# New drug for metastatic prostate cancer now also approved in Europe

**On December 13, 2022, the European Commission granted approval to a drug against metastatic prostate cancer whose active ingredient was developed under the leadership of the German Cancer Research Center (DKFZ) in collaboration with Heidelberg University Hospital and Heidelberg University. The drug can significantly improve the survival chances of patients. The patented invention on which the drug is based is an outstanding example of the transfer of excellent research results into clinical application, says DKFZ board member Michael Baumann.**

The drug, which is based on the active ingredient Lutetium-177 PSMA-617, was approved by the European Commission on Dec. 13, 2022, for the treatment of metastatic prostate cancer carrying the surface molecule PSMA (prostate specific membrane antigen). The drug had already received FDA approval for the United States in March of this year. The approval is limited to patients who had previously received chemotherapy and who do not respond to hormone withdrawal. The authorization holder is Novartis.

Federal Minister of Research Bettina Stark-Watzinger comments:
"Through excellent and interdisciplinary research, scientists at DKFZ, the University Hospital and the University of Heidelberg have succeeded in developing a new active substance against prostate cancer. This is a great success for German cancer research, which will hopefully help many patients. It is an example of the enormous potential of our research landscape. Here, the rapid and successful transfer of research results into practice is the key to a better future."

"Men with advanced prostate cancer currently have hardly any promising treatment options. The fact that these patients can now finally benefit from Lutetium-177 PSMA-617 in Germany is a great success for the DKFZ. Our mission is to provide knowledge and solutions for clinical practice through excellent basic research. With the invention of Lutetium-177 PSMA-617, our scientists have succeeded in providing an outstanding example of this transfer," says Michael Baumann, Chairman of the Board of Management of DKFZ.

"The inventors recognized the clinical potential of the compound and targeted preclinical development. We secured the rights early on and looked for partners in the pharmaceutical industry who would take over the further development into a drug. This consistent focus on transfer is now paying off - above all for the patients concerned," says Ursula Weyrich, Administrative Director of DKFZ.

Lutetium-177 PSMA 617, invented and patented by DKFZ, the University of Heidelberg and Heidelberg University Hospital, was first brought into clinical trials by ABX GmbH in Radeberg and then developed by Novartis until it was approved. The approvals in the U.S. and the EU are an important collaborative contribution of the aforementioned partners in the fight against cancer. Additional clinical trials are already underway to determine whether Lutetium-177 PSMA-617 provides a survival benefit to patients with metastatic prostate cancer who have not previously received chemotherapy.

With 70,000 new cases/year, prostate cancer is the most common cancer and the second most common cause of cancer death among men in Germany. If the tumor is still confined to the prostate gland at diagnosis, the probability of surviving the first five years after diagnosis is almost 100 percent, whereas for metastasized tumors it is only 30 percent.

Lutetium-177 PSMA-617 is a ligand coupled with radioactive Lutetium-177 that can dock precisely onto the prostate-specific membrane antigen, or PSMA for short. The majority of all prostate cancer cells carry the glycoprotein PSMA on their cell membrane, but it is rarely found in the rest of the body. The cancer cells take up the active substance into the cell interior, so that it accumulates in the tumors and delivers its lethal dose of radiation from within. This makes the effect of the therapy particularly precise and targeted.

**Press release**

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Source: German Cancer Research Center (DKFZ)

## Further information

- German Cancer Research Center (DKFZ), Heidelberg
- Heidelberg University Hospital