JULY 2023

TACOS ONCOLOGY DRUG NEWSLETTER

The Arizona Clinical Oncology Society

FDA APPROVALS

Flotufolastat F 18 injection (Posluma)

The FDA has granted approval for the flotufolastat F 18 injection (Posluma; formerly 18F-rhPSMA-7.3) for PET of prostate-specific membrane antigen–positive lesions in patients with prostate cancer with suspected metastasis who are eligible for initial definitive therapy or in those with suspected recurrence based on elevated serum prostate-specific antigen level.[1]

In the phase 3 LIGHTHOUSE (NCT04186819)[2] and SPOTLIGHT (NCT04186845)[3] trials, the flotufolastat F 18 injection demonstrated an ability to detect distant metastatic lesions and showed a clinically meaningful correct detection rate, increasing upstaging of disease in recurrent prostate cancer. The correct detection rate was between 45% and 47%, which defines the percentage of patients scanned with at least 1 true positive PET finding compared with the standard of truth of histopathology or confirmatory conventional imaging.

REFERENCES

1. US FDA approves Blue Earth Diagnostics' Posluma (flotufolastat F 18 injection, first radiohybrid PSMA-targeted PET imaging agent for prostate cancer. News release. Blue Earth Diagnostics. May 30, 2023. Accessed May 30, 2023. https://tinyurl.com/355xaeu8
2. Blue Earth Diagnostics announces additional results from phase 3 LIGHTHOUSE trial of investigational PET imaging agent 18F-rhPSMA-7.3 in newly diagnosed prostate cancer. News release. Blue Earth Diagnostics. February 16, 2023. Accessed May 30, 2023. https://tinyurl.com/3dhxwb58
3. Fleming MT. Impact of 18F-rhPSMA-7.3 PET on upstaging of patients with prostate cancer recurrence: results from the prospective, phase 3, multicenter, SPOTLIGHT study. Presented at: 2022 American Urological Association Annual Meeting; May 13-16, 2022; New Orleans, LA. Abstract PLLBA-02.

Olaparib (Lynparza)

The FDA has approved olaparib (Lynparza) in combination with abiraterone acetate (Zytiga) and prednisone or prednisolone for adult patients with metastatic castration-resistant prostate cancer.[1,2]

This approval is based on findings from the phase 3 PROpel trial (NCT03732820),[3] which demonstrated that the combination reduced the risk of progression or death by 34% in this patient population compared with abiraterone alone (n = 397; HR, 0.66; 95% CI, 0.54-0.81; P < .0001).

The combination also elicited a median radiographic progression-free survival of 24.8 months vs 16.6 months with abiraterone alone. The overall survival had reached 28.6% maturity and favored the combination of olaparib and abiraterone compared with placebo (HR, 0.86; 95% CI, 0.66-1.12). Moreover, the safety and tolerability profile of the combination proved consistent with prior clinical trial data and with what is known of the individual treatments.

REFERENCES

1. FDA approves olaparib with abiraterone and prednisone (or prednisolone) for BRCA-mutated metastatic castration-resistant prostate cancer. News release. FDA. May 31, 2023. Accessed May 31, 2023. https://tinyurl.com/352x6kad
2. Lynparza in combination with abiraterone granted priority review in the US for patients with metastatic castration-resistant prostate cancer. Press release. AstraZeneca; August 16, 2022. Accessed January 23, 2023. https://bit.ly/3QFtLUM
3. Study on olaparib plus abiraterone as first-line therapy in men with metastatic castration-resistant prostate cancer. ClinicalTrials.gov. Updated April 5, 2022. Accessed August 16, 2022. https://clinicaltrials.gov/study/NCT03732820?tab=table

This content is being shared with permission from MJH Life Sciences.
All content of Targeted Oncology is independently created and owned by MJH Life Sciences.

PRIORITY REVIEW

Fruquintinib (HMPL-013)

The FDA has granted priority review of the new drug application (NDA) for fruquintinib (HMPL-013) for the treatment of adult patients with previously treated metastatic colorectal cancer (CRC).[1] Fruquintinib is a highly selective and potent inhibitor of VEGFR1, VEGFR2, and VEGFR3 that has been shown to inhibit the migration, proliferation, and survival of endothelial cells and to inhibit microvessel formation, tumor cell proliferation, and tumor cell death.

This NDA is supported by results from the FRESCO-2 study (NCT04322539),[2] which met its primary and secondary end points showing a significant and clinically meaningful improvement in overall survival (OS) and progression-free survival (PFS), respectively, and reduced the risk of death by 34% in patients with refractory mCRC, as well as data from the phase 3 FRESCO trial (NCT02314819)[3] conducted in China.

If granted approval, fruquintinib will be the first and only highly selective inhibitor of all 3 VEGF receptors to be approved in the United States for this patient population.

Additionally, the FDA has set a Prescription Drug User Fee Act goal date for the NDA of November 30, 2023. In the randomized, double-blind, placebo-controlled, phase 3 FRESCO-2 study, 691 patients with refractory mCRC from the United States, Europe, Japan, and Australia were included if they had received prior chemotherapy and anti-VEGF therapy. Patients who were *RAS* wild-type received prior anti-EGFR therapy, and those with BRAF V600E-mutant or microsatellite instability-high disease must have received 1 or more targeted regimens, as well as prior trifluridine/tipiracil (Lonsurf) and/or regorafenib (Stivarga) exposure.

The median duration of treatment in the study was 11.3 months among patients given fruquintinib and 11.2 months for those given placebo. Data showed that the median OS with fruquintinib and best supportive care (BSC) was 7.4 months compared with 4.8 months with placebo and BSC, showing a significant improvement (HR, 0.66; 95% CI, 0.55-0.80; P < .0001). For the secondary end point of PFS, the median PFS in the fruquintinib and BSC arm was 3.7 months vs 1.8 months in the placebo and BSC arm (HR, 0.32; 95% CI, 0.27-0.39; P < .001), an ORR of 1.5% vs 0%, and DCR of 55.5% vs 16.1%, respectively.

REFERENCES

1. Takeda and HUTCHMED announce new drug application (NDA) for fruquintinib for treatment of previously treated metastatic colorectal cancer granted priority review. News release. HUTCHMED. May 25, 2023. Accessed May 26, 2023. https://tinyurl.com/2ryxvzcv
2. A study of efficacy and safety of fruquintinib (HMPL-013) in patients with metastatic colorectal cancer (FRESCO-2). ClinicalTrials.gov. Updated March 29, 2023. Accessed May 26, 2023. https://clinicaltrials.gov/ct2/show/NCT04322539
3. Dasati NA, Lonardi S, Garcia-Carbonero R, et al. LBA25 FRESCO-2: A global phase III multiregional clinical trial (MRCT) evaluating the efficacy and safety of fruquintinib in patients with refractory metastatic colorectal cancer. Ann Oncol. 2022;33(suppl 7): S1391-S1392. doi:10.1016/j.annonc.2022.08.021

BIOLOGICS LICENSE APPLICATION

Lifileucel (LN-144)

The FDA has accepted the biologics license application (BLA) and granted priority review for lifileucel for patients with advanced melanoma, according to Iovance Biotherapeutics, Inc.[1] Lifileucel is a tumor-infiltrating lymphocyte therapy designed for patients with advanced melanoma who progressed on or after prior anti–PD-1/-L1 therapy and targeted therapy, where applicable.

This content is being shared with permission from MJH Life Sciences.
All content of Targeted Oncology is independently created and owned by MJH Life Sciences.

Positive data from the C-144-01 clinical trial (NCT02360579),[2] which evaluated the agent in patients with advanced melanoma who progressed on or after prior anti–PD-1/-L1 therapy and targeted therapy, were the basis of this BLA submission. In C-144-01, efficacy data from 153 patients with advanced melanoma enrolled in cohort 2 (n = 66) and cohort 4 (n = 87) were evaluated.

Lifileucel led to an overall response rate of 31.4% (95% CI, 24.1%-39.4%) with
9 complete responses and 39 partial responses, and the median duration of response was not reached at 36.5 months. A total of 42% of responses lasted 24 months or more. The median time from lifileucel infusion to best response was 1.5 months and deepened over time.

REFERENCES

1. Iovance Biotherapeutics announces U.S. food and drug administration acceptance of the biologics license application of lifileucel for the treatment of advanced melanoma. News release. Iovance Biotherapeutics Inc. May 26, 2023. Accessed May 30, 2023. https://tinyurl.com/2ku25fnv

2. Iovance Biotherapeutics announces updated clinical data for lifileucel in advanced melanoma at society for immunotherapy of cancer (SITC) annual meeting. News release. Iovance Biotherapeutics Inc. November 10, 2022. Accessed May 30, 2023. https://tinyurl.com/4yfc2h4d

FAST TRACK DESIGNATION

IMPT-314

The FDA has granted fast track designation to IMPT-314, a potential first-in-class CD19/CD20 chimeric antigen receptor (CAR) T-cell therapy for the treatment of patients with B-cell–mediated malignancies, according to ImmPACT Bio.[1] The potential indications for IMPT-314—after 2 or more lines of systemic therapy—include all patients with relapsed or refractory (R/R) aggressive B-cell lymphoma, diffuse large B-cell lymphoma (DLBCL) not otherwise specified, high-grade B-cell lymphoma, primary mediastinal B-cell lymphoma, and DLBCL arising from follicular lymphoma.

This designation is supported by promising findings from an investigator-led phase 1 study (NCT05826535)[2]

where the bispecific CD19/CD20 CAR T-cell therapy demonstrated unmatched safety and durability in patients with R/R non-Hodgkin lymphoma.

In the study, IMPT-314 yielded an objective response rate of 91%, with 73% achieving a durable complete response. With a median follow-up of 20.5 months, the median progression-free survival was 18.2 months, Additionally, there was no neurotoxicity or immune effector cell-associated neurotoxicity syndrome observed, as well as no cytokine release syndrome above grade 1.

REFERENCES

1. ImmPACT Bio granted FDA fast track designation for IMPT-314 in patients with relapsed or refractory aggressive B-cell lymphoma. News release. Impact Bio. May 15, 2023. Accessed May 16, 2023. https://prn.to/42WVzda

2. Study of IMPT-314 in R/R aggressive B-cell. ClinicalTrials.gov. Updated April 24, 2023. Accessed May 16, 2023. https://clinicaltrials.gov/ct2/show/NCT05826535

CHANGES IN LABELED INDICATIONS

Docetaxel (Taxotere)

New findings show docetaxel injections to be harmful to fetuses when administered to pregnant women.[1] Updated indications require prior verification of pregnancy status for female patients before docetaxel treatment.[1] It is advised to use effective contraception during and 2 months after the last docetaxel injection.[1]

REFERENCES

1. Drug safety-related labeling changes. US Food and Drug Administration. Revised July 5, 2023. Accessed July 11, 2023. https://bit.ly/3Daa0zO

This content is being shared with permission from MJH Life Sciences.
All content of Targeted Oncology is independently created and owned by MJH Life Sciences.