

Multidisciplinary Usage: The Future of Intervention

At Istanbul's Liv Hospital, the cardiology and interventional neuroradiology departments share an angiography system in order to work more efficiently – a trend that is becoming increasingly popular at private hospitals.

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Professors Alp Burak Çatakoglu, Head of Cardiology, and Adem Uçar, Head of Radiology at Liv Hospital in Istanbul.

The attractive villa would be almost indistinguishable from the neighboring gated communities of the Ulus district were it not for a sign at the entrance directing people to the emergency department. On a small table next to the reception stands a collection of flags representing the countries whose languages are spoken here – and there are lots of them. One in four patients is from abroad, and a 15-people-strong team of interpreters is on hand to ensure effective communication. Decorated in muted browns and beiges, the corridors spread out through the building like blood vessels. The physicians speak softly, the atmosphere feels focused, and the staff is eager to help.

With 30,000 square meters of floor space, this exclusive new hospital provides 154 beds and eight top-notch operating rooms. In just the past year, almost ten thousand procedures were performed here. As well as complex cases, Liv also welcomes affluent patients with special requirements, particularly in the areas of cardiology and stem cell therapy.

Renaissance of a medical tradition

“Private hospitals are experiencing a boom in Turkey,” says Yüksel Yazıcı, Head of the Biomedical Branch of the Medical Park Group, the holding company behind the Liv Hospital chain. Having trained as a biomedical and electronics engineer, Yazıcı has a broad scope of responsibility: The Medical Park Group was founded in 1993 and maintains 29 facilities nationwide under the names Medical Park, Liv Hospital, and VM Medical Park. Founded three years ago, the group’s private Istinye University is tasked with training the next generation of physicians in parallel to the teaching they receive from the hospital’s medical team. “You can also view it as the renaissance of an age-old tradition,” Yazıcı explains.

Multidisciplinary usage improves workflow and utilization

“Until two years ago, we worked with a monoplane system,” explains Professor Alp Burak Çatakoglu, Head of Cardiology at Liv Hospital.



At Liv Hospital, the interior design is as contemporary as the technology is state-of-the-art.

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Professor Adem Uçar, Director of Radiology

However, this equipment was not operating at sufficient capacity. The hospital’s search for a solution led it to an angiography system that is suitable for both cardiology and interventional radiology. “After we received the Artis zee biplane angiography system, my work became considerably easier. It’s a state-of-the-art system that, among other things, also offers dedicated functions for cardiology. I’m particularly pleased with the razor-sharp quality of the 3D images, and we also use less contrast agent.” With the



The Artis zee biplane system is used by physicians from different departments, resulting in a broader exchange of knowledge.

system's interdisciplinary applications and greatly expanded technical capabilities, much more demanding interventions can be performed in a more thorough way than with the previous monoplane system. "With a DynaCT run, I obtain almost tomographic quality," explains Çatakoglu.

The hospital's team of four cardiologists includes two who are responsible for interventions, one for arrhythmia problems, and one for noninvasive examinations. The department performs around a thousand cardiac interventions each year, the majority of which are complex cases.

Patients are admitted after failed operations or to receive treatment for chronic conditions such as cardiac dysrhythmia.

"Normally, patients come to us based on a recommendation," explains Çatakoglu, who also sits on the board of the Turkish Society of Cardiology. "One benefit is that our angiography system is also suitable for precise measurements relating to the condition of the epicardial vessels, like FFR – fractional flow reserve." At Liv Hospital, wireless FFR was made possible for the first time in Turkey thanks to a collaboration between Siemens Healthineers and Abbott.

Advantages of multidisciplinary collaboration

The angiography system is housed in a relatively small room and is used by physicians from different departments, such as cardiology and interventional neuroradiology, according to a precise weekly schedule. Large screens allow the patient to follow the imaging process themselves, and the physicians are only too happy to explain it to them.

Professor Adem Uçar, Director of Radiology, highlights the successful collaboration with his colleagues: "Since we began sharing one system, we've benefited from each other's expertise. I've learned a lot about cardiological contexts, although I primarily use the system in interventional neuroradiology. Both the time I save thanks to the biplane system and the low amounts of contrast agent required are particularly beneficial in pediatrics and in patients with kidney problems."

Like Professor Çatakoglu, he also believes that multidisciplinary represents the future of intervention: "The multidisciplinary system broadens the range of treatments we can provide, allowing hospital management to plan the patients' pathway more comprehensively and in greater detail."

Quick, local service

“The key factors in our decision to buy Artis zee were the cost savings due to multidisciplinary use, the quick, local service, and the excellent technical support that goes with it,” says Head of Purchasing Yüksel Yazıcı. “The procurement costs, operational expenses, high standards, and optimum utilization by our physicians are also significant factors.” One key point, he says, is that Siemens Healthineers has an excellent infrastructure in Turkey: “The setup process needs to be fast, as does any repair work.” Looking forward ten years, it is important that systems can be upgraded.

Although Turkey has potential for growth in terms of medical technology, private hospitals in particular are very well equipped. For the physicians, this represents not only a challenge but also a source of satisfaction. In the future, Professor Çatakoglu would like to see a system that can be integrated into the existing infrastructure, and that delivers accurate reports in a shorter time. “One day, we’ll be able to perform operations from home.” ●

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Jürgen Gottschlich has worked as a correspondent for German-language media in Istanbul for over 15 years. He is a trained journalist and the author of several books about Turkey.

The statements by Siemens Healthineers customers described herein are based on results that were achieved in the customer’s unique setting. Since there is no “typical” hospital and many variables exist (e.g., hospital size, case mix, level of IT adoption) there can be no guarantee that other customers will achieve the same results.



With the Artis zee biplane system, the Liv Hospital team has found an angiography system that is suitable for both cardiology and interventional radiology.