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News Release

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Results from Phase 2 THOR-2 Study Showed Improved Rates of Recurrence-Free Survival in Patients with High-Risk Non-Muscle-Invasive Bladder Cancer with Select Fibroblast Growth Factor Receptor Alterations Treated with Erdafitinib Versus Chemotherapy

Data from Cohort 1 of the Phase 2 THOR-2 study showed oral erdafitinib reduced the risk of disease recurrence or death compared with intravesical standard-of-care chemotherapy[1]

BEERSE, Belgium, 21 October, 2023 – The Janssen Pharmaceutical Companies of Johnson & Johnson today announced results from Cohort 1 of the Phase 2 randomised, open-label THOR-2 study evaluating erdafitinib versus investigator choice of intravesical chemotherapy in patients with high-risk non-muscle-invasive bladder cancer (HR-NMIBC) and select fibroblast growth factor receptor (FGFR) alterations which recurred after Bacillus Calmette-Guérin (BCG) therapy.[1] The data were featured today in a Proffered Paper Late-Breaking Session (Abstract #LBA102) at the European Society for Medical Oncology (ESMO) 2023 Congress taking place 20-24 October in Madrid, Spain. The study results are simultaneously published in *Annals of Oncology*.[2]

"Treatment options are limited for patients with high-risk non-invasive bladder cancer with disease recurrence after Bacillus Calmette-Guérin therapy and who are ineligible or refuse radical cystectomy, the current standard of care," said Martin Vogel, EMEA Therapeutic Area Lead Oncology, Janssen-Cilag GmbH. "Patients are at the forefront of all that we do, and we

are committed to following the science to explore new options that may provide improved care in areas of high unmet need, such as this."

Of the 73 patients included in Cohort 1, 49 were randomised to erdafitinib and 24 were randomised to chemotherapy.[1] Oral erdafitinib reduced the risk of recurrence of disease or death by 72 percent compared with intravesical chemotherapy in patients with high-risk resected papillary Ta/T1 NMIBC harbouring FGFR mutations or fusions with recurrence after BCG treatment and who refused or were ineligible for radical cystectomy.[1]

With a median follow-up of 13.4 months at the data cutoff, median recurrence-free survival (RFS) was not met in patients who received erdafitinib and was 11.6 months for patients who received chemotherapy (Hazard Ratio [HR] 0.28; 95 percent Confidence Interval [CI], 0.1-0.6; *P*=0.0008).[1] The six- and twelve-month RFS rates (95 percent CI) were 96 percent (83.7-98.9) and 77 percent (60.0-87.4) for erdafitinib versus 73 percent (50.1-87.1) and 41 percent (18.9-61.7) for chemotherapy, respectively.[1]

Grade 3 or 4 serious treatment-related adverse events (TRAEs) were observed in 15 patients (31 percent) who received erdafitinib and one patient (4 percent) randomised to chemotherapy.[3] Fourteen patients (29 percent) assigned to erdafitinib and zero patients who received intravesical chemotherapy had TRAEs that lead to discontinuation of treatment.[1] Central serous retinopathy occurred in 19 patients (39 percent) who received erdafitinib and resolved in 11 patients (58 percent).[3]

"Patients with NMIBC who experience disease recurrence after BCG treatment have limited treatment options, and those eligible patients with FGFR alterations who received erdafitinib in the THOR-2 trial had far fewer recurrences against patients treated by the current standard of care," said James W.F. Catto*, Ph.D., Department of Oncology and Metabolism, University of Sheffield, Sheffield, UK and presenting author of the study. "Our findings underscore the importance of detecting certain genetic biomarkers to identify patients who may benefit from treatment with a targeted therapy like erdafitinib."

"Janssen's ongoing development of erdafitinib reinforces our commitment to bringing targeted, precision medicines to patients with FGFR-driven bladder cancer," said Kiran Patel, M.D., Vice President, Clinical Development, Solid Tumors, Janssen Research & Development, LLC. "These results support the importance of testing for FGFR in early-stage bladder cancer

and potential benefit with erdafitinib in patients with high-risk non-muscle-invasive bladder cancer where disease progression and poor outcomes are common."

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About THOR-2

THOR-2 is a (NCT04172675) Phase 2 randomised, open-label study evaluating erdafitinib versus investigator choice of intravesical chemotherapy in participants with NMIBC with FGFR+ alternations who recurred after BCG therapy.[4] Patients are categorised to one of three cohorts based on their disease presentation: patients with HR-NMIBC and a papillary tumour only, where early cancer cells are still confined within the innermost layer of the bladder lining[5] (Cohort 1), patients with HR-NMIBC presenting as carcinoma in situ (CIS) with or without a concurrent papillary tumour (Cohort 2), or patients with intermediate-risk NMIBC presenting with papillary disease only (Cohort 3).[4] Patients in Cohort 1 are randomised to receive either erdafitinib or chemotherapy (mitomycin C or gemcitabine) in a 2:1 ratio and all patients in Cohorts 2 and 3 will receive erdafitinib.[2] The Cohort 1 primary endpoint is RFS; secondary endpoints include RFS at six- and 12-months, time to progression, overall survival, plasma concentration of erdafitinib and number of patients with adverse events.[4] The study consists of screening period, treatment phase, follow-up phase and long-term extension phase.[4]

About Erdafitinib

Erdafitinib is a once-daily, oral pan-fibroblast growth factor receptor (FGFR) tyrosine kinase inhibitor[6] being evaluated by Janssen Research & Development, LLC in Phase 2 and 3 clinical trials in patients with advanced urothelial cancer.[7,8,9,10]

In addition to the Phase 2 THOR-2 (NCT04172675) study, erdafitinib is being studied in the Phase 3 THOR study (NCT03390504), evaluating the efficacy of erdafitinib versus chemotherapy or pembrolizumab in patients with advanced urothelial cancer harbouring selected FGFR aberrations, with disease progression during or following at least one line of therapy containing a programmed death receptor-1 (PD-1) agent (cohort 1), or one prior treatment not containing an anti- PD-(L) 1 agent (cohort 2);[11] the Phase 1b/2 NORSE (NCT03473743) study of erdafitinib in combination with cetrelimab in patients with locally advanced or mUC and select FGFR gene alterations;[12] the Phase 2 RAGNAR (NCT04083976) study evaluating the safety and efficacy of erdafitinib in patients with advanced solid tumours, regardless of cancer type or tumour location (tumour-agnostic), driven by FGFR1–4

alterations;[10] the Phase 1 study (NCT05316155) investigating erdafitinib in patients with non-muscle invasive or muscle invasive bladder cancer with selected FGFR alterations, given via the TARIS intravesical drug delivery system (TAR-210), which is designed to offer a sustained release of erdafitinib in the bladder to treat localised bladder cancer, while potentially reducing systemic toxicities.[13]

In September 2023, Janssen submitted a marketing authorisation application to the European Medicine's Agency (EMA) seeking approval of erdafitinib for the treatment of patients with locally advanced or metastatic urothelial cancer with susceptible FGFR alterations, based on data from Cohort 1 of the Phase 3 THOR study.[14] In August 2023, the Company also submitted a Supplemental New Drug Application to the U.S. Food and Drug Administration (FDA), based upon the same data.[15]

In 2008, Janssen Pharmaceutica NV entered into an exclusive worldwide license and collaboration agreement with Astex Therapeutics Limited to develop and commercialise erdafitinib.[16]

About Non-Muscle-Invasive Bladder Cancer

Non-muscle-invasive bladder cancer (NMIBC) is cancer found in the tissue that lines the inner surface of the bladder.[17] The bladder muscle is not involved.[17] Patients are categorised into one of three risk groups which describe how likely the cancer will progress, spread further, or come back after treatment: low-risk, intermediate-risk or high-risk.[18] Radical cystectomy is currently recommended for NMIBC patients who fail BCG therapy, with over 90 percent cancer-specific survival if performed before muscle-invasive progression.[18,19] Given that NMIBC typically affects older patients, many may be unwilling or unfit to undergo radical cystectomy.[19] The high rates of recurrence and progression can pose significant morbidity and distress for these patients.[19]

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: Oncology, Immunology, Neuroscience, Cardiovascular, Pulmonary Hypertension, and Retina.

Learn more at www.janssen.com/emea. Follow us at www.linkedin.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.

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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 erdafitinib and cetrelimab. 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 materialise, actual results could vary materially from the expectations and projections of Janssen Pharmaceutica NV, Janssen-Cilag GmbH, Janssen Research & Development, LLC, 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 behaviour 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 1, 2023, 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, 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.

**Dr. Catto has not been paid for any media work.*

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[1] Catto JWF, et al. THOR-2 Cohort 1: Results of Erdafitinib Versus Intravesical Chemotherapy in Patients With High-Risk Non–Muscle-Invasive Bladder Cancer With Select FGFR Alterations Who Received Prior BCG Treatment. 2023 European Society for Medical Oncology. Oral presentation, 2023 ESMO Annual Meeting. October 21, 2023.

[2] Catto JWF, et al. Erdafitinib in BCG-treated high-risk non-muscle invasive bladder cancer. Annals of Oncology. 2023.

[3] Catto, JWF. THOR-2 Cohort 1: Results of Erdafitinib (Erda) vs Intravesical Chemotherapy (Chemo) in Patients (Pts) With High-Risk Non–MuscleInvasive Bladder Cancer (HR NMIBC) With Select Fibroblast Growth Factor Receptor Alterations (FGFRalt) Who Received Prior Bacillus CalmetteGuérin (BCG) Treatment. Abstract presentation #LBA102, 2023 ESMO Annual Meeting.

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