Revacept – an innovative vascular plaster proved in coronary heart disease

The novel drug Revacept can reduce heart attacks and strokes more efficient and safer than previous standard therapies. This is the result of a study in an investigator initiated study in patients carried out with the German Center for Heart and Circulation Research (DZHK). The study was recently published in *JAMA Cardiology*. With Revacept severe complications such as heart attacks and stroke in combination with bleedings were rarer than with the standard therapy Aspirin and Clopidogrel in patients with coronary artery disease.

Revacept seals the lesion in a blood vessel like a plaster. It acts locally at the ruptured plaque instead of involving the complete organism, as is the case for all established drugs. The innovative principle was invented and developed by a team of scientists around the Bavarian biotech company advanceCOR.

The study was carried out under the auspices of Professor Adnan Kastrati, German Heart Center Munich and Prof. Steffen Massberg, Ludwig-Maximilians-University Munich. Nine University hospitals in Germany included overall 334 patients from November 2017 until April 2020. The study was funded by the DZHK and the PATTIS program for individualized medicine of the German Ministry for Education and Science.

All patients received the current standard therapy with Aspirin and Clopidogrel to prevent vessel occlusions. In a random distribution three groups received a further substance as onetime infusion: either placebo or 80 or 160 milligram Revacept respectively. In the catheter lab the physicians removed the stenosis of the coronary artery and placed stents to allow unhampered blood flow. All patients were followed-up for 30 days.

During the observation period only few severe complications occurred: 29 patients in all three groups together. Serious events such as heart attack or stroke caused by thromboses were similar in all groups. Bleedings were up to 40 percent reduced after Revacept compared to the placebo-group with regular standard therapy.

Prof. Götz Münch, CEO of advanceCOR, summarizes: " This is remarkable because patients were already maximally treated with standard platelet inhibitors. And there was an additional effect of Revacept on platelet inhibition. Bleedings are the most common problem in cardiac catheter interventions and the most relevant complication for the further prognosis of these patients. Even when the primary endpoint of the study was not reached this result is very convincing.

The new study not only confirmed the safe use of Revacept, but also leads to a remarkable added use of the novel compound for the targeted reduction of thrombosis and bleedings says the lead investigator of the study, Professor Adnan Kastrati. "Revacept should be investigated in high-risk patients — where the additional effect should be even higher." Professor Steffen Massberg further explains: "We think that patients with acute coronary syndrome — with high risk for thrombosis and emergency admission without premedication - will benefit most from Revacept." Into this direction point also previous studies, amongst others the phase-II-study with patients with stroke and stenosis of the carotid artery (Revacept CS/02, Eudra-CT 2011-00100610). The importance of Revacept as plaque-specific platelet

inhibitor without bleeding risk was also emphasized in a review article by independent experts in the field.

After positive results from this and other recent studies our company aims to collaborate with a larger pharma company to carry out a phase-III study together, says Götz Münch, cardiologist and CEO of advanceCOR. We want to show the efficacy of Revacept for the prevention of strokes in a larger patient population with carotid stenosis: "We are currently contacting potential partners and hope to offer this unique principle to patients combining anti thrombotic potency and reduction of bleedings."

Links

recent study in JAMA Cardiology:

https://jamanetwork.com/journals/jamacardiology/article-abstract/2777812

Phase-II-Studie 2020 in stroke patients:

https://clinicaltrials.gov/ct2/show/NCT01645306?term=Revacept&draw=2&rank=2

review article 2019:

https://pubmed.ncbi.nlm.nih.gov/30760019/

About Revacept

Revacept is the soluble form of the GPVI receptor, which prevents the local activation of platelets at sites of vascular injury, acting like a "vascular coating". Efficacy studies showed that Revacept resulted in significantly reduced thrombus formation at these sites. However, systemic haemostasis is not affected.

In a study completed in patients with carotid artery stenosis and recent ischemic stroke, Revacept also significantly reduced the combined clinical events of MACE and bleedings. Revacept is the first anti-thrombotic drug that reduced both ischemic complications and bleedings.

About advanceCOR GmbH

advanceCOR GmbH is a biotechnology company for the personalized treatment of cardiac diseases located in Martinsried near Munich, Germany. advanceCOR owns several clinical and preclinical projects generated from its own scientific program or from the university groups of the company's founders.

www.advancecor.com