# nvestor Newsletter

Issue 08 2015



### **MPSC New COO Appointment**

#### **Jason Zhang**

MicroPort Scientific Corporation ("MPSC") is pleased to announce that, approved by the Board of Directors, effective August 31, 2015 Mr. Jason (Rui Nian) Zhang has joined MPSC as the Chief Operating Officer ("COO").

Mr. Zhang has brought twenty three plus years of experience and profound knowledge as well as expertise across disciplines in medical industry. Before this appointment, he was recently the General Manager, Orthopaedic & Neuro Group for Johnson & Johnson Medical China.



In addition to Johnson & Johnson, Mr. Zhang's career path across with many of the famous multinational corporations and served as the senior executives for various areas including Xi'an-Janssen (joint venture of Johnson & Johnson), Rhone-Poulenc Rorer, Baxter Healthcare, Edwards Lifesciences World Trade Corp., Applied Biosystems and Medtronic China.

Throughout his career as the General Manager role, Mr. Zhang has diversified experience in managing different business within healthcare industry which includes Cardiovascular, General Surgery, Orthopedics, Neurosurgery & Neurovascular, In Vitro Diagnostic, Diabetes Care and Medical and Analytical Instrument, etc.

Mr. Zhang got his Bachelor of Science in Medicine from Shanghai Second Medical University in China and MBA degree from University of British Columbia ("UBC") in Canada.



### Fast Recovery - The New Concept of Medical Science for Joint Replacement

On August 29, sponsored by Shanghai Sixth People's Hospital ("Shanghai No.6 Hospital") and Suzhou MicroPort Joint Co ("MicroPort" Joint"), which is a wholly owned subsidiary of Shanghai MicroPort Medical (Group) Co ("MicroPort"), the "New Technology Academic Exchange Conference of Minimally Invasive Orthopedic Arthroplasty" was held in Shanghai No.6 Hospital. More than 200 experts in the field of joint surgery had discussions focusing on the hot topic of artificial joint replacement and its challenges.

It is reported that, when fast recovery technology and apparatus for joint replacement surgery is applied, it could take only 3 hours after surgery for the patients to walk on the ground in the fastest cases, instead of needing the long recovery period, as described by the traditional concept of "beating 100 days". In addition, Shanghai No.6 Hospital and MicroPort® Joint are working together to build "MicroPort® Joint rehabilitation training center". The center will hold training classes to the surgeons in the aspects of joint replacement surgery technology, accelerating the promotion of the concept of fast recovery, in order to serve the patients better. Changqing Zhang, the Vice President of Shanghai No.6 Hospital, said: "minimally invasive has been the goal that the surgeons have been pursuing all the time. With the aging of the population, China's artificial joint replacement market grows quickly, and how to help patients to achieve fast recovery of joint function and how to improve patients' satisfaction have become the most important field of artificial joint replacement. Fast recovery is a comprehensive concept involving minimally invasive surgical techniques, blood management, pain management, and postoperative rehabilitation program."

#### Fast Recovery after Minimally Invasive Surgery

As Co-founders of "MicroPort° Joint rehabilitation training center", MicroPort° Joint and Shanghai No.6 Hospital will have in-depth cooperation in fast recovery, people training, surgical technique training. A series of advanced fast recovery surgery technology including SuperPath™ surgical technique will be promoted in training center.

SuperPath™ surgical technique is a major leap in artificial hip joint replacement technique, which was promoted in the United States and European countries widely. Compared with the traditional hip replacement technology, SuperPath™'s incision is as small as 6-8 cm for artificial hip replacement, preserving the soft tissues as most as it can and significantly reducing bleeding and injury in the operation. Patients do not need to restrict their body movement positions and activities after surgery and therefore, SuperPath™ can shorten patients' time of stay in hospital, greatly improving the early post-operative efficacy and patients' satisfaction rate. SuperPath™ was applied in 2014 by Shanghai MicroPort Orthopedics Co ("Shanghai MicroPort® Orthopedics") for the first time, which has been extended to nearly 50 hospitals within 14 provinces and cities.



#### Fast Recovery makes patients to walk more naturally

In the eyes of orthopedics experts, the key for fast recovery depends not only on the use of advanced surgical techniques, but also the selection of the implant in the Department of orthopedics. Both are equally important. Shanghai MicroPort® Orthopedics in the conference launched the second generation of Evolution™ Medial-Pivot Knee System that is the world's first and only complete imitation of human physiological structure of knee joint. It is the new product, which is dedicated to help patients recover quickly after a total knee arthroplasty. The Evolution™ is designed to replicate the movement and stability of a normal, healthy knee by incorporating a patented ball-in-socket feature on the medial side. At the same time, it reduces the Evolution™ osteotomy during operation, so patients can recover faster, and patient satisfaction rate is improved.

In addition, Evolution<sup>™</sup> solves the problem of walking instability that exists after total knee arthroplasty surgery in the traditional system. Thigh muscles of patients don't need to be put with extra effort to achieve more movement. Evolution<sup>™</sup> also has a high degree of movement capability, can meet the needs of stairs climbing, squatting, sitting on knees in Asian countries, taking into consideration of stability and movement capability. Using Evolution<sup>™</sup>, patients can recover their normal life capability, including swimming, mountain climbing and riding bikes, achieving even better joint functionality and overall physical feeling, without compromising life quality.

As the main trend of the development of artificial joint replacement, the concept of "fast recovery" has been highly recognized and approved by hospitals, clinical experts and medical enterprises. It can not only improve the management efficiency, improve the level of recovery of postoperative rehabilitation, but also improve the utilization of medical resources. Zhaohua Chang, the Chairman and Chief Executive Officer of MicroPort\*, said: "minimally invasive surgery is not only an advanced operation method, but also a kind of medical enlightenment that puts patients first. In the future, "MicroPort\* Joint rehabilitation training center" will provide an educational platform for a lot of surgeons that combines theory training, operation observation and clinical practicing. It will improve joint surgery technology, allow fast rehabilitation of joint replacement and benefit more patients in China, so patients in China can enjoy the world's most advanced joint replacement

technology and products without going overseas."



# MicroPort® Orthopedics Launches Profemur™ Preserve™ Hip Stem

Inaugural Surgery Performed by Phillip Merritt, MD

Recently, MicroPort Orthopedics Inc. ("MicroPort® Orthopedics") announced the launch of the Profemur™ Preserve™ Hip Stem ("Profemur™ Preserve™"), a short stem designed to support today's growing market of bone and tissue preserving surgical techniques. "As physicians evaluate the landscape of short stems, Profemur™ Preserve™ is attractively positioned to capture market share," said Patrick Gregory, Hip Product Manager for MicroPort® Orthopedics. Short stems have grown in popularity as physicians give additional consideration to tissue-friendly approaches and ongoing care for a younger patient population. Shorter stems preserve bone, which facilitates future revisions through a wider range of treatment options.



Preserve™ Classic was designed to maximize head center coverage with the fewest number of SKUs resulting in an optimized stem with virtually no technique learning curve. Preserve™ Classic and Preserve™ Modular are part of MicroPort® Orthopedics' Simply Versatile™ platform which allows surgeons the flexibility of using classic and modular stems utilizing the same surgical technique with a common set of instruments. "Managing OR flow and consistency are central initiatives for MicroPort® Orthopedics as we bring new products to the market," said Gregory.

The surgeon performing the first two hip replacement surgeries with Profemur™ Preserve™ is Dr. Phillip Merritt, Direct Anterior Approach Specialist, Glendale, California.



#### MicroPort® Attends SOLACI 2015

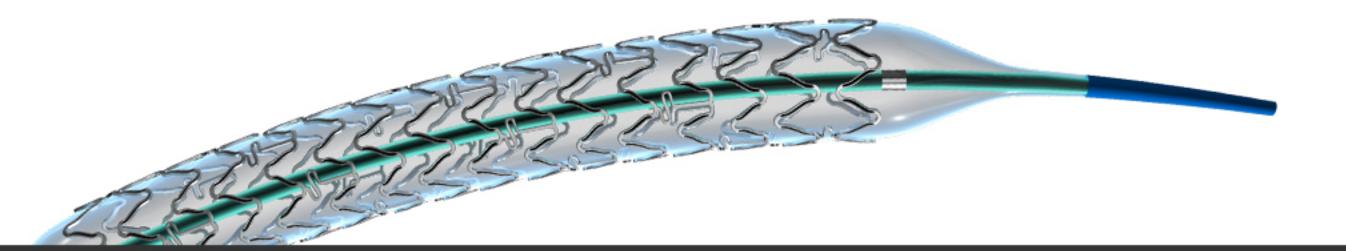
MicroPort® recently attended the Society of Latin American Cardiology Intervention 2015 ("SOLACI 2015") held from August 5 to August 7, and presented the independently designed third generation Firehawk® Rapamycin Target Eluting Coronary Stent System ("Firehawk®") with a satellite meeting.

MicroPort® invited Dr. Alfredo E. Rodriguze as the president of the satellite meeting themed "New Era for Target Eluting Stent - Firehawk® from Clinical Trials to Clinical Application." Dr. Renu Virmani, founder of CV Path Institute, Dr. Qiyi Luo, Chief Technology Officer of MicroPort®, and Dr. Yaojun Zhang from the First Hospital of Nanjing, were invited as guest speakers. Many experts participated in the satellite meeting.

During the meeting, Dr. Luo presented the new technical features of Firehawk® and Dr. Virmani focused on the pre-clinical study on Firehawk®. Dr. Yaojun Zhang released the latest clinical study results of Firehawk® Target series and introduced the Target All Comer – a large-scale randomized clinical trial that MicroPort® plans to carry out in the Europe – to participants. Meanwhile, Dr. Zhang shared the clinical experience in treating complex lesions with Firehawk® and spoke highly of its safety and efficacy.

During the interactive session, participants had a warm discussion on Firehawke's design, features, DAPT treatment time as well as the application of Firehawke in complex diseases such as diabetes. In the end of the meeting, Dr. Rodriguez expressed his expectation to see Firehawke launched in Argentina and other major South American countries soon, to provide solutions for more patients.

Aside from the satellite meeting, MicroPort®'s booth attracted a lot of attention from participants as well. Gary Minz, an international renowned intravascular ultrasound expert, also came to visit our booth and had in-depth discussion with Dr. Luo, Yinqing Lin, Vice President of MicroPort® International Business, and Ming Zheng, MicroPort® Senior Director of Medical Affairs. Through the meeting, MicroPort® presented the outstanding performance and growth potential of its innovative stent, paving the way for further opening up the Latin America market.





#### New Technology Clinical Study of Second Generation Bioresorbable Scaffold System Completed

On August 8, the New Technology Clinical Study of a Bioresorbable Scaffold System researched and developed independently by MicroPort\* was successfully completed in Fuwai Hospital of Chinese Academy of Medical Sciences. The operation was broadcasted live in China Heart Convention ("CHC 2015"). The operation was carried out smoothly, and the patient's vital signs were stable after the operation.

The Bioresorbable Scaffold System is designed to treat patients with ischaemic heart disease caused by some coronary primary lesions. Compared with the traditional permanent metal stents, Bioresorbable Scaffold System is made of special biodegradable material, and is expected to be completely absorbed by the human body within 3 years after implantation, which will help patients recover the natural state of blood vessels. Bioresorbable Scaffold System can effectively reduce the incidence of adverse events such as late thrombosis, and it is conducive to the reconstruction of the blood vessel itself and beneficial to the diagnosis of CT and MRI. But its indications, long-term clinical effects as well as market acceptance, still need to be further verified and confirmed with large-scale studies.

MicroPort\* Bioresorbable Scaffold System is currently the first and only polymer bioresorbable scaffold with strut thickness less than 150µm in China, whose strut thickness is only 100µm-125µm. Such design will facilitate the neointimalization on scaffold after implantation, so as to reduce the risk of thrombosis after operation. With less implant material, the degradation period will be shortened. Meanwhile, MicroPort\* Bioresorbable Scaffold System adopts Target Eluting Technology and is the first and only bioresorbable scaffold with Target Eluting function in China. MicroPort\* Bioresorbable Scaffold System only retains the drug on the abluminal surface that contacts blood vessels, reduces the drug dosage, enhances the efficiency of the treatment, and prevents a large amount of drug residual from remaining in the body for a long time. Bo Xu, Director of Intervention Catheter Department in the Fuwai Hospital, spoke highly of the product, saying it is the second-generation bioresorbable scaffold with three main features -Target Eluting, ultra-thin strut thickness and low drug dosage.

As a product that brings revolutionary change to the treatment of coronary artery disease, Bioresorbable Scaffold System has been approved in the European market in 2012, but not yet in the domestic market. After fully analyzing the advantages and disadvantages of the concept of bioresorbable scaffold, MicroPort\* started to carry out the research and development work of Bioresorbable Scaffold System very carefully in 2009, and the success in the new technology clinical study preliminarily proved the safety of the product. It is expected that the product's official FIM clinical research will start in September of this year. Once the concept of bioresorbable scaffold is accepted by surgeons and patients, after its market launch MicroPort\*'s Bioresorbable Scaffold System will help improve the treatment methods of coronary artery diseases together with the metal stents (Firehawk\* Rapamycin Target Eluting Coronary Stent System and Firebird2\* Rapamycin-Eluting Coronary CoCr Stent System), and more options and benefits will be available to patients with coronary artery diseases.



#### MicroPort® Attends CHC 2015

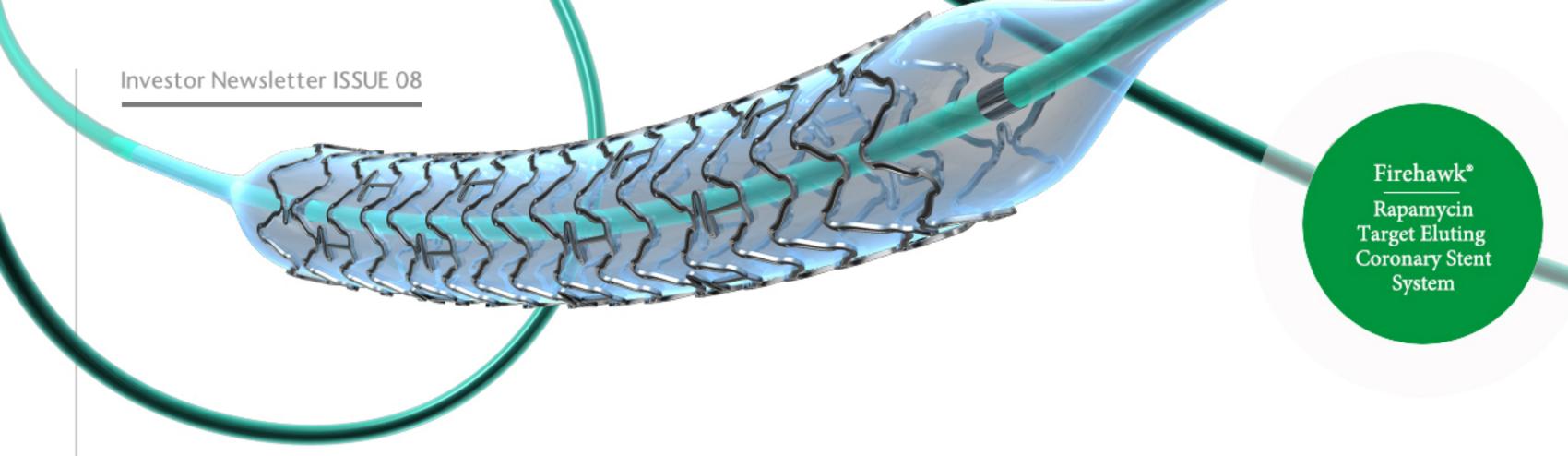
MicroPort® recently attended CHC 2015 held from August 6 to August 8. More than 7,500 experts and scholars from cardiovascular related fields came to the conference. MicroPort® held a satellite meeting during the conference to promote the in-house developed third generation Firehawk®. During the satellite meeting, MicroPort® shared the four-year follow-up data of Firehawk® TARGET I clinical studies to the experts in attendance.

The MicroPort® satellite meeting was held on August 8. Professor Shubin Qiao from Fuwai Hospital, Professor Lang Li from the First Affiliated Hospital of Guangxi Medical University, Professor Guizhou Tao from the First Affiliated Hospital of Liaoning Medical University and Professor Xuebo Liu from Shanghai East Hospital were invited as presidents of the satellite meeting. Professor Bo Xu from Fuwai Hospital, Professor Xiaohua Ying from Public Health School of Fudan University, Professor Yue Li from the First Affiliated Hospital of Harbin Medical University and Professor Wei Guo from Shuguang Hospital, introduced Firehawk®'s features, shared its clinical trial results, reported health economic evaluation of Firehawk® and shared case review of Firehawk® at the satellite meeting.

Professor Bo Xu analyzed the four-year follow-up data of Firehawk® TARGET I clinical study, and reached two conclusions: Firstly, the data showed that the TLF of the Firehawk® group and the Xience V group were 4.5% and 6.3% respectively, and there was only one additional case of Target Lesion Revascularization in the Firehawk® group while six cases were found in the Xience V group. Firehawk® has the same efficacy as Xience V stent with only 1/2 drug dosage compared to Xience V stent. But Firehawk® was proved to be safer as in the Firehawk® group the rate of myocardial infarction in the target vessel did not increase and the incidence rate of stent thrombosis remained zero, while in the Xience V group one possible stent thrombosis occurred in the four-year clinical study, with 0.4% incidence rate. Secondly, the four-year follow-up results of the TARGET I long stent group showed TLF stood at 10.6%, no cardiac death occurred, two cases of myocardial infarction and three cases of iTLR occurred during the preoperative period, and no thrombosis occurred, which proved Firehawk®'s safety in long lesions. Professor Bo Xu spoke highly of Firehawk®'s safety and efficacy, and his report helped enhance attendees' understanding in the product.







Professor Xiaohua Ying interpreted the health economic evaluation report of Firehawk® at the satellite meeting. By comparing the prices and economic benefits of Firehawk® and Xience V, the report proved that Firehawk® is more cost-effective than Xience V in treating single coronary artery lesion in single vessel. It showed Firehawk®'s advantages and promising future prospects.

During the conference, MicroPort® also carried out satisfaction survey activities, and communicated with relevant experts about current coronary products, development trend of products under research, and how MicroPort® will provide follow-up service. Experts showed high recognition of MicroPort® products' perfect quality and good performances in clinical surgeries.

As cardiovascular industry's most influential academic event of cardiovascular diseases in China and the Asia-Pacific region, CHC 2015, themed "healthy heart, a better life - innovation, translation and cooperation," displayed new achievements in clinical prevention and basic research of cardiovascular diseases, introduced new developments in translational medical research, explored the future trend of integrated medicine and individualized treatment, prevention and research, so as to further promote the development of cardiology in China.



#### FOXTROT™ PTCA Balloon Catheter Gains CFDA Approval

On August 14, MicroPort® received approval from China Food and Drug Administration ("CFDA") for its in-house developed product, FOXTROT™ PTCA Balloon Catheter. Before this, it was permitted to enter into Japanese market by Japan's Ministry of Health Labor and Welfare ("MHLW") in September 2005, and by now, more than 12,000 sets have been sold in the Japan market. The product received its CE mark in September 2013, and also was granted clearance from US Food and Drug Administration ("FDA") in March 2015.

FOXTROT™ PTCA Balloon Catheter is a sterile, single-use, rapid exchange percutaneous transluminal coronary angioplasty catheter. The design is an integrated shaft system with a balloon near the distal tip for the purpose of improving myocardial perfusion. The balloon is designed to provide an inflatable segment of known diameter and length at recommended pressures (12atm). It has a high rated burst pressure (RBP=20atm). The distal portion of the shaft is coated with a hydrophilic coating to provide lubrication, which allows the catheter to move freely in the cardiovascular system, and reach the narrow lesion area smoothly. Two radiopaque markers aid in the positioning of the balloon under fluoroscopy during procedures.

Compared with the most commonly used semi-compliant balloon catheter, as a non-compliant balloon catheter, FOXTROT™ PTCA Balloon Catheter has other unique advantages, in addition to the feature of expanding vascular access for the insertion of the stent. It can be used for the post-delivery expansion of balloon expandable stents, such as the accurate post-delivery expansion after a drug eluting stent deployment, in order to reduce the edge effect and to protect the healthy tissue.

The device features high burst pressure, low compliance and small outer diameter for folding profile, which lead to its excellent pushability, traceability and crossability. From March to November 2013, in Beijing Chao-Yang Hospital, which is affiliated to the Capital University of Medical Sciences, together with other 4 research institutes, 120 cases were conducted with a 10-day follow-up that evaluated the safety and effectiveness of FOXTROT™ PTCA's clinical use. The research provided corroborating evidence for FOXTROT™ PTCA's ultimate official approval and application in China.

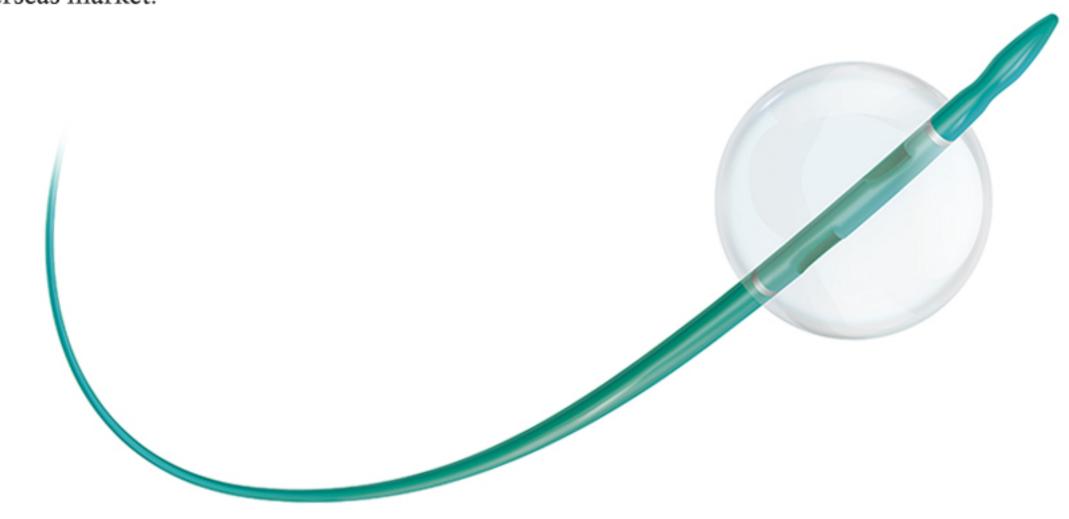


# Hercules™ Balloon Dilation Catheter Gains Market Launch Approval in Brazil

MicroPort Endovascular (Shanghai) Co ("MicroPort® Endovascular") recently gained the registration certificate for its in-house developed Hercules™ Balloon Dilation Catheter from Brazil's National Health Surveillance Agency.

Hercules<sup>™</sup> Balloon Dilation Catheter is indicated for enhancing the vessel wall apositioning of self-expandable graft-stent. It can effectively enhance graft-stent expansion, avoid incomplete vessel wall apositioning, eliminate aneurysm endoleak risk, and ensure precise deployment.

Hercules<sup>™</sup> Balloon Dilation Catheter is designed to work with MicroPort<sup>®</sup> Endovascular's Hercules<sup>™</sup> Thoracic Stent-Graft System and Hercules Bifurcated Stent-Graft System. With Hercules<sup>™</sup> Balloon Dilation Catheter's market launch approval in Brazil, the entire serial of MicroPort<sup>®</sup> Endovascular's Hercules<sup>™</sup> products have been launched in the local market, which will better serve the need of surgeons and further expand the company's overseas market.





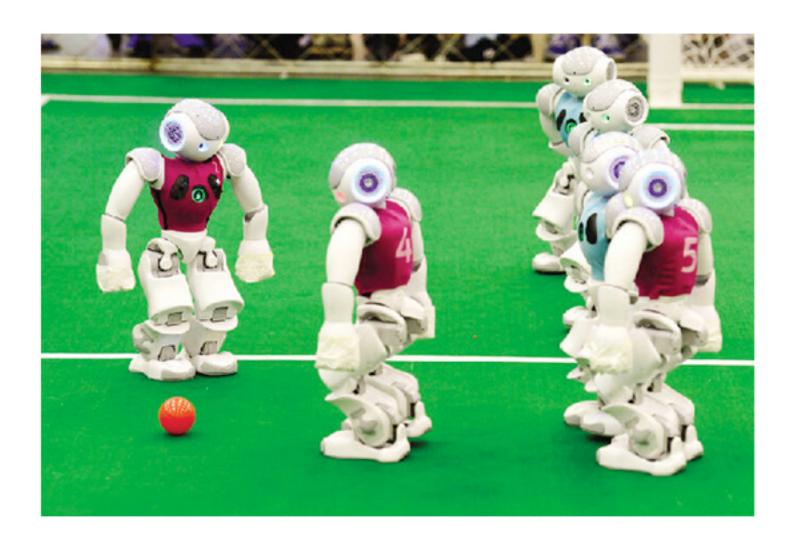
# SuperPath™ Academic Salon in Zhoushan

On August 6, sponsored by Shanghai MicroPort® Orthopedics, hosted by Zhoushan Guang'an Orthopedics Hospital of Zhejiang Province, the "2015 SuperPath™ Academic Salon in Zhoushan" was held. During the meeting, a surgeon from Zhoushan Guang'an Orthopedics Hospital presented a report regarding the development history of the technology of SuperPath™ minimally invasive hip replacement surgery. In addition, the Shanghai MicroPort® Orthopedics' products were presented and the SuperPath™ tool operation were demonstrated, both receiving warm responses from participants.



#### 2015 China Robot Competition and RoboCup Open

From July 25 to July 26, Surgical Robot Project Team of MicroPort\* was invited to participate in the "2015 China Robot Competition and RoboCup Open". A staff of the Surgical Robot Project presented the theme report "The Development and Research Methods of Medical Robots" at the meeting. After the meeting, the staff and the Organizing Committee discussed the feasibility of future cooperation in the recruitment and future robotics competitions. Meanwhile, the project team set up a temporary recruitment platform, and conducted on-site interviews.







#### The Fourth Northern China Blood Vessel Forum

From July 31 to August 2, the Fourth Northern China Blood Vessel Forum was held in Shijiazhuang. During the forum, surgeons from Beijing An Zhen Hospital, Peking University People's Hospital, Beijing Friendship Hospital, Second Hospital Affiliated to Hebei Medical University, Affiliated Hospital of Inner Mongolia Medical University and Shanxi Hospital were invited by MicroPort® Endovascular as special hosts. Experts shared their experience in classic cases of applying Minos Ultra Low Profile, Hercules™ Low Profile, and Aegis™- in operations, which were well received by attendees.

Experts simulated the operation and gained on-site experience of applying Minos Ultra Low Profile, Hercules™ Low Profile, and Aegis™. Staffs of MicroPort® Endovascular introduced the latest development of the two Low Profile stent system products. The experts spoke highly of the products and offered a lot of suggestions.



# **Zhejiang Provincial**Vascular Surgery Annual Meeting

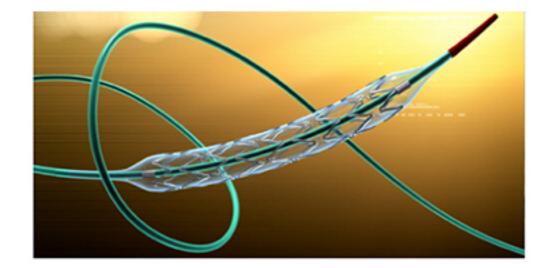
From July 31 to August 2, the "Zhejiang Provincial Vascular Surgery Annual Meeting" was held in Jiaxing, Zhejiang. During the meeting, experts in attendance shared some classic cases, and had hot discussions. MicroPort" Endovascular attended the event and displayed the upcoming Castor Branched Aortic Stent Graft System, which gain high recognition from the participating experts.

# Fujian Provincial Hai Xi Vascular Surgery Summit Forum

From August 7 to August 9, the fourth Fujian Provincial Hai Xi Vascular Surgery Summit Forum was held in Fuzhou. The sales staff of the MicroPort® Endovascular in the southern China and eastern China regions participated in the meeting, and exhibited the products of MicroPort® Endovascular. The forum was organized by the First Affiliated Hospital of Fujian Medical University, which aimed to provide a platform for experts to exchange ideas, to strengthen cooperation between hospitals, and to better serve the patients.







**APOLLO Intracranial Stent System** 

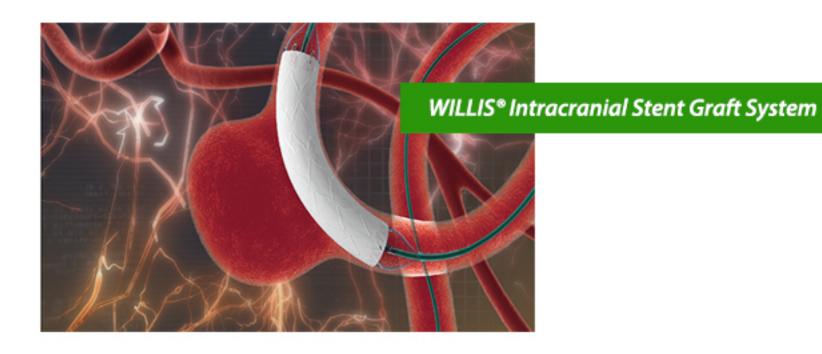
#### **Neurosurgery Academic Forum of North China**

From August 7 to August 9, the Neurosurgery Academic Forum of North China was held in Tianjin Medical University General Hospital. MicroPort NeuroTech (Shanghai) Co ("MicroPort" NeuroTech") attended the meeting, and presented the APOLLO Intracranial Stent System and WILLIS" Intracranial Stent Graft System ("WILLIS") to the participants. Many clinicians and distributors expressed interest in the WILLIS".



# Cerebrovascular Disease Development Forum of Beijing

Recently, the fourth Cerebrovascular Disease Development Forum of Beijing was held. The colleagues from Sales Department of MicroPort® NeuroTech participated in the meeting and visited some VIP customers. During the meeting, many well-known experts were invited to give lectures on ischemia and bleeding problems in clinical practices. A surgeon of Shanghai No.6 People's Hospital explained the clinical application of WILLIS®, which led to a warm discussion.



# Dongguan Kewei Attends the Regional Exposition of National Medical Appliance

From July 30 to August 1, "the 16th Regional Exposition of National Medical Appliance" was held in Chengdu. Colleagues of National Sales and Marketing of Dongguan Kewei Medical Instrument Co ("Dongguan Kewei") attended the meeting. During the meeting, Dongguan Kewei exhibited several products and collected contact the information of dealers who are interested in cooperating with us.



# Investor Newsletter

Issue 08 2015



For more information, please contact:

#### **Hongbin Sun**

Chief Financial Officer Shanghai MicroPort Medical (Group) Co., Ltd. (HQ) Tel: (86)(21) 38954600

Email: ir@microport.com

#### Xun You

Board Secretary
Shanghai MicroPort Medical (Group) Co., Ltd. (HQ)

Tel: (86)(21) 38954600 **Email: ir@microport.com**