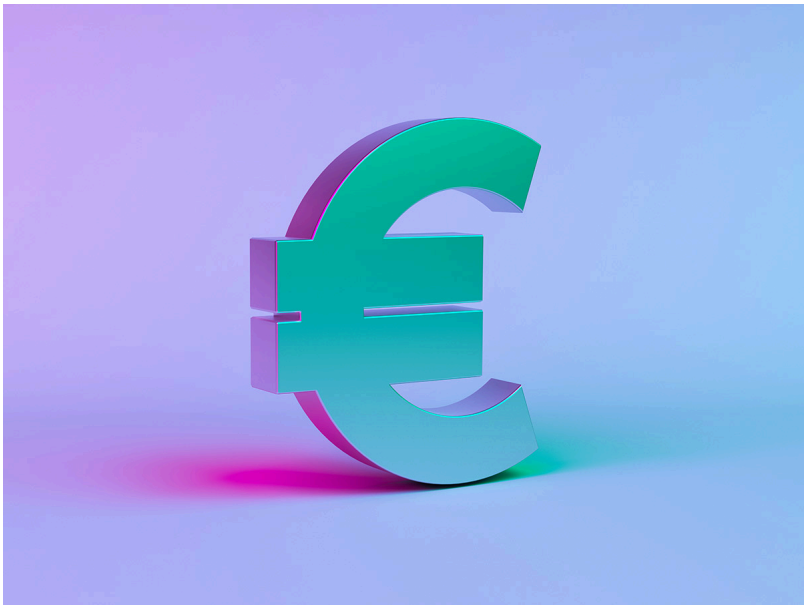
www.bioworld.com/articles/717161-cardiovascular-robotics-and-ai-attract-european-vcs



Cardiovascular, robotics and AI attract European VCs

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Med-tech companies focusing on cardiovascular diseases or neurological conditions, women's health or robotic surgery, will find European investors willing to deploy capital into their stories. European venture capital firms are excited about the continuing innovation and opportunities in the sector. Further, the use of AI and the increasing convergence of data and omics is leading to an evolution of med-tech solutions.

BioWorld spoke to several, leading life sciences investors in Europe to understand the areas med-tech investment will be flowing in 2025 and beyond.

Looking over the next decade investors are beginning to see an evolution of the sector with the linking of AI and med-tech.

"The sheer number of tools being developed using AI, algorithms and data is certainly transforming health care. The availability of more data and its convergence with med-tech is leading to the evolution of the sector," said Werner Lanthaler, founder and CEO of Wlanholding.

There will continue to be hardcore med-tech especially with an aging population and the need for devices to treat these populations, which continue to drive investor interest. However, Lanthaler has observed that med-tech is increasingly becoming a converging sector.

"Med-tech today without data doesn't exist anymore. Med-tech without understanding biology doesn't exist anymore," he said. "You really see a change from the narrow definition of med-tech to a much broader definition of where med-tech plays a role and increasingly will play a role. Because it's the convergence of technology and data that ultimately will allow us to see much more impactful therapies, diagnostics and tools than we have ever seen before."

For example, in the world of omics-based diagnostics, the convergence will help health care professionals not only understand whether a patient has a disease or not, but how far along the disease has progressed, explained Lanthaler. The tools and biological information that will give us that insight will be more impactful and customer focused.

"From semi-intelligent machines, we will have hyper-intelligent machines in this med-tech world, and that will create significantly more interest. And with this, I think, the sector, like many others, will be quite in vogue for the next decade," said Lanthaler.

At the heart of investment

Looking more to the present and near-term and driving the path to Lanthaler's perception of the future, investors are seeing other med-tech areas that are rapidly developing.

The cardiovascular space remains a significant area for investment. "The cardiovascular space remains pretty important," said Antoine Papiernik, chairman and managing partner, at Sofinnova Partners, echoing the comments from his peers. "We've been big investors in companies with solutions for structural heart conditions, such as Corevalve and Highlife Medical. Furthermore, structural heart technologies are very interesting for a lot of corporates, so we are focusing on this area too. We think there's a lot of innovation there."

Companies with devices to address heart failure is another area of interest, noted Papiernik. "I think solutions for heart failure patients with preserved ejection fraction, or reduced ejection fraction, so HFpEF and HFrEf, those two areas are of great interest to the corporate world and therefore technologies that can address these are going to be very important," he added.

Cardiovascular diseases are the leading causes of death worldwide, killing an estimated 17.9 million people each year. Devices play a vital role in saving or prolonging the lives of patients, especially with an increasingly aging population. Therefore, the companies which develop such technologies are attractive to investors.

"Cardiology remains one of the most prolific and innovative sectors in the small to mid-sized companies which we follow and like a lot," said Olivier Litzka, a partner at Andera Partners.

Devices for the heart's valves, both for repair and replacement, is an area where considerable progress has been made and there is still a significant medical need, noted Litzka. "Although we are deeply involved in the minimally invasive replacement of three cardiac valves – tricuspid with Tricares SAS, mitral from Highlife Medical SAS and aortic through Jenavalve Technologies Inc. – we are still looking at many other technologies in the space, in particular next generation repair devices," he said.

Companies with devices to treat heart failure are also of interest to Andera which has recently invested in two such companies, Fire 1 Ltd. and Kestra Medical, and the VC fund continues to look at other opportunities. "Heart failure is unfortunately a massive medical problem and lots of good innovations try to address different parts of the problem," said Litzka.

Last year, several companies were acquired by large corporates looking to build or bolster their cardiology portfolio. Johnson & Johnson acquired Shockwave Medical Inc. for $13 billion (https://www.bioworld.com/articles/707324-j-and-j-paces-interventional-cardio-market-with-13b-shockwave-buy) and also took out V-Wave Ltd for $1.7 billion (https://www.bioworld.com/articles/711744-j-and-j-pumps-up-cardiac-commitment-with-17b-v-wave-acquisition). Additionally, Edwards Lifesciences Corp.'s purchased Jenavalve Technology Inc. and Endotronix Inc.

(https://www.bioworld.com/articles/710447-edwards-pumps-up-to-165b-into-m-and-a-with-jenavalve-and-endotronix-deals) for a total of $1.65 billion, and paid $300 million for Innovalve Bio Medical Ltd. (https://www.bioworld.com/articles/710286-edwards-buying-innovalve-bio-medical-for-300m)

Ongoing heart-related interest

For med-tech companies in Europe developing devices to treat heart-related and blood vessel conditions, corporates' appetite for deals looks set to continue and the cardiology space will remain active to investors.

Echoing his peers, Janke Dittmer, a general partner at Gilde Healthcare sees strong interest in cardiovascular innovations, particularly in heart failure and structural heart, which pose an increasingly large burden for patients and society overall despite recent pharmacological advancements. Ideally, minimally invasive transcatheter solutions are particularly compelling, especially when preventing recurrent hospital visits and improving survival.

For Matthias Guth, a partner at MIG Capital, "the pressure for med-tech innovation in the cardiovascular space is high. This is largely driven by a high medical need in an area where not many drugs have been effective." MIG Capital recently invested in Coremedic GmbH which is developing the Chordart system to treat mitral valve regurgitation.

Christopher Shen, a partner at Novo Holdings, argued that companies developing devices to treat cardiovascular conditions, tick all the boxes for investors. Their solutions meet an ongoing clinical need, and the companies could also be listed on public markets and become acquisition targets.

Besides the heart

Although cardiovascular dominates investors' interest there are a number of other areas in med-tech which hold great appeal. For example, urology is attracting attention, especially with advancements in minimally invasive treatments for benign prostatic hyperplasia and urinary incontinence. Ophthalmology is also creating opportunities with solutions to treat glaucoma.

The neuromodulation space is another area of interest. Andera continuously puts a "strong emphasis" on investing in this sector having been successful with Axonics Inc. and Sapiens Steering Brain Stimulation, noted Litzka. The VC fund is currently invested in Nyxoah SA, which has developed an obstructive sleep apnea technology, and sees solutions for back pain and migraine as two very promising areas.

Shen also sees neuromodulation as exciting for med-tech companies. "There's real opportunity there and some really unique technologies that we think could be very transformative. In addition, historically, anything that's been 'neuromodulatory,' these kinds of devices, have tended to have some of the highest gross margins in the industry, almost like pharmaceutical gross margins."

Investors also see significant progress in neurovascular and stroke interventions, with improved clot retrieval, imaging and AI-driven procedural support for advancing outcomes. Neurostimulation and bioelectronic medicine continue to gain traction, particularly for conditions with limited pharmaceutical options.

Surgical robotics

Beyond these areas, robotics and AI in surgery remain highly active areas, with many European startups developing cost-effective solutions that could challenge larger incumbents. For example, CMR Surgical Ltd. (https://www.bioworld.com/articles/711942-cmr-surgical-looks-to-transform-the-surgical-robotics-

market), Moon Surgical SAS (https://www.bioworld.com/articles/708962-moon-surgical-gets-fda-clearance-for-surgical-robotic-system), Medical Microinstruments Inc. (https://www.bioworld.com/articles/706155-mmi-raises-110m-for-microsurgical-robot-expansion) (MMI), Distalmotion SA (https://www.bioworld.com/articles/502069-distalmotion-wins-ce-mark-for-surgical-robot), Quantum Surgical SAS (https://www.bioworld.com/articles/696999-quantum-surgical-awarded-fda-clearance-for-abdominal-cancer-robot) and Robocath SAS (https://www.bioworld.com/articles/697237-robocath-launches-robotic-platform-for-cardiology-as-siemens-drops-business), have all developed surgical robots on the back of the success of Intuitive Surgical Inc.'s Da Vinci robotic system.

Alessio Beverina, co-founder and managing partner at Panakes, sees huge opportunities for these companies. Not only are these robotics systems smaller than the Da Vinci robot, but they can also be deployed to treat different conditions, he said.

Indeed, although Da Vinci dominates the surgical robotics market, its biggest impact has been in urology. Furthermore, the large size of the robotic platform and cost of up to $2.5 million per unit, means that there are opportunities for more agile systems with modular designs.

Panakes is an investor in MMI. "If you look at the market, Intuitive Surgical has less than 10% of the surgeries in laparoscopy, so there is 90% of the market available. Furthermore, Da Vinci is used, most of the time, for procedures that last more than 45-50 minutes and the system is large. If you have a solution which is easier to install in the operating room, is much easier to use, and less costly than there is a huge market opportunity."

Andera also invested in MMI, and the VC firm is looking at further opportunities in the robotic space, said Litzka. However, "we place a lot of weight in truly differentiated innovation and solutions, we avoid me-too-better developments," he added.

Women's health

Elsewhere, solutions for women's health are an evolving area of interest. Papiernik reckons that investment in devices to address women's health is long overdue. "For some reason, there has always been a wariness about women's health. They say it's complicated. We're talking about 50% of the world population," he said.

There are many conditions that only impact women, some which disproportionately impact them and there are other conditions and diseases that affect women in different ways than men. However, decades of research have excluded women from clinical trials and investment has been slow to flow towards women's health.

Sofinnova is investing in May Health SAS, which is developing the Ovarian Rebalancing therapy to treat polycystic ovary syndrome that affects 10% of women.

With the health of half the world's population underserved, Papiernik noted that solutions are needed, and the focus should not be on how complicated or difficult solutions are, but attention should also be paid to the market opportunity.

New areas of interest for diagnostic

Another trend developing this year and into the future are solutions for early diagnostics. "Today, what I find most exciting for the med-tech sector is that new drug approvals create a greater need for early diagnosis," said Hubert Birner, managing partner at TVM Capital. "Now we are seeing better diagnostics re-

sulting in more patients being able to access new effective therapies. A sort of self-fulfilling prophecy for the pharma industry, this is a good trend for both drug developers and med-tech innovators."

With drugs such as Leqembi and Kisunla gaining U.S. FDA approval to treat devastating neurological conditions such as Alzheimer's disease, companies developing diagnostic methods are seeing an increasing level of demand for their technology. For example, Zurich, Switzerland-based Positrigo AG is developing a brain positron emission tomography system which helps to diagnose Alzheimer's disease.

A range of med-tech tools and diagnostic tests are being developed to detect diseases earlier. The use of algorithms and AI-based tools are being used for cancer detection from images, while blood tests are also used to identify certain biomarkers for targeted therapies.

AI, data and beyond

The adoption and use of AI is certainly changing health care. AI is not only increasingly being integrated into medical devices, but has been applied to diagnostic tools to improve their precision. There are an increasing number of AI-based solutions being used in pathology and radiology to help with diagnostic accuracy and speed.

AI developed to be integrated with technological solutions to help hospital management and workflow optimization will attract attention this year given the growing need to make hospitals more cost efficient, said Birner.

"Some of these technologies will help with patient documentation, patient workflow and sharing of information," noted Birner. TVM has Smart Reporting GmbH in its portfolio, which is medical reporting software that automates and streamlines physicians' workload. "It saves basically 35% of the time of radiologists analyzing radiographs and that is a massive time and cost improvement because the radiologist is the most expensive doctor in the hospital," said Birner.

Guth argued that devices not only have to help treat patients but also bring economic benefits to health care systems. "The challenge is to develop therapies that are less costly for healthcare systems because they are under increasing budget pressure, a trend we continue to see. Therefore, treatments that improve patient outcomes while saving costs for the health care system, are attractive and a nice investment case."