

The Managed Equipment Service in Leeds is provided by Medipass Healthcare to the Leeds Teaching Hospitals Trust as part of a 15-year equipment concession in partnership with the project company St James's Oncology SPC Ltd. Stewart MacDuff, Manager of the Medipass MES in Leeds said, "This groundbreaking installation was only possible because we have such a close working relationship between Medipass and our project partners – St James's Oncology SPC Ltd, the Leeds Teaching Hospitals Trust, and Elekta."

For more information contact Sophie Seymour T: +44 (0)7881 906407.

Addenbrooke's Hospital Increases Access to the Latest Radiation Treatment for Prostate Cancer

According to Cancer Research UK, prostate cancer is the most common malignancy in men, and in the United Kingdom, approximately 40,000 cases are diagnosed annually. At Addenbrooke's Hospital, more prostate cancer patients are receiving a rapid form of Intensity Modulated Radiation Therapy (IMRT) called Volumetric Modulated Arc Therapy (VMAT). This is due to the centre's integration of advanced beam-shaping technology and VMAT software in two Elekta treatment machines that the center acquired in 2011 and 2012. VMAT enables the radiation dose to conform more precisely to the tumour shape by modulating the beam as it rotates round the patient.

With VMAT, single or multiple radiation beams sweep in fast, uninterrupted arcs around the patient. VMAT's high-speed IMRT delivery is best exploited with high-speed beam shaping, a benefit that Elekta's Agility™ 160-leaf multileaf collimator (MLC) provides.

Addenbrooke's was able to upgrade its current systems by purchasing the new MLC and VMAT option to offer advanced radiation delivery to their patients. The clinic began treating prostate cancer patients in March 2013.

"These Elekta machines are increasing the numbers of prostate cancer patients in our department that can benefit by having IMRT." says Simon Thomas, head of radiotherapy physics at Addenbrooke's.

For further information contact: Patrick Greally, Elekta Limited, T: +44 (0)1293 654 462, E: Patrick.Greally@elekta.com

Brain cancer treatments lag seriously behind

A new report released earlier this year by Brain Tumour Research shows that treatments for brain tumours lag seriously behind other cancers. This report also shows that spending for brain tumour research is falling while both new instances of brain tumours and mortality rates from the disease are both on the rise.

Brain cancer is the biggest cancer killer of the under 40s and responsible for over 20 years of life lost in the average patient, making this the most lethal cancer by this measure. Brain Tumour Research is campaigning for a sea-change in the research funding priority and calling for government to extend the reach of the national cancer register to include all research grants and research on cancer across the UK.

Sue Farrington-Smith, Chief Executive of Brain Tumour Research, said: "Lives are being devastated; people are living without hope. Action is needed now – by the government, the larger cancer charities and the public. Please help raise awareness of and support the research. We can't afford to wait."

Professor Geoff Pilkington, Neuro-oncologist at the University of Portsmouth added: "Talented young graduates are being driven to other research areas where the funding is historically more robust."

Find out more: www.braintumourresearch.org/published-reports

Elekta's Versa HD System Now Features Automated Breath Hold Gating for Improved Breast and Lung Radiotherapy

Users of Elekta's Versa HD™ linear accelerator can now bring target immobilisation to new levels through automated gating with Active Breathing Coordinator™. For anatomies affected by respiratory motion, Active Breathing Coordinator provides non-invasive, internal immobilisation of the target, triggering radiation delivery when anatomy is immobilised.

Automated gating with Active Breathing Coordinator recently received CE marking from the European Union, and in combination with Elekta's Response™ gating interface, provides additional benefits to both the Versa HD clinically-tailored solutions for treating breast and lung cancers.

Active Breathing Coordinator helps patients pause their breathing at a precisely indicated tidal volume – a deep-inspiration breath-hold – which increases the distance between the tumour and critical structures, resulting in the ability to reduce doses to the critical structures.

By consistently immobilising the target in an identifiable, repeatable and stationary position, clinicians are better able to reduce tumour margins and implement dose escalation and hypofractionation strategies, such as SBRT. Automated beam delivery increases clinical confidence and efficiency, in addition to reducing treatment times over manual techniques.

Versa HD and Active Breathing Coordinator with automated gating are not available for sale in all markets.

For further information contact:
Patrick Greally, Elekta Limited,
T: +44 (0)1293 654 462,
E: Patrick.Greally@elekta.com

Single injection may revolutionise melanoma treatment, Moffitt Study shows

A new study at Moffitt Cancer Center could offer hope to people with melanoma, the deadliest form of skin cancer. Researchers are investigating whether an injectable known as PV-10 can shrink tumours and reduce the spread of cancer. PV-10 is a solution developed from Rose Bengal, a water-soluble dye commonly used to stain damaged cells in the eye. Early clinical trials show PV-10 can boost immune response in melanoma tumours, as well as the blood stream.

"Various injection therapies for melanoma have been examined over the past 40 years, but few have shown the promising results we are seeing with PV-10," said Shari Pilon-Thomas, Ph.D., assistant member of Moffitt's Immunology Program.

In the initial study, researchers injected a single dose of PV-10 into mice with melanoma. The result was a significant reduction in the skin cancer lesions, as well as a sizable reduction in melanoma tumours that had spread to the lungs. The researchers said the dye solution appeared to produce a robust anti-tumour immune response and may be safer than existing immunological agents.

For further information visit:
http://www.pvct.com

Cancer Patients in Lebanon Treated on Country's First TrueBeam Radiotherapy and Radiosurgery System

Cancer patients in Lebanon have gained access to fast and precise radiotherapy and radiosurgery treatments with the clinical deployment of the country's first Varian TrueBeam™ medical linear accelerator. A 24-year-old man with sino-nasal cancer was the first person in Lebanon to be treated on the newly-installed TrueBeam system at the Hotel-Dieu de France Hospital (HDF) of the University of St Joseph in Beirut.

The patient received RapidArc® volumetric modulated arc therapy (VMAT) to help spare the parotid glands from exposure during treatment. "We were able to deliver his treatment in just two continuous arcs or rotations of the machine rather than having to stop and start the machine to deliver the treatment beam from different angles," said Dr. Elie Nasr, professor and chairman of HDF. "The integrated imaging enabled us to carefully align the patient every day and showed us the progress of the

treatment as we saw the tumour shrinking over the course of treatment. By sharing this information with the patient we are able to reassure them and increase their commitment to the treatment."

For further information contact:
Neil Madle, Varian Medical Systems,
T: +44 7786 526068,
E: neil.madle@varian.com
W: www.varian.com

The Christie Hospital NHS Foundation Trust awards OIS a three year contract for the provision of immobilisation devices

After an extensive review across all three Christie Hospital sites, Oncology Imaging Systems Ltd (OIS) are delighted to have been chosen as the exclusive supplier for all thermoplastic materials to the trust.

This contract is to last for three years with a possible extension for an extra year and starts with immediate effect.

Lead Radiographer, Pat Lawrence said "Our aim is to standardise the use of thermoplastic material across all of The Christie's three sites and following a full evaluation we are delighted to choose OIS as our main supplier. The contract between ourselves and OIS further strengthens our ongoing working relationship and gives us confidence to provide the best possible patient care."

The thermoplastic can be used in conjunction with the kVue couches and Pentafix inserts, also supplied by OIS, meaning overlay boards are no longer necessary for most treatments, which in turn reduces skin dose to the patients.

Managing Director of OIS, Steve Imber commented "This contract is another significant achievement for OIS and we are delighted to be working with one of the world's leading cancer centres."

For further information
T: +44 (0)1825 840 633,
E: sales@oncologyimaging.com or
visit: www.oncologyimaging.com