



*Interview with Dr Pellenc and
Dr Juliard from Bichat-Claude
Bernard Hospital in Paris, France.*



New Hybrid OR Boosts Treatment Possibilities in the North of Paris

Hybrid procedures are set to increase in the future, making interventional systems like Canon Medical's Infinix-i Hybrid + relevant in a large variety of clinical scenarios. Two physicians at Bichat-Claude Bernard Hospital in Paris, France, explained how the system helps them carry out more treatments and improve their visibility in the European cardiovascular landscape.

With its unique double sliding C-arm the Infinix-i Hybrid + provides ultra-fast whole body 3D coverage, free head access and a unique lateral C-arm stroke for better ergonomics, improved productivity and stunning 3D images from head to toe.

The system's great flexibility makes it fit to use in a large variety of settings across different clinical disciplines. These benefits convinced Bichat-Claude Bernard Hospital, to open a hybrid OR equipped with X-ray and intraoperative 3D imaging in September 2018.



Vascular and Cardiac team, Bichat-Claude Bernard Hospital in Paris, France.

Wide range of procedures

“The system enables to perform all the structural interventional cardiology interventions, some of which we used to perform in the catheter lab, in a dedicated environment for cardiologists and anaesthesiologists. The room is also an operating room for a simultaneous intervention of cardiologists and cardiac surgeons in some complex procedures,” Dr Juliard, interventional cardiologist, said.

Dr Juliard uses the system to carry out his structural interventions - percutaneous aortic valve implantation, and valve-in-valve and valve-in-ring implantation for mitral and tricuspid diseases - and percutaneous closure of PFOs, ASDs and LAAs as well as paravalvular leaks and MitraClip procedures.

The Infinix-i Hybrid + increases the range of treatments that the unit can

offer to patients, Dr Pellenc, vascular surgeon at Bichat, added: “Now we can offer all endovascular modern techniques and treat more patients. The Infinix-i Hybrid + room has the particularity of combining a high-quality preoperative imaging and an ergonomic surgical table offering the highest security for the patient in case of unscheduled surgical procedure or open surgical conversion.”

Every standard thoracic (TEVAR) and abdominal (EVAR) aortic stent grafts are now also performed in the hybrid room. Dr Pellenc and his colleagues have increased the number of F-B EVAR procedures and can also perform digestive arteries angioplasty and stenting in the superior mesenteric artery or celiac trunk.

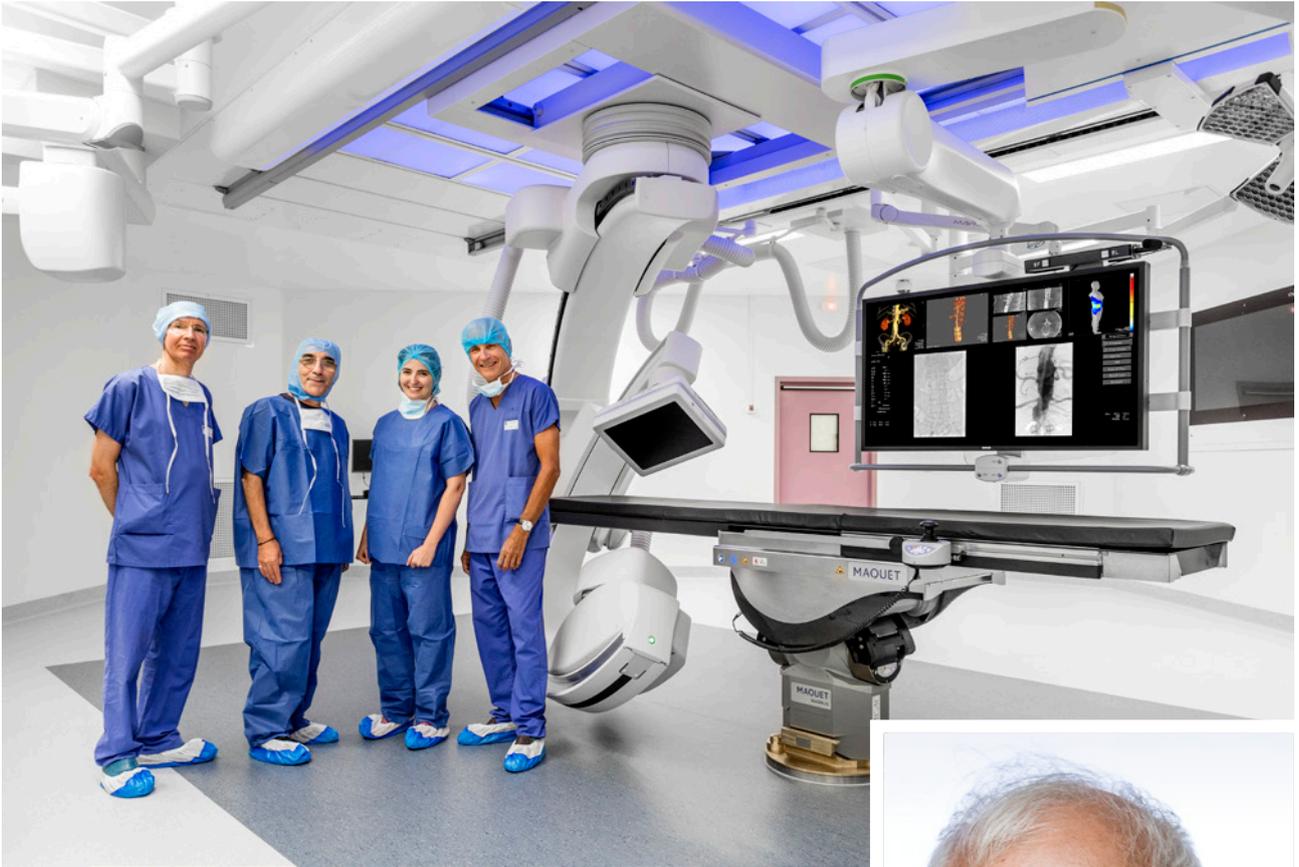
“The combination with the Magnus Maquet operating table allows us

to perform a lot of common hybrid procedures, such as supra aortic trunk debranching during TEVAR or retrograde superior mesenteric open stenting, but also complex endoleaks after stentgrafts, thanks to high quality imaging,” Dr Pellenc said.

Raising the profile of the institution

The Bichat-Claude Bernard Hospital was founded in 1980 and is part of the prestigious Assistance Publique - Hôpitaux de Paris (AP-HP) network. In 1999, upon the arrival of Prof Alec Vahanian, a world famous leader in percutaneous balloon mitral valvuloplasty, the hospital's activity spread to structural interventional cardiology.

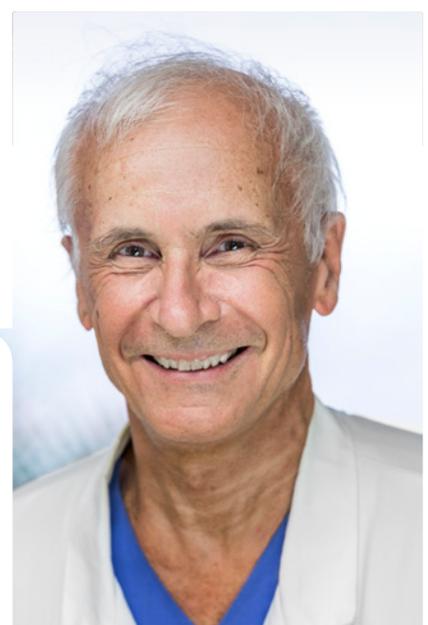
With another recognised expert in percutaneous aortic valve implantation, Dr Dominique Himbert, in the team, the centre soon became a leading hub in France.



Cardiac team with Dr Juliard at Bichat-Claude Bernard Hospital.

“The system enables to perform a wide range of procedures for both interventional cardiologists and cardiac surgeons.”

Dr Jean-Michel Juliard, interventional cardiologist at Bichat-Claude Bernard Hospital.



Dr Juliard has worked mainly in acute coronary syndromes management together with Dr Himbert and Dr Gabriel Steg, one of the finest specialists in the field. “With the Infinix-i Hybrid + the hospital can now boast about being one of Europe’s centres of excellence,” Dr Juliard explained. “The Cardiology department is at the same level as other European centres, for example the one in Munich or Leipzig in Germany.”

Opening the hybrid room also led to an increase of TEVAR and TAVI procedures, which will further increase the hospital’s attractiveness and national visibility, Dr Pellenc believes.

The institution is now well placed to offer complex hybrid interventions and innovative techniques, for example percutaneous treatment of functional tricuspid regurgitation.

“New innovative techniques are also in progress for percutaneous treatment of tricuspid and mitral valve diseases, and probably implantation of dedicated mitral valves, with either a transeptal or apical approach,” Dr Juliard said.

Multidisciplinary experience with the system

To carry out all these procedures, vascular and thoracic surgeons work

hand in hand, together with anaesthesiologists, cardiac surgeons and pneumologists. It is particularly useful to use the Infinix-i Hybrid + in that context, Dr Pellenc explained.

“We are a pioneering team in the creation of a digestive stroke centre in collaboration with the Gastroenterology

and Digestive Surgery departments of our hospital. This very specific activity is quite unique in France and is particularly adapted to the use of a hybrid room such as the one provided by Canon Medical,” Dr Pellenc said.

Dr Juliard particularly appreciates the vast area of the room, the large screen

display and the possibility to have multi-modality imaging on the same screen. “Many other screens are available in the room for all the operators, echocardiographers, anesthesiologists and visitors,” he said.

The room is currently shared between cardiologists (3 days per week) and vas-

“We can now offer all endovascular modern techniques and treat more patients. Furthermore, the image quality is excellent and the digital zoom is very useful for complex procedures.”

Dr Quentin Pellenc, vascular surgeon, at Bichat-Claude Bernard Hospital.



Vascular team with Dr Pellenc at Bichat-Claude Bernard Hospital.



Bichat-Claude Bernard Hospital in Paris, France.

cular surgeons (2 days per week). We are with 4 surgeons and 4 junior surgeons.

The project of installing the hybrid room started nearly a decade ago and faced many challenges due to local building constraints. But the final result is as good as expected for all specialists involved.

“Our experience with the Infinix-i Hybrid + is recent but thanks to the simplicity of handling, we progress really fast - even the older surgeons. We really appreciate the ergonomics of the room. The C-arm can be positioned in a multitude of angles, allowing combined approaches from femoral and upper body access during the same

surgery. Furthermore, image quality is excellent and the digital zoom is very useful for complex procedures such as fenestrated and branched stent grafts,” Dr Pellenc said.

The system presents many dose reduction tools - live zoom, spot fluoroscopy, Dose Tracking System (DTS) fluoro roadmap -, which are essential during complex aortic repair or mesenteric stenting, which imposes lateral views. Dr Pellenc and his team of vascular surgeons have heartily welcomed these new tools: “Dose reduction compared with the use of a mobile C-arm is significant. This is a key advance for both patients and physicians.”

Surgeons were also happily surprised by the system’s ease of use. “We are not radiologists and we were a little bit worried about using a hybrid suite. We were amazed by the simplicity of the interface,” Dr Pellenc said.

The main challenge when working within hybrid OR is not using the equipment, but rather cooperating between medical and administrative staff. “The key was to involve all the medical teams from the beginning. With the Infinix-i Hybrid + room, we now have a suitable tool for all our medical and surgical specialists,” he concluded. //