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**News Release**

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**Janssen Presents Updated Data Demonstrating Improved Outcomes from the Use of Niraparib in Combination with Abiraterone Acetate Plus Prednisone as a First-Line Therapy in Patients with BRCA-Positive Metastatic Castration-Resistant Prostate Cancer**

*Results from the Phase 3 MAGNITUDE study second interim analysis to be featured in an oral presentation at ASCO GU<sup>1</sup>*

**BEERSE, BELGIUM, 16 February 2023** – The Janssen Pharmaceutical Companies of Johnson & Johnson today announced updated results from the Phase 3 MAGNITUDE study evaluating the investigational use of niraparib, a highly selective poly (ADP-ribose) polymerase (PARP) inhibitor, in combination with abiraterone acetate plus prednisone (AAP) in patients with metastatic castration-resistant prostate cancer (mCRPC) with or without specific homologous recombination repair (HRR) gene alterations, including BRCA mutations.<sup>1</sup> Results will be featured in a Rapid Abstract Session ([Abstract #170](#)) at the American Society of Clinical Oncology’s Genitourinary (ASCO GU) Cancers Symposium 2023, taking place February 16-18.<sup>1</sup>

In the second interim analysis (IA2) of the MAGNITUDE study ([NCT03748641](#)), the treatment

combination of niraparib and AAP, in comparison to placebo and AAP at 26.8 months of median follow-up, demonstrated a statistically significant prolongation in time to symptomatic progression (TSP) and continued consistent improvement of time-to-initiation of cytotoxic chemotherapy (TCC) in the HRR-positive population and a strong improvement in TSP for the BRCA subgroup of the HRR-positive population.<sup>1,2</sup> Updated radiographic progression free survival (rPFS) results were consistent with the primary analysis which showed statistically significant benefit in both the HRR-positive population and BRCA subgroup.<sup>1,2,3</sup> Additionally, a trend toward improvement in overall survival (OS) was observed in the BRCA subgroup.<sup>1,2</sup> No new safety signals were identified.<sup>1,2</sup> The most common adverse events for niraparib and AAP versus placebo and AAP, regardless of causality, were anemia (50.0 percent vs 22.7 percent, respectively), hypertension (33.0 percent vs 22.3 percent) and constipation (33.0 percent vs 15.6 percent).<sup>1,2</sup> Patients without HRR gene alterations had no improvement in outcomes from the use of niraparib in combination with AAP.<sup>1,2</sup>

“Patients with HRR-positive mCRPC, especially those with BRCA mutations, are more likely to experience poor outcomes. Although additional follow-up for overall survival continues, it is encouraging to see a trend toward improvement in overall survival among patients with BRCA-positive mCRPC who received niraparib and AAP as compared to placebo and AAP,” said Kim Chi\*, M.D., Medical Oncologist at BC Cancer - Vancouver and principal investigator of the MAGNITUDE study. “Taken together, these data continue to support the potential use of niraparib in combination with AAP in patients with mCRPC and BRCA mutations.”

Notably, in the BRCA subgroup (8.1 months additional follow-up at IA2), rPFS by central review demonstrated a consistent and clinically meaningful treatment effect favoring niraparib and AAP, with a median rPFS of 19.5 months at IA2 compared with 10.9 months for placebo and AAP (hazard ratio [HR], 0.55 (95 percent confidence interval [CI], 0.39-0.78).<sup>1,2</sup> For patients with BRCA-positive mCRPC, preplanned sensitivity analysis evaluating rPFS by investigator review also showed benefit for niraparib and AAP (HR, 0.46 [95 percent CI, 0.32-0.67]).<sup>1,2</sup> Further, results of the IA2 indicate that patients with BRCA mutations treated with niraparib and AAP experienced a trend towards delayed time to worst pain intensity (HR, 0.70 [95 percent CI, 0.44-1.12]) and pain interference (HR, 0.67 [95 percent CI, 0.40-1.12]) compared with placebo and AAP.<sup>1,2</sup>

“At Janssen, our goal is to provide treatment options that delay progression, prolong life, and support a better quality of life for those diagnosed with prostate cancer,” said Martin Vogel, EMEA Therapeutic Area Lead for Oncology, Janssen-Cilag GmbH. “The MAGNITUDE study highlights the importance of biomarker testing to identify those who will optimally benefit from the combination of niraparib and AAP. This is a crucial step in ensuring we can bring the right treatment to the right patients, based on their unique characteristics, and speaks to our wider commitment to exploring precision medicine to treat, intercept and prevent, and potentially one day cure, diseases like mCRPC.”

“A high unmet need remains for patients living with BRCA-mutated mCRPC. The MAGNITUDE results further demonstrate the potential of niraparib plus abiraterone acetate plus prednisone to overcome the poor prognostic outcome in these patients. These findings underscore the importance of identifying patients with BRCA mutations to better inform treatment strategies and enable the right patients to receive add-on therapy with a PARP inhibitor,” said Mary Guckert, RN, MSN, Vice President, Development Leader, Prostate Cancer, Janssen Research & Development, LLC. “As the treatment landscape for prostate cancer continues to evolve, we are committed to evaluating innovative targeted therapies to help improve outcomes for patients with HRR-positive prostate cancer.”

Prostate cancer is the most common cancer in men across Europe.<sup>4</sup> In 2020, more than 473,000 patients were diagnosed in Europe and over 100,000 deaths were attributed to this challenging disease.<sup>5</sup> Patients with mCRPC and HRR gene alterations, of which BRCA mutations are the most common, are more likely to have aggressive disease, poor outcomes and a shorter survival time.<sup>6,7,8,9</sup> Up to 30% percent of mCRPC cancer cases have alterations in genes associated with HRR.<sup>3,10</sup> Approximately 10 to 15 percent of patients with mCRPC have BRCA gene alterations.<sup>11,12</sup>

In April 2022, Janssen submitted a marketing authorisation application to the European Medicines Agency seeking approval for niraparib in combination with abiraterone acetate in the form of a dual action tablet (DAT), plus prednisone or prednisolone, based on data from the MAGNITUDE study.<sup>13</sup> Marketing authorisation applications are under review across a number of countries globally.

#ENDS#

## **About MAGNITUDE**

MAGNITUDE ([NCT03748641](https://clinicaltrials.gov/ct2/show/study/NCT03748641)) is a Phase 3, randomised, double-blind, placebo-controlled, multicenter clinical study evaluating the safety and efficacy of the combination of niraparib and AAP for patients with mCRPC, with or without certain HRR gene alterations, and who have not received prior therapy for mCRPC except for standard of care, next-generation androgen receptor inhibitors and up to 4 months of AAP.<sup>3,14</sup> Patients were randomised to receive either niraparib and AAP or placebo and AAP. Additionally in an open-label cohort of HRR-positive patients, all patients received the DAT formulation of niraparib and abiraterone acetate plus predisone.<sup>3,14</sup> The primary endpoint of the MAGNITUDE trial is rPFS determined by blinded independent central review. Secondary endpoints include TCC, TSP and OS.<sup>3</sup>

## **About Niraparib**

Niraparib is an orally administered, highly selective poly (ADP-ribose) polymerase (PARP) inhibitor that is currently being studied by Janssen for the treatment of patients with prostate cancer.<sup>3</sup> Additional ongoing studies include the Phase 3 [AMPLITUDE study](#) evaluating the combination of niraparib and AAP in a biomarker-selected patient population with metastatic castration-sensitive prostate cancer (mCSPC).<sup>15</sup>

In April 2016, Janssen Biotech, Inc. entered a worldwide (except Japan) collaboration and license agreement with TESARO, Inc. (acquired by GlaxoSmithKline [GSK] in 2019) for exclusive rights to niraparib in prostate cancer.<sup>16</sup>

In the European Union, niraparib is indicated as monotherapy for the maintenance treatment of adult patients with advanced epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in a complete or partial response following completion of first-line platinum-based chemotherapy; and as monotherapy for the maintenance treatment of adult patients with platinum-sensitive relapsed high grade serious epithelial ovarian, fallopian tube, or primary peritoneal cancer who are in complete or partial response to platinum-based chemotherapy.<sup>17</sup> Niraparib is currently marketed by GSK as ZEJULA®.<sup>17</sup>

## **About Metastatic Castration-Resistant Prostate Cancer**

Metastatic castration-resistant prostate cancer (mCRPC) characterises cancer that no longer responds to androgen deprivation therapy (ADT) and has spread to other parts of the body.<sup>18</sup> The most common metastatic sites are bones, followed by lymph nodes, lungs and liver.<sup>19</sup>

Prostate cancer is the most common cancer in men in Europe.<sup>4</sup> More than one million men around the world are diagnosed with prostate cancer each year.<sup>20</sup> Patients with mCRPC and HRR gene alterations, of which BRCA mutations are the most common, are more likely to have aggressive disease, poor outcomes and a shorter survival time.<sup>6,7,8,9</sup>

### **About abiraterone acetate**

Abiraterone acetate is an orally administered androgen biosynthesis inhibitor. In the European Union, abiraterone acetate is indicated with prednisone or prednisolone for the treatment of newly diagnosed high risk mHSPC in adult men in combination with ADT; the treatment of mCRPC in adult men who are asymptomatic or mildly symptomatic after failure of ADT in whom chemotherapy is not yet clinically indicated; and the treatment of mCRPC in adult men whose disease has progressed on or after a docetaxel-based chemotherapy regimen.<sup>21</sup>

Abiraterone acetate is currently marketed by Janssen Janssen-Cilag International NV as ZYTIGA<sup>®</sup>.<sup>21</sup>

### **About the Janssen Pharmaceutical Companies of Johnson & Johnson**

At Janssen, we're creating a future where disease is a thing of the past. We're the Pharmaceutical Companies of Johnson & Johnson, working tirelessly to make that future a reality for patients everywhere by fighting sickness with science, improving access with ingenuity, and healing hopelessness with heart. We focus on areas of medicine where we can make the biggest difference: Cardiovascular, Metabolism & Retina; Immunology; Infectious Diseases & Vaccines; Neuroscience; Oncology; and Pulmonary Hypertension.

Learn more at [www.janssen.com/EMEA](http://www.janssen.com/EMEA). Follow us at [www.twitter.com/janssenEMEA](https://www.twitter.com/janssenEMEA) for our latest news. Janssen Pharmaceutica NV, Janssen-Cilag GmbH and Janssen Research & Development, LLC are part of the Janssen Pharmaceutical Companies of Johnson & Johnson.

\*Dr. Chi has served as a consultant to Janssen; he has not been paid for any media work.

### ***Cautions Concerning Forward-Looking Statements***

*This press release contains "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995 regarding product development and the potential benefits and treatment impact of niraparib, abiraterone acetate + prednisone. The reader is cautioned not*

*to rely on these forward-looking statements. These statements are based on current expectations of future events. If underlying assumptions prove inaccurate or known or unknown risks or uncertainties, actual results could vary materially from the expectations and projections of Janssen Pharmaceutica NV, Janssen-Cilag GmbH, Janssen Research & Development, LLC, or any of the other Janssen Pharmaceutical Companies and/or Johnson & Johnson. Risks and uncertainties include, but are not limited to: challenges and uncertainties inherent in product research and development, including the uncertainty of clinical success and of obtaining regulatory approvals; uncertainty of commercial success; manufacturing difficulties and delays; competition, including technological advances, new products and patents attained by competitors; challenges to patents; product efficacy or safety concerns resulting in product recalls or regulatory action; changes in behavior and spending patterns of purchasers of health care products and services; changes to applicable laws and regulations, including global health care reforms; and trends toward health care cost containment. A further list and descriptions of these risks, uncertainties and other factors can be found in Johnson & Johnson's Annual Report on Form 10-K for the fiscal year ended January 2, 2022, including in the sections captioned "Cautionary Note Regarding Forward-Looking Statements" and "Item 1A. Risk Factors," and in Johnson & Johnson's subsequent Quarterly Reports on Form 10-Q and other filings with the Securities and Exchange Commission. Copies of these filings are available online at [www.sec.gov](http://www.sec.gov), [www.jnj.com](http://www.jnj.com) or on request from Johnson & Johnson. None of the Janssen Pharmaceutical Companies nor Johnson & Johnson undertakes to update any forward-looking statement as a result of new information or future events or developments.*

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## References

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<sup>2</sup> Efstathiou E, et al. Niraparib With Abiraterone Acetate and Prednisone in Patients With Metastatic Castration-Resistant Prostate Cancer and Homologous Recombination Repair Gene Alterations: Second Interim Analysis of MAGNITUDE. Abstract 170, 2023 ASCO GU Annual Meeting. February 16, 2023.

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