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MEDIA & INVESTOR RELEASE

Novartis receives positive CHMP opinion for Pluvicto® for patients with progressive, PSMA-positive metastatic castration-resistant prostate cancer

- *Phase III VISION trial showed Pluvicto® plus best standard of care significantly improved survival for patients with pre-treated PSMA-positive mCRPC[1]*

- *Approximately 473,000 prostate cancer cases and 108,000 prostate cancer-related deaths occurred across Europe in 2020[2]; Metastatic prostate cancer has a 5-year survival rate of approximately 30%[3]*

- *Two Phase III trials are underway to evaluate Pluvicto® for treatment in earlier stages of metastatic prostate cancer*

Basel, October 14, 2022 — Novartis announced today that the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) has adopted a positive opinion and recommended granting a marketing authorization for Pluvicto® (INN: lutetium (^{177}Lu) vipivotide tetraxetan) (formerly referred to as ^{177}Lu-PSMA-617), a radioligand therapy, in combination with androgen deprivation therapy (ADT) with or without androgen receptor (AR) pathway inhibition, for the treatment of adult patients with progressive prostate-specific membrane antigen (PSMA)-positive metastatic castration-resistant prostate cancer (mCRPC) who have been treated with AR pathway inhibition and taxane based chemotherapy.

“People at this advanced stage of disease have already received many different treatments and have few alternatives left,” said Prof. Karim Fizazi, MD, PhD, VISION trial investigator and Head of Medical Oncology at Gustave Roussy, first European cancer center based in Villejuif, France. “If approved in Europe, Pluvicto® would represent a new type of precision medicine targeting a biomarker broadly expressed in prostate cancer patients[4] and provide a therapeutic option with demonstrated potential to improve outcomes[1]. As a clinician this gives me hope for patients facing a very difficult situation.”

The positive CHMP opinion is based on data from the Phase III VISION study, in which Pluvicto® plus best standard of care (BSoC) demonstrated significantly improved overall survival in PSMA-positive mCRPC patients previously treated with AR pathway inhibition and taxane-based chemotherapy compared to BSoC alone[1].

Results from the VISION trial demonstrated that participants treated with Pluvicto® plus BSoC had a 38% reduction in risk of death and a 60% reduction in the risk of radiographic disease progression or death (rPFS) compared to BSoC alone[1]. In addition, approximately a third (29.8%) of patients with evaluable disease at baseline demonstrated an overall response (per RECIST 1.1) with Pluvicto® plus BSoC, compared to 1.7% in the BSoC alone arm[1]. The most common adverse events (all grades) in the Pluvicto® arm of the study were fatigue (43%), dry mouth (39%), nausea (35%), anemia (low red blood cell counts) (32%), decreased appetite (21%), and constipation (20%)[1].

“This positive CHMP opinion for Pluvicto® is an important step forward in our goal of bringing transformative innovation to more patients around the world,” said Marie-France Tschudin, President, Innovative Medicines International & Chief Commercial Officer, Novartis. “If approved by the European Commission, Pluvicto® would be the first and only commercial radioligand therapy for people with advanced prostate cancer in Europe. We are committed to exploring the potential of radioligand therapy to address unmet needs in prostate cancer, including in earlier stages of disease.”

The CHMP’s positive opinion on Pluvicto® in PSMA–positive mCRPC patients will be referred to the European Commission (EC), which will deliver a final decision in approximately two months. The decision will be applicable to all 27 EU member states plus Iceland, Norway, Northern Ireland and Liechtenstein.

About Pluvicto® (lutetium (^{177}Lu) vipivotide tetraxetan)
Despite advances in prostate cancer care, there is a high unmet need for new targeted treatment options to improve outcomes for patients with mCRPC[1]. Pluvicto® is a radioligand therapy combining a targeting compound (ligand, in this case directed to PSMA) with a therapeutic radioisotope (a radioactive particle, in this case lutetium-177)[1]. Pluvicto® delivers radiation to PSMA-positive cells and the surrounding microenvironment[1]. Pluvicto® was approved by the FDA in March 2022.

Two additional Phase III trials in earlier lines of treatment for metastatic prostate cancer are ongoing, investigating potential clinical utility in the mCRPC pre-taxane setting (PSMAfore)[11] and in the metastatic hormone-sensitive setting (PSMAddition)[12]. Novartis is also evaluating opportunities to investigate Pluvicto® radioligand therapy in earlier stages of prostate cancer.

About VISION
VISION is an international, prospective, randomized, open-label, multicenter, phase III study that assessed the efficacy and safety of Pluvicto® (lutetium (^{177}Lu) vipivotide tetraxetan) (7.4 GBq administered by IV infusion every 6 weeks for a maximum of 6 cycles) plus investigator-chosen standard of care (BSoC) in the investigational arm, versus BSoC in the control arm[1]. Patients with PSMA PET-scan positive mCRPC who have received androgen receptor (AR) pathway inhibition and taxane-based chemotherapy, were randomized in a 2:1 ratio in favor of the investigational arm[1]. The alternate primary endpoints were rPFS and OS[1]. The study enrolled 831 patients[1].

Novartis and Prostate Cancer
With more 1.4 million new cases and 375,000 deaths in 2020 alone, prostate cancer is the most frequently diagnosed cancer in 112 countries—more than half the world[13].

At Novartis, we are harnessing the innovation of our world-class scientists, strategic partnerships, and one of the industry’s most competitive pipelines to explore the potential of new, targeted therapies and precision medicine platforms to address the greatest unmet needs in prostate cancer.

Through the bold science of targeted therapies, our goal is to reduce the global disease burden, extend the lives of patients with prostate cancer, and elevate current standards of care.

About Phenotypic Precision Medicine in advanced prostate cancer
More than 80% of patients with prostate cancer highly express a phenotypic biomarker[4] called prostate-specific membrane antigen (PSMA)[4-8], making it a promising diagnostic (through positron emission tomography (PET) scan imaging) and therapeutic target for radioligand therapy[9]. This differs from ‘genotypic’ precision medicine which targets specific genetic alterations in cancer cells[10].

Disclaimer

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About Novartis

Novartis is reimagining medicine to improve and extend people’s lives. As a leading global medicines company, we use innovative science and digital technologies to create transformative treatments in areas of great medical need. In our quest to find new medicines, we consistently rank among the world’s top companies investing in research and development. Novartis products reach nearly 800 million people globally and we are finding innovative ways to expand access to our latest treatments. About 108,000 people of more than 140 nationalities work at Novartis around the world. Find out more at https://www.novartis.com.

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