



NEWS RELEASE

Rubraca® (Rucaparib) Approved in the U.S. as Monotherapy Treatment for Patients with BRCA1/2-Mutant, Metastatic Castration-Resistant Prostate Cancer (mCRPC) Who Have Been Treated with Androgen Receptor-Directed Therapy and a Taxane-Based Chemotherapy

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Rubraca is the first PARP inhibitor approved in a prostate cancer setting

Accelerated approval based on objective response rate (ORR) and duration of response (DOR) data from the TRITON2 clinical trial

44% ORR (95% CI 31, 57) and median DOR not evaluable (95% CI 6.4, NE, range in months at data cutoff 1.7-24.0+) by blinded independent radiologic review (IRR) i

Most common Grade 3-4 adverse reaction was anemia; most common Grade 3-4 lab abnormality was decrease in hemoglobin i

BOULDER, Colo.--(BUSINESS WIRE)-- Clovis Oncology, Inc. (NASDAQ: CLVS), announced today that the U.S. Food and Drug Administration (FDA) approved Rubraca® (rucaparib) tablets for the treatment of adult patients with a deleterious BRCA mutation (germline and/or somatic)-associated metastatic castration-resistant prostate cancer (mCRPC) who have been treated with androgen receptor-directed therapy and a taxane-based chemotherapy. The FDA approved this indication under accelerated approval based on objective response rate (ORR) and duration of response (DOR) data from the multi-center, single arm TRITON2 clinical trial. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials. The TRITON3 clinical trial is expected to serve as the confirmatory study for the Rubraca accelerated approval in mCRPC. Warning and precautions include myelodysplastic syndrome (MDS), acute myeloid leukemia (AML) and embryo-fetal toxicity. Please see additional warnings and precautions and select safety information below.i

“Standard treatment options for men with mCRPC have been limited to androgen receptor-targeting therapies, taxane chemotherapy, Radium-223 and sipuleucel-T,” said Wassim Abida, M.D., Medical Oncologist, Memorial Sloan Kettering Cancer Center, and Principal Investigator for the TRITON2 study. “Rubraca is the first in a class of drugs to become newly available to patients with mCRPC who harbor a deleterious BRCA mutation. Given the level and duration of responses observed with Rubraca in men with mCRPC and these mutations, it represents an important and timely new treatment option for this patient population.”

The FDA approval for this third indication for Rubraca is based on efficacy data from patients with mCRPC and a deleterious BRCA mutation (germline and/or somatic) enrolled in the multi-center, single arm TRITON2 (NCT02952534) clinical trial. The major efficacy outcomes are confirmed ORR and DOR by modified RECIST version 1.1/PCWG3 criteria assessed by blinded independent radiologic review (IRR). Confirmed prostate-specific antigen (PSA) response rate is an additional prespecified endpoint.i,ii

Evaluable patient populations in the supplemental New Drug Application dataset included the following: 62 RECIST-evaluable patients with a BRCA (germline and/or somatic) mutation and measurable disease (IRR); 115 patients with a BRCA (germline and/or somatic) mutation and measurable or non-measurable disease; and 209 patients with HRD-positive mCRPC enrolled in TRITON2. Patients should be selected for treatment of mCRPC with Rubraca based on the presence of a deleterious BRCA mutation (germline and/or somatic).i

Efficacy outcomes and safety results are summarized below:

- 44% ORR (N=62; 95% CI 31, 57) by blinded-IRR assessment.
 - Objective response rates were similar for patients with a germline BRCA versus somatic BRCA mutation.
- Median DOR by blinded-IRR assessment was not evaluable (NE) at data cut-off.

	Rubraca (N=62)
Confirmed Objective Response Rate (95% CI) ^a	44% (31, 57)
Median DOR in months (95% CI) ^b	NE (6.4, NE)

NE = not evaluable

^aDefined per modified RECIST v1.1 criteria and with no confirmed bone progression per PCWG3.

^bThe range for the DOR was 1.7-24+ months. Fifteen of the 27 (56%) patients with a confirmed objective response had a DOR of ≥ 6 months.

Additionally, a 55% confirmed prostate specific antigen (PSA) response rate (95% CI 45, 64) was observed in an analysis of 115 patients with a deleterious BRCA mutation (germline and/or somatic) and measurable or non-measurable disease.ii

The safety evaluation of Rubraca 600 mg twice daily as monotherapy treatment is based on an analysis of 209

patients with HRD-positive mCRPC from the multi-center, single arm TRITON2 clinical study, including 115 with BRCA-mutated mCRPC. The most common adverse reactions (greater than or equal to 20% of patients; CTCAE Grade 1-4) occurring in the BRCA mutant population (n=115) were asthenia/fatigue, nausea, anemia, ALT/AST increased, decreased appetite, constipation, rash, thrombocytopenia, vomiting, and diarrhea. The most common laboratory abnormalities (greater than or equal to 35% of patients; CTCAE Grade 1-4) were increase in ALT, decrease in leukocytes, decrease in phosphate, decrease in absolute neutrophil count, decrease in hemoglobin, increase in alkaline phosphatase, increase in creatinine, increase in triglycerides, decrease in lymphocytes, decrease in platelets, and decrease in sodium.ⁱ

“The data from the TRITON2 clinical trial supporting the FDA approval of Rubraca in mCRPC have been highly consistent over time, and we are pleased that the FDA has granted an accelerated approval for Rubraca in this third indication,” said Patrick J. Mahaffy, President and CEO of Clovis Oncology. “We are proud to offer Rubraca as a new treatment option to physicians and eligible prostate cancer patients with a deleterious BRCA mutation beginning today.”

“The FDA approval of Rubraca is a significant milestone for patients with metastatic castration-resistant prostate cancer and a deleterious BRCA mutation,” said Howard Soule, Ph.D., Executive Vice President and Chief Science Officer of the Prostate Cancer Foundation. “Although new treatments for prostate cancer have been approved in recent years, most men living with advanced stages of this disease continue to face a difficult journey with few treatment options.”

About Prostate Cancer

The American Cancer Society estimates that nearly 192,000 men in the United States will be diagnosed with prostate cancer in 2020ⁱⁱⁱ, and the GLOBOCAN Cancer Fact Sheets estimated that approximately 450,000 men in Europe were diagnosed with prostate cancer in 2018.^{iv} Castration-resistant prostate cancer has a high likelihood of developing metastases. Metastatic castration-resistant prostate cancer, or mCRPC, is an incurable disease, usually associated with poor prognosis. Approximately 43,000 men in the U.S. are expected to be diagnosed with mCRPC in 2020.^v According to the American Cancer Society, the five-year survival rate for mCRPC is approximately 30 percent.^{vi} Approximately 12 percent of patients with mCRPC harbor a deleterious germline and/or somatic mutation in the genes BRCA1 and BRCA2. These molecular markers may be used to select patients for treatment with a PARP inhibitor.^{vii}

Rubraca U.S. FDA Approved Indication

Rubraca is indicated for the treatment of adult patients with a deleterious BRCA mutation (germline and/or somatic)-associated metastatic castration-resistant prostate cancer (mCRPC) who have been treated with androgen

receptor-directed therapy and a taxane-based chemotherapy.

This indication is approved under accelerated approval based on objective response rate and duration of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials.

Select Important Safety Information

Myelodysplastic Syndrome (MDS)/Acute Myeloid Leukemia (AML) has occurred in patients treated with Rubraca, and are potentially fatal adverse reactions. In 1146 treated patients, MDS/AML occurred in 20 patients (1.7%), including those in long term follow-up. Of these, 8 occurred during treatment or during the 28 day safety follow-up (0.7%). The duration of Rubraca treatment prior to the diagnosis of MDS/AML ranged from 1 month to approximately 53 months. The cases were typical of secondary MDS/cancer therapy-related AML; in all cases, patients had received previous platinum-containing regimens and/or other DNA damaging agents. In TRITON2, MDS/AML was not observed in patients with mCRPC (n=209) regardless of homologous recombination deficiency (HRD) mutation.

Do not start Rubraca until patients have recovered from hematological toxicity caused by previous chemotherapy (\leq Grade 1). Monitor complete blood counts for cytopenia at baseline and monthly thereafter for clinically significant changes during treatment. For prolonged hematological toxicities ($>$ 4 weeks), interrupt Rubraca or reduce dose and monitor blood counts weekly until recovery. If the levels have not recovered to Grade 1 or less after 4 weeks or if MDS/AML is suspected, refer the patient to a hematologist for further investigations, including bone marrow analysis and blood sample for cytogenetics. If MDS/AML is confirmed, discontinue Rubraca.

Based on findings in genetic toxicity and animal reproduction studies, advise male patients with female partners of reproductive potential or who are pregnant to use effective methods of contraception during treatment and for 3 months following last dose of Rubraca. Advise male patients not to donate sperm during therapy and for 3 months following the last dose of Rubraca.

Most common adverse reactions in TRITON2 (\geq 20%; Grade 1-4) were fatigue/asthenia (62%), nausea (52%), anemia (43%), AST/ALT elevation (33%), decreased appetite (28%), rash (27%), constipation (27%), thrombocytopenia (25%), vomiting (22%), and diarrhea (20%).

Co-administration of rucaparib can increase the systemic exposure of CYP1A2, CYP3A, CYP2C9, or CYP2C19 substrates, which may increase the risk of toxicities of these drugs. Adjust dosage of CYP1A2, CYP3A, CYP2C9, or CYP2C19 substrates, if clinically indicated. If co-administration with warfarin (a CYP2C9 substrate) cannot be avoided, consider increasing frequency of international normalized ratio (INR) monitoring.

Click here for full Prescribing Information for Rubraca.

You may also report side effects to Clovis Oncology, Inc. at 1-415-409-7220 (US toll) or 1-844-CLVS-ONC (1-844-258-7662; US toll-free).

About Accessing Rubraca

Rubraca is available in the United States through specialty pharmacies and distributors. Clovis is committed to ensuring Rubraca access for patients and offers eligible patients financial and reimbursement support through Rubraca Connections. More information about Rubraca Connections is available at **RubracaConnections.com** or by calling 1-844-779-7707 between 8 a.m. and 8 p.m. Eastern Time, Monday through Friday.

About Rubraca (rucaparib)

Rucaparib is an oral, small molecule inhibitor of PARP1, PARP2 and PARP3 being developed in multiple tumor types, including ovarian and metastatic castration-resistant prostate cancers, as monotherapy, and in combination with other anti-cancer agents. Exploratory studies in other tumor types are also underway.

About Clovis Oncology

Clovis Oncology, Inc. is a biopharmaceutical company focused on acquiring, developing and commercializing innovative anti-cancer agents in the U.S., Europe and additional international markets. Clovis Oncology targets development programs at specific subsets of cancer populations, and simultaneously develops, with partners, for those indications that require them, diagnostic tools intended to direct a compound in development to the population that is most likely to benefit from its use. Clovis Oncology is headquartered in Boulder, Colorado, with additional office locations in the U.S. and Europe. Please visit **www.clovisoncology.com** for more information.

This press release contains forward-looking statements (as defined under the Private Securities Litigation Reform Act of 1995) about the potential of Rubraca® (rucaparib) for the treatment of adult patients with deleterious BRCA mutation (germline and/or somatic)-associated metastatic castration-resistant prostate cancer (mCRPC) who have been treated with androgen receptor-directed therapy and a taxane-based chemotherapy, and reflects Clovis Oncology's current beliefs. As with any pharmaceutical product, there are substantial risks and uncertainties in the process of development and commercialization that could cause actual results to differ materially from those expressed or implied by the forward-looking statements. In particular, there are no guarantees that future study results and patient experience will be consistent with the study findings to date, that Rubraca will receive regulatory approval for any future indications, or that it will prove to be commercially successful. A further description of risks

and uncertainties can be found in Clovis Oncology's filings with the Securities and Exchange Commission, including its Annual Report on Form 10-K and its reports on Form 10-Q and Form 8-K. All forward-looking statements are based on information currently available to the company, and Clovis Oncology does not undertake to update or revise any forward-looking statements

- i Rubraca [package insert]. Boulder, CO; Clovis Oncology. 2020
- ii Data on file. Clovis Oncology; Boulder, CO
- iii American Cancer Society. Key Statistics for Prostate Cancer. <https://www.cancer.org/cancer/prostate-cancer/about/key-statistics.html>. Accessed January 30, 2020.
- iv GLOBOCAN Cancer Fact Sheets: prostate cancer. Prostate Cancer Estimated Incidence, Mortality and Prevalence Worldwide in 2018. <https://gco.iarc.fr/today/data/factsheets/cancers/27-Prostate-fact-sheet.pdf>. Accessed February 4, 2020.
- v Cameron A. Wade and Natasha Kyprianou. Profiling Prostate Cancer Therapeutic Resistance. International Journal of Molecular Sciences. 2018, 19, 204. <https://www.mdpi.com/1422-0067/19/3/904/pdf>.
- vi American Cancer Society. Survival rates for prostate cancer. <https://www.cancer.org/cancer/prostate-cancer/detection-diagnosis-staging/survival-rates.html>. Accessed February 4, 2020.
- vii Abida W, Armenia J, Gopalan A, et al. Prospective Genomic Profiling of Prostate Cancer Across Disease States Reveals Germline and Somatic Alterations That May Affect Clinical Decision Making. JCO Precis Oncol 2017: 1-16.

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