

Pfizer's TALZENNA® in Combination with XTANDI® Receives U.S. FDA Approval

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- *TALZENNA is first and only PARP inhibitor approved for use with an existing standard of care (XTANDI) for adult patients with homologous recombination repair (HRR) gene-mutated metastatic castration resistant prostate cancer (mCRPC)*

NEW YORK--(BUSINESS WIRE)-- Pfizer (NYSE: PFE) announced today that the U.S. Food and Drug Administration (FDA) has approved TALZENNA (talazoparib), an oral poly ADP-ribose polymerase (PARP) inhibitor, in combination with XTANDI (enzalutamide), for the treatment of adult patients with homologous recombination repair (HRR) gene-mutated metastatic castration-resistant prostate cancer (mCRPC). This approval is based on the statistically significant and clinically meaningful radiographic progression-free survival (rPFS) data from the Phase 3 TALAPRO-2 trial, which demonstrated a 55% reduction in the risk of disease progression or death in patients with mCRPC with prospectively identified HRR gene mutations (*ATM*, *ATR*, *BRCA1*, *BRCA2*, *CDK12*, *CHEK2*, *FANCA*, *MLH1*, *MRE11A*, *NBN*, *PALB2*, or *RAD51C*) treated with TALZENNA plus XTANDI vs placebo plus XTANDI (HR 0.45; 95% CI, 0.33–0.61; $p < 0.0001$).

Metastatic CRPC is a form of prostate cancer that has spread beyond the prostate gland and has progressed despite medical or surgical treatment to lower testosterone. Approximately 10-20% of patients with prostate cancer develop mCRPC within 5-7 years of diagnosis,¹ and in the U.S. in 2020, approximately 60-90 thousand of the three million cases of prostate cancer were mCRPC.² HRR gene mutations are found in approximately 25% of tumors from men with mCRPC and have been associated with aggressive disease and poor prognosis.^{3,4,5,6}

“Despite treatment advancement in metastatic castration-resistant prostate cancer, the disease can progress quickly, and many patients may only receive one line of therapy. Therefore, new first-line treatment options are needed to reduce the risk of disease progression or death. For patients with mCRPC harboring HRR genetic alterations, outcomes are even worse,” said Neeraj Agarwal, M.D., FASCO, Professor and Presidential Endowed Chair of Cancer Research at Huntsman Cancer Institute, University of Utah, and global lead investigator for TALAPRO-2. “The FDA’s approval of the talazoparib and enzalutamide combination is based on the findings from the pivotal TALAPRO-2 study, which demonstrated statistically significant and clinically meaningful reductions in the risk of progression or death among HRR gene-mutated tumors in patients with metastatic castration-resistant prostate cancer. It represents a treatment option deserving of excitement and attention.”

“Pfizer has a legacy of bringing medicines to patients with genitourinary cancers and helping improve outcomes for patients suffering from advanced prostate cancer,” said Angela Hwang, Chief Commercial Officer, President, Global Biopharmaceuticals Business, Pfizer. “As a global standard of care, XTANDI has shown efficacy in three types of prostate cancer, and the addition of TALZENNA demonstrated significant improvements in delaying or preventing radiographic progression-free survival or death in patients with this type of advanced prostate cancer. With today’s FDA approval of TALZENNA plus XTANDI, we are proud to be able to offer this potentially

practice-changing treatment to patients and add to their options in managing this aggressive disease.”

The Phase 3 TALAPRO-2 trial is a two-part, two-cohort, multicenter, randomized, double-blind, placebo-controlled study that included two patient cohorts: Cohort 1 (all-comers; n=805 and Cohort 2 (those with HRR mutations [HRRm]; n=399). The primary endpoint of the trial was rPFS, and overall survival (OS) was a key secondary endpoint. The results from the TALAPRO-2 Cohort 1 were previously reported and published in *The Lancet*. A trend in OS favoring TALZENNA plus XTANDI was also observed, though these data are immature. The final TALAPRO-2 OS data will be reported once the predefined number of survival events has been reached and, if appropriate, may be used to support a potential regulatory filing to benefit broader patient populations. The final OS data is expected in 2024.

The safety of TALZENNA plus XTANDI in the TALAPRO-2 trial was generally consistent with the known safety profile of each medicine. Serious adverse reactions (ARs) occurred in 30% of patients treated with TALZENNA plus XTANDI. Serious adverse reactions reported in >2% of patients included anemia (9%) and fracture (3%). Discontinuation of TALZENNA occurred in 10% of patients.

A marketing authorization application (MAA) for the TALZENNA and XTANDI combination has been accepted for review by the European Medicines Agency. Pfizer has also shared data with other regulatory agencies to support regulatory filings.

About TALZENNA® (talazoparib)

TALZENNA (talazoparib) is an oral inhibitor of poly ADP-ribose polymerase (PARP), which plays a role in DNA damage repair. Preclinical studies have demonstrated that TALZENNA blocks PARP enzyme activity and traps PARP at the site of DNA damage, leading to decreased cancer cell growth and cancer cell death.

TALZENNA is approved in over 70 countries, including the U.S., as a once-daily monotherapy for the treatment of adult patients with deleterious or suspected deleterious germline breast cancer susceptibility gene (BRCA)-mutated (gBRCAm) human epidermal growth factor receptor 2 (HER2)-negative locally advanced or metastatic breast cancer. In the U.S., TALZENNA is now approved in combination with XTANDI® (enzalutamide) for the treatment of adult patients with homologous recombination repair (HRR) gene-mutated metastatic castration-resistant prostate cancer (mCRPC).

TALZENNA® (talazoparib) Indication in the U.S.

TALZENNA (talazoparib) is indicated for the treatment of adult patients with deleterious or suspected deleterious germline breast cancer susceptibility gene (BRCA)-mutated (gBRCAm) human epidermal growth factor receptor 2 (HER2)-negative locally advanced or metastatic breast cancer. Select patients for therapy based on an FDA-approved companion diagnostic for TALZENNA. TALZENNA is indicated in combination with enzalutamide for the treatment of adult patients with homologous recombination repair (HRR) gene-mutated metastatic castration-resistant prostate cancer (mCRPC).

TALZENNA® (talazoparib) Important Safety Information

WARNINGS and PRECAUTIONS

Myelodysplastic Syndrome/Acute Myeloid Leukemia (MDS/AML), including cases with a fatal outcome, has been reported in patients who received TALZENNA. Overall, MDS/AML has been reported in 0.4% (3 out of 788) of solid tumor patients treated with TALZENNA as a single agent in clinical studies. In TALAPRO-2, MDS/AML occurred in 2 out of 511 (0.4%) patients treated with TALZENNA and enzalutamide and in 0 out of

517 (0%) patients treated with placebo and enzalutamide. The durations of TALZENNA treatment in these five patients prior to developing MDS/AML were 0.3, 1, 2, 3, and 5 years, respectively. Most of these patients had received previous chemotherapy with platinum agents and/or other DNA damaging agents including radiotherapy.

Do not start TALZENNA until patients have adequately recovered from hematological toxicity caused by previous chemotherapy. Monitor blood counts monthly during treatment with TALZENNA. For prolonged hematological toxicities, interrupt TALZENNA and monitor blood counts weekly until recovery. If counts do not recover within 4 weeks, refer the patient to a hematologist for further investigations including bone marrow analysis and blood sample for cytogenetics. If MDS/AML is confirmed, discontinue TALZENNA.

Myelosuppression consisting of anemia, neutropenia, and/or thrombocytopenia have been reported in patients treated with TALZENNA. In TALAPRO-2, Grade ≥3 anemia, neutropenia, and thrombocytopenia were reported, respectively, in 45%, 18%, and 8% of patients receiving TALZENNA and enzalutamide. Overall, 39% of patients (199/511) required a red blood cell transfusion, including 22% (111/511) who required multiple transfusions. Discontinuation due to anemia, neutropenia, and thrombocytopenia occurred, respectively, in 7%, 3%, and 0.4% of patients.

Withhold TALZENNA until patients have adequately recovered from hematological toxicity caused by previous therapy. Monitor blood counts monthly during treatment with TALZENNA. If hematological toxicities do not resolve within 28 days, discontinue TALZENNA and refer the patient to a hematologist for further investigations including bone marrow analysis and blood sample for cytogenetics.

Embryo-Fetal Toxicity TALZENNA can cause fetal harm when administered to pregnant women. Advise male patients with female partners of reproductive potential or who are pregnant to use effective contraception during treatment with TALZENNA and for 4 months after receiving the last dose.

ADVERSE REACTIONS

Serious adverse reactions reported in >2% of patients included anemia (9%) and fracture (3%). Fatal adverse reactions occurred in 1.5% of patients, including pneumonia, COVID infection, and sepsis (1 patient each).

The most common adverse reactions (≥ 10%, all Grades), including laboratory abnormalities, for patients in the TALAPRO-2 study who received TALZENNA in combination with enzalutamide vs patients receiving placebo with enzalutamide were hemoglobin decreased (79% vs 34%), neutrophils decreased (60% vs 18%), lymphocytes decreased (58% vs 36%), fatigue (49% vs 40%), platelets decreased (45% vs 8%), calcium decreased (25% vs 11%), nausea (21% vs 17%), decreased appetite (20% vs 14%), sodium decreased (22% vs 20%), phosphate decreased (17% vs 13%), fractures (14% vs 10%), magnesium decreased (14% vs 12%), dizziness (13% vs 9%), bilirubin increased (11% vs 7%), potassium decreased (11% vs 7%), and dysgeusia (10% vs 4.5%).

Clinically relevant adverse reactions in <10% of patients who received TALZENNA with enzalutamide included abdominal pain (9%), vomiting (9%), alopecia (7%), dyspepsia (4%), venous thromboembolism (3%) and stomatitis (2%).

Based on animal studies, TALZENNA may impair fertility in males of reproductive potential.

DRUG INTERACTIONS

Coadministration with P-gp inhibitors The effect of coadministration of P-gp inhibitors on talazoparib exposure when TALZENNA is taken in combination with enzalutamide has not been studied. Monitor patients for increased adverse reactions and modify the dosage as recommended for adverse reactions when TALZENNA is coadministered with a P-gp inhibitor.

Coadministration with BCRP inhibitors Monitor patients for increased adverse reactions and modify the dosage as recommended for adverse reactions when TALZENNA is coadministered with a BCRP inhibitor. Coadministration of TALZENNA with BCRP inhibitors may increase talazoparib exposure, which may increase the risk of adverse reactions.

USE IN SPECIFIC POPULATIONS

Renal Impairment The recommended dosage of TALZENNA for patients with moderate renal impairment (CL_{Cr} 30 - 59 mL/min) is 0.35 mg taken orally once daily in combination with enzalutamide. The recommended dosage of TALZENNA for patients with severe renal impairment (CL_{Cr} 15 - 29 mL/min) is 0.25 mg taken orally once daily in combination with enzalutamide. No dose adjustment is required for patients with mild renal impairment. TALZENNA has not been studied in patients requiring hemodialysis.

Please see full U.S. Prescribing Information and Patient Information for TALZENNA[®] (talazoparib) at www.TALZENNA.com. There may be a delay as the document is updated with the latest information. It will be available as soon as possible. Please check back for the updated full information shortly.

About XTANDI[®] (enzalutamide) and Important Safety Information

XTANDI (enzalutamide) is an androgen receptor signaling inhibitor. XTANDI is a standard of care that has received regulatory approvals for use in men with metastatic hormone-sensitive prostate cancer (mHSPC), metastatic castration-resistant prostate cancer (mCRPC), and non-metastatic castration-resistant prostate cancer (nmCRPC) in the United States and for one or more of these indications in more than 100 countries, including the European Union and Japan. More than one million patients have been treated with XTANDI globally.⁷

Warnings and Precautions

Seizure occurred in 0.5% of patients receiving XTANDI in seven randomized clinical trials. In a study of patients with predisposing factors for seizure, 2.2% of XTANDI-treated patients experienced a seizure. It is unknown whether anti-epileptic medications will prevent seizures with XTANDI. Patients in the study had one or more of the following predisposing factors: use of medications that may lower the seizure threshold, history of traumatic brain or head injury, history of cerebrovascular accident or transient ischemic attack, and Alzheimer's disease, meningioma, or leptomeningeal disease from prostate cancer, unexplained loss of consciousness within the last 12 months, history of seizure, presence of a space occupying lesion of the brain, history of arteriovenous malformation, or history of brain infection. Advise patients of the risk of developing a seizure while taking XTANDI and of engaging in any activity where sudden loss of consciousness could cause serious harm to themselves or others. Permanently discontinue XTANDI in patients who develop a seizure during treatment.

Posterior Reversible Encephalopathy Syndrome (PRES): There have been reports of PRES in patients receiving XTANDI. PRES is a neurological disorder that can present with rapidly evolving symptoms including seizure, headache, lethargy, confusion, blindness, and other visual and neurological disturbances, with or without associated hypertension. A diagnosis of PRES requires confirmation by brain imaging, preferably MRI. Discontinue XTANDI in patients who develop PRES.

Hypersensitivity reactions, including edema of the face (0.5%), tongue (0.1%), or lip (0.1%) have been observed with XTANDI in seven randomized clinical trials. Pharyngeal edema has been reported in post-marketing cases. Advise patients who experience any symptoms of hypersensitivity to temporarily discontinue XTANDI and promptly seek medical care. Permanently discontinue XTANDI for serious hypersensitivity reactions.

Ischemic Heart Disease: In the combined data of four randomized, placebo-controlled clinical studies, ischemic heart disease occurred more commonly in patients on the XTANDI arm compared to patients on the placebo arm (2.9% vs 1.3%). Grade 3–4 ischemic events occurred in 1.4% of patients on XTANDI versus 0.7% on placebo. Ischemic events led to death in 0.4% of patients on XTANDI compared to 0.1% on placebo. Monitor for signs and symptoms of ischemic heart disease. Optimize management of cardiovascular risk factors, such as hypertension, diabetes, or dyslipidemia. Discontinue XTANDI for Grade 3–4 ischemic heart disease.

Falls and Fractures occurred in patients receiving XTANDI. Evaluate patients for fracture and fall risk. Monitor and manage patients at risk for fractures according to established treatment guidelines and consider use of bone-targeted agents. In the combined data of four randomized, placebo-controlled clinical studies, falls occurred in 11% of patients treated with XTANDI compared to 4% of patients treated with placebo. Fractures occurred in 10% of patients treated with XTANDI and in 4% of patients treated with placebo.

Embryo-Fetal Toxicity: The safety and efficacy of XTANDI have not been established in females. XTANDI can cause fetal harm and loss of pregnancy when administered to a pregnant female. Advise males with female partners of reproductive potential to use effective contraception during treatment with XTANDI and for 3 months after the last dose of XTANDI.

Adverse Reactions (ARs)

In the data from the four randomized placebo-controlled trials, the most common ARs (? 10%) that occurred more frequently (? 2% over placebo) in XTANDI-treated patients were asthenia/fatigue, back pain, hot flush, constipation, arthralgia, decreased appetite, diarrhea, and hypertension. In the bicalutamide-controlled study, the most common ARs (? 10%) reported in XTANDI-treated patients were asthenia/fatigue, back pain, musculoskeletal pain, hot flush, hypertension, nausea, constipation, diarrhea, upper respiratory tract infection, and weight loss.

In AFFIRM, the placebo-controlled study of metastatic CRPC (mCRPC) patients who previously received docetaxel, Grade 3 and higher ARs were reported among 47% of XTANDI-treated patients. Discontinuations due to adverse events (AEs) were reported for 16% of XTANDI-treated patients. In PREVAIL, the placebo-controlled study of chemotherapy-naïve mCRPC patients, Grade 3–4 ARs were reported in 44% of XTANDI patients and 37% of placebo patients. Discontinuations due to AEs were reported for 6% of XTANDI-treated patients. In TERRAIN, the bicalutamide-controlled study of chemotherapy-naïve mCRPC patients, Grade 3–4 ARs were reported in 39% of XTANDI patients and 38% of bicalutamide patients. Discontinuations with an AE as the primary reason were reported for 8% of XTANDI patients and 6% of bicalutamide patients.

In PROSPER, the placebo-controlled study of non-metastatic CRPC (nmCRPC) patients, Grade 3 or higher ARs were reported in 31% of XTANDI patients and 23% of placebo patients. Discontinuations with an AE as the primary reason were reported for 9% of XTANDI patients and 6% of placebo patients.

In ARCHES, the placebo-controlled study of metastatic CSPC (mCSPC) patients, Grade 3 or higher AEs were reported in 24% of XTANDI-treated patients. Permanent discontinuation due to AEs as the primary reason was reported in 5% of XTANDI patients and 4% of placebo patients.

Lab Abnormalities: Lab abnormalities that occurred in ? 5% of patients, and more frequently (> 2%) in the XTANDI arm compared to placebo in the pooled, randomized, placebo-controlled studies are neutrophil count decreased, white blood cell decreased, hyperglycemia, hypermagnesemia, hyponatremia, and hypercalcemia.

Hypertension: In the combined data from four randomized placebo-controlled clinical trials, hypertension was reported in 12% of XTANDI patients and 5% of placebo patients. Hypertension led to study discontinuation in < 1% of patients in each arm.

Drug Interactions

Effect of Other Drugs on XTANDI Avoid strong CYP2C8 inhibitors, as they can increase the plasma exposure to XTANDI. If co-administration is necessary, reduce the dose of XTANDI. Avoid strong CYP3A4 inducers as they can decrease the plasma exposure to XTANDI. If co-administration is necessary, increase the dose of XTANDI.

Effect of XTANDI on Other Drugs Avoid CYP3A4, CYP2C9, and CYP2C19 substrates with a narrow therapeutic index, as XTANDI may decrease the plasma exposures of these drugs. If XTANDI is co-administered with warfarin (CYP2C9 substrate), conduct additional INR monitoring.

Please see [Full Prescribing Information](#) for additional safety information.

About Pfizer Oncology

At Pfizer Oncology, we are committed to advancing medicines wherever we believe we can make a meaningful difference in the lives of people living with cancer. Today, we have an industry-leading portfolio of 24 approved innovative cancer medicines and biosimilars across more than 30 indications, including breast, genitourinary, colorectal, blood, and lung cancers, as well as melanoma.

About the Pfizer/Astellas Collaboration

In October 2009, Medivation, Inc., which is now part of Pfizer (NYSE: PFE), and Astellas (TSE: 4503) entered into a global agreement to jointly develop and commercialize enzalutamide. The companies jointly commercialize XTANDI in the United States, and Astellas has responsibility for manufacturing and all additional regulatory filings globally, as well as commercializing XTANDI outside the United States.

Disclosure Notice

The information contained in this release is as of June 20, 2023. Pfizer assumes no obligation to update forward-looking statements contained in this release as the result of new information or future events or developments.

This release contains forward-looking information about Pfizer Oncology, TALZENNA and XTANDI, including their potential benefits, and an approval in the U.S. of TALZENNA in combination with XTANDI for the treatment of adult patients with homologous recombination repair (HRR) gene-mutated metastatic castration-resistant prostate cancer that involves substantial risks and uncertainties that could cause actual results to differ materially from those expressed or implied by such statements. Risks and uncertainties include, among other things, uncertainties regarding the commercial success of TALZENNA in combination with XTANDI; the uncertainties inherent in research and development, including the ability to meet anticipated clinical endpoints, commencement and/or completion dates for our clinical trials, regulatory submission dates, regulatory approval dates and/or launch dates, as well as the possibility of unfavorable new clinical data and further analyses of existing clinical data; whether TALAPRO-2 trial will meet the secondary endpoint for overall survival; the risk

that clinical trial data are subject to differing interpretations and assessments by regulatory authorities; whether regulatory authorities will be satisfied with the design of and results from our clinical studies; whether and when applications for TALZENNA, XTANDI or a combination may be filed in any jurisdictions for the new indication or for any other potential indications; whether and when any such applications for TALZENNA, XTANDI or a combination that may be pending or filed (including the application pending with the European Medicines Agency) may be approved by regulatory authorities, which will depend on myriad factors, including making a determination as to whether the product's benefits outweigh its known risks and determination of the product's efficacy and, if approved, whether TALZENNA, XTANDI or a combination will be commercially successful; decisions by regulatory authorities impacting labeling, manufacturing processes, safety and/or other matters that could affect the availability or commercial potential of TALZENNA, XTANDI or a combination; uncertainties regarding the impact of COVID-19 on our business, operations and financial results; and competitive developments.

A further description of risks and uncertainties can be found in Pfizer's Annual Report on Form 10-K for the fiscal year ended December 31, 2022 and in its subsequent reports on Form 10-Q, including in the sections thereof captioned "Risk Factors" and "Forward-Looking Information and Factors That May Affect Future Results", as well as in its subsequent reports on Form 8-K, all of which are filed with the U.S. Securities and Exchange Commission and available at www.sec.gov and www.pfizer.com.

¹ Kirby M, et al. *Int J Clin Pract*. 2011;11:1180-1192.

² Scher HI, et al. *PLoSOne*. 2015;10:e0139440.

³ Furlow B. NCCN: More Genetic Testing to Inform Prostate Cancer Management. *Cancer Network*. 2019. <https://www.cancernetwork.com/nccn/nccn-more-genetic-testing-inform-prostate-cancer-management>

⁴ Robinson D, et al. Integrative Clinical Genomics of Advanced Prostate Cancer. *Cell*. 2015;162(2) : 454. <https://doi.org/10.1016/j.cell.2015.06.053>

⁵ Pritchard C, et al.. Inherited DNA-Repair Gene Mutations in Men with Metastatic Prostate Cancer. *The New England Journal of Medicine*. 2016;375(5):443–453. <https://doi.org/10.1056/NEJMoa1603144>

⁶ Prospective Comprehensive Genomic Profiling of Primary and Metastatic Prostate Tumors. Chung JH, Dewal N, Sokol E, Mathew P, Whitehead R, Millis SZ, Frampton GM, Bratslavsky G, Pal SK, Lee RJ, Necchi A, Gregg JP, Lara P Jr, Antonarakis ES, Miller VA, Ross JS, Ali SM, Agarwal N. *JCO Precis Oncol*. 2019;3:PO.18.00283. doi: 10.1200/PO.18.00283. Epub 2019 May 10.

⁷ Data on file. Northbrook, IL: Astellas Inc.

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