

The MEDICAL DIGEST

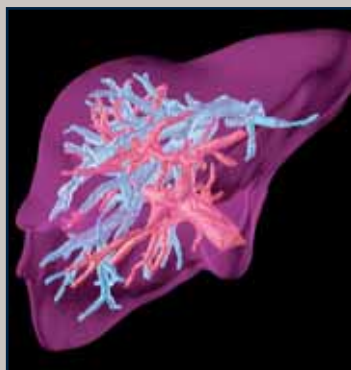
The Middle East and North Africa



For The Latest in Healthcare Technology



Zimmer MedizinSysteme- A New Dimension in Radial Shock Wave Therapy - enPuls Version 2.0



Holoxica- 3D Imagery to Improve Surgical Visualisation of Liver Cancer



Berchtold- The Operon 800 Series of OR-Tables



SIUI- The Apogee 3800 Ultrasound System



MEDICA and COMPAMED- Strong international Feedback Gives "MedTech" Industry Tailwind for Exports



Advances in Radiotherapy Detailed at Cancer Summit Organized by Varian Medical Systems



Anetic Aid's New QA3 Patient Trolley is Better Than Ever



Evac+Chair- The Worlds No.1 Emergency Stairway Evacuation Chair



Arab Health 2012 – Healthcare Industry Remains Competitive in the Region

WINTER 2011 ISSUE



reddot design award
winner 2011

S20

Powerful workflow
You Have Never Experienced Before.....



FROST & SULLIVAN
Entrepreneurial Company Award

FROST & SULLIVAN
Product Quality Leadership Award



ISO 13485

SonoScape Co., Ltd

TEL: 86-755-2672 2890

FAX: 86-755-2672 2850

E-mail: market@sonoscape.net www.sonoscape.com



Dear Reader,

It gives me great pleasure to present you with our latest edition of The Medical Digest.

It has always been our intention to provide you with up-to-date information on the latest Healthcare technology available on the market today. Our aim is to provide our advertisers with a platform from which they can reach our readership of healthcare professionals in both the public and the private sectors and we are proud to have amongst our readers leading companies in this region for the importing, supply and distribution of such technology into this market. We always endeavour to maintain this delicate balance, one which has served both parties well during years we have been publishing The Medical Digest.

A. H. Najjar- Publisher

Advertisers in this issue

Anetic Aid	17	Intersurgical	1 3	SIUI Co. Ltd.	9
Arab Health Exhibition	IBC	Labtech	37	SonoScape	IFC
bon	11	Meditrax Limited	35	Ultrasound Technologies	9
Berchtold	OBC	NDS Surgical Imaging	27	Varian	25
Evac Chair	13	Nucletron	23	Zimmer MedizintSysteme	17
Fjordblink	13	Protect Laserschutz	35		
GE Ultrasound	15	RTI	11		

THE MEDICAL DIGEST

Published by

SAHARA PUBLICATIONS LIMITED

Sahara House, 38 Greyhound Road, London W6 8NX, England

Tel: +44 20 7610 1387 Fax: +44 20 7610 0078 Email: sahara@btconnect.com Website:www.saharapublications.com

The opinions expressed in this magazine are not necessarily those of the publishers, and while every effort is made to ensure the accuracy of the information contained herein, no responsibility can be accepted for errors, omissions or their consequences.

No part of The Medical Digest can be reproduced in any form without the written permission of the publishers.

Arab Health 2012 – Healthcare Industry Remains Competitive in the Region

Commentary by Simon Page,
Managing Director, Life Sciences, Informa Exhibitions

How does Has Arab Health retain its competitive edge year-on-year?

Retaining our competitive edge in the market and appealing to our target audience has meant that it has been necessary to stay up-to-date with market fluctuations and to identify new trends in the MENA healthcare industry.

We view the healthcare market in the MENA region to be one of the most attractive markets for healthcare investments in the world. The healthcare market has experienced stellar growth over the last decade and is projected to maintain its growth momentum driven by a multitude of factors including demographic growth, high and expanding medical needs, more active investments by governments and private sector in the healthcare market, development of social welfare systems, introduction of private insurance market, increased healthcare regulation, introduction of compulsory health insurance in a number of countries; to name a few.

By acknowledging the current trends in the market and identifying the niche opportunities available for our exhibitors, Arab Health continues to be

the preferred platform for our customers to market their products, garner intelligence, debate industry issues and network with each other.

For many years Arab Health was venue bound selling out year on year with no room to expand. In 2010 that all changed with the addition of the new Sheikh Saeed halls to the existing space at the Dubai International Convention and Exhibition Centre. These four new state-of-the art halls added over 25,000sqm of exhibition space allowing Arab Health to grow by more than 20 per cent in size from previous years allowing Arab Health to firmly cement its position as one of the foremost healthcare trade events in the world.

Year on year Arab Health continues to build on our conference portfolio offering a scientific and educational platform that comprises the world's largest multi-track series of conferences. Each year we assess the specific requirements for the region and we develop our conferences specifically to cater for the delegates who attend our conferences. Last year we saw the launch of four new conferences and this year the Arab Health Congress will be further



enhanced with the addition of Biomedical Engineering, Medical Ethics, Medical Education, Psychiatry and Wound Care conferences bringing the total number of CME accredited conference to 17.

Remaining competitive also means rewarding achievement which is why we host the annual Arab Health Innovation & Achievement Awards that recognise the outstanding achievements of individuals, departments, teams or an organisation that have contributed to the growth and development of the Middle East Healthcare Industry. The 2012 Arab Health Awards winners will be announced on the 24 January, 2012 at a gala awards dinner at the Intercontinental Hotel, Dubai Festival City, Dubai.

Have you seen any particular shift in target audience demographic over the same period?

The audience at Arab Health changes and develops subtly as the healthcare market changes. We are seeing greater percentages of international visitors to the event as Arab Health becomes the exhibition of choice for healthcare dealers, distributors, purchasers and specifiers across the globe. The large majority of visitors are from outside the UAE. In particular we have seen





the transfer of know-how, training, the building of clinics and hospitals and in the import and export of pharmaceutical products and medical supplies.

The report also indicates that the estimated value of forthcoming GCC healthcare projects will reach USD \$10 billion alone. The rapid growth in population rate and the increment of expenditure per capita in the GCC on healthcare is considered to be the most important factors.

These factors have caused governments in the region to pay closer attention to meeting the healthcare needs in their respective countries by putting in place plans for several large-scale projects in the sector as well as

growth in the attendance from China, India, other Asian countries as well as central Europe. We have also seen an increasing number of visitors interested in emerging healthcare sectors such as e-health from across the globe.

Are you optimistic about the future of the healthcare exhibitions industry?

In a report released by KFH Research Limited about the future status of the healthcare sector in the GCC, experts expect the healthcare market to triple within the coming years to reach USD \$55 billion in 2020, a year-on-year growth of 9%.

This offers proof of the immense potential for all aspects of medical provisioning in the region, namely in



reforming rules and regulations governing the industry with the view of attracting more private sector investment in the space.

Healthcare exhibitions such as Arab Health will continue to be a major platform for companies looking to expand their presence into this niche market.

The Arab Health Exhibition & Congress takes place from 23 – 26 January, 2012, at the Dubai International Convention and Exhibitions Centre.

Visit www.arabhealthonline.com

Log on:
www.hospital-technology.com
 for the latest in Healthcare

Fetal Monitors from Ultrasound Technologies

Ultrasound Technologies Ltd has been designing quality Medical Ultrasound equipment since its establishment in 1992 and our design team have more than 20 years experience in this industry. The company designs and manufactures in South Wales, all its products are approved to international standards and are currently exported to most countries of the world through a network of distributors and directly from our web ordering system, UltraTec Direct. Recognition of the companies achievements came in November 2003 when it was voted "Exporter of the Year for 2003" by Wales Trade International and the South Wales chamber of commerce.

The UltraTec PD1 is a small, lightweight, high sensitivity pocket Doppler. Its 2MHz fetal Doppler probe is ideal for use by General Practitioner or Midwife for routine antenatal fetal detection. The fetal signal is available to the user via the built in loudspeaker or optional headset with output level controlled by edge mounted volume control. The fetal signals are easily located using the lightweight narrow beam transducer while internal signal processing minimises the noise artefacts.

The UltraTec PD1dwr is a small, lightweight, high sensitivity pocket Doppler with built in fetal heart rate processing. The 2MHz fetal Doppler probe is sealed for immersion in water and ideal for use by a General Practitioner or Midwife for routine antenatal fetal detection or waterbirth FHR monitoring. The fetal heart rate is displayed on a large LCD display with the audio signal available to the user via the built in loudspeaker or optional headset with output level controlled by rotary volume control. FHR traces are available by connection of the serial output to the optional UltraTrace 2 PC compatible software. The fetal signals are easily located using the sealed lightweight narrow beam transducer while internal signal processing minimises the noise artefacts. The unit is powered by a standard 9V battery which provides over 6 hours of use.

The PD1dwr meets all current EEC standards for medical equipment.

The UltraTec PD1+ is a small, lightweight, high sensitivity pocket Doppler with built in fetal heart rate processing. The 2MHz fetal Doppler probe is ideal for use by a General Practitioner or Midwife for routine antenatal fetal detection.

The fetal heart rate is displayed on a large LCD display with the audio signal available to the user via the built in loudspeaker or optional headset with output level controlled by rotary volume control. FHR traces are available by connection of the serial output to the optional UltraTrace 2 PC compatible software. The fetal signals are easily located using the lightweight narrow beam transducer. Internal signal processing minimises the noise artefacts.

The fetatrack 310s2 offers continuous antenatal fetal monitoring in the antenatal clinic or labour wards.

Weighing less than 4Kg the fetatrack 310s2 is a truly portable unit. The fetatrack 310s2 has all the necessary facilities for accurate antenatal fetal assessment in one cost effective and compact unit. Fully integrated digital transducers allow you to choose the mode of operation you require from single fetus to twins or even triplets. Standard on the FT310s2 is the external toco transducer and hand held event marker providing a means of patient indicated fetal movement. Simple to operate the 310s2 is designed with controls that are easy to learn and understand, the display is a large colour graphic LCD and LED back lit for low light environments. The display will allow the user to chose between numeric and graphical fetal heart rate data. Operators can be assured that they are getting the best, reliable signals and there is a distinctive alarm which warns when heart rate is out of range. High resolution multipoint digital autocorrelation provides accurate and reliable FHR traces and there is no loss of data when the paper runs out as the unit will store the traces until a new pack is installed, the user is alerted with a visual warning and an audible alarm. Contoured transducers are less obtrusive and greatly aid patient comfort during extended monitoring sessions and are designed to aid correct placement.

The fetatrack 360 offers continuous monitoring of fetal and maternal heart rate throughout the last trimester of pregnancy to the baby's first moments of life. The fetatrack 360 has all the necessary facilities for accurate fetal assessment in one cost effective and compact unit. Twin fetal heart rate ultrasound channels are standard on both models with the 360i adding direct fetal ecg and maternal heart rate as well as intrauterine pressure. An option on both units is maternal pulse oximetry, allowing the measurement of blood oxygen perfusion in the mother. Simple to operate the 360 is designed with controls that are easy to learn and understand, the display is a high brightness colour graphic OLED for low light environments. Operators can be assured that they are getting the best, reliable signals and there is a distinctive alarm which warns when heart rate is out of range. There is no loss of data when the paper runs out as the unit will store the traces until a new pack is installed.

The fetatrack DD250 offers continuous fetal and vascular doppler in small clinics, hospital or doctors office. Weighing under 2Kg the fetatrack DD250 is a truly portable unit. It will operate from a mains supply or for over 30 hours from its built in rechargeable batteries. The fetatrack DD250 has all the necessary facilities for accurate antenatal fetal heart rate detection or vascular assessment in one cost effective and compact unit. The probes are connected to the unit via a long retractile cable, reducing the need to continuously move the unit, and interchanged using a high reliability connector. With full multipoint digital autocorrelation the fetal heart detection it provides is accurate and reliable with the display of fetal heart rate on a large easy to read LCD display. Simple to operate the DD250 is designed with a minimum number of controls. Just one to turn the unit on / off and to adjust the volume. Fetal heart rate records can be kept by using the FetaTrace PC software that is available as a monitoring package with the option of a wide angle monitoring transducer. All fetatrack products are supplied with a standard 3 year warranty.

Fax: +44 1291 427093

E-mail: sales@doppler.co.uk

simply monitoring...



feta
TRACK
310
fetal monitoring system

fetrack® DD250
desk top doppler



...simply doppler
www.doppler.co.uk

ultrasound
technologies

Lodge Way, Portskewett, Caldicot, NP26 5PS, South Wales. UK
Tel: +44 (0)1291 425425 Fax: +44 (0)1291 427093 email: sales@doppler.co.uk

MEDICA and COMPAMED- Strong international Feedback Gives “MedTech” Industry Tailwind for Exports

Summing up results of the world’s biggest medical trade fair after four days (16 – 19 November 2011) Joachim Schäfer, Managing Director at Messe Düsseldorf, said: “The manufacturers of medical device technology, medical products and medical IT have once again used the framework of MEDICA in Düsseldorf to impressively evidence their operational excellence. Professional organisations reported an excellent mood prevailing amongst exhibitors and of good business as a result of the high attendance of international and decision-making trade visitors.” At MEDICA and the concurrently held COMPAMED 2011 for upstream supplies (627 exhibitors) 4,571 exhibitors presented the entire cross-section of new products, services and processes for increasing efficiency and quality for in and out-patient care to 134,500 visitors (2010: 137,087) in halls well attended across the board.

An important aspect for all export-oriented suppliers regardless of their country of origin: visitors came from over 100 countries. All in all, 50% of the visitors travelled to MEDICA 2011 from abroad, including as most prominent guests, EU Health Commissioner John Dalli (Malta), the British State Minister for Trade and Investment Lord Green and US Assistant Secretary of Commerce Suresh Kumar. On his tour of the trade fair Dalli was impressed by the range of new products and ideas and the pivotal role that MEDICA plays as a central hub for an innovation-driven growth industry. Suresh Kumar declared MEDICA a “generator of jobs” stressing the difference between this and trade fairs in other sectors of industry: “In the aviation or automotive field the leading trade shows are dominated by major corporations alone. By contrast MEDICA is a business platform for thousands of small and medium-sized companies. The deals concluded here create new jobs immediately.”

The Theme Parks and Forums forming part of MEDICA such as the MEDICA MEDIA FORUM (telemedicine/medical IT), the MEDICA PHYSIO FORUM (physiotherapy), the MEDICA TECH FORUM (medical device technology innovations) or the newly



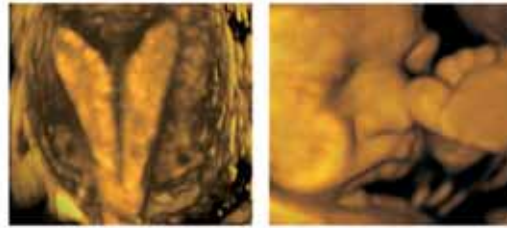
launched MEDICA WOUND CARE FORUM (wound care) enjoyed very good visitor attendance on all four days of the event and covered a wide variety of subjects, some also in English. Several thousands of participants were registered at the MEDICA Congress. Also in terms of its wide and varied programme of almost 200 seminars, courses and workshops it again fulfilled its role as Germany’s biggest multi-disciplinary continuous professional education platform. The complementary “PatientenForen” also went down very well; the highlight clearly was the event revolving around the key question “How to turn 100” dealing with the right lifestyle needed to reach a high age.

The 34th German Hospital Day as the leading communication platform for all hospital professionals addressed health policy issues under the general heading “Improving Care – Removing

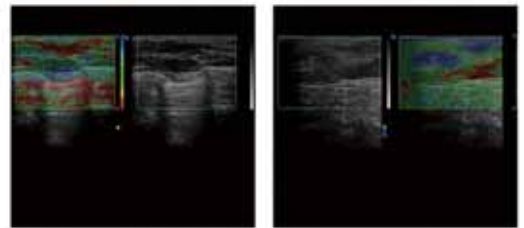




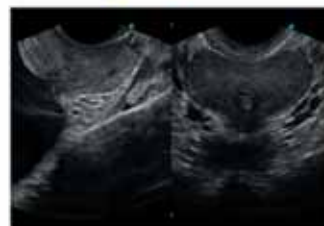
● Real-time 4D



● Elastography



● Urology Application



Visit Us



ARAB HEALTH

HALL2 2J19

Shantou Institute of Ultrasonic Instruments Co., Ltd.
tel: +86-754-88250150 email: siui@siui.com web: www.siui.com



Barriers!“ The 2,250 delegates were also offered a multi-faceted information programme such as the nursing care forum or specialist events on the topics IT, Hygiene and Controlling.

A premiere was held for the international audience under the umbrella of the German Hospital Day. 160 top-notch decision-makers from European clinics were pioneers at the “First Joint European Hospital Conference”.

Always held in parallel with MEDICA, COMPAMED once again underpinned its position as the leading international event showcasing supplies for medical manufacturing. 627 exhibitors from 40 countries, the largest number of exhibitors since its inception, were presented in Halls 8a and 8b showcasing their high-tech solutions to around 16,000 visitors in the medical device industry. In addition to the participating enterprises the exhibits on show such as new materials, mechanical and electronic components, packaging, quality testing and complete contract manufacturing also featured in the two specialised forums integrated into COMPAMED.

For information online go to:
Websites: www.medica.de and
www.compamed.de

**Dates of next MEDICA in
Düsseldorf:**

14 – 17 November 2012

**Dates of next
COMPAMED in
Düsseldorf: 14 – 16
November 2012**

The Apogee 1100 Portable Colour Ultrasound System

With respect to most portable colour ultrasound systems, the designers usually have to compromise image quality in order to achieve device portability. The launch of Apogee 1100 completely breaks this rule. It significantly improves image quality of



ultrasonic systems, which enables the compact system with advanced features you can only find in high-end trolley colour Doppler.

When observing an object, human eyes tend to selectively pick up the useful information and reflect it to the brain, thus certain details are clear to the brain and impressive to the memory. Based on such characteristics of eye identification and brain thinking, the Apogee 1100 originally adopts SRT technology. The system can automatically trace useful tissue characterisation, consolidate such information and reject surrounding noise. The successful application of this technology improves image resolution remarkably, which delivers more clear-cut tissue edge and better shading. Tissue and structure with lesion can be identified easily. Even minor early lesion can be distinguished clearly, really beneficial to early diagnosis of disease.

E-mail: siui@siui.com
Website: www.siui.com

The Apogee 3800 Ultrasound System



The Apogee 3800 Touch is a premium ultrasound delivering complete and professional solution for women’s health on obstetrics, gynaecology and breast. All applications are specially designed for caring women’s health.

Obstetrics

With the exceptional 4D image and outstanding B/W image of Apogee 3800 Touch, doctors can help pregnant mother to see all details of her baby in the uterus.

Gynaecology

With the sensitive colour doppler and B/W image of Apogee 3800 Touch, doctors can feel more convenient and confident in diagnosis of Gynaecology and provide exact medical solutions for female patients.

Breast

With the advanced Elastography image, doctors can have more supporting evidences to identify breast cancer in early stage, providing in-time curing without delay.

E-mail: siui@siui.com
Website: www.siui.com

www.hospital-technology.com

Please visit our comprehensive web site for the hospital industry
- Manufacturers and Suppliers - Latest Product Showcase
- Exhibitions and Conferences Worldwide
- Hospital Links Worldwide

For Everyone

Smart

SMART, DIRECT & AFFORDABLE



Cobia
SMART

Cobia Smart – for quality assurance of X-ray devices



RTI Electronics AB • www.rti.se
Flöjelbergsgatan 8 C, SE - 431 37 Mölndal, Sweden
Phone: + 46 31 746 36 00, sales@rti.se,



Visit us at Arab Health, Dubai, booth no. ZM58

bon

www.bon.de



30 years ophthalmic expertise.

Berchtold Receives Largest Single Order in The Last Ten Years. Efficient, Powerful OR Technology for the Middle East

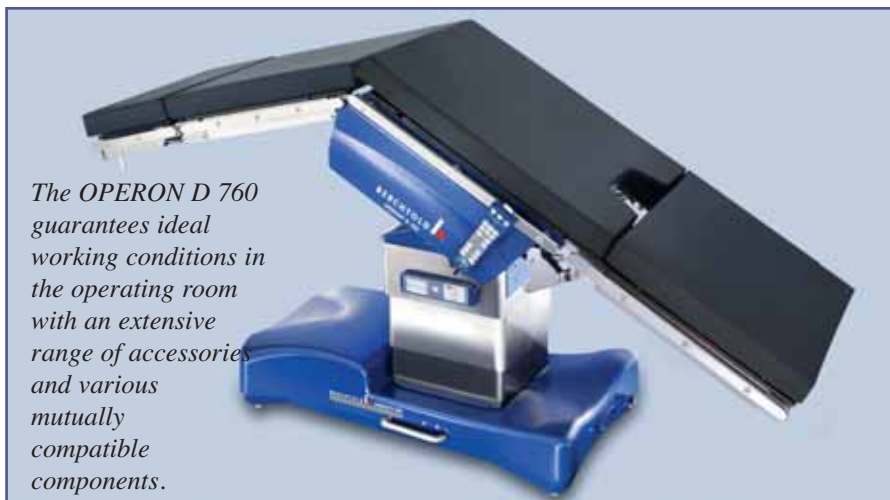
The Sheikh Khalifa Specialist Hospital in Ras Al Khaimah, United Arab Emirates, has commissioned Berchtold to deliver 108 ceiling mounts, 130 OR and examination lights, and 13 mobile OR-tables with accessories. This is the largest single order Berchtold has received in the last ten years.

The products will be used in a newly built hospital with 400 beds and nine operating rooms. The hospital specialises mainly in oncology, general surgery, cardiology, traumatology and emergency medicine. The Sheikh Khalifa Specialist Hospital selected this equipment because for decades Berchtold equipment has been known as high-quality, reliable, durable, and low-maintenance, even in the United Arab Emirates. Due to its modular concept, it can be installed quickly and can also be upgraded securely for future technologies. The construction is scheduled for completion by the end of 2011.

With the CHROMOPHARE F 300, the medical device manufacturer provides a treatment and examination light with the latest generation of high-performance LEDs. This ensures optimal lighting almost without reflections and shadows, ideal colour reproduction of patient tissue, and low power consumption. The small CHROMOPHARE D 300 therapy and examination light is the all-around solution for all types of emergencies, injuries and other examinations. It has a light intensity of 50,000 lux. Depending on the need the examination lights can be mounted on ceilings, walls, or mobile floor stands. For the operating rooms, the hospital will receive various halogen lights with a light intensity from 80,000 to 160,000 lux. Both the CHROMOPHARE D 300 examination light and the surgical lights are equipped with "BRITe Technology" (Berchtold Reflective Illumination



CHROMOPHARE halogen lights are included in the delivery. They are equipped with "BRITe technology". Unwanted warm infrared radiation is reflected precisely back onto the filament.



The OPERON D 760 guarantees ideal working conditions in the operating room with an extensive range of accessories and various mutually compatible components.

Technology). This reflects unwanted warm infrared radiation precisely back onto the filament. The scope of the contract also includes various LED lights. The OPERON D 760 and D 850 type mobile operating tables are versatile and strong. Accessory parts are added to the OR-tables for the various operating procedures and thus ensure safe, precise patient support. The

The Sheikh Khalifa Specialist Hospital in Ras Al Khaimah, United Arab Emirates.

TELETOM type ceiling mounts ensure that cables, leads, and hoses are routed cleanly.

For nearly 90 years Berchtold has been one of the world's leading developers and manufacturers of high quality surgical equipment. The company offers surgical lights, OR-Tables, ceiling supply units, video and camera systems, information and communications systems, and customised

surgical solutions. Berchtold has approximately 440 employees at production, research and development facilities in Germany and the USA. Worldwide, the company has an efficient distribution network with ten subsidiaries.

Fax: + 49 (0) 7461 181-201
Nicole.Schaumburg@BERCHTOLD.biz
Website: www.BERCHTOLD.biz



Fjordblink® Medical Promoting Pain Relieving Water Birth



Fjordblink® Medical's mission is to promote pain relieving water birth by manufacturing and marketing birth pools that meet the highest requirements for hygiene, comfort, and ergonomics.

It is well established that hot water has a soothing and pain relieving effect. In collaboration with leading midwives at Danish hospitals, Fjordblink® Medical has developed a unique birth pool for pain relieving water birth.

Fjordblink® Medical's product concept combines maximum comfort and safety for women in labour with professional requirements for functionality, ergonomics, and hygiene. Fjordblink® Medical birth pools are therefore developed as a medical device and certified in accordance with the ISO standard.

During two decades Fjordblink® Medical's product concept has been used successfully in numerous countries, and through ongoing contact with professionals Fjordblink® Medical continuously improves modern birth pool technology.

FJORDBLINK® MEDICAL P/S, Dybdalvej 6,
Assentoft, 8960 Randers SOE, Denmark
Tel. +45 70222266 - Fax +45 86494908
mail@fjordblink.com - www.fjordblink.com

".....it is recommended that all hospitals have second generation SADs available for both routine use and rescue airway management"¹



INTERSURGICAL
i-gel

www.i-gel.com

INTERSURGICAL®
COMPLETE RESPIRATORY SYSTEMS
Quality, innovation and choice



Reference (1): 14th National Audit Project of The Royal College of Anaesthetists and the Difficult Airway Society. Major complications of airway management in the UK. Report and lessons. March 2011. Chapter 1. Page 35.

EVAC+CHAIR

The World's No.1 Stairway Evacuation Chair

- 100% Quality Assured
- Lightweight, Quick, Easy to Use
- Versatile - Use Along Corridors
- Certified Competency Training
- Single Person Operation



T: + 44 (0)121 706 6744
F: + 44 (0)121 706 6746
info@evacchair.co.uk



www.evacchair.co.uk

Liver Metastases: What can be done when bowel cancer has spread to the liver

Mr Giuseppe Kito Fusai, Consultant Liver Surgeon

Bowel cancer can spread (metastasise) to various other organs, most commonly to the liver. Liver metastases occur in more than half of patients with bowel cancer and can often be treated surgically, or in combination with other treatment modalities. This abridged article from totalhealth describes how this can be accomplished safely, and highlights the importance of multidisciplinary management for patients.

The bowel and liver cancer association

Bowel cancer is the third most common malignant tumour in men and the second most common in women in Europe. Every year approximately 400,000 people die from colorectal cancer worldwide.

In the UK, almost 35,000 new cases are diagnosed each year. Of these approximately 60% will develop metastatic disease, of which, half will be localised to the liver. Liver metastases may occur either at the same time that bowel cancer is diagnosed - (synchronous metastases) or some time after the primary tumour has been resected (metachronous metastases). Surgery is the only potentially curative treatment for these patients. Without surgery, the average survival with palliative treatment is usually less than 2 years.

Suitability for surgery

Several factors are important to determine whether a patient is deemed suitable for surgery. The distribution of the metastases dictates the technical feasibility, as at least 20-30% of the liver has to be preserved to prevent liver failure. The liver is unique in that it is the only organ capable of regeneration if part of it is removed. Indeed, a second and third operation can be performed to remove recurrent metastases, with an outcome surprisingly similar to the one observed in patients after the first surgical procedure. For this reason it is essential that patients are followed up for at least five years after surgery with

repeat CT scans every three to four months for the first two years and six monthly or yearly thereafter.

Needless to say it is essential that patients are generally fit to undergo major surgery, although this doesn't necessarily correlate with increasing age with many good results found in octogenarians. Improvement in peri-operative care, including anaesthesia and intensive care support, as well as technical progress in surgical equipment, have led to a dramatic decrease of postoperative mortality, with very few patients dying as a result of liver surgery. This improvement is also associated with a better management of the complications, which occur in 20-40% of patients, the most serious complications being bleeding, infection, bile leakage and liver failure. A particularly important advance over the last few years has been the development of minimally invasive liver surgery. With the same technique used to remove the gallbladder (laparoscopic or keyhole surgery), it is possible to operate on the liver, though this technique can only be used in selected cases. The benefit of this approach is mainly to speed up recovery. Patients can get out of bed the following day, have very little pain and go home a few days after surgery.

Combining treatments for liver cancer

Over the last few years various strategies have been designed to increase the number of cases who can benefit from surgical treatment. Chemotherapy plays a key role and virtually all patients with liver metastases from colorectal cancer receive this treatment at some stage. Chemotherapy is administered after surgery to minimise the chance of recurrence (adjuvant chemotherapy) or before surgery in patients with advanced disease and poor prognosis (neo-adjuvant chemotherapy).

Managing metastases

In cases with initially inoperable metastases, pre-operative chemo-

therapy can reduce the size of the lesions to the point where these patients can be operated on. The response rate is greater than 50% and in very few cases metastases can even disappear on follow-up scans, although they recur in most people if surgery is not carried out. Complete pathological response where the whole tumour is eradicated by chemotherapy is a rare event, occurring in no more than 10% and doctors should not encourage a 'wait and see' attitude.

Chemotherapy regimens

Chemotherapy regimens commonly comprise a combination of drugs, often including 5-fluorouracil with Oxaliplatin (FOLFOX) or Irinotecan (FOLFIRI). More recently, biological agents, such as monoclonal antibodies, have been introduced in current clinical practice and have been associated with a greater response rate.

Preventing liver failure

Chemotherapy is often associated with several side effects and although it may be well tolerated by patients, it has a toxic effect on the liver. A period of at least four to six weeks is required to have elapsed between the end of the treatment and extensive resections, in order to prevent liver failure.

Promoting liver growth

In cases where the anticipated proportion of liver to be removed is greater than 70-75%, it is possible to increase the volume of the remnant by blocking the branch of the portal vein (the main vein providing the blood supply to the liver) supplying the affected lobe of the liver. This causes shrinkage of the affected side and elicits a regenerative response on the other. This procedure is called portal vein embolization (PVE) and is routinely performed by our interventional radiologists in the x-ray department under local anaesthesia and sedation. The procedure is normally well tolerated and requires 24 hours hospitalisation. After a period of 4-6 weeks a liver MRI scan is repeated to assess the response prior to surgery.

Two-stage procedure Even combining chemotherapy and PVE, it is sometimes impossible to remove all the metastases with one operation and



some patients require a “two stage” procedure where two liver resections are performed within approximately three months to allow regeneration of the remnant liver and prevent liver failure. In other circumstances, and sometimes to avoid further surgery, it is possible to destroy some of these lesions with local ablation. Different types of energy used to ablate liver tumours include radiofrequency, microwave, electrolysis and cryotherapy, with radiofrequency being the most widely used in clinical practice. The recurrence rate after local ablation, however, is much greater than after surgery, and the success rate is proportional to the size of the lesion ablated.

The extracorporeal technique

In very selected cases, it is also possible to remove the liver from the abdominal cavity, resect the metastases on the bench and reimplant the liver, with a technique similar to the one used for liver transplantation. This extracorporeal technique is an exceptional surgical procedure reserved for cases where the major vessels are involved and require vascular reconstruction. This can only be performed in centres with liver transplant facilities.


Curative surgery for liver metastases

With these strategies and a proper multidisciplinary approach it is estimated that an additional 10– 15% of initially inoperable patients can today be offered potentially curative surgery. Unfortunately, however, a large proportion of cases will never be candidates for liver resection. Palliative chemotherapy can extend survival but cannot provide a cure. A recently developed technique called selective intra-arterial radiotherapy (SIRT), has been tested in phase II trials and can be an option for these patients.

Management of liver metastases


Although the liver is a common target for bowel cancer, this malignant tumour can also spread to the lungs, lymph-glands, other intra-abdominal organs and to the. In the presence of

GE Healthcare



LOGIQ E9
Volume Navigation
Real-time ultrasound fusion.

For decades, GE has delivered a continuous stream of breakthrough technologies resulting in Volume Ultrasound technology which has set the standards for image quality, accelerated new applications and increased clinical efficiency. Today, Voluson ultrasound platform is the system of choice for women's healthcare.

 GE imagination at work

© 2008 General Electric Company
GE Medical Systems Ultrasound & Primary Care Diagnostics, LLC, a subsidiary of General Electric Company, doing business as GE Healthcare.

GE Healthcare
Building 18, Dubai Internet City
P.O. Box 74594, Dubai, United Arab Emirates
Phone: +9714 429 6101, Fax: +9714 429 6201

For more information about GE Healthcare's ultrasound products, please visit us online at gehealthcare.com

extra-hepatic disease, the management of liver metastases is more complex, as the objective of liver surgery is to eradicate the disease. In some circumstances, a staged surgical approach can be appropriate, where liver surgery is followed by lung surgery. The involvement of the lymph-glands and peritoneal spread has been traditionally regarded as a

contraindication to liver surgery. Although this remains true for the majority of the patients, there are a number of exceptions where lymph-glands near the liver can be cleared (after successful chemotherapy) and even the peritoneum can be stripped off. This article is an abridged version of an article that originally appeared on www.totalhealth.co.uk

www.hospital-technology.com
Please visit our comprehensive web site for the hospital industry where all your information needs could be met.
- Manufacturers and Suppliers - Latest Product Showcase
- Exhibitions and Conferences Worldwide

Zimmer MedizinSysteme Presents the New Dimension in Radial Shock Wave Therapy - enPuls Version 2.0

enPuls Version 2.0 is a mobile radial shockwave therapy system with ballistic drive, high-energy pulses.

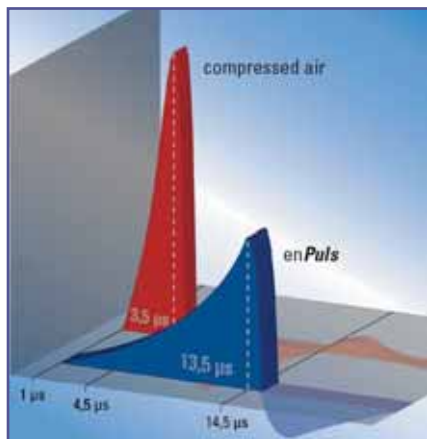
It's perfect for the treatment of biological tissues and structures in various pathologies and medical conditions. It is an unique, easy-to-use system offering shockwave therapy access to all therapists.

The Principle:

A heavy, electromagnetically accelerated, ballistic projectile transfers its kinetic energy to a transmitter head in the handpiece. The kinetic energy is transformed into impact energy in the applicator head. Shockwaves result and spread out radially from the contact area into the desired treatment region of the body.

enPuls Version 2.0 has an electromagnetically accelerated projectile for:

- efficient energy transfer
- less maintenance, longer lifetime
- unique shockwave pulse with higher comfort



With enPuls Version 2.0 we are using modern technology as for example the unique enPuls "Softshock".

enPuls 2.0 creates unique shockwave pulses by using a projectile 5 times heavier than standard air-pressure systems and a reduced final velocity upon contact with the applicator.

Through the force of the accelerator and the mass of the projectile, the pulses carry the same amount of mechanical energy, but are more

comfortable for the patient than comparative shockwave systems. The longer pulse rise time maintains the energy without the need for unpleasant high peak pressure amplitudes. (picture 1: diagram) The lower peak and longer rise time minimise the stinging, painful sensation normally related to this therapy. Increased patient compliance results with easier treatments at higher energy levels.

Less pain, same efficiency – enPuls softshot technology.



The Features:

- Touch-Screen operated
- Energy levels from 60 to 185 mJ (equivalent 1-5 bar)
- Pulse frequencies from 1 to 22 Hz*
- Burst mode for Trigger Point Treatment (16 Hz for 0,5 s)
- Positive shockwave counter
- Negative shockwave counter with value preset
- Indication menu with preset treatment protocols
- 1 GB SD-card for memory, updates and service

The observed tissue reactions and metabolic effects are basically:

- increased metabolism
- altered cell membrane permeability
- improvement of cellular structure
- improvement of tensile stability
- increased cell activity by gene expression
- expression of substance P

(a growth and pain mediator hormone)

The average application consists of one or two treatment sessions weekly, for a total of 6 – 10 treatment sessions. A treatment session applies approximately 2000 pulses and takes about 10 minutes.

Especially useful for: Orthopaedic Treatment, Orthopaedic Rehabilitation, Sport Rehabilitation, Traumatology, Physiotherapy and Osteopathy.

We will welcome you on our booth ZE 54 on the Arab Health 2011!

E-mail: export@zimmer.de

Website: www.zimmer.de

GE Optima CT660 High Efficiency Computed Tomography Systems

GE's Optima CT660 Series scanner of Computed Tomography (CT) systems is designed to reduce electricity consumption and associated CO2 emissions on the electric grid, calibration time, and siting requirements compared to prior GE technology, while maintaining image quality.



GE's Optima CT660 Series scanner is designed to reduce electricity consumption for operation and ambient cooling by more than 10,000 kWh per machine annually, a savings of more than 15% compared to prior GE technology. With its Energy Saving Mode activated during evenings and weekends, the Optima CT660 Series scanner can reduce electricity consumption by an additional 23,000 kWh, or 45% per machine per year. This can avoid the emission of a total of 20 metric tons of CO2 per year on the US grid, equivalent to the annual CO2 emissions of 4 cars on US roads. GE's Optima CT660 Series scanner is designed to reduce electricity consumption for operation and ambient cooling by more than 10,000 kWh per machine annually, a savings of more than 15% compared to prior GE technology. With its Energy Saving Mode activated during evenings and weekends, the Optima CT660 Series scanner can reduce electricity consumption by an additional 23,000 kWh, or 45% per machine per year.

Log on:

www.hospital-technology.com

for the latest in Healthcare

NEW

QA3 Patient Trolley System



3 YEAR WARRANTY

Designed following comprehensive research into patient trolley function and ergonomics

- Supremely manoeuvrable
- Exceptional low height
- Virtually zero transfer gap
- Easily guided by one person
- Designed for patient comfort
- Gas assisted backlift
- Trendelenburg tilt
- K8 Pressure care mattress
- Fixed transfusion pole – quick release
- Infection control – smooth moulded surfaces

Innovative Technology – Practically Applied

SPECIALISING IN:

- Patient & Surgery Trolley Systems
- Operation Table Accessories
- Stainless Steel Theatre Furniture
- Surgical Instruments
- Electro-Surgical Accessories
- Tourniquet Systems
- Fibre Optic Instruments
- Service & Maintenance



+44 (0)1943 878647 sales@aneticaid.com
 Queensway, Guiseley, West Yorkshire, LS20 9JE UK.
 www.aneticaid.com



MADE IN THE UK



QUALITY ASSURED



GLOBAL DISTRIBUTION



AneticAid
 The Theatre Equipment Specialists

Zimmer
 MedizinSysteme

Radial Shockwave Therapy

enPuls 2

Visit us on Arab Health
 Booth 3F51

high energy
 mobile
 compact
 economic

**New generation
 without compressor!**



Zimmer MedizinSysteme GmbH
 Junkerstraße 9
 89231 Neu-Ulm
 Tel. 49. 731. 9761-291
 Fax 49. 731. 9761-299
 export@zimmer.de
 www.zimmer.de

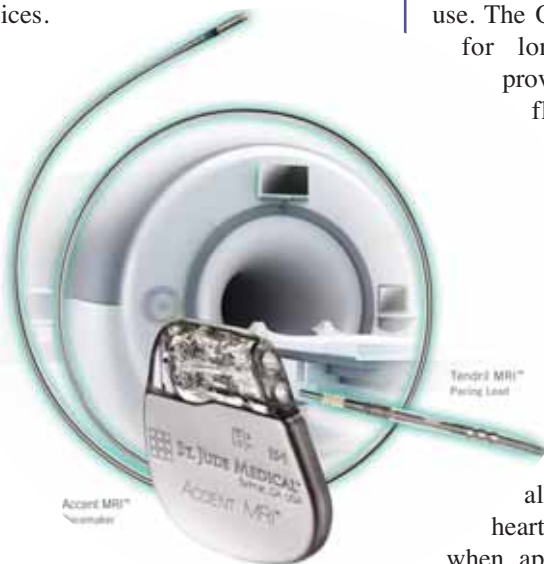
**enPuls 2
 + Cryo 6**

First Accent MRI Pacemaker Implanted in the UK- New Pacing System Designed and Tested for MRI Use

St. Jude Medical, Inc., a global medical device company, today announced the first implants in the UK of the Accent MRI™ pacemaker and Tendril MRI™ lead were performed at The Heart Hospital in London by Dr. Edward Rowland. The new pacemaker and lead allow patients to undergo full-body, high-resolution magnetic resonance imaging (MRI) scans to accommodate patients' current and future medical needs.

MRI scans are important because they can provide imaging information to better evaluate the presence of certain diseases that may not be adequately assessed with other imaging methods, such as X-ray or ultrasound.

Each year approximately one million pacemakers are implanted worldwide, with about 46,000 in the UK alone. It is estimated that up to 75 percent of pacemaker patients could benefit from MRI scans during the lifetime of their devices.



The new Accent MRI pacemaker system is an advanced pacing platform that provides wireless telemetry and algorithms to address individual patient conditions, with the added benefit of MRI conditional scanning capability.

“Undertaking MRI scans in patients with pacemakers has previously been impossible or fraught with technical

difficulties. I feel I can now advise patients that a magnetic scan can be performed without compromising the safety of the pacemaker,” Dr. Rowland said. “It was also reassuring to implant pacemaker leads that performed and handled as well as standard state-of-the-art pacing leads.”

The system features an MRI Activator™ device that provides a simple alternative option for programming the device to the appropriate MRI mode for use during the scan. A single button press on the handheld MRI Activator device can be used to program the specific device parameters to be used during the MRI scan. These parameters are pre-selected by the patient's physician and stored in the Accent MRI pacemaker.

Built on the proven Tendril lead platform, the pacing lead offers unique design advantages for safe, MRI-conditional scanning. The thin diameter makes it easier for physicians to implant, as it retains the handling characteristics of the well established Tendril platform of pacing leads. In addition, the lead features Optim™ lead insulation, the first silicone-polyurethane co-polymer material created specifically for cardiac lead use. The Optim insulation is designed for long-term reliability, while providing physicians with better flexibility and handling to facilitate device implantation.

The Accent MRI pacemaker has several features that simplify patient management. These features include AutoCapture™ Pacing System technology that measures the heart's reaction to pacing beat-by-beat, and the VIP™ algorithm that enables the heart's intrinsic rhythm to prevail when appropriate, thereby reducing unnecessary ventricular pacing.

Cardiac pacemakers are used to treat bradycardia, which is a heart rate that is too slow. These devices monitor the heart and provide electrical stimulation when the heart beats too slowly for each patient's specific physiological requirements.

Tel +1 651 756 4347

E-mail: jweigelt@sjm.com

RTI Electronics Have Made the Complex Simple! An Easy-to-use Instrument for Quality Assurance of X-ray Devices

We've made the complex simple. When we created Cobia Smart, the goal was to develop a measurement instrument so simple to use that anyone could use it, while not compromising on the high quality and accuracy that RTI is renowned for. And we succeeded. Cobia Smart is fast, clear, modern and straightforward.

Cobia Smart is a simple-to-use instrument for checking that the output from an X-ray tube is correct. You simply place it beneath the X-ray tube, make an X-ray exposure, and rapidly get an accurate reading. The measured values can be read directly from Cobia Smart, its large and clear display, even from a distance. No adjustments are required, making it exceptionally easy to use.

Check and Go

Cobia Smart is perfect for anyone wanting to ensure that an X-ray device is functioning as it should. For example, Cobia Smart is ideal for checking fast and often that the kV and/or dose are not changing over time.

Rotatable Display and Smart Battery Indicator

Cobia Smart has a clear and rotatable display, so you can read off measurement results fast and easily ^ even from a distance. The innovative display even shows the results right way up in measurement situations where the instrument needs to be positioned upside down. The display also has a very useful, smart battery indicator that shows how much measuring time remains.

Only Pay for What You Need

There are three versions of Cobia Smart for measuring a range of different radiography and fluoroscopy parameters. Select the model that best





suits your needs, and only pay for the parameters you want to measure.

Straightforward and Trouble-free

Cobia Smart is a straightforward and trouble-free instrument that anyone could use. RTI has over 30 years, experience in the manufacture of X-ray detectors, and Cobia Smart is a direct implementation of our high-tech knowledge coupled with what we have learned in the field.

Up to 10 Year Warranty

Cobia Smart is calibrated by an accredited X-ray lab and comes with an automatic 2-year manufacturer's warranty when purchased new, with the option of taking out an extended warranty of up to 10 years. Meaning that you can feel very confident with your Cobia Smart for a very long time!
E-mail: marie.wendin@rti.se
Tel: +46 31 746 3626

New Retinal Imager Can Help Millions of Diabetes Patients Zero-dilation EasyScan Solution Now Available in Europe

A new, hi-tech retinal imaging solution that can help millions of diabetes patients from going blind has been released in Europe[1]. The

groundbreaking system, called EasyScan, has been developed by i-Optics, a specialist eye diagnostics company that is pioneering innovative retina and cornea imaging systems.

Validated with specialists at the Netherlands' Rotterdam Eye Hospital, EasyScan is a fast and easy-to-use non-mydratric retinal imaging system that uses advanced Scanning Laser Ophthalmoscope (SLO) technology. In addition, EasyScan is less expensive and more portable than the systems currently employed for retinal imaging, so bringing high-end eye-care within reach of far more eye specialists – and their patients. This is good news for diabetes patients everywhere. Early diagnosis and timely treatment are crucial to preventing blindness among the more than 300 million diabetes sufferers worldwide. “With aging populations and growing obesity, countries everywhere face a rapid increase in diabetic retinopathy, age-related macular degeneration, glaucoma, and other retinal diseases,” said Jeroen Cammeraat, CEO at i-Optics. “Unfortunately, the traditional fundus cameras used to diagnose these conditions are large, exclusive, and expensive, as well as being slow and difficult to use. EasyScan has been designed from the ground up to solve all these problems.”

EasyScan offers a number of benefits over fundus cameras: it is fast, easy-to-use, patient friendly and accessible. Weighing less than 7kg and with a footprint smaller than a binder, EasyScan is extremely portable – which means imaging can be brought closer to the patient. It consumes little power and it connects to a PC or laptop via a standard USB connection. EasyScan is based on SLO technology, which brings out clinical features in the retina in the earliest stages, provides better contrast than fundus cameras, and can better penetrate media opacities such as cataract and corneal opacities.

Because pupil dilation is not required – as a confocal camera, EasyScan can image through pupils as small as 2mm – using EasyScan reduces the patient's waiting time by at least 30 minutes. Patients can also drive home immediately after being examined. Scanning also takes significantly less



time. Internal fixation lights, for example, guide the patient's gaze, enabling the operator to image both the central and nasal field quickly and comfortably. Other time-saving benefits include live image previewing with the option to freeze the image on your computer screen, self-guiding software that eliminates the multitude of settings and controls required by fundus cameras, and automatic focusing. “Add in a full digital workflow for storing, retrieving, archiving and sharing images instantly, and immediate plug-and-play connectivity, and EasyScan truly can be used by anyone, anywhere,” said Cammeraat. i-Optics pioneers smart and superior eye diagnosis solutions that are affordable, fast and easy to use by care providers worldwide to serve their patients best. Our innovations include EasyScan, Cassini and EyePrevent. EasyScan is a zero-dilation breakthrough retinal imaging system that uses Scanning Laser Ophthalmoscope technology for the diagnosis of diabetic retinopathy, age-related macular degeneration, and glaucoma. Cassini is a first-of-its-kind corneal topographer based on Colour LED Topography. It supports superior contact lens fitting, earlier detection of Keratoconus, and could help improve the outcomes of corneal transplants and refractive surgery. EyePrevent is a retinal-disease screening service for diabetic and other patients.

Tel: +31 70 399 31 12
E-mail r.vanthoof@i-optics.com

Progress in the treatment of advanced prostate cancer

Professor Agamemnon Epenetos

Introduction

Prostate cancer has been recognised as a clinical entity since antiquity, when it was first described by the ancient Egyptians, and surgery to remove the prostate was first developed more than a century ago. In the last 30 years, the availability of a blood test for prostate-specific antigen (PSA) has revolutionised the diagnosis of prostate cancer leading to detection and cure of early prostate cancer.

Early Prostate Cancer

In early prostate cancer radical prostatectomy, as compared with watchful waiting, reduces the rate of death. If surgery is not appropriate, then conventional-dose radiotherapy (or brachytherapy) may be appropriate, either as a single agent or combined with hormonal therapy. Hormonal therapy is not indicated for low-risk disease, whereas six months of hormonal therapy can improve survival in high-risk patients.

Although localised prostate cancer may be cured with surgery or radiotherapy, with or without hormonal therapy, the disease recurs in approximately 20–30% of patients.

Advanced Prostate Cancer

Studies in the 1940's on the role of the male androgen, testosterone, led to the proposal of androgen deprivation therapy. Blocking the action of androgens has been the standard care of advanced prostate cancer since then.(1) Androgen blockade can decrease the concentration of the tumour marker PSA, induce tumour regression and provide relief of symptoms in most patients.

However, the response to treatment may not always be long-lasting, and with time, PSA concentrations could rise, indicating relapse. Many alternative endocrine treatments have been evaluated in these patients, but none have led to prolonged survival, until recently.

Three *non-hormonal systemic approaches* were shown to prolong survival: docetaxel(2) as first-line, and cabazitaxel(3) as second-line

chemotherapy, and active cellular immunotherapy (vaccine) with sipuleucel-T.(4)

Docetaxel: When given with prednisone, treatment with docetaxel every three weeks can lead to improved survival and response rate in terms of pain, PSA level, and quality of life.

PSA declines of at least 50% occurred in half of patients, and objective tumour responses were observed in 20% of patients with measurable disease. Side effects included fever, nausea and vomiting, and cardiovascular events.

Cabazitaxel: Treatment with cabazitaxel plus prednisone was shown to have important clinical antitumour activity, improving overall survival in patients whose disease has progressed during or after

docetaxel-based therapy. The most common side effects were neutropenia and diarrhoea.

Sipuleucel-T: Sipuleucel-T, a form of immunotherapy, has shown evidence of efficacy in men with metastatic hormone-resistant prostate cancer.(4,5) The effect of sipuleucel-T on survival was observed consistently across most subgroups of patients. Side effects were mild to moderate and included chills and fever headache, influenza-like illness, myalgia, hypertension, increased sweating, and groin pain.

A new and promising hormonal agent is Abiraterone, a drug designed and developed at The Institute of Cancer Research and The Royal Marsden Hospital, London UK.

Abiraterone is a selective inhibitor of androgen biosynthesis that blocks a critical enzyme in the manufacture of testosterone. Treatment with abiraterone, either as a single agent or in combination with low-dose glucocorticoids such as prednisone, resulted in anti-tumour activity among both patients with progressing hormone-resistant prostate cancer who had, and had not, received chemotherapy. The most common adverse events included fluid retention and hypertension; these events were lessened by co-administering low-dose glucocorticoids.(5) Improved survival

was observed in many patients including some who had received previous chemotherapy. The use of hormonal agents is not typically considered in patients who have received prior chemotherapy.

These results provide support for the evaluation of other endocrine therapies in this stage of the disease.

New Developments

A major clinical challenge is the propensity for advanced prostate cancer to metastasise to bone, causing patient morbidity as well as mortality. Unlike other tumours that occasionally metastasise to bone, metastatic prostate cancer almost invariably metastasises to bone, and furthermore displays characteristic osteoblastic (bone-forming) rather than osteolytic (bone-breaking) lesions. Despite the clinical relevance of bone metastasis, the mechanisms that underlie this increase in bone formation following prostate cancer are not well understood. Treatment is palliative and includes analgesia, chemotherapy, bisphosphonates, radiotherapy, and radioisotopes.

Radiotherapy can help to relieve symptoms of prostate cancer that has spread. It is particularly useful for helping to control bone pain and may help cut down on painkillers. This can be given as a single treatment or several daily treatments. If appropriate, radiotherapy can be given via a relatively new method called the CyberKnife®.

CyberKnife® is a robotic radiosurgery system which can be used for localised metastatic prostatic lesions. The two main elements of CyberKnife® are the radiation produced from a linear accelerator and a robot which directs the radiation to any part of the body from any direction and can target treatment more accurately than standard radiotherapy.

Internal radiotherapy for prostate cancer is the intravenous injection of radioactive isotopes called Samarium and Strontium. The mechanism of action is very simple. Samarium and Strontium home into bone due to their chemical similarity to Calcium and then give off radiation directly to the cancer cells. The treatment can shrink bone tumours, relieve pain and may delay the development of new tumours



in the bones. The pain relief usually lasts for several months.

New developments in internal radiotherapy include the use of bone-targeted radium-223. Radium, a bone-seeking radionuclide which emits alpha particles, was found to be well-tolerated with minimum myelotoxicity, and had a significant symptomatic benefit. These alpha particles are highly damaging and kill neighbouring cancer cells, but they're extremely short range, so, normal cells further away will be spared. It is likely that radium-223 will be approved and will become a standard treatment for men with bone metastases from prostate cancer resistant to hormonal therapy.

Cancer Stem Cells and the Challenges Ahead

Molecular analyses of prostate cancer have shown that prostate tumours express a wide range of genes associated with cancer stem cells. Cancer stem cells (CSCs) are a small group of cancer cells found within tumours that possess similar characteristics to normal stem cells. CSCs have the ability to be tumourigenic (tumour-forming). CSCs may generate tumours through the stem cell processes of self-renewal. They are probably resistant to standard treatments, leading to recurrence and spread. Therefore, development of specific therapies targeted at CSCs holds hope for improving survival and quality of life of cancer patients, especially for sufferers of metastatic disease.

Trials on cancer stem cells and the miRNAs which regulate cancer are ongoing and may provide possible therapeutic agents in the future.

References

1. Hellerstedt BA, Pienta KJ. The current state of hormonal therapy for prostate cancer. *CA Cancer J Clin* 2002;52:154-179
2. Tannock IF, de Wit R, Berry WR, et al. Docetaxel plus prednisone or mitoxantrone plus prednisone for advanced prostate cancer. *N Engl J Med* 2004;351:1502-1512
3. de Bono JS, Oudard S, Ozguroglu M, et al. Prednisone plus cabazitaxel or mitoxantrone for metastatic castration-resistant prostate cancer progressing after docetaxel treatment: a randomised

open-label trial. *Lancet* 2010;376:1147-1154

4. Kantoff PW, Higano CS, Shore ND, et al. Sipuleucel-T immunotherapy for castration-resistant prostate cancer. *N Engl J Med* 2010;363:411-422

5. de Bono JS, Logothetis CJ, Molina A, et al. Abiraterone and increased survival in metastatic prostate cancer. *N Engl J Med* 2011;364:1995-2005

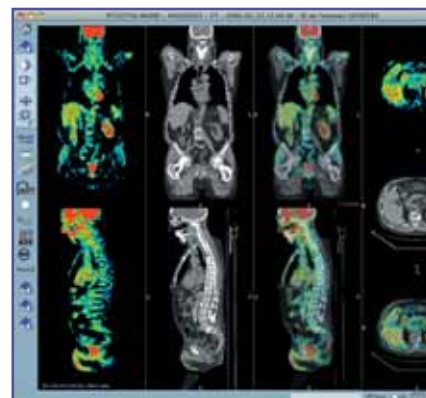
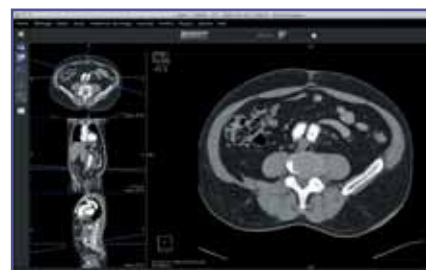
This article is an abridged version of an article that originally appeared on www.totalhealth.co.uk

Second Generation PACS Software Combines Integrated Support for DICOM and Non-DICOM Images with Comprehensive Multimedia and Sharing Functionality

Telemis, the specialist in medical imaging solutions, is offering visitors to this year's RSNA event the first opportunity to see second-generation PACS (Picture Archiving and Communication System) software that combines true multimedia capabilities with support for both DICOM and non-DICOM images.

Built on the latest version of Telemis-Medical PACS, the new 'MACS' (Multimedia Archiving and Communication System) provides a single, integrated solution for the sharing, archiving, retrieval and editing of digital images, high-definition video and other multimedia files across a wide variety of medical disciplines. All standard DICOM formats including DICOM-RT, DICOM Multiframe and DICOM-Video are supported.

Using MACS, radiologists, nuclear medicine specialists, endoscopists, surgeons, clinicians and a variety of other medical professionals can quickly and easily access the same tools and visualisation functionality via a consistent, intuitive interface. As well as sharing information within a hospital, clinic or practice, MACS supports external, secure access via



PCs and laptops for medical staff that may be travelling or based at other locations. In addition a module is also available that allows general practitioners (GPs) to securely access their patients' medical images from their local surgeries.

While Telemis MACS provides the leading solution for hospitals, clinics and private practices looking to install their first PACS system, it can also be used to replace and upgrade existing PACS systems from a variety of suppliers. Telemis has developed specific tools for migration and recovery of patient history data that ensures rapid and seamless evolution to a MACS implementation – either as an upgrade of an existing PACS or a complete migration from PACS to MACS.

Built into Version 4.3 of Telemis-Medical PACS, the new MACS functionality also offers an extensive range of tools for collaboration that will enable radiologists and clinicians to work more efficiently together. www.telemis.com

SonoScape Wins Reddot Design Award for S20 Cart-based Colour Doppler Ultrasonic Diagnostic System

SonoScape, specialises in providing ultrasound systems and high definition transducers for the healthcare all over the world, announced today that the company's latest ultrasound model cart-based colour Doppler system S20 is among the winners of this year's "red dot award: product design" for its outstanding ergonomic design and excellent performance.



Approximately 1,700 companies from 60 countries have taken part in this year's red dot competition with 4,433 entries in total. Ultimately, only the very best products managed to convince the expert jury. S20 acquired recognition from the professional expert jury by its user-friendly ergonomic designs such as smart touch screen, intuitive operation interface, omni-directional arm and slim

building, and its excellent performance in imaging and image-processing. Combining 17" wide monitor with 10.4" touch panel together, the S20 will provide the most smoothly work flow which doctors have never experienced before. The high definition image quality is also strength for S20. Thanks to the innovative technologies, such as Multi-beam processing and γ -scan, the doctors will be confident for even toughest patients. So, from technology to imaging, from archiving to reporting, the S20's innovation will bring all the best for clinical practice in everyday.

Fax: +86 755 26722850

E-mail: sonoscape@sonoscape.net

FDA Clearance for Planned Nuance Excel Full-Field Digital Mammography (FFDM) System

Planned Nuance Excel FFDM System combines fast examination time, low radiation dose, and outstanding image quality. The system includes Planned's proprietary MaxView Breast Positioning System for enhanced tissue visibility, and Side Access patient positioning for optimal working ergonomics.

Planned's products are well known for their exquisite design and user ergonomics. The Planned Nuance Excel features a large 24x31 cm amorphous selenium (a-Se) detector. It is intended for both screening and diagnostic mammography.

Planned's analog mammography units are widely used in the U.S. and supported by Planned's subsidiary Planned, Inc. located in Roselle, Illinois. "We are very pleased to extend our mammography equipment line to also cover full-field digital mammography. Many of our customers have been looking forward to this clearance," says Chris Oldham, Director of Sales of Planned, Inc.

Planned Nuance Excel full-field digital mammography system will be on display at the Radiology Society of North America (RSNA) meeting



starting on November 27, 2011 in Chicago.

Planned Oy and the Planmeca Group Planned Oy develops, manufactures, and markets advanced imaging equipment and accessories for mammography and orthopedic imaging. Planned's extensive mammography product range covers digital and analog units, stereotactic biopsy devices, and breast positioning systems for an early detection of breast cancer. Within orthopedic 3D imaging Planned offers low dose extremity CT imaging for quicker, easier and more accurate diagnosis at the Point-of-Care. Planned Oy exports more than 98% of its production to over 70 countries worldwide. The principal markets are Europe, Japan, and Oceania as well as North and Latin America where the company has considerable market shares. Planned Oy is part of the Finland-based Planmeca Group which manufactures and markets advanced equipment for medical and dental fields. The Group employs approximately 2,400 professionals and the estimated turnover for the year 2011 is MEUR 700.

Tel. +358 20 7795 301

E-mail: vesa.mattila@planned.com

Log on:
www.hospital-technology.com
for the latest in Healthcare

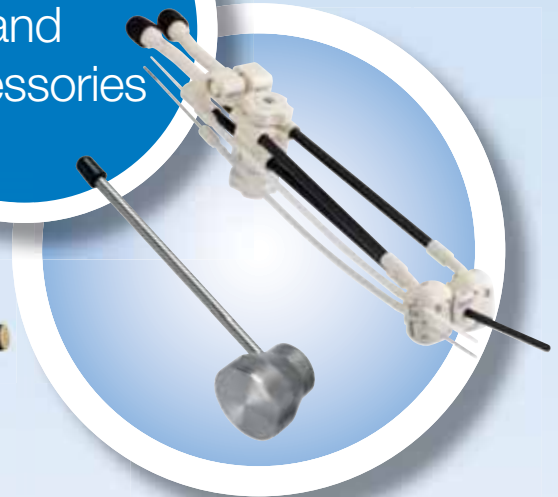
Committed to Brachytherapy,
today and for the future



Oncentra
Treatment
Planning



Applicators
and
Accessories



Flexitron
Afterloader



microSelectron
Afterloader



Nucletron's commitment to brachytherapy entails providing you with the latest innovations in precision radiotherapy treatment for your patients. Our aim is to provide you with all-in-one solutions for many body sites, alongside a full range of service and support.

www.aboutbrachytherapy.com www.nucletron.com

Advances in Radiotherapy Detailed at Cancer Summit Organised by Varian Medical Systems

Cancer experts from around the world gathered in Berlin recently to hear of advances in radiotherapy that are bringing additional treatment possibilities for cancer patients. More than 450 oncologists, physicists and radiotherapy practitioners attended the two-day Berlin Oncology Summit, organised by radiotherapy world leader Varian Medical Systems, to share experiences and highlight the expanding use of radiotherapy and radiosurgery to treat an increasingly wide range of cancers.



Key sessions at the event looked at ten years' worth of data since the first IMRT (intensity modulated radiotherapy) treatments in Europe, as well as advanced clinical applications using higher dose delivery systems such as Varian's TrueBeam™ linear



accelerator and the growing practice of hypo-fractionated stereotactic body radiotherapy (SBRT) for prostate cancer. Varian introduced the advanced TrueBeam system in April 2010 and has since taken 380 orders and installed more than 145 systems.

SBRT, a form of radiosurgery which differs from traditional radiotherapy in that higher doses are given over a shorter number of treatments, is an emerging treatment for prostate cancer and a viable alternative, in some cases, to more invasive surgical procedures that require hospital stays and long recovery periods. Possible advantages of SBRT include fewer side effects and greater patient convenience.

Rolf Staehelin, Varian's international head of marketing operations, said,

"This is the twelfth time we have held a gathering such as this and the best attended yet. Many of the major advances in radiotherapy and radiosurgery described at this event are in routine clinical use on a daily basis for the benefit of cancer patients worldwide. What's particularly noticeable is the growing use of SBRT to treat cancers that would previously have only been treatable using surgery. These new techniques are offering patients an efficient, non-invasive outpatient alternative to invasive surgical approaches which entail anaesthetic and long recovery periods in hospitals."

Tel: +41 41 749 88 44

Website: www.varian.com

E-mail: info.europe@varian.com

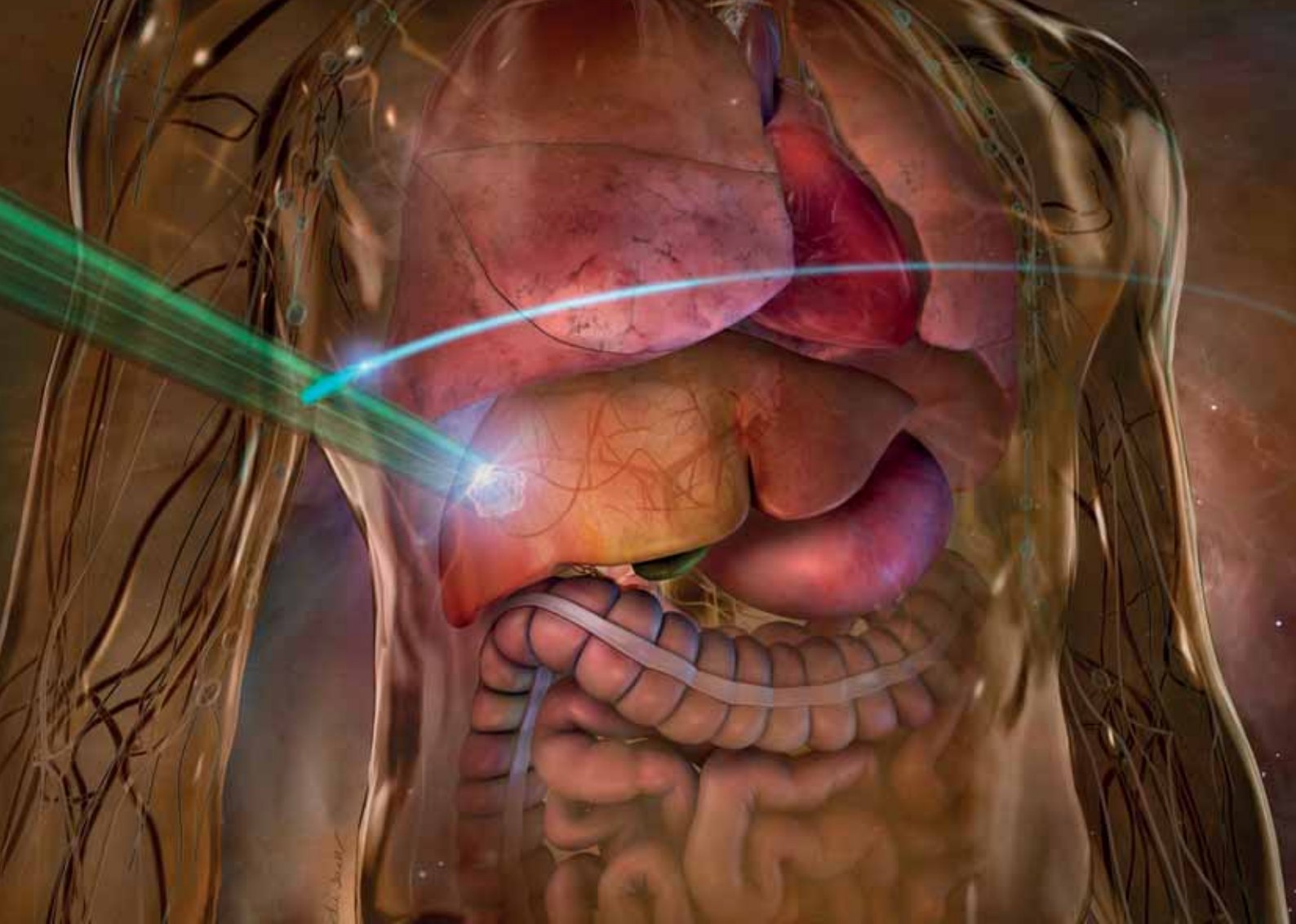
Modulith® SLX-F2- Shock Wave Lithotripter and Integrated Urological Workstation

The new MODULITH® SLX-F2 is designed for unsurpassed usability in endourology and shock wave lithotripsy. The workstation comprises a universal motorised table including Trendelenburg-inclination for all kinds of endourological procedures and a state of the art shock wave generator as well as ultrasound and X-ray imaging modalities. It can be complemented by a set of endoscopic components of Karl Storz. All devices are operated by a

centralised touch screen control panel. So the workflow of complex procedures such as URS, PCNL and SWL is streamlined. DICOM networking as well as patient and treatment reports by the StorM-Base software enable clean and easy documentation and archiving as well as scientific evaluation of treatment protocols. The unique design of the cylindrical shock wave source provides highest fragmentation efficiency with simultaneous gentle shock wave transmission through the skin area. Analgesia requirements are minimal. The proprietary shock wave technology of Storz Medical makes use of extraordinary wide aperture with 30 cm diameter spreading the shock wave

energy over a large entrance area, resulting in an extremely low pain sensation. Focussing by a low loss parabolic reflector, primarily cylindrical waves are concentrated on a tight focal spot with exactly the amount of energy requested. Fragmentation takes place within this area only. Adjacent tissue areas are optimally protected against excessive shock wave energy. The unique 'Dual Focus'- feature of the MODULITH® SLX-F2 provides an additional extended focus which may compensate for excessive respiratory stone movements. It is also useful for simultaneous treatment of multiple stone fragments.

E-mail: info@storzmedical.com



RapidArc® for SBRT. Simply Revolutionary.

Stereotactic body radiation therapy (SBRT) is a technique where high doses of radiation are precisely delivered from many directions to a focused target. This results in an ablative treatment with curative intent and spares surrounding critical structures.

RapidArc radiotherapy technology delivers sophisticated SBRT treatments faster than previously possible and opens up new treatment options for your patients.



A partner for **life**

Varian Medical Systems International AG, Zug, Switzerland

Phone +41-41-749 88 44

www.varian.com/rapidarc info.europe@varian.com

Anetic Aid's New QA3 Patient Trolley is Better Than Ever

With a host of enhanced features, the new generation QA3 V3.0 Variable Height Patient Trolley is here: see it at Arab Health on the Anetic Aid stand number B39 in Hall 7.

Keeping all of the features that customers value in the current model – light weight, robust with superb manoeuvrability – we have taken the QA3 Version 3.0 to the next level of ease of use, practicality and patient comfort.

Extensive consultations with customers helped our designers to plan and refine a number of key enhancements – including the adjustable height range. The QA3's design with one central column has always been unique, but this new version is now able to descend 100mm lower than the previous model, making it easier for frail or elderly patients to get on and off the trolley independently which is better and safer for them and, from a lifting and handling point of view, for staff.

Generally, people - and therefore patients - are getting larger, so there is an increased 250kg weight capacity, and new ergonomically positioned handles are designed to make it even easier for staff to push the trolley with the patient sitting up or lying down.



The mattress width has also been increased by 100mm, even though the overall width of the trolley has only increased by 30mm.

The cot sides too, have been completely reworked, and now fold away under the footprint of the mattress, leaving virtually no transfer gap – again more comfortable for patients when they are being moved – and easier for staff doing the moving. Infection control has been another important consideration, so we have created smooth moulded surfaces and acrylic capped vac formings which enclose the trolley mechanics

to minimise dirt traps. Where possible, we have used materials with anti-bacterial and anti-microbacterial properties – both for the trolley and for the K8 pressure care mattress which is fitted as standard with every model.

- A specially designed version of the QA3 for Accident & Emergency departments is also available, including an X-ray translucent platform, a medirail and optional features such as a monitor shelf and Venturi Suction System

Tel: +44 1943 878647

E-mail: sales@aneticaid.com

Website: www.aneticaid.com

SonoSite's M-Turbo® Ideally Suited to Vascular Science


Vascular scientists at Queen Elizabeth Hospital Birmingham (QEHB) are taking advantage of the flexibility of SonoSite's M-Turbo® hand-carried ultrasound system to provide a wide range of diagnostic and ultrasound-guided interventional services. Roger Chan, Vascular Scientist at the QEHB, explained: "Advances in point-of-care ultrasound technology have significantly improved diagnostic confidence for vascular diseases, and hand-carried systems are now routinely used for a variety of vascular applications, including bedside assessments for inpatients on the ward,



one-stop outpatient clinics, critical care units and in ambulatory theatre. The multi-functional nature of the M-Turbo system is ideally suited to this varied role, offering rapid, good quality imaging for diagnosis and procedure guidance. The portability and robust nature of SonoSite's systems and probes are also very important, as we need to be able to quickly and easily

transport them between clinics, wards and theatres."

"Our M-Turbo systems are increasingly being used to provide specialist services – such as TIA clinics, DVT clinics and pre-screening of cardiac cases to assess donor veins – and have also allowed us to introduce ultrasound-guided procedures such as endovenous laser treatment (EVLV) and foam sclerotherapy. The M-Turbo's compact, ergonomic and user-friendly design also makes it easy to use for all levels of experience levels, from trainees to the most experienced practitioners, and we have been very impressed with both the performance of our instruments and the service we receive from SonoSite; it really does offer the whole package for our needs." Fax +44 (0)1462 444 801



Let there be
LED backlight.



Introducing the new 26" Radiance® G2 High-Bright surgical display. It's the first of its kind to feature stabilized LED backlight technology, delivering a benchmark of brightness, color, and contrast that is simply astonishing. With the highest luminance output in the industry, true 16:9 HDTV aspect ratio, and a dynamic color matching algorithm to the BT.709 industry standard, it's the latest innovation from the market-leading Radiance family. See more at www.ndssi.com.

First in Imaging

 **NDS**
SURGICAL · IMAGING
www.ndssi.com

New Bionic Exoskeleton Enables People With Spinal Cord Injuries to Walk Again

EksO Bionics™ have unveiled Ekso Legs, a wearable, artificially intelligent, bionic device that powers paraplegics up, to enable them to stand and walk, at the London International Technology Show (LITS).

EKSO Bionics™ - formerly Berkeley Bionics - is a US-based developer and manufacturer of bionic exoskeletons that enhance human strength, endurance and mobility.

Ekso Legs, which were launched successfully in the United States in 2010 (under the name of eLEGS) will be demonstrated by Amanda Boxtel at the LITS Excel on Friday 21 October. EKSO Bionics' CEO, Eythor Bender, said: "Many wheelchair users continue to live very active lives but as they research their options for increased mobility they discover that wheelchairs are the only real option. This has been the only alternative for nearly 500 years. We want to enhance their independence and freedom of movement," he added, "and with Ekso Legs they now have the option to stand and walk for the first time since their injury."

The Ekso Legs device can be adjusted to fit most people between 5'2" (1.5m) and 6'2" (1.9m), weighing up to 220 pounds (100kgs) in a matter of minutes. Users must be able to self-transfer from their wheelchair. Simple straps secure Ekso Legs safely to the user, over their clothing and shoes.

The wearable robot provides unprecedented knee flexion, which translates into the most natural human gait available in any exoskeleton today. The device is battery-powered and uses a gesture-based human-machine interface, which utilising sensors, observes the gestures the user makes to determine their intentions and then acts accordingly. A real-time computer draws on sensors and input devices to orchestrate every aspect of a single stride.

Ten of the top rehabilitation centres in the United States are leading the way with this new technology and are now



conducting investigational trials to see how Ekso Legs can be best integrated into their rehabilitation programs. To date, nearly one hundred people have walked in the device.

Dr. Kristjan T. Ragnarsson, Professor and Chair of Rehabilitation Medicine at Mount Sinai Medical Centre in New York City, commented, "There has been little progress over the past 40 years in developing orthotic devices for people with complete paraplegia that would enable them to ambulate functionally in the community, even for short distances. The limiting factor has always been the tremendous energy consumption associated with such movement. As a powered exoskeleton, Ekso Legs may sufficiently reduce that energy consumption and enable people with paraplegia – for the first time - to walk after their injury."

In the UK and Europe the device will initially be used in spinal cord Injury rehabilitation centres under clinical supervision and we hope to expand the use of the device to other medical condition over the coming months. The vision is to create a personal device that can be safely used in the home, to be worn throughout the day as early as 2013.

Website: www.berkeleybionics.com

The bon E70 Examination Unit with Wheelchair Access



The bon E70 is a new, compact examination unit with wheel chair access. With an electro - motorised height adjustable table and an electro motorised swing away chair, the unit is ideal for the Eye Clinic where wheel chair access is a must. The E70 has a double instrument sliding table. A phoropter and projector can also be mounted. Made in Germany, the E70 is robust and durable but with a chic and innovative design.

bon Optic Lübeck has been manufacturing work stations for Ophthalmologists for 3 decades. The bon philosophy of excellent quality at a fair price is reflected across the product range, which is hand crafted in Germany. bon units combine practicality with design flair creating work stations that are more than functional: they look good too. Customers can select bespoke colours and finishes from a wide choice. bon offers a complete service from room planning to installation and commissioning. The bon range of ophthalmic work stations is complemented by a comprehensive program of diagnostic instruments including Digital Slit Lamps, Topography systems, Scheimpflug camera with Placido Rings.

E-mail: meiners@bon.de or call@bon.de

Website: www.bon.de

Nucletron- Improving Patient Care Through Innovation, Teamwork and Reliability to Serve Radiation Oncology Providers Around the World

Nucletron established in 1975 and headquartered in the Netherlands with offices in 17 countries and delivers tailored services and solutions to more than 3,000 institutions within 120 countries, provides state of the art radiotherapy solutions for cancer treatment that meet the evolving needs of patients, their caregivers and healthcare professionals around the



service and support of the world's most innovative cancer treatment products, Nucletron actively partners with its customers to provide the most effective and efficient patient care options. Nucletron continuously invests in innovative research and development to create products that improve patients' quality of care. This approach has made it possible to successfully treat body-site specific cancer,



world. Nucletron has unmatched global leadership in brachytherapy, a very precise, highly effective and well-tolerated treatment option for healthcare providers, tailored to the needs of individual patients. We work with clinical teams to constantly improve and develop an innovative portfolio of integrated products, software and services that assures excellent patient outcomes.

Nucletron specialises in the development, manufacture, sales,

including gynaecologic, breast, prostate, head and neck, skin surface, lung, and esophagus.

Nucletron offers comprehensive products and services based around the following areas:

- Consultancy
- Imaging
- Treatment Planning
- Treatment Delivery
- Service, support, training and education

Website: www.nucletron.com

nFlow Infant Nasal CPAP Device Designed to Care

The new nFlow infant nasal CPAP range, with gas flip technology, is now available from Intersurgical.

The nFlow product range has been designed to offer a cost effective solution for the clinician using infant nasal CPAP. The system is fully compatible with all drivers used for gas flip technology devices found in the Neonatal intensive care and transport areas.



The nFlow range is provided with the patient masks, prongs and bonnets packaged separately from the breathing system and generator, to help minimise hospital waste. The nFlow is offered as part of Intersurgical's extensive range of neonatal breathing systems and accessories offering the clinician a total solution to their requirements.

Intersurgical® i-gel™

Intersurgical revolutionary single use, supraglottic airway, i-gel, is indicated for use in resuscitation as well as in anaesthesia.



The rapid and easy insertion, improved safety provided by the gastric channel, low post-operative complications and high seal pressures, provide benefits to both clinician and patient. With its unique, soft, non-inflatable cuff, valuable time is not wasted deflating and inflating a cuff. This allows a patent airway to be established in the quickest possible time. In many cases, insertion can be achieved in less than 5 seconds.

Telephone: +44 (0) 1189 656300

Fax: +44 (0) 1189 656356

Email: info@intersurgical.co.uk

3D Imagery to Improve Surgical Visualisation of Liver Cancer

Holoxica, an Edinburgh-based 3D holographic imaging company, has furthered the boundaries of biomedical imaging by creating the world's first 3D, full colour hologram of a human liver, paving the way for a breakthrough in the way surgeons plan liver operations to remove tumours.

The human liver hologram will enable surgeons and oncologists to 'look around' the 'virtual' organ and marks a breakthrough for medical science which until now, has had to rely on two-dimensional screens to view three-dimensional information from CT, MRI and ultrasound scanning techniques. 3D models based on actual patient data can be used for training and simulation by surgeons, enabling the surgeon to visualise the intricacies of navigation within the organ.

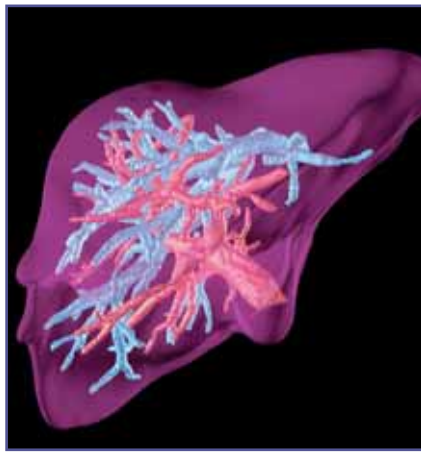
It means that specialists can now find new ways of visualising the complete structure of a human liver in greater detail and to better understand tumour behaviour within the liver than would be the case from 2D images they currently use.

This helps to accurately pinpoint diseased liver tissue so surgeons can plan extraction operations armed with a fuller awareness of the surrounding tissues and organs. It is hoped that this will lead to improved chances of survival.

Javid Khan, managing director of Holoxica comments;

"This truly is a leap forward in ascertaining tumour characteristics within the liver or other organs. Holographic technology can now be used to great effect in the field of biomedical science. One scenario could be cancer treatment planning in radiation therapy. It's important that the radiation beam is concentrated directly on the tumour and not on surrounding tissues. A "true 3D" imaging hologram can help create a radiation plan that does just that!

It will also help with operation planning. Surgeons have always viewed the liver two dimensionally, yet can visualise a 3D model of the "scene". Therefore, a holographic



A 3D Hologram image of a Liver

image of the patient's target will give the surgeon a true perspective on where a tumour might be located and the best way to access it. Additionally, a holographic "print out" could be useful for archiving patient data for reference."

Holoxica has collaborated with the renowned Germany-based Fraunhofer Institute, Europe's largest application oriented research organisation, which has an annual research budget of over £.65 billion, to develop this application. Liver imaging has been commonly undertaken in patients with cancer history because it is one of the most frequently involved organs vulnerable to the spread of tumours to other organs. To assist this, Holoxica plans to map a human liver in three conditions, so surgeons can acquaint themselves with a liver in healthy, diseased and post surgical states.

The goal of liver imaging includes liver tumour detection and characterisation and with new screening techniques continuing to evolve, the use of 3D modelling will give surgeons a far greater understanding of how a liver reacts to tumour and other chronic diseases.

Javid Khan, added; "The life science community is benefiting from our technology in allowing them to access information in a manner which brings the subject - a human organ or any organism - to life in a more realistic manner they can gain a better understanding from it and better inform their subsequent course of action."

The Schaerer Arcus® - A Versatile Operating Table

A year before the 100th anniversary of Schaerer's operation table production, started in 1912, the company presented its highlights at MEDICA 2011, the schaerer® arcus.

The world's most solid and versatile mobile operating table exclusively offers up to 500kg (1100lbs) static load capacity and 360kg (800lbs) dynamic load capacity in all positions, with a 1240mm (49") x-ray window / column offset. These three major features already put the schaerer® arcus on top of the list of mobile operating tables.

There are more unique features which also create unbeatable value: the schaerer® arcus is the most versatile, reliable and safe table for every operating room and for all medical disciplines.

Schaerer Medical also introduces the following product news for the schaerer® arcus operating table line:

- New digital interface and control
- New drive unit.



Schaerer Medical continuously invests in innovative products in close cooperation with leading surgeons and personalities of the medical sector. Schaerer Medical distributes its products through its US-subsiary Schaerer Mayfield USA, Inc. and a global network of distributors in more than 75 countries. The local service partners guarantee worldwide availability of schaerer® products, first-class local service and customer proximity.

Fax: +41 31 720 22 30

www.schaerermedical.ch

www.hospital-technology.com

- Manufacturers and Suppliers - Latest Product Showcase
- Exhibitions and Conferences Worldwide - Hospital Links Worldwide

The Operon 800 Series OR-Tables

The medical device manufacturer and specialist in mobile OR-tables Berchtold has redesigned its proven OR-table models, the OPERON D 850, D 820 and D 760. Users are now able to configure the tables individually so that they meet the requirements of the intended surgical discipline and access to the surgery site.

All OPERON tables also meet the highest possible standards of safety and quality. High-grade materials and fully developed technical components enable unrestricted handling with patients weighing up to 450 kilograms. With the aid of components at the OPERON coupling points, the surgical tabletop can be shortened or extended, and equipped with special accessories for various patient positions. The tabletops and special accessories are also interchangeable, and can be retrofitted at any time.

The OPERON tables are ideal for robot-assisted surgery. Their low minimum height and good access to the table mean that both the equipment and the patient can be positioned with extreme precision.

The OPERON is not only remarkable for its modular construction, but also for its functional equipment. For example, equipment variants that

originally appeared exclusively on the OPERON D 850, such as the levelling adjustment, are now available as options for all three base tables. Four cylinders, integrated at each corner in the table base, detect surface unevenness completely automatically, compensate for it and so ensure that the table is always perfectly stable. A hand pendant with clean design and background light is also available now for any base table. The background light enables the table to be manoeuvred safely in darkened rooms, for example during endoscopic procedures. In addition, a second "emergency hand pendant" is now part of the standard equipment on all tables. The surgical tabletop can consist optionally of extremely durable carbon fibre or phenol plates in this way radiation exposure is also significantly lower when X-rays are taken, so there is less burden on the patient and the OR team. Phenol is the more attractive alternative from the point of view of cost. All tables offer a wide imaging window and optimum conditions for unobstructed access with the C-arm. In addition, the tables are equipped with a full-length, continuous X-ray cassette tunnel, even in the area above the column. This helps ensure superior results with traditional X-ray imaging as well.

Fax: + 49 (0) 7461 181-201

Nicole.Schaumburg@BERCHTOLD.biz

NDS Surgical Imaging Launches Next-Generation ConductOR™ G2 Informatics Platform

NDS Surgical Imaging (NDSsi) is the global leader in designing and manufacturing medical imaging and informatics systems. NDSsi technology solutions have led the way in re-defining the modern surgical OR, radiology rooms, endoscopy suites and minimally invasive environments.



NDSsi Launched its Next- Generation Visualisation and Informatics Platform, the ConductOR™.

ConductOR™ medical-grade products are leading the industry in procedural efficacy by offering the unique ability to connect the realms of PACS imaging, surgical video and medical informatics. The industry's only customisable informatics appliance designed specifically for placement on a cart or boom, ConductOR™ offers user-selective multi-display support, industry-leading HD image routing and HD surgical video streaming over the Ethernet/Internet. This powerful medical-grade device—housed in one compact enclosure—can serve as the visualisation informatics backbone for operating theatres and minimally invasive surgery environments, enhancing clinical workflow and improving overall efficiency.

The ConductOR™ platform supports up to ten multiple-format video inputs from a wide array of medical devices and signal types, which can then be routed to three independently switched multi-modality outputs. Examples include viewing live ultrasound alongside HD endoscopy, displaying hi-resolution PACS images from presurgical planning alongside HD surgical video, and hi-resolution pathology images alongside HD endoscopy—all on different monitors within the surgical environment.

E-mail: marketing@ndssi.com

Website: www.ndssi.com



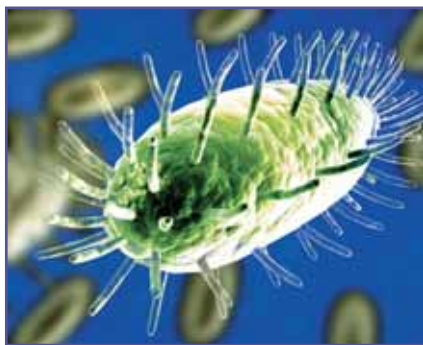
Revolutionary New Air Disinfection Unit- Aerte's AD 2.0 - Actively Neutralises the Threat of Airborne Pathogens

Aerte, the air disinfection specialists, today announced the launch of a new revolutionary air disinfection unit, the AD 2.0, specifically designed and proven to continuously eliminate airborne Healthcare Associated Infections (HCAI) from clinical settings - including MRSA, c-difficile and Norovirus.



The wall mounted system can disinfect any room up to a maximum volume of 300m³ and has been proven to not only remove virtually all airborne pathogens, but also to target bacteria and viruses present on surfaces (over 20% reduction on most materials). What's more, each unit can be controlled remotely, with automatic notifications alerting staff when the cartridges have run out and on the unit's current status (e.g. working, sleeping, off) - making monitoring of this system very easy and largely labour free.

The unit is designed to be used with a consumable cartridge containing a reagent, which is ionised and reacted with traces of ozone, resulting in the generation of hydroxyl 'free radicals'. Hydroxyl radicals work by neutralising any dangerous bacteria and viruses, altering their molecular structures so that they become nonviable -



neutralising 99.99%. The reason the process is so effective is because hydroxyl radicals are highly reactive molecules missing a hydrogen atom, meaning they can traverse an entire room virtually instantly (in under a second), continuing its search until it encounters a hydrogen atom - forcibly removing it from any organic material and inexorably changing the compounds molecular structure.

Prof. Hugh Pennington, emeritus professor of bacteriology at the University of Aberdeen, and an independent advisor to Aerte, said: "Over the last 10-years we have made enormous strides in tackling the spread and prevalence of HCAs. However, whilst large scale operations and protocols are now in place to ensure the cleanliness of a hospital's clinical surfaces, no universal strategy has been trialed for the air - leaving it as the last major source of transmission. By using products that eliminate airborne pathogens we will then have a complete solution where all possible causes of transmission have been addressed."

Studies were carried out using aerosolised *Staphylococcus aureus* (a category 2 organism) in a Bioaerosol Test chamber of 20m³. Bacteria were delivered in the centre of the chamber and survival over the course of one hour was monitored by sampling airborne bacteria and counting surviving organisms. Aerte (formerly Inov8) produce a range of disinfection products for both the consumer and trade marketplaces, with a particular focus on advanced air disinfection systems. The Company has harnessed its unique understanding of atmospheric chemistry and the Hydroxyl Radicals in particular, to deliver products and services that ensure air quality, whilst reducing the risk of infectious diseases.

E-mail: info@aerte.com

New Fast Throughput Genomic Testing Improves Use of Targeted Drug Treatments

UK molecular diagnostics company has developed new dedicated stratified medicine assay development and clinical testing services using special rapid technology gene sequencing and genotyping solutions. The new service is being used for the molecular profiling of tumours and development of new clinical assays as part of the provision of targeted and personalised medical treatment programmes.

Jointly owned by Newcastle Hospitals NHS Foundation Trust and Newcastle University, NewGene is successfully using the Sequenom MALDI-TOF Mass Spectrometer for the rapid turnaround of tumour marker assays for KRAS, BRAF and EGFR mutation testing required to prescribe appropriate drug treatments for different types of cancer.



This platform, more usually associated with medical research applications, is now being used in molecular diagnostics to analyse specific genetic variants with very high levels of specificity and sensitivity. It is particularly suitable for the detection of known somatic point mutations in poor quality tumour DNA.

This high capacity analysis platform enables accurate diagnosis for personalised medicine treatments to be undertaken rapidly and very cost effectively - with consequent benefits in test turnaround times and overall costs.

Fax: 0191 241 8799

E-mail: info@newgene.org.uk

Website: www.newgene.org.uk

Next Generation Mobile Human Health Monitoring

Wireless innovations company Hidalgo has launched its latest exciting range of mobile products that monitor human life.

The technology could revolutionise the future of the healthcare and pharmaceutical industries worldwide, with customers already including NHS hospitals and international research bodies.



Under its innovative brand Equivital, the team of engineers, scientists and doctors have been pioneering products that allow accurate data to be measured from real people in real environments for over 10 years.

“The Equivital personal devices are designed to be used on a ‘wear and forget’ principle and the latest product range is being appreciated for this quality,” says Dr Ekta Sood from Hidalgo.

The new Equivital EQ02 LifeMonitor incorporates a miniaturised body-worn sensor module that senses, records, processes and transmits data from the human body.

The data includes physiological parameters such as ECG, respiration rate and body temperature but importantly can be used to derive information – for example for biometric verification - or for creating indexes such as for stress monitoring. Using external sensors the LifeMonitor data channels can include oxygen saturation, galvanic skin response, and core body temperature.

In combination with the eqView PC, mobile and web based software platform, the LifeMonitor sends information to be viewed and, where applicable, further analysed or acted upon.

“Having the ability to measure and model physiological information about

the human body - in both health and disease states and on a mass scale - will lead to a better understanding of its cause and effect behaviours and catalyse an era of more proactive and personalised healthcare,” explained Dr Sood.

“Hidalgo is developing devices and software which can do this in real time so that in the future, for example, timely and appropriate action can be taken if patterns of data from the person under observation changes.

The devices are already being put to good use in healthcare and pharmaceutical fields. A trial funded by Oxford Biomedical Research Centre and the Wellcome Trust - and run by a team at Churchill Hospital and Oxford University - is using the Equivital LifeMonitor to continuously monitor haemodialysis patients. Such patients are at a much higher risk of sudden and potentially fatal emergencies.



Using human data taken before, during and after haemodialysis, the team is developing an index that pro-actively alerts clinicians to the likelihood of a life threatening event. This could enable timely intervention and prevent adverse situations.

Orders have already been received for the new EQ02 Equivital LifeMonitor system through distributors around the world.

Mobile human health monitoring technologies offer a significant advance in both personalising healthcare and extending care from the hospital into the community and the home. Hidalgo, which is at the cutting edge of this emerging field, believes it will see a rapid increase in the uptake and availability of such systems in the next five years.

Website: www.equivital.co.uk

Log on:

www.hospital-technology.com
for the latest in Healthcare

Voluson Compact Series Ultrasound Imaging Platforms

GE Healthcare's High Efficiency Voluson Compact Series ultrasound imaging platforms reduce energy and paper consumption, enhance image acquisition and quality, and improve productivity by reducing scan time.

GE Healthcare's Voluson Compact ultrasound systems are among the most energy efficient in the industry. Due to decreased scan time and lower power consumption, a Voluson Compact consumes 1,300 kWh less electricity per year than compared to prior GE console-based technology for the same number of scans, a savings of 87%. GE Healthcare's High Efficiency Voluson DICOM digital imaging feature enables the elimination of printouts for archival purposes. A hospital using the Voluson Compact can reduce archival printouts by 50% per year versus analog technology. This yields an annual reduction in ultrasound paper usage of 28 kg (62 lb) per machine per year compared to prior GE console-based technology. Alternatively, if a hospital were to leverage the Voluson Compact Series' decreased scan time to image as many as 2 additional patients per 10-hour day of operation, the hospital would avoid an increase in paper usage, assuming a 50% reduction in archival printouts per patient. (In some regions, DICOM is offered as an option rather than a standard feature.) GE Healthcare's High Efficiency Voluson Series ultrasound imaging platforms enhance image acquisition and quality while improving productivity through reduced scan time. The Voluson Compact Series reduces scan time 12% compared to prior GE console-based technology, which could enable 2 additional patients to be scanned per 10-hour day of operation. In addition, GE's High Efficiency Voluson DICOM digital imaging feature enables the elimination of printouts for archival purposes. Assuming the same imaging volume, a hospital using the Voluson Compact reduces archival printouts by 50% per year versus analog technology.

ResMed Helps Patients Breathe Easier with S9™ Series Sleep Therapy Devices Incorporating SABIC's High-Tech Cycoloy* and Lexan* Resins

SABIC's Innovative Plastics strategic business unit today announced that ResMed – a global leader in medical products for treating and managing respiratory disorders – has selected Cycoloy* and Lexan* resins to enhance the performance, aesthetics and sustainability of the new ResMed S9™ series of sleep apnoea devices. SABIC's Cycoloy polycarbonate/acrylonitrile-butadiene-styrene (PC/ABS) resin, featuring non-halogenated flame retardance and high flow, is used to mold the complex, thin-



wall S9™ chassis. Lexan resin, a tough, biocompatible material with exceptional surface finish, is used for the S9™ top case and H5i™ humidifier flip lid. Both materials helped ResMed create a sleek design and outstanding aesthetics for consumer appeal. The next-generation ResMed S9™ device series demonstrates how SABIC's broad and growing portfolio of high-performance materials and value-added services help healthcare customers create new, innovative technologies. "SABIC offers healthcare customers one of the most robust portfolios of high-end materials in the plastics industry to address major trends in the medical device sector, such as miniaturisation and improved aesthetics for home use," said Thomas O'Brien, marketing director, Healthcare, Innovative Plastics. "We take great pride in our close collaboration with leading device companies such as ResMed, with the goal of enabling the highest quality and

best performance for their products. Our proven products, combined with over 75 years as a leading pioneer in the thermoplastics sector, are a driving force in helping customers continuously innovate to meet the changing demands of consumers and clinicians worldwide."

The new ResMed S9™ series of sleep apnoea devices – including continuous, auto and variable positive airway pressure models – combine a streamlined, high-tech design with superior functionality and greater comfort via combined climate control and humidification of the air that the patient breathes.

These new devices are designed with the SABIC Lexan and Cycoloy resin materials to be unobtrusive in the home – looking more like a clock radio or

stereo than a piece of medical equipment. For ease of use, they are engineered to be lightweight yet durable. Further, this material provides flame retardance without the use of hazardous materials, enabling it to meet the requirements of the European Union's (EU) Restriction of Hazardous Substances (RoHS) and Waste Electrical and Electronic Equipment (WEEE) directives. The Cycoloy resin chassis was custom-coloured dark-grey.

Lexan resin was chosen for the H5i™ humidifier flip lids for its exceptional impact properties. Lexan resin is part of SABIC's extensive and growing portfolio of over 50 healthcare resin grades, which are supported by a comprehensive healthcare product policy. www.sabic-ip.com/prtechnquiry.

Low Cost, Mobile, Non-Invasive Breast Cancer Screening Devices from Westhouse Medical

New healthcare specialist Westhouse Medical Services Plc today announces the acquisition of revolutionary new breast cancer screening technology and patents. The low cost, mobile and non-invasive device will provide the healthcare industry with a modern alternative to mammogram screening, and further supports Westhouse Medical's breast cancer screening product development. The breast cancer screening device uses thermometry-based technology to measure for temperature differences in breast tissue indicating any abnormalities and early symptoms of precursors to more serious conditions, including cancerous cells. Upon detection, the patient can then be referred on for further professional analysis and diagnosis.

Jack Kaye, chief executive for Westhouse Medical Services comments: "This acquisition is a valuable addition to the company's product portfolio, and complements our current work on the development of a low-cost thermometry-based breast cancer screening device, BreastCheck™, which will be available for both hospital and home use, meaning patients can now self-test.



Kaye continues: "At present, there are few options available to the healthcare industry for breast cancer screening outside of mammograms. Whilst mammograms have formed the cornerstone of screening programmes for decades, they can be uncomfortable for the patient, expensive for healthcare providers and a drain of hospital resources, given the need for expert practitioners to administer tests.

"Given the expense, some countries do not even have breast cancer screening programmes, whilst others are looking to reduce costs by raising the age at which testing takes place, or making screening less frequent. Westhouse Medical is developing a low cost alternative which now allows for economical, easy, regular testing which can start at a lower age. It means more women can be screened more often, which we hope will save more lives." E-mail: info@westhousemedical.com Website: westhousemedical.com

Protect-Laserschutz New Frame Style COMBOR

PROTECT-Laserschutz GmbH offers a new frame style 'COMBOR'. It is available in colours black/grey or grey/blue.

The special advantages of these frame style are the light-



weight, the large lens which provides wide field of vision, soft elastomer face seal for a perfect fit, adjustable temples, optional elastic headstrap, easy change of the temples against a headstrap. It can be changed easily of the temples against a headstrap. The frame is certified according EN 207.



These eyewear is useful for all common medical laser applications. Therefore the special polycarbonate laser filters are available. The necessary protection levels must be calculated based on the laser data of the medical laser system.

Fax: +49 (0) 911 / 9644731

E-mail: info@protect-laserschutz.de

Website: www.protect-laserschutz.de



Laser and IPL Protection



PROTECT-Laserschutz GmbH is one of the leading manufacturers of various kinds of laser safety products such as laser safety eyewear, windows, barriers and curtains. The product range also includes a large variety of different special products for medical applications like e.g. IPL glasses, shutter goggles, magnifying loupes, children and patient eyewear, UV and X-ray glasses, face shields and many others.

PROTECT-Laserschutz GmbH

Mühlhofer Hauptstr. 7 · D-90453 Nürnberg

phone: +49(0)911-96 44 7-30 · fax: +49(0)911-96 44 7-31

e-mail: info@protect-laserschutz.de

www.protect-laserschutz.de

The Fjordblink Water Birthing Pool Concept

Fjordblink® Medical's mission is to promote pain relieving water birth by manufacturing and marketing birth pools that meet the highest requirements for hygiene, comfort, and ergonomics.

It is well established that hot water has a soothing and pain relieving effect. In collaboration with leading midwives at



Danish hospitals, Fjordblink® Medical has developed a unique birth pool for pain relieving water birth.

Fjordblink® Medical's product concept combines maximum comfort and safety for women in labour with professional requirements for

functionality, ergonomics, and hygiene. Fjordblink® Medical birth pools are therefore developed as a medical device and certified in accordance with the ISO standard.

During two decades Fjordblink® Medical's product concept has been used successfully in numerous countries, and through ongoing contact with professionals Fjordblink® Medical continuously improves modern birth pool technology.

Fax: +45 86494908

E-mail mail@fjordblink.com

The Worlds No.1 Emergency Stairway Evacuation Chair

Evac+Chair is a universal evacuation solution for smooth stairway descent during an emergency. Single user operation ensures no heavy lifting or manual handling is required during emergency evacuation procedures. In the event of an emergency such as an earthquake or a fire, lifts should not be used in multi-storey buildings, therefore people with a disability or who are injured maybe become trapped. Our evacuation chair is the perfect solution; it is a light weight and easy to use device which glides effortlessly down stairways to assist with the quick and safe removal of people who are mobility impaired in the event of an emergency evacuation. The Evac+Chair is wall mounted and folds away discreetly making it the perfect solution to ensure your business is compliant with the latest health & safety and fire safety regulations.

 Evac Chair is fully equipped to provide the best training and equipment needed by large scale buildings and venues in the event of an emergency egress, stairway evacuation, building evacuation or fire



evacuation situation. In order to meet fire and safety regulations, it is important for all large scale buildings to provide adequate disabled evacuation options for those who should need it.

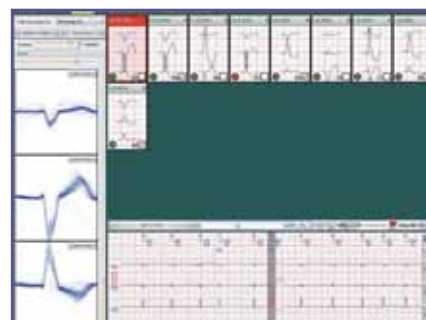
Emergency evacuation chairs, also known as disabled evacuation chair, stairway evacuation chair, fire evacuation chairs, evacuation chair or evac chairs, allow wheel chair users or less able bodied people to be evacuated quickly and safely down a large flight of stairs.

Website: www.evac-chair.co.uk

recorder and PC screen as well. Bluetooth-type wireless communication makes the start of recording easy, fast and convenient.

An integrated 3D accelerometer is included in the recorders for motion detection, which provides more information about the movement intensity of the patient. Low power consumption and internal memory makes it possible to record for 24, 48 and 72 hours up until 1 week. Essential functions like pacemaker detection and possibility to mark events by the patient naturally remained in the system.

The system's PC software has several advanced functions which enables doctors to analyse records in the greatest possible depths. The algorithms guarantee a very precise QRS classification and rhythm analysis, while template classification and demix functions enables doctors to supervise/overwrite the software's decisions. The software also includes arrhythmia analysis and overview, ST, QT and QTC analysis, HRV analysis (Time and frequency domain), Heart Rate Turbulence analysis, Pacemaker analysis, Atrial Fibrillation analysis. It is possible to create various Holter reports, and the database can be integrated to DICOM and GDT systems.



You can get familiar with Labtech products at the Medica exhibition in Duesseldorf, Germany between 16-19 November, 2011, at Hall 10, Stand D53.

Fax: +3652412023

E-mail: medical@labtech.hu

Web: www.labtech.hu

Mini Holter Recorders Launched by Labtech Ltd.

Labtech Ltd. has more than 20 years of experience in manufacturing PC-based ECG systems, its product scale ranging from Resting ECG Systems through Stress Test ECG Systems, ambulatory products such as ABPMs and Holter ECG Systems for long-term monitoring and the combination of these products. The renewed Bluetooth-type Holter family has improved characteristics and a completely new design.

These systems are offered with 1-, 2-, 3- and 12-channel recorders, which are



less than half the size and weight of the previous models, they include an LCD screen to check ECG signs on the

Log on:

www.hospital-technology.com
for the latest in Healthcare

PC-Based ECG Systems:

ECG Holter and ABPM Systems
Resting and Stress ECGs



Holter ECG



NetECG



Ambulatory BP



Resting ECG



Stress ECG



**LAB
TECH**

Labtech ECG Systems

WWW.LABTECH.HU

Mail: Labtech Ltd., Hungary
4031 Debrecen, Vág street 4.

Phone: +36-52-310-128

Fax: +36-52-412-023

Email: medical@labtech.hu

Q Core Innovative Sapphire Infusion Delivery Pump to Debut at Medica 2011

A complete Solution that meets Hospital and Ambulatory Needs for Safe, Reliable, Easy-To-Use Medical Delivery System



Q Core, developers of medical infusion delivery systems, will be introducing the Sapphire infusion pump at the upcoming Medica Show in Dusseldorf, Germany, November 16-19, 2011. The lightweight, accurate and highly versatile infusion pump is a comprehensive multi therapy, drug delivery solution for the healthcare industry, including hospitals, institutions, clinics and homecare markets. Q Core's first generation infusion pump system has been available in Europe since 2009.

Sapphire's proprietary advanced, proven, reliable magnetic flow control technology reduces the pump's moving parts thus increasing the unit's life cycle and keeping down maintenance costs. The pump's drug delivery

technology enables it to be as accurate as syringe pumps in all ranges.

With a colour touch screen akin to mobile data devices, the safe pump is a versatile, easy to use platform. By combining various colours, font sizes and schemes, the platform indicates treatment parameters and provides differing alarm notifications allowing caregivers to efficiently implement diverse treatments and programs.

Q Core's Sapphire is a complete, precise, single-platform medical infusion solution for supplying an array of therapies. Sapphire meets the need for low cost of ownership pumps that institutional, hospital and ambulatory care require as healthcare professionals seek to cut costs and increase safety. Sapphire is future ready with built-in extra slots for all forms of connectivity, pump locator and other smart capabilities, as well as software that can be adapted to meet changing needs. The platform is very user friendly, with a touch screen and embedded safety features that enable nurses and other professionals to quickly learn how to use the pump and operate the Sapphire for their patients, the pump's ultimate beneficiaries.

Standing out in the market, the Sapphire family satisfies a wide range of increasingly challenging drug delivery needs and its readily adaptable to ever-developing clinical requirements. The Sapphire multi-therapy pump is the flagship product in a line that also includes dedicated models for TPN, PCA, epidural and drug-specific delivery.

E-mail: info@qcore.com

Cambridge Consultants designed a unique mechanical trigger mechanism, and incorporated a novel flexible primary pack, called Fleximed®, developed by Neopac a world leader in high barrier tubes. By moving away from the standard glass primary pack and designing around a flexible one, the team was able to rethink the look and feel of the device to give it strong ergonomic appeal. The team estimates that the device could be manufactured in volume for less than \$5 per unit, making it highly competitive with existing products on the market.

With the overall size of the design being just over 11cm long, it has been designed to fit into a handbag or coat pocket, so as to improve the way this critical drug delivery device can integrate into patients' everyday lives.



Flexi-ject™ has been designed to be extremely easy to use in a simple four step process; open – load the Fleximed® tube – close – deploy. The action of opening and closing the device resets the mechanical parts within the device so that it is activated when pressed against the skin. Its 'egg-shaped' design makes it easy to hold and stable to use for patients, which is especially important for certain types of patients with limited muscle control or joint pain.

The design also incorporates the ability to change the needle depth (depending on which part of the body the device is being used on), and an end-of-dose indicator to reassure users that they have correctly received the full drug dose. Unlike the auto-injectors currently used to treat Rheumatoid Arthritis, Flexi-ject™ has been designed to be re-used with an individually pre-packed drug dose, so that waste can be minimised and the cost per dose reduced.

cambridgeconsultants@emlwildfire.com

Cambridge Consultants Creates Easy-to-use, Novel Auto-injector- Flexi-ject™

Cambridge Consultants, a leading technology product design and development firm, today announced that it had created a novel auto-injector concept that has been ergonomically designed to be easy to hold and use. Flexi-ject™, which comfortably fits into the hand, simply requires the user to press the device against their skin to

deliver a 1ml dose of drug, rather than having to simultaneously hold the device in the correct position and press a button.

Auto-injectors are used to treat a range of conditions including Rheumatoid Arthritis and Multiple Sclerosis. Onset of Rheumatoid Arthritis is generally between 40 - 60 years of age and is prevalent in 0.5% - 1% of the adult population. With an ageing population in many Western counties, the numbers affected are potentially set to increase. To create a device which is considerably more compact than existing auto-injectors, the drug delivery team at

PRESENTING ARAB HEALTH CONGRESS 2012
The World's Largest Multi-Track Medical Congress



Sponsored By:



23 January	NEW	Middle east Wound Care Conference
24 January	NEW	M+Health Conference
25 January	NEW	Middle East Psychiatry Conference
	NEW	Medical Education in the 21st Century Conference
26 January		Leaders in Healthcare 5 th Middle East Interventional Cardiovascular Conference
23 – 24 January		5 th Middle East Anaesthesia Conference 3 rd Quality Management in Healthcare Conference 2 nd Chronic Respiratory and Sleep Diseases (CRSD)
23 – 25 January		12 th Middle East Medical Imaging & Diagnostics Conference 8 th Middle East Orthopaedics Conference 11 th Middle East Surgery Conference 4 th Middle East Paediatrics Conference 4 th Middle East Gastroenterology Conference
23 – 26 January		MEDLAB Conferences
25 – 26 January		5 th Middle East Urology Conference 2 nd Multi-Disciplinary Approach to Cancer Therapy

The above activities are CME accredited

25 - 26 January **NEW** GCC Conference for Biomedical Engineering

**Conference programme and CME provider subject to change without notice*

Priority Code AHC

EARLY BIRD DISCOUNTS AVAILABLE

For more details and to book your delegate place, visit www.ahcongress.com

Leading Congress Supporter

Supported By

Organised By



Ideas. Innovations. Solutions.

Welcome to the OR of the future.

Our custom-made solutions and innovative, cutting-edge technologies ensure the highest degree of flexibility and efficiency in your daily operating schedule.

We plan, design and realise the ideal, integrated operating room for a safer working environment for patients and staff alike, and an optimisation of resources.

