Johnson&Johnson

Media contacts:
Suzanne Frost
+1 416 317-0304

Ania DiAntonio
+1 215 620-0717

Investor contact:
Raychel Kruper
investor-relations@its.jnj.com

U.S. Medical Inquiries
+1 800 526-7736

TAR-210 results show 90% recurrence-free survival and 90% complete response in patients with high-risk and intermediate-risk non–muscle-invasive bladder cancer, respectively

Updated results reinforce the potential of TAR-210 to transform treatment of non–muscle-invasive bladder cancer with fibroblast growth factor receptor (FGFR) *alterations*

SAN ANTONIO, May 5, 2024 – Johnson & Johnson announced today updated results from an open-label, multicenter, multi-cohort Phase 1 study of the safety and efficacy of TAR-210, an intravesical targeted releasing system designed to provide sustained, local release of erdafitinib into the bladder, in patients with non–muscle-invasive bladder cancer (NMIBC) with select *FGFR* alterations. These data were featured today in an Oral Presentation Session (Abstract # PD48-02) at the 2024 American Urological Association (AUA) Annual Meeting taking place May 3-6, 2024, in San Antonio, Texas.

Results featured updated data from Cohort 1 (C1), patients with recurrent, Bacillus Calmette-Guérin (BCG)–unresponsive high-risk (HR) NMIBC (high-grade Ta/T1; papillary only) who refused or were ineligible for radical cystectomy and Cohort 3 (C3), patients with recurrent, intermediate-risk NMIBC (Ta/T1) low-grade papillary disease left in situ as tumor marker lesions. First results were featured at the European Society for Medical Oncology 2023 Congress, with interim results presented at the European Association of Urology (EAU) 2024 Annual Congress.

“Advancement in the treatment landscape of high- or intermediate-risk non–muscle-invasive bladder cancer has remained stagnant for more than 50 years,” said Antoni Vilaseca,* M.D., Ph.D., of the Hospital Clínic de Barcelona, presenting author of the Phase 1 TAR-210 study. “Results presented today further underscore that TAR-210 for the localized treatment of bladder cancer may offer a promising alternative for patients with limited treatment options.”

At the data cutoff of March 22, 2024, 64 patients had been treated with TAR-210 across the 2 cohorts. Of the 21 patients in C1 with HR-NMIBC, the 12-month recurrence-free (RF) survival rate was 90%. In C3, 31 patients were efficacy evaluable with a complete response (CR) rate of 90%.[1]

The most common treatment emergent adverse events (TEAEs) were Grade 1/2 lower urinary tract events. There were no dose-limiting toxicities and no deaths. Two patients (3%) discontinued the study due to TEAEs of low-grade urinary symptoms and two patients had serious TEAEs with pyelonephritis and sepsis or UTI and sepsis, respectively.[1]

“*FGFR* genetic alterations are most common in NMIBC,” said Sabine Brookman-May, M.D., Vice President, Late Development Oncology, Johnson & Johnson Innovative Medicine. “These results further support the potential of TAR-210 with quarterly administration as a bladder-sparing and BCG-free treatment option, underscoring our deep commitment to pioneering novel therapies for patients who face limited treatment avenues.”

TAR-210 is an investigational targeted releasing system designed to provide sustained local release of erdafitinib. Oral erdafitinib was approved by the U.S. Food and Drug Administration (FDA) as BALVERSA® (erdafitinib) for patients with locally advanced or metastatic urothelial carcinoma (mUC) with susceptible *FGFR3* genetic alterations that have progressed on or after at least one line of prior systemic therapy. BALVERSA® is not recommended for the treatment of patients who are eligible for and have not received prior PD-1 or PD-L1 inhibitor therapy.[2]

Bladder cancer ranks as the sixth most prevalent cancer in the U.S., with over 83,000 individuals receiving diagnoses annually.[3] NMIBC constitutes approximately 75-85% of these cases.[4] Currently, adjuvant intravesical immunotherapy with BCG or intravesical chemotherapy is the standard of care for patients with intermediate- and high-risk NMIBC.[5] Between 30 and 40% of patients do not respond to BCG, facing disease recurrence or progression.[6] In such scenarios of HR-NMIBC, radical cystectomy (removal of the bladder) emerges as the primary treatment option. This major abdominal procedure requires a urinary diversion to be created to collect and store urine.[7]

About TAR-210

TAR-210 is an investigational erdafitinib intravesical targeted releasing system. The safety and efficacy of TAR-210 is being evaluated in a Phase 1 study (NCT05316155) in patients with muscle-invasive bladder cancer (MIBC) and NMIBC. The study categorizes patients into 4 cohorts based on their disease presentation. Cohort 1 includes patients with recurrent, BCG-unresponsive high-risk NMIBC with concomitant high-grade papillary disease who have refused or are ineligible for radical cystectomy (RC). Cohort 2 includes patients with the same presentation, but who are scheduled for RC. Cohort 3 includes

Johnson&Johnson

Media contacts:
Suzanne Frost
+1 416 317-0304

Ania DiAntonio
+1 215 620-0717

Investor contact:
Raychel Kruper
investor-relations@its.jnj.com

U.S. Medical Inquiries
+1 800 526-7736

patients with recurrent, intermediate-risk NMIBC with a history of low-grade papillary disease. To be eligible for C3, the presence of visible tumor(s) is required. Cohort 4 includes patients with MIBC. The primary endpoint of the study is safety (adverse events, including dose-limiting toxicity). Secondary endpoints include pharmacokinetics, RF survival in patients in C1 and C2, CR rate and duration of CR in patients in C3 and pathologic CR rate in C4.[8]

About BALVERSA®

BALVERSA® (erdafitinib) is a once-daily, oral *FGFR* kinase inhibitor indicated for the treatment of adult patients with locally advanced or mUC with susceptible fibroblast growth factor receptor 3 *(FGFR3*) genetic alterations whose disease has progressed on or after at least one line of prior systemic therapy. BALVERSA® is not recommended for the treatment of patients who are eligible for and have not received prior PD-1 or PD-(L)1 inhibitor therapy.[2] Patients are selected for therapy based on an FDA-approved companion diagnostic for BALVERSA®. Information on FDA-approved tests for the detection of *FGFR* genetic alterations in urothelial cancer is available at: http://www.fda.gov/CompanionDiagnostics.

BALVERSA® received Breakthrough Therapy Designation from the U.S. FDA in 2018 and received accelerated approval in 2019 for the treatment of adults with locally advanced or mUC that has susceptible *FGFR3* or fibroblast growth factor receptor 2 *(FGFR2)* genetic alterations and who have progressed during or following at least one line of prior platinum-containing chemotherapy, including within 12 months of neoadjuvant or adjuvant platinum-containing chemotherapy.[2]

The Company submitted a marketing authorization application to the European Medicines Agency in September 2023 for BALVERSA® as a treatment for adult patients with *FGFR3-altered*, locally advanced unresectable or mUC that has progressed following therapy with a PD-(L)1 inhibitor.

In 2008, Janssen Pharmaceuticals entered into an exclusive worldwide license and collaboration agreement with Astex Pharmaceuticals to develop and commercialize BALVERSA®.

For more information, visit www.BALVERSA.com.

BALVERSA® IMPORTANT SAFETY INFORMATION

WARNING AND PRECAUTIONS

The safety population described in the Warnings and Precautions reflect a pooled safety population of 479 patients with advanced urothelial cancer and FGFR alterations who received BALVERSA®.

Ocular Disorders – BALVERSA® can cause ocular disorders, including central serous retinopathy/retinal pigment epithelial detachment (CSR/RPED) resulting in visual field defect.

CSR/RPED occurred in 22% of patients treated with BALVERSA®, with a median time to first onset of 46 days. In 104 patients with CSR, 40% required dose interruptions and 56% required dose reductions; 2.9% of BALVERSA®-treated patients required permanent discontinuation for CSR. Of the 24 patients who restarted BALVERSA® after dose interruption with or without dose reduction, 67% had recurrence and/or worsening of CSR after restarting. CSR was ongoing in 41% of the 104 patients at the time of last evaluation.

Dry eye symptoms occurred in 26% of BALVERSA®-treated patients. All patients should receive dry eye prophylaxis with ocular demulcents as needed.

Perform monthly ophthalmological examinations during the first 4 months of treatment and every 3 months afterwards, and urgently at any time for visual symptoms. Ophthalmological examination should include assessment of visual acuity, slit lamp examination, fundoscopy, and optical coherence tomography. Withhold or permanently discontinue BALVERSA® based on severity and/or ophthalmology exam findings.
Hyperphosphatemia and Soft Tissue Mineralization – BALVERSA® can cause hyperphosphatemia leading to soft tissue mineralization, cutaneous calcinosis, non-uremic calciphylaxis and vascular calcification. Increases in phosphate levels are a pharmacodynamic effect of BALVERSA® *[see Pharmacodynamics (12.2)].* Increased phosphate occurred in 73% of BALVERSA®-treated patients. The median onset time of increased phosphate was 16 days (range: 8–421) after initiating BALVERSA®. Twenty-four percent of patients received phosphate binders during treatment with BALVERSA®. Vascular calcification was observed in 0.2% of patients treated with BALVERSA®.

Monitor for hyperphosphatemia throughout treatment. In all patients, restrict phosphate intake to 600-800 mg daily and avoid concomitant use of agents that may increase serum phosphate levels. If serum phosphate is above 7.0 mg/dL, consider adding an oral phosphate binder until serum phosphate level returns to <7.0 mg/dL. Withhold, dose reduce, or permanently discontinue BALVERSA® based on duration and severity of hyperphosphatemia.

Embryo-Fetal Toxicity – Based on the mechanism of action and findings in animal reproduction studies, BALVERSA® can cause fetal harm when administered to a pregnant female. In a rat embryo-fetal toxicity study, erdafitinib caused malformations and embryo-fetal death at maternal exposures that were less than the human exposures at the maximum human recommended dose based on AUC. Advise pregnant patients of the potential risk to the fetus. Advise female patients of reproductive potential to use effective contraception during treatment with BALVERSA® and for one month after the last dose. Advise male patients with female partners of reproductive potential to use effective contraception during treatment with BALVERSA® and for one month after the last dose.

Adverse Reactions
In this pooled safety population described in Warnings and Precautions, the median duration of treatment was 4.8 months (range: 0.1 to 43 months). The most common (>20%) adverse reactions, including laboratory abnormalities, were increased phosphate, nail disorders, stomatitis, diarrhea, increased creatinine, increased alkaline phosphatase, increased alanine aminotransferase, decreased hemoglobin, decreased sodium, increased aspartate aminotransferase,

Johnson&Johnson

Media contacts:
Suzanne Frost
+1 416 317-0304

Ania DiAntonio
+1 215 620-0717

Investor contact:
Raychel Kruper
investor-relations@its.jnj.com

U.S. Medical Inquiries
+1 800 526-7736

fatigue, dry mouth, dry skin, decreased phosphate, decreased appetite, dysgeusia, constipation, increased calcium, dry eye, palmar-plantar erythrodysesthesia syndrome, increased potassium, alopecia, and central serous retinopathy.

In Cohort 1 of the BLC3001 (NCT03390504, THOR) study:

- Serious adverse reactions occurred in 41% of patients who received BALVERSA®. Serious reactions in >2% of patients included urinary tract infection (4.4%), hematuria (3.7%), hyponatremia (2.2%), and acute kidney injury (2.2%). Fatal adverse reactions occurred in 4.4% of patients who received BALVERSA®, including sudden death (1.5%), pneumonia (1.5%), renal failure (0.7%), and cardiorespiratory arrest (0.7%).
- Permanent discontinuation of BALVERSA® due to an adverse reaction occurred in 14% of patients. Adverse reactions which resulted in permanent discontinuation of BALVERSA® in >2% of patients included nail disorders (3%) and eye disorders (2.2%).
- Dosage interruptions of BALVERSA® due to an adverse reaction occurred in 72% of patients. Adverse reactions which required dosage interruption in >4% of patients included nail disorders (22%), stomatitis (19%), eye disorders (16%), palmar-plantar erythrodysesthesia syndrome (15%), diarrhea (10%), hyperphosphatemia (7%), increased aspartate aminotransferase (6%), and increased alanine aminotransferase (5%).
- Dose reductions of BALVERSA® due to an adverse reaction occurred in 69% of patients. Adverse reactions which required dose reductions in >4% of patients included nail disorders (27%), stomatitis (19%), eye disorders (17%), palmar-plantar erythrodysesthesia syndrome (12%), diarrhea (7%), dry mouth (4.4%), and hyperphosphatemia (4.4%).
- Clinically relevant adverse reactions in <15% of patients who received BALVERSA® included nausea (15%), pyrexia (15%), epistaxis (13%), vomiting (10%), and arthralgia (10%).

Drug Interactions

Effects of Other Drugs on BALVERSA®

- Moderate CYP2C9 or Strong CYP3A4 Inhibitors: Consider alternative agents; however, if co-administration is unavoidable, monitor closely for adverse reactions.
- Strong CYP3A4 inducers: Avoid co-administration with BALVERSA®.
- Moderate CYP3A4 inducers: If co-administration is required at the start of BALVERSA® treatment, administer BALVERSA® at a dose of 9 mg daily.
- Serum phosphate level-altering agents: Avoid co-administration with agents that can alter serum phosphate levels before the initial dose increase period based on serum phosphate levels.

Effect of BALVERSA® on Other Drugs

- P-gp substrates: If co-administration is unavoidable, separate BALVERSA® administration by at least 6 hours before or after administration of P-gp substrates with narrow therapeutic indices.

Please click here to see full BALVERSA® Prescribing Information.

About High-Risk Non–Muscle-Invasive Bladder Cancer

High-risk non-muscle-invasive bladder cancer (HR-NMIBC) is a type of non-invasive bladder cancer that is more likely to recur or spread beyond the lining of the bladder, called the urothelium, and progress to invasive bladder cancer compared to low-risk NMIBC. HR-NMIBC makes up 15-44% of patients with NMIBC and is characterized by a combination of high-grade, large tumor size, presence of multiple tumors, and carcinoma in situ. Radical cystectomy (RC) is currently recommended for NMIBC patients who fail BCG therapy, with over 90% cancer-specific survival if performed before muscle-invasive progression. Given that NMIBC typically affects older patients, many may be unwilling or unfit to undergo RC. The high rates of recurrence and progression can pose significant morbidity and distress for these patients.[9]

About Johnson & Johnson

At Johnson & Johnson, we believe health is everything. Our strength in healthcare innovation empowers us to build a world where complex diseases are prevented, treated, and cured, where treatments are smarter and less invasive, and solutions are personal. Through our expertise in Innovative Medicine and MedTech, we are uniquely positioned to innovate across the full spectrum of healthcare solutions today to deliver the breakthroughs of tomorrow, and profoundly impact health for humanity. Learn more at https://www.jnj.com/ or at www.janssen.com/johnson-johnson-innovative-medicine. Follow us at @JanssenUS and @JNJInnovMed. Janssen Research & Development, LLC, and Janssen Biotech, Inc., are both Johnson & Johnson companies.

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 TAR-210 or BALVERSA® (erdafitinib). 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 materialize, actual results could vary materially from the expectations and projections of Janssen Research & Development, LLC, Janssen Biotech, Inc., 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; competition, including technological advances, new products and patents attained by competitors; challenges to patents; 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 December 31, 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 Janssen Research &

Johnson&Johnson

Media contacts:
Suzanne Frost
+1 416 317-0304

Ania DiAntonio
+1 215 620-0717

Investor contact:
Raychel Kruper
investor-relations@its.jnj.com

U.S. Medical Inquiries
+1 800 526-7736

Development, LLC, Janssen Biotech, Inc., nor Johnson & Johnson undertakes to update any forward-looking statement as a result of new information or future events or developments.

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

---

[1] Vilaseca A, Jayram G, Raventos C, Shore ND, Zainfeld D, Kang TW, et al. PD48-02 first safety and efficacy results of the TAR-210 erdafitinib intravesical delivery system in patients with non–muscle-invasive bladder cancer with select *FGFR* alterations. *Journal of Urology.* 2024;211.
[2] BALVERSA® [Prescribing Information]. Horsham, PA: Janssen Biotech, Inc.
[3] American Cancer Society. Cancer facts & figures 2024. Atlanta: American Cancer Society; 2024.
[4] Deng S, Meng F, Wang L, et al. Global research trends in non–muscle invasive bladder cancer: Bibliometric and visualized analysis. *Front Oncol.* 2022;12:1044830. Published 2022 Nov 17. Doi:10.3389/fonc.2022.1044830
[5] Laukhtina E, Abufaraj M, Al-Ani A, et al; European Association of Urology-Young Academic Urologists (EAU-YAU): Urothelial carcinoma working group. Intravesical therapy in patients with intermediate-risk non–muscle-invasive bladder cancer: A systematic review and network meta-analysis of disease recurrence. *Eur Urol Focus.* 2022;8(2):447-456. doi: 10.1016/j.euf.2021.03.016. Epub 2021 Mar 21. PMID: 33762203
[6] Zlotta AR, Fleshner NE, Jewett MA. The management of BCG failure in non–muscle-invasive bladder cancer: an update. *Can Urol Assoc J.* 2013;3(6-S4):199.
[7] Bladder removal surgery: What is a radical cystectomy? Bladder Cancer Advocacy Network. Accessed April 1, 2024. https://bcan.org/bladder-removal-surgery/.
[8]Vilaseca A, Guerrero F, Zainfeld D, Shore ND, Rodriguez Faba O, Meijer RP, et al. Safety and efficacy of the erdafitinib (erda) intravesical delivery system, TAR-210, in patients (pts) with non–muscle-invasive bladder cancer (NMIBC) or muscle-invasive bladder cancer (MIBC) harboring select *FGFR* mutations or fusions: Phase 1 first-in-human study. *Journal of Clinical Oncology*. 2023;41.
[9] Brooks NA, O'Donnell MA. Treatment options in non–muscle-invasive bladder cancer after BCG failure. *Indian J Urol.* 2015;31(4):312-319. Accessed March 20, 2024. doi:10.4103/0970-1591.166475