BIÇAKCILAR
Touching Lives One Device at a Time

MARKETWATCH

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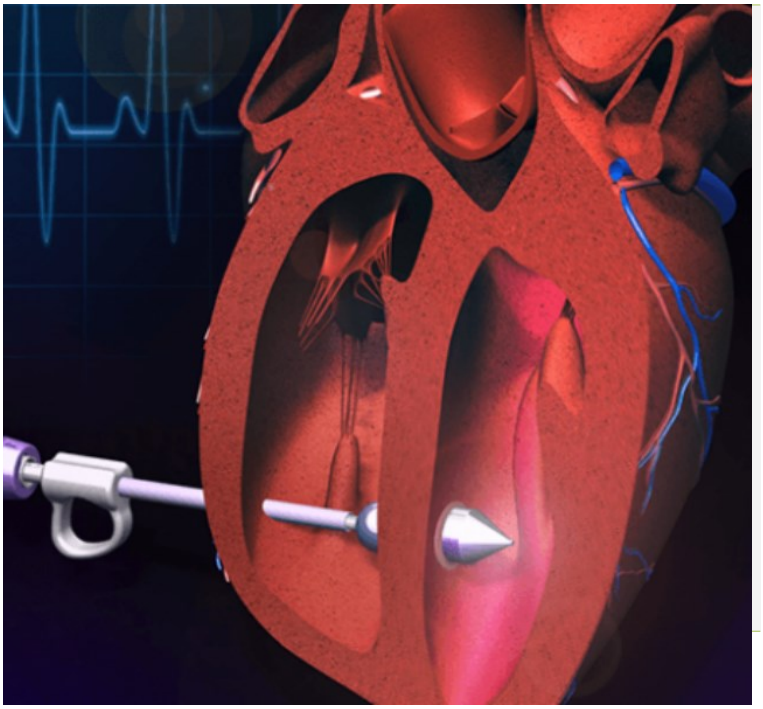
In this issue…

19 MARCH 2018 NEWS

US researchers license new catheter technology to HoliStick Medical



Harvard University in the US has out-licensed a new surgical catheter technology to French start-up HoliStick Medical for further development and commercialisation.

Harvard co-owns this medical technology with Brigham & Women's Hospital, Boston Children's Hospital and Massachusetts Institute of Technology (MIT).

Under the agreement signed between Harvard's Office of Technology Development (OTD) and HoliStick, the latter gets exclusive worldwide rights to commercially develop the new surgical device.

The minimally invasive device was developed by a team of bioengineers and clinicians led by Harvard John A Paulson School of Engineering and Applied Sciences (SEAS) professor Conor Walsh and doctoral student Ellen Roche.

It has been designed to repair holes in the heart and tissue defects in other organs by using flexible, deployable soft structures such as patches and eliminates the need for sutures or rigid products.

"The researchers hope that over time the device can help in offering lasting repair for certain organ defects, including a hole in the heart." Walsh said: "Ellen's brilliant leadership of this project and the essential input of our engineering and clinical colleagues have resulted in the creation of a less invasive, less traumatic device that could really improve the way difficult tissue repairs are performed and, hopefully, reduce the need for procedures like open-heart surgery." The researchers hope that over time the device can help in offering lasting repair for certain organ defects, including a hole in the heart, without the challenges or risks associated with existing more invasive surgical procedures.

Harvard OTD Strategic Partnerships executive director Sam Liss said: "To carry an early stage medical technology into clinical application requires both commitment and strategic sophistication.

In This Issue

In this issue… *more partnerships in cardiology...*

Boston Scientific and CÚRAM plan to develop heart surgery devices

Boston Scientific has partnered with Ireland-based CÚRAM, the SFI Research Centre for Medical Devices at National University Ireland (NUI) Galway, to advance medical devices for cardiovascular (CV) surgeries.

The partners plan to develop new devices that will support minimally invasive procedures performed to treat aneurysms and aortic valve repair.

Currently, valve repair procedures involving the use of a catheter to insert a replacement valve are being frequently performed and are said to minimise the risk of surgery for patients.

The new devices will be designed to further decrease this risk, while also improving patient outcomes.

“The partners plan to develop new devices that will support minimally invasive procedures performed to treat aneurysms and aortic valve repair.”

Under the project, which will be led by CÚRAM principal investigator (PI) Dr Niamh Hynes, the organisations will combine their respective expertise and experience in clinical, biomedical and scientific research.

CÚRAM scientific director Abhay Pandit said: “This unique, multi-disciplinary, specialist environment is key to CÚRAM’s success in developing strong programmes of work with our industry partners; in this case bringing substantial investment from Boston Scientific.

“This project is in addition to three other ongoing research projects with Boston Scientific.”

The SFI Research Centre is also conducting a preclinical assessment of a catheter device to support muscle and vascular regeneration in critical limb ischemia.

In another project, CÚRAM and Boston Scientific have partnered to create a new implantable electrical stimulation device that will improve cardiovascular circulation.

Pandit added: “CÚRAM’s goal is to establish long-term strategic relationships with our industry partners, to complete projects that advance medical device technologies and inventions and convert these into products and services that benefit the patient.” .

Marketwatch

Canon develops Aquilion ONE / GENESIS Edition device to address stroke

The device can be used to image the entire brain with a single 640-slice rotation to cover 16cm of space. It is also capable of capturing both anatomy and function, thereby offering physicians with additional tools to help diagnose a stroke with a single CT scan.

Furthermore, the device can help reduce the need for multi-modality exams, which can require a lot of time.

It is also equipped with Forward projected model-based Iterative Reconstruction SoluTion (FIRST) MBIR, which is designed to enhance high-contrast spatial resolution and low-contrast detectability in the brain. This allows for the possibility of seeing early signs of stroke with CT. “The device is capable of capturing both anatomy and function, thereby offering physicians with additional tools to help diagnose a stroke with a single CT scan.”

FIRST can reduce noise and radiation dose by up to 82.4%, as well as remove workflow challenges of MBIR.

Canon Medical Systems USA CT, PET / CT, and MR Business Units senior director Dominic Smith said: “CT scans are often the first line of defence when it comes to stroke diagnosis. We understand how critical those first few minutes are.

“That’s why we designed the Aquilion ONE / GENESIS Edition with the ability to deliver a comprehensive dataset for assessing anatomy, flow and perfusion in one single scan.

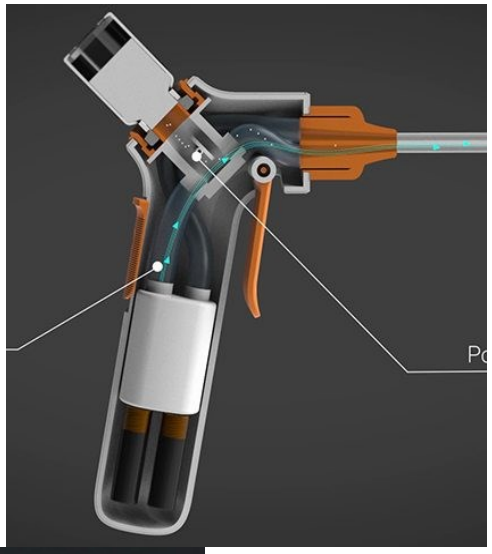
“This drastically cuts the time needed to make critical diagnoses and can improve a patient’s outcome.”

New Devices

Product Launch

Convesaid, a Hemostat Powder Spray That Can't Cause Embolisms

Team Consulting, a firm based out of an old barn in Cambridge, UK that develops medical devices, one being the EpiPen, has now come up with a hemostat powder sprayer that cannot cause embolisms. When spraying a powder onto a leaking vein, the air that pushes the powder can enter the exposed blood flow and cause an air embolism. This typically happens when the sprayer gets too close to the vein, but to avoid the chances altogether, the new Convesaid sprayer doesn't let any air out of the nozzle to cause embolisms in the first place.



This is accomplished thanks to a bit of clever engineering that allows the device to separate the air from the powder particles, returning all the air back through the nozzle while letting the hemostat powder fly out the front. The air moving through the device won't even escape out of the nozzle if the tip is pressed against tissue, virtually guaranteeing that an embolism won't occur.

ACUSON Bonsai, a Powerful Cardio Ultrasound in a Small, Portable Package

Soft robots made using 3D printing may offer uniquAt the just concluded American College of Cardiology's 67th Annual Scientific Session and Expo, Siemens Healthineers introduced its new ACUSON Bonsai portable cardiovascular ultrasound e advantages for medical applications

Countries

CHINA

THE CHINESE MEDTECH SECTOR

The current healthcare system covers 95 per cent of the population through the basic medical insurance scheme. The coverage, however, is not comprehensive and does not address expenditures caused by chronic diseases. It happens that patients with chronic diseases cannot pay their health bills and need to file for bankruptcy. Currently, 5 per cent of China's GDP is spent on healthcare. The healthcare expenditure per capita is US$ 650 (OECD 2013). The Government has ambitious plans to reform the long-neglected healthcare system. A major initiative is to let patients enter the healthcare system through community health centers which act as gatekeepers and not through grade 3 hospitals as it is the case at present. Furthermore, private hospitals which only account for ten per cent of the patient volume today should double their capacity within the next five years. The Government is also allowing doctors from public hospitals to practice at multiple sites in pilot projects.

It is obvious that there will be two healthcare systems in China in the future, namely: 1. a large high-volume, low-priced public and 2. a small low-volume, high-priced private system. Currently, the first system is much larger than the second one in terms of medical device sales. In short, foreign medtech players have to learn to adjust to high volumes and low prices while domestic companies have to upgrade their products in order to compete. Since privatisation is moving forward slowly, a sizeable outbound medical tourism market has developed, increasing 5-fold from the year 2015 to 2016. In the «Healthy China 2030 Reform» the Government tries to improve the healthcare system so that main health indicators reach the standards of high-income countries, which is a very ambitious target taking the limited resources available into consideration.

Undoubtedly, there is a trend to lower prices of medical devices through tenders and to favor locally manufactured products. As far as locally manufactured products are concerned, there is a distinction between foreign and domestic ownership in some tenders. In most medtech segments, the Chinese market contributes between 2 and 10 per cent of the world market. Claims that the current Chinese medtech market is huge are unfounded, because reimbursement does not or only partially exist for implantable medical devices. Most typically foreign medtech subsidiaries of MNCs in China contribute 2 to 10 per cent of global sales and for most MNCs the size of their Japanese subsidiary is larger than the size of their Chinese one.

Why Bıçakcılar is NOT like the other Chinese manufacturers?

1. **Turkish social healthcare system is far more advanced in telemedicine due to superior IT infrastructure compared to Chinese as well as the increasing number of private hospitals.**
2. **We provide expertise and after sales service at all times– something they don't do for the same devices they manufacture, lack the expertise and know and lack of qualified technicians is a major difference**
3. **Our logistic systems do not even compare to the Chinese which is mostly operated by family companies and that directly impacts the safe and sound distribution of the devices.**

This is “For Us” page…

Doctors in China...

There is a substantial shortage of qualified doctors in China in most disciplines. The fields in highest demand are pediatrics and psychiatry. Due to this shortage and the current set-up of the healthcare system which will be discussed below, the patient-doctor relationship is tense. The violence against healthcare providers in China has made headlines and is a tragedy. This is a reason why the guidelines foresee a new way to mediate disputes between doctors and patients and try to find compensation models for failed cases.

“Obviously, our customers aren’t trying hard enough!”

It is obvious that the majority of doctors in China have not reached the skill and education level of Western doctors. Chinese patients are going to grade 3 hospitals to be treated by the most skilled Chinese doctors. This is the reason why most public grade 3 hospitals are overcrowded, because patients seek medical treatment from the best doctors. These doctors have little time left for working with pioneering companies to develop new innovative medical device products. At weekends, these doctors often travel to other cities treating complex cases which the local doctors cannot treat.

“Unfortunately, we lost the notes on this portion of our sales strategy.”

It is now allowed for medical doctors to practice at multiple sites, meaning public doctors have the opportunity to treat at private hospitals too. This measure is, however, often ineffective because doctors have internal barriers at public hospitals to let them practice at non-public hospitals. Traditionally, Chinese doctors are not well paid at public hospitals and this is still the case today. It is easy for pharmaceutical and medical device companies to attract young doctors to join them, because the salaries at companies exceed those at public hospitals. Beside the official salary, doctors get commissions from patients, distributors and other sources to improve their income. The government and the public know about this and media have covered this topic in China extensively. Therefore, it is vital that the remuneration of healthcare professionals is improved in order to counter this behavior.

Contact Us

If you have any specific area that you need information on, please contact Corporate Marketing so we can focus on the specific areas to research to speed up your efforts.

Gülderen Somar,Director, Corporate Marketing

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