



News Release

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Janssen Highlights Commitment to Advancing Transformative Innovations in Oncology with Scientific Updates from Deep, Diverse Pipeline and Portfolio at ASCO and EHA Virtual Scientific Programs

- *Clinical Data from More Than 10 Approved and Investigational Treatments for Solid Tumors and Hematologic Malignancies to be Presented During the 2021 ASCO Annual Meeting*
- *Multiple Myeloma and Chronic Lymphocytic Leukemia Data to be Featured During EHA 2021 Virtual Congress*

June 1, 2021 (RARITAN, N.J.) – The Janssen Pharmaceutical Companies of Johnson & Johnson announced today that more than 30 company-sponsored studies, including six oral presentations, will be featured during the 2021 American Society of Clinical Oncology (ASCO) Annual Meeting, June 4-8. Janssen presentations will include new data and updates for both approved and investigational therapeutics that are being studied for the treatment of various solid tumors and blood cancers. Immediately following ASCO, additional data will be featured during the European Hematology Association (EHA) Virtual Congress, June 9-17. A complete list of Janssen-sponsored abstracts scheduled for presentation during ASCO and EHA is available at the [Janssen Oncology Virtual Newsroom](#).

“Through a deliberate scientific focus on deep disease understanding, we continue to advance a diverse, differentiated portfolio and pipeline of targeted therapies and combination regimens in select cancers where unmet medical needs persist,” said Peter Lebowitz, M.D., Ph.D., Global Therapeutic Area Head, Oncology, Janssen Research & Development, LLC. “At this year’s ASCO, we look forward to presenting the latest research from our dedicated scientists on behalf of investigators, study centers and the patients participating in our programs, with a focus on improving the lives of patients diagnosed with cancer and driving toward the elimination of cancer in the future.”

“At Janssen Oncology, we are driven by our mission to reimagine cancer care and to ultimately drive better outcomes for people living with cancer,” said Serge Messerlian, President, Oncology, Janssen Biotech, Inc. “Our latest scientific research at ASCO represents our commitment to advancing treatment options across a broad range of difficult-to-treat cancers, disease stages and risk factors. We are acting with urgency to deliver new therapies and hope to patients who currently have limited or no current treatment options.”

Key highlights from Janssen-sponsored studies to be presented at ASCO include:

RYBREVANT™ (amivantamab-vmjw) in Combination with Lazertinib For the Treatment of Patients With Advanced EGFR-Mutated Non-Small Cell Lung Cancer – New Findings From the Phase 1 CHRYSALIS Study

- **Oral presentation:** New data from the ongoing [CHRYSALIS study](#) evaluating RYBREVANT™ (a fully-human epidermal growth factor receptor [EGFR]-MET bispecific antibody) in combination with lazertinib in patients with chemotherapy-naïve EGFR-mutated non-small cell lung cancer (NSCLC) whose disease has relapsed on osimertinib ([Abstract #9006](#))
- **Poster:** Data from an indirect treatment comparison of RYBREVANT™ monotherapy in patients with NSCLC with EGFR exon 20 insertion mutations compared to those treated with real-world therapies such as immune checkpoint inhibitors, tyrosine kinase inhibitors and single-agent chemotherapies ([Abstract #9052](#))

New Cilta-Cel Efficacy and Safety Data in the Treatment of Patients with Relapsed or Refractory Multiple Myeloma – Updated Results from the Phase 1b/2 CARTITUDE-1 Study and First Results from the Phase 2 CARTITUDE-2 Study

- **Oral presentation:** Longer-term, 18-month follow-up efficacy and safety results from the Phase 1b/2 [CARTITUDE-1 study](#) of ciltacabtagene autoleucel (cilta-cel), an investigational B-cell maturation antigen (BCMA)-directed chimeric antigen receptor T

cell (CAR-T) therapy, in patients with relapsed or refractory multiple myeloma (RRMM) ([Abstract #8005](#))

- **Poster presentation:** First data from Cohort A of the Phase 2 CARTITUDE-2 study evaluating the efficacy and safety of cilta-cel in patients with MM who have received 1-3 lines of prior therapy, and who were lenalidomide refractory ([Abstract #8013](#))
- **Poster:** Data on the incidence, mitigation and management of neurologic adverse events (AEs) in patients treated with cilta-cel in CARTITUDE-2 ([Abstract #8028](#))
- **Poster:** Data comparing outcomes of treatment with cilta-cel in the CARTITUDE-1 study vs. Real-World Standard of Care for patients with triple-class exposed RRMM ([Abstract #8045](#))

Updated Data for Bispecific Antibodies Talquetamab (GPC5DxCD3) and Teclistamab (BCMAxCD3) in Relapsed or Refractory Multiple Myeloma

- **Oral presentation:** Updated results from the Phase 1 MonumentAL-1 study of talquetamab administered subcutaneously to RRMM patients ([Abstract #8008](#))
- **Oral presentation:** Updated results from the Phase 1 MajesTEC-1 study of teclistamab in RRMM patients treated at the recommended Phase 2 dose ([Abstract #8007](#))
- **Poster presentation:** An evaluation of changes in soluble B-cell maturation antigen (BCMA, CD269) levels in RRMM patients in response to treatment with teclistamab or talquetamab ([Abstract #8047](#))

First Data from the Fixed-Duration Cohort of the CAPTIVATE Study Evaluating IMBRUVICA® (ibrutinib) in Combination With Venetoclax for First-line Treatment of Chronic Lymphocytic Leukemia (CLL), Plus Longer-term Follow-up for IMBRUVICA® Monotherapy in Previously Untreated CLL Patients

- **Oral presentation:** First data from the fixed-duration cohort of the Phase 2 [CAPTIVATE study](#) evaluating IMBRUVICA® plus venetoclax in previously untreated CLL patients ([Abstract #7501](#))
- **Poster presentation:** Extended, up to seven-year, follow-up data from the Phase 3 RESONATE-2 study of IMBRUVICA® monotherapy in previously untreated CLL patients ([Abstract #7523](#))

Results of DARZALEX FASPRO® (daratumumab and hyaluronidase-fihj)-based Combination Regimen for Patients with Light Chain (AL) Amyloidosis; Interim Analysis of DARZALEX® (daratumumab) Maintenance Therapy for Patients with Multiple Myeloma

- **Oral presentation:** New data from the Phase 3 [ANDROMEDA study](#) of DARZALEX FASPRO® in combination with bortezomib, cyclophosphamide and dexamethasone (D-VCd) for the treatment of newly diagnosed AL amyloidosis ([Abstract #8003](#)).
- **Oral presentation:** Interim results from the CASSIOPEIA Part 2 study of DARZALEX® as maintenance therapy in patients with newly diagnosed MM (NDMM) who received treatment with bortezomib, thalidomide and dexamethasone (VTd) with or without DARZALEX® and autologous stem cell transplant (ASCT) ([Abstract #8004](#))
- **Poster presentation:** Final analysis from the Phase 2 LYRA study investigating DARZALEX® maintenance therapy following induction with DARZALEX®, cyclophosphamide, bortezomib and dexamethasone (Dara+CyBorD) in patients with NDMM as well as RRMM ([Abstract #8035](#))

ERLEADA® (apalutamide) Patient-Reported Outcomes (PRO) Data from the Final Analysis of the Phase 3 TITAN Study in Metastatic Castration-Sensitive Prostate Cancer (mCSPC)

- **Poster:** New PRO data from the Phase 3 [TITAN study](#) will report the impact on quality of life of ERLEADA® in combination with androgen deprivation therapy as a first-line treatment for patients with mCSPC ([Abstract #5068](#)). The long-term efficacy and safety data from the final analysis of the TITAN study were recently [published](#) in *The Journal of Clinical Oncology*

Latest Data Assessing Outcomes for Histology-Agnostic Patients Receiving BALVERSA® (erdafitinib) in the Phase 2 RAGNAR Study, The Prognostic Value of Fibroblast Growth Factor Receptor Alterations (FGFRa) and The Evaluation of a New Drug-Delivery System for Patients With Muscle-Invasive Bladder Cancer (MIBC)

- **Poster:** Preliminary results of molecular screening for fibroblast growth factor receptor alteration (FGFRa) in the ongoing Phase 2 histology-agnostic RAGNAR study of BALVERSA® (erdafitinib) ([Abstract #4081](#))
- **Poster:** Fibroblast Growth Factor Receptor Alteration (FGFRa) Status and Progression Outcomes of Patients with Advanced or Metastatic Urothelial Cancer (mUC) ([Abstract #4530](#))
- **Poster:** Phase 3 analysis of TAR-200, an investigational drug-delivery system, in combination with systemic cetrelimab compared with concurrent chemoradiotherapy in patients with MIBC ([Abstract #TPS4586](#))

Data from IMBRUVICA® and DARZALEX® Featured in Late-Breaking Abstracts will be Presented during the EHA Virtual Congress:

- First data from the Phase 3 GLOW study evaluating fixed-duration therapy with IMBRUVICA® in combination with venetoclax versus chemoimmunotherapy in previously untreated CLL patients.
- Overall survival data from the MAIA study of DARZALEX® in combination with lenalidomide and dexamethasone in newly diagnosed patients with multiple myeloma (NDMM) who are ineligible for autologous stem cell transplantation.

About RYBREVANT™

RYBREVANT™ is being studied in a comprehensive clinical development program for people with untreated advanced EGFR-mutated NSCLC, including the Phase 3 MARIPOSA ([NCT04487080](#)) trial studying RYBREVANT™ in combination with lazertinib**.¹ Another Phase 3 trial, PAPHON ([NCT04538664](#)), is studying RYBREVANT™ in combination with carboplatin-pemetrexed for people with advanced or metastatic EGFR-mutated NSCLC with exon 20 insertion mutations.² On May 21, 2021, RYBREVANT™ [received](#) accelerated approval by the U.S. FDA for the treatment of adult patients with locally advanced or metastatic NSCLC with EGFR exon 20 insertion mutations, as detected by an FDA-approved test, whose disease has progressed on or after platinum-based chemotherapy.³ Janssen has filed regulatory submissions for RYBREVANT™ with health authorities in [Europe](#) and other markets.

**In 2018, Janssen Biotech, Inc. entered into a license and collaboration agreement with Yuhan Corporation for the development of lazertinib.

About Lazertinib

Lazertinib is an oral, third-generation, brain-penetrant, EGFR tyrosine kinase inhibitor (TKI) that targets both the T790M mutation and activating EGFR mutations while sparing wild type-EGFR.⁴ Interim safety and efficacy results from the lazertinib Phase 1-2 study were published in [The Lancet Oncology](#) in 2019. In 2018, Janssen Biotech, Inc. entered into a license and collaboration agreement with Yuhan Corporation for the development of lazertinib.

About ciltacabtagene autoleucel (cilta-cel)

Cilta-cel is an investigational chimeric antigen receptor T cell (CAR-T) therapy that is being studied in a comprehensive clinical development program for the treatment of patients with relapsed or refractory multiple myeloma and in earlier lines of treatment. The design consists of a structurally differentiated CAR-T with two BCMA-targeting single domain antibodies.⁵ In December 2017, Janssen Biotech, Inc. [entered](#) into an exclusive worldwide license and collaboration agreement with Legend Biotech USA, Inc. to develop and commercialize cilta-cel.

In April 2021, Janssen [announced](#) submission of a Marketing Authorisation Application to the European Medicines Agency seeking approval of cilta-cel for the treatment of patients with relapsed and/or refractory multiple myeloma. In December 2020, Janssen [announced](#) initiation of a rolling submission of its BLA to the U.S. FDA for cilta-cel, which completed in March 2021. In addition to U.S. Breakthrough Therapy Designation [granted](#) in December 2019, cilta-cel [received](#) a PRIority MEdicines (PRiME) designation from the European Commission in April 2019, and a Breakthrough Therapy Designation in China in August 2020.^{6,7,8} Janssen also received Orphan Drug Designation for cilta-cel from the U.S. FDA in February 2019, and from the European Commission in February 2020.

About Talquetamab

Talquetamab is a first-in-class investigational bispecific antibody targeting both GPRC5D, a novel multiple myeloma target, and CD3, a T-cell receptor.⁹ CD3 is involved in activating T-cells, and GPRC5D is highly expressed on multiple myeloma cells.^{10,11,12} Results from preclinical studies in mouse models demonstrate that talquetamab induces T-cell-mediated killing of GPRC5D-expressing multiple myeloma cells through the recruitment and activation of CD3-positive T-cells and that it inhibits tumor formation and growth.¹³

Talquetamab is currently being evaluated in a Phase 1/2 clinical study for the treatment of relapsed or refractory multiple myeloma ([NCT03399799](#)) and is also being explored in combination studies ([NCT04586426](#)).

About Teclistamab

Teclistamab is an investigational bispecific antibody targeting both BCMA and CD3. BCMA, B-cell maturation antigen, is expressed at high levels on multiple myeloma cells.^{14,15,16} Teclistamab redirects CD3-positive T-cells to BCMA-expressing myeloma cells to induce cytotoxicity of the targeted cells.^{17,18} Results from preclinical studies demonstrate that teclistamab kills myeloma cell lines and bone marrow-derived myeloma cells from heavily pretreated patients.

Teclistamab is currently being evaluated in a Phase 2 clinical study for the treatment of relapsed or refractory multiple myeloma ([NCT03145181](#)) and is also being explored in combination studies ([NCT04586426](#), [NCT04108195](#), [NCT04722146](#)). On June 1, 2021, Janssen [announced](#) teclistamab had been granted Breakthrough Therapy Designation by the U.S. FDA. In 2020, the European Commission and the U.S. FDA each granted teclistamab orphan designation for the treatment of multiple myeloma. In January 2021, teclistamab was granted PRIME (PRIority MEdicines) designation by the European Medicines Agency (EMA).

About IMBRUVICA®

IMBRUVICA® is a once-daily oral medication that is jointly developed and commercialized by Janssen Biotech, Inc. and Pharmacyclics LLC, an AbbVie company. Since its launch in 2013, IMBRUVICA® has received 11 FDA approvals across six disease areas: chronic lymphocytic leukemia (CLL) with or without 17p deletion (del17p); small lymphocytic lymphoma (SLL) with or without del17p; Waldenström macroglobulinemia; previously-treated patients with mantle cell lymphoma (MCL)*; previously-treated patients with marginal zone lymphoma (MZL) who require systemic therapy and have received at least one prior anti-CD20-based therapy*; and previously-treated patients with chronic graft-versus-host disease (cGVHD) after failure of one or more lines of systemic therapy.¹⁹

** Accelerated approval was granted for MCL and MZL based on overall response rate. Continued approval for MCL and MZL may be contingent upon verification and description of clinical benefit in confirmatory trials.*

For more information, visit www.IMBRUVICA.com.

About DARZALEX FASPRO® and DARZALEX®

DARZALEX FASPRO® [received](#) U.S. FDA approval in May 2020 and is approved for six indications in multiple myeloma (MM), two of which are for frontline treatment in newly diagnosed patients who are transplant ineligible.²⁰ DARZALEX FASPRO® is the only subcutaneous CD38-directed antibody globally approved to treat patients with MM. DARZALEX FASPRO® is co-formulated with recombinant human hyaluronidase PH20 (rHuPH20), Halozyme's ENHANZE® drug delivery technology. In January 2021, DARZALEX FASPRO® became the first FDA approved therapy for light chain amyloidosis. In August 2012, Janssen [entered](#) into an exclusive global license and development agreement with Genmab A/S to develop, manufacture, and commercialize DARZALEX®.²¹ DARZALEX® has been approved in eight indications, three of which are in the frontline setting, including for newly diagnosed patients who are transplant eligible as well as those who are ineligible.²⁰

For more information, visit www.DARZALEX.com.

About ERLEADA®

ERLEADA® (apalutamide) is an androgen receptor inhibitor indicated for the treatment of patients with non-metastatic castration-resistant prostate cancer (nmCRPC) and for the treatment of patients with metastatic castration-sensitive prostate cancer (mCSPC).²² ERLEADA® [received](#) U.S. FDA approval for nmCRPC in February 2018, and was [approved](#) for mCSPC in September 2019. To date, more than 25,000 patients worldwide have been treated with ERLEADA®.

For more information, visit www.ERLEADA.com.

About BALVERSA®

BALVERSA® (erdafitinib) is a kinase inhibitor indicated for the treatment of adults with locally advanced or metastatic urothelial carcinoma (UC) that has susceptible fibroblast growth factor receptor (FGFR)3 or FGFR2 genetic alterations and has progressed during or following at least one line of prior platinum-containing chemotherapy, including within 12 months of neoadjuvant or adjuvant platinum-containing chemotherapy.²³ Patients are selected for therapy based on an FDA-approved companion diagnostic for BALVERSA®.²⁸ Information on FDA-approved tests for the detection of FGFR genetic alterations in urothelial cancer is available at: <http://www.fda.gov/CompanionDiagnostics>. This indication is approved under accelerated approval based on tumor response rate. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials.

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

For more information, visit www.BALVERSA.com.

About TAR-200

TAR-200 is a novel localized intravesical drug delivery system, enabling controlled release of gemcitabine into the bladder, increasing dwell time and local drug exposure. Treatment with TAR-200 has demonstrated early clinical benefit, with favorable tolerability, in patients with muscle invasive bladder cancer (MIBC).²⁴

RYBREVANT™ IMPORTANT SAFETY INFORMATION³

WARNINGS AND PRECAUTIONS

Infusion Related Reactions³

RYBREVANT™ can cause infusion related reactions (IRR); signs and symptoms of IRR include dyspnea, flushing, fever, chills, nausea, chest discomfort, hypotension, and vomiting.

Based on the safety population, IRR occurred in 66% of patients treated with RYBREVANT™. Among patients receiving treatment on Week 1 Day 1, 65% experienced an IRR, while the incidence of IRR was 3.4% with the Day 2 infusion, 0.4% with the Week 2 infusion, and cumulatively 1.1% with subsequent infusions. Of the reported IRRs, 97% were Grade 1-2, 2.2%

were Grade 3, and 0.4% were Grade 4. The median time to onset was 1 hour (range 0.1 to 18 hours) after start of infusion. The incidence of infusion modifications due to IRR was 62% and 1.3% of patients permanently discontinued RYBREVANT™ due to IRR.

Premedicate with antihistamines, antipyretics, and glucocorticoids and infuse RYBREVANT™ as recommended. Administer RYBREVANT™ via a peripheral line on Week 1 and Week 2. Monitor patients for any signs and symptoms of infusion reactions during RYBREVANT™ infusion in a setting where cardiopulmonary resuscitation medication and equipment are available. Interrupt infusion if IRR is suspected. Reduce the infusion rate or permanently discontinue RYBREVANT™ based on severity.

Interstitial Lung Disease/Pneumonitis³

RYBREVANT™ can cause interstitial lung disease (ILD)/pneumonitis. Based on the safety population, ILD/pneumonitis occurred in 3.3% of patients treated with RYBREVANT™, with 0.7% of patients experiencing Grade 3 ILD/pneumonitis. Three patients (1%) discontinued RYBREVANT™ due to ILD/pneumonitis.

Monitor patients for new or worsening symptoms indicative of ILD/pneumonitis (e.g., dyspnea, cough, fever). Immediately withhold RYBREVANT™ in patients with suspected ILD/pneumonitis and permanently discontinue if ILD/pneumonitis is confirmed.

Dermatologic Adverse Reactions³

RYBREVANT™ can cause rash (including dermatitis acneiform), pruritus and dry skin. Based on the safety population, rash occurred in 74% of patients treated with RYBREVANT™, including Grade 3 rash in 3.3% of patients. The median time to onset of rash was 14 days (range: 1 to 276 days). Rash leading to dose reduction occurred in 5% of patients, and RYBREVANT™ was permanently discontinued due to rash in 0.7% of patients.

Toxic epidermal necrolysis occurred in one patient (0.3%) treated with RYBREVANT™.

Instruct patients to limit sun exposure during and for 2 months after treatment with RYBREVANT™. Advise patients to wear protective clothing and use broad spectrum UVA/UVB sunscreen. Alcohol free emollient cream is recommended for dry skin.

If skin reactions develop, start topical corticosteroids and topical and/or oral antibiotics. For Grade 3 reactions, add oral steroids and consider dermatologic consultation. Promptly refer patients presenting with severe rash, atypical appearance or distribution, or lack of improvement

within 2 weeks to a dermatologist. Withhold, dose reduce or permanently discontinue RYBREVANT™ based on severity.

Ocular Toxicity³

RYBREVANT™ can cause ocular toxicity including keratitis, dry eye symptoms, conjunctival redness, blurred vision, visual impairment, ocular itching, and uveitis. Based on the safety population, keratitis occurred in 0.7% and uveitis occurred in 0.3% of patients treated with RYBREVANT™. All events were Grade 1-2. Promptly refer patients presenting with eye symptoms to an ophthalmologist. Withhold, dose reduce or permanently discontinue RYBREVANT™ based on severity.

Embryo Fetal Toxicity³

Based on its mechanism of action and findings from animal models, RYBREVANT™ can cause fetal harm when administered to a pregnant woman. Advise females of reproductive potential of the potential risk to the fetus. Advise female patients of reproductive potential to use effective contraception during treatment and for 3 months after the final dose of RYBREVANT™.

Adverse Reactions³

The most common adverse reactions ($\geq 20\%$) were rash, IRR, paronychia, musculoskeletal pain, dyspnea, nausea, fatigue, edema, stomatitis, cough, constipation, and vomiting. The most common Grade 3 or 4 laboratory abnormalities ($\geq 2\%$) were decreased lymphocytes, decreased albumin, decreased phosphate, decreased potassium, increased alkaline phosphatase, increased glucose, increased gamma-glutamyl transferase, and decreased sodium.

IMBRUVICA® IMPORTANT SAFETY INFORMATION

WARNINGS AND PRECAUTIONS

Hemorrhage: Fatal bleeding events have occurred in patients who received IMBRUVICA®. Major hemorrhage (\geq Grade 3, serious, or any central nervous system events; e.g., intracranial hemorrhage [including subdural hematoma], gastrointestinal bleeding, hematuria, and post procedural hemorrhage) occurred in 4% of patients, with fatalities occurring in 0.4% of 2,838 patients who received IMBRUVICA® in 27 clinical trials. Bleeding events of any grade including bruising and petechiae occurred in 39%, and excluding bruising and petechiae occurred in 23% of patients who received IMBRUVICA®, respectively.

The mechanism for the bleeding events is not well understood.

Use of either anticoagulant or antiplatelet agents concomitantly with IMBRUVICA® increases the risk of major hemorrhage. Across clinical trials, 3.1% of 2,838 patients who received IMBRUVICA® without antiplatelet or anticoagulant therapy experienced major hemorrhage. The addition of antiplatelet therapy with or without anticoagulant therapy increased this percentage to 4.4%, and the addition of anticoagulant therapy with or without antiplatelet therapy increased this percentage to 6.1%. Consider the risks and benefits of anticoagulant or antiplatelet therapy when co-administered with IMBRUVICA®. Monitor for signs and symptoms of bleeding.

Consider the benefit-risk of withholding IMBRUVICA® for at least 3 to 7 days pre- and post-surgery depending upon the type of surgery and the risk of bleeding.

Infections: Fatal and non-fatal infections (including bacterial, viral, or fungal) have occurred with IMBRUVICA® therapy. Grade 3 or greater infections occurred in 21% of 1,476 patients who received IMBRUVICA® in clinical trials. Cases of progressive multifocal leukoencephalopathy (PML) and Pneumocystis jirovecii pneumonia (PJP) have occurred in patients treated with IMBRUVICA®. Consider prophylaxis according to standard of care in patients who are at increased risk for opportunistic infections.

Monitor and evaluate patients for fever and infections and treat appropriately.

Cytopenias: In 645 patients with B-cell malignancies who received IMBRUVIC® as a single agent, grade 3 or 4 neutropenia occurred in 23% of patients, grade 3 or 4 thrombocytopenia in 8% and grade 3 or 4 anemia in 3%, based on laboratory measurements.

Monitor complete blood counts monthly.

Cardiac Arrhythmias and Cardiac Failure: Fatal and serious cardiac arrhythmias and cardiac failure have occurred with IMBRUVICA®. Grade 3 or greater ventricular tachyarrhythmias occurred in 0.2% of patients, Grade 3 or greater atrial fibrillation and atrial flutter occurred in 4%, and Grade 3 or greater cardiac failure occurred in 1% of 1,476 patients who received IMBRUVICA® in clinical trials. These events have occurred particularly in patients with cardiac risk factors, hypertension, acute infections, and a previous history of cardiac arrhythmias.

At baseline and then periodically, monitor patients clinically for cardiac arrhythmias and cardiac failure. Obtain an ECG for patients who develop arrhythmic symptoms (e.g.,

palpitations, lightheadedness, syncope, chest pain) or new onset dyspnea. Manage cardiac arrhythmias and cardiac failure appropriately, and if it persists, consider the risks and benefits of IMBRUVICA® treatment and follow dose modification guidelines.

Hypertension: Hypertension occurred in 19% of 1,476 patients who received IMBRUVICA® in clinical trials. Grade 3 or greater hypertension occurred in 8% of patients. Based on data from 1,124 of these patients, the median time to onset was 5.9 months (range, 0.03 to 24 months).

Monitor blood pressure in patients treated with IMBRUVICA® and initiate or adjust anti-hypertensive medication throughout treatment with IMBRUVICA® as appropriate.

Second Primary Malignancies: Other malignancies (10%), including non-skin carcinomas (4%), occurred among the 1,476 patients who received IMBRUVICA® in clinical trials. The most frequent second primary malignancy was non-melanoma skin cancer (6%).

Tumor Lysis Syndrome: Tumor lysis syndrome has been infrequently reported with IMBRUVICA®. Assess the baseline risk (e.g., high tumor burden) and take appropriate precautions. Monitor patients closely and treat as appropriate.

Embryo-Fetal Toxicity: Based on findings in animals, IMBRUVICA® can cause fetal harm when administered to a pregnant woman. Advise pregnant women of the potential risk to a fetus. Advise females of reproductive potential to use effective contraception during treatment with IMBRUVICA® and for 1 month after the last dose. Advise males with female partners of reproductive potential to use effective contraception during the same time period.

ADVERSE REACTIONS

B-cell malignancies: The most common adverse reactions ($\geq 30\%$) in patients with B-cell malignancies (MCL, CLL/SLL, WM and MZL) were thrombocytopenia (54.5%)*, diarrhea (43.8%), fatigue (39.1%), musculoskeletal pain (38.8%), neutropenia (38.6%)*, rash (35.8%), anemia (35.0%)*, and bruising (32.0%).

The most common Grade ≥ 3 adverse reactions ($\geq 5\%$) in patients with B-cell malignancies (MCL, CLL/SLL, WM and MZL) were neutropenia (20.7%)*, thrombocytopenia (13.6%)*, pneumonia (8.2%), and hypertension (8.0%).

Approximately 9% (CLL/SLL), 14% (MCL), 14% (WM) and 10% (MZL) of patients had a dose reduction due to adverse reactions. Approximately 4-10% (CLL/SLL), 9% (MCL), and 7% (WM [5%] and MZL [13%]) of patients discontinued due to adverse reactions.

cGVHD: The most common adverse reactions ($\geq 20\%$) in patients with cGVHD were fatigue (57%), bruising (40%), diarrhea (36%), thrombocytopenia (33%)*, muscle spasms (29%), stomatitis (29%), nausea (26%), hemorrhage (26%), anemia (24%)*, and pneumonia (21%). The most common Grade 3 or higher adverse reactions ($\geq 5\%$) reported in patients with cGVHD were pneumonia (14%), fatigue (12%), diarrhea (10%), neutropenia (10%)*, sepsis (10%), hypokalemia (7%), headache (5%), musculoskeletal pain (5%), and pyrexia (5%).

Twenty-four percent of patients receiving IMBRUVICA® in the cGVHD trial discontinued treatment due to adverse reactions. Adverse reactions leading to dose reduction occurred in 26% of patients.

*Treatment-emergent decreases (all grades) were based on laboratory measurements.

DRUG INTERACTIONS

CYP3A Inhibitors: Co-administration of IMBRUVICA® with strong or moderate CYP3A inhibitors may increase ibrutinib plasma concentrations. Dose modifications of IMBRUVICA® may be recommended when used concomitantly with posaconazole, voriconazole, and moderate CYP3A inhibitors. Avoid concomitant use of other strong CYP3A inhibitors. Interrupt IMBRUVICA® if strong inhibitors are used short-term (e.g., for ≤ 7 days). See dose modification guidelines in USPI sections 2.3 and 7.1.

CYP3A Inducers: Avoid coadministration with strong CYP3A inducers.

SPECIFIC POPULATIONS

Hepatic Impairment (based on Child-Pugh criteria): Avoid use of IMBRUVICA® in patients with severe hepatic impairment. In patients with mild or moderate impairment, reduce recommended IMBRUVICA® dose and monitor more frequently for adverse reactions of IMBRUVICA®.

Please [click here](#) to see the full Prescribing Information.

DARZALEX FASPRO® IMPORTANT SAFETY INFORMATION

CONTRAINDICATIONS

DARZALEX *FASPRO*[®] is contraindicated in patients with a history of severe hypersensitivity to daratumumab, hyaluronidase, or any of the components of the formulation.

WARNINGS AND PRECAUTIONS

Hypersensitivity and Other Administration Reactions

Both systemic administration-related reactions, including severe or life-threatening reactions, and local injection-site reactions can occur with DARZALEX *FASPRO*[®].

Systemic Reactions

In a pooled safety population of 683 patients with multiple myeloma (N=490) or light chain (AL) amyloidosis (N=193) who received DARZALEX *FASPRO*[®] as monotherapy or in combination, 10% of patients experienced a systemic administration-related reaction (Grade 2: 3.5%, Grade 3: 1%). Systemic administration-related reactions occurred in 9% of patients with the first injection, 0.4% with the second injection, and cumulatively 0.8% with subsequent injections. The median time to onset was 3.2 hours (range: 9 minutes to 3.5 days). Of the 117 systemic administration-related reactions that occurred in 66 patients, 100 (85%) occurred on the day of DARZALEX *FASPRO*[®] administration. Delayed systemic administration-related reactions have occurred in less than 1% of the patients.

Severe reactions included hypoxia, dyspnea, hypertension, and tachycardia. Other signs and symptoms of systemic administration-related reactions may include respiratory symptoms, such as bronchospasm, nasal congestion, cough, throat irritation, allergic rhinitis, and wheezing, as well as anaphylactic reaction, pyrexia, chest pain, pruritus, chills, vomiting, nausea, and hypotension.

Pre-medicate patients with histamine-1 receptor antagonist, acetaminophen, and corticosteroids. Monitor patients for systemic administration-related reactions, especially following the first and second injections. For anaphylactic reaction or life-threatening (Grade 4) administration-related reactions, immediately and permanently discontinue DARZALEX *FASPRO*[®]. Consider administering corticosteroids and other medications after the administration of DARZALEX *FASPRO*[®] depending on dosing regimen and medical history to minimize the risk of delayed (defined as occurring the day after administration) systemic administration-related reactions.

Local Reactions

In this pooled safety population, injection-site reactions occurred in 9% of patients, including Grade 2 reactions in 0.7%. The most frequent (>1%) injection-site reaction was injection-site erythema. These local reactions occurred a median of 5 minutes (range: 0 minutes to 4.7 days) after starting administration of DARZALEX *FASPRO*[®]. Monitor for local reactions and consider symptomatic management.

Cardiac Toxicity in Patients With AL Amyloidosis

Serious or fatal cardiac adverse reactions occurred in patients with AL amyloidosis who received DARZALEX *FASPRO*[®] in combination with bortezomib, cyclophosphamide, and dexamethasone. Serious cardiac disorders occurred in 16% of patients, and fatal cardiac disorders occurred in 10% of patients. Patients with NYHA Class IIIA or Mayo Stage III A disease may be at greater risk. Patients with NYHA Class IIIB or IV disease were not studied. Monitor patients with cardiac involvement of AL amyloidosis more frequently for cardiac adverse reactions and administer supportive care as appropriate.

Neutropenia

Daratumumab may increase neutropenia induced by background therapy. Monitor complete blood cell counts periodically during treatment according to manufacturer's prescribing information for background therapies. Monitor patients with neutropenia for signs of infection. Consider withholding DARZALEX *FASPRO*[®] until recovery of neutrophils. In lower body weight patients receiving DARZALEX *FASPRO*[®], higher rates of Grade 3-4 neutropenia were observed.

Thrombocytopenia

Daratumumab may increase thrombocytopenia induced by background therapy. Monitor complete blood cell counts periodically during treatment according to manufacturer's prescribing information for background therapies. Consider withholding DARZALEX *FASPRO*[®] until recovery of platelets.

Embryo-Fetal Toxicity

Based on the mechanism of action, DARZALEX *FASPRO*[®] can cause fetal harm when administered to a pregnant woman. DARZALEX *FASPRO*[®] may cause depletion of fetal immune cells and decreased bone density. Advise pregnant women of the potential risk to a fetus. Advise females with reproductive potential to use effective contraception during treatment with DARZALEX *FASPRO*[®] and for 3 months after the last dose.

The combination of DARZALEX *FASPRO*[®] with lenalidomide or thalidomide is contraindicated in pregnant women because lenalidomide and thalidomide may cause birth defects and death of the

unborn child. Refer to the lenalidomide and thalidomide prescribing information on use during pregnancy.

Interference With Serological Testing

Daratumumab binds to CD38 on red blood cells (RBCs) and results in a positive indirect antiglobulin test (indirect Coombs test). Daratumumab-mediated positive indirect antiglobulin test may persist for up to 6 months after the last daratumumab administration. Daratumumab bound to RBCs masks detection of antibodies to minor antigens in the patient's serum. The determination of a patient's ABO and Rh blood type are not impacted.

Notify blood transfusion centers of this interference with serological testing and inform blood banks that a patient has received DARZALEX *FASPRO*[®]. Type and screen patients prior to starting DARZALEX *FASPRO*[®].

Interference With Determination of Complete Response

Daratumumab is a human IgG kappa monoclonal antibody that can be detected on both the serum protein electrophoresis (SPE) and immunofixation (IFE) assays used for the clinical monitoring of endogenous M-protein. This interference can impact the determination of complete response and of disease progression in some DARZALEX *FASPRO*[®]-treated patients with IgG kappa myeloma protein.

ADVERSE REACTIONS

In multiple myeloma, the most common adverse reaction ($\geq 20\%$) with DARZALEX *FASPRO*[®] monotherapy is upper respiratory tract infection. The most common adverse reactions with combination therapy ($\geq 20\%$ for any combination) include fatigue, nausea, diarrhea, dyspnea, insomnia, pyrexia, cough, muscle spasms, back pain, vomiting, upper respiratory tract infection, peripheral sensory neuropathy, constipation, and pneumonia.

The most common adverse reactions ($\geq 20\%$) in patients with AL amyloidosis are upper respiratory tract infection, diarrhea, peripheral edema, constipation, fatigue, peripheral sensory neuropathy, nausea, insomnia, dyspnea, and cough.

The most common hematology laboratory abnormalities ($\geq 40\%$) with DARZALEX *FASPRO*[®] are decreased leukocytes, decreased lymphocytes, decreased neutrophils, decreased platelets, and decreased hemoglobin.

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DARZALEX® IMPORTANT SAFETY INFORMATION

CONTRAINDICATIONS

DARZALEX® is contraindicated in patients with a history of severe hypersensitivity (eg, anaphylactic reactions) to daratumumab or any of the components of the formulation.

WARNINGS AND PRECAUTIONS

Infusion-Related Reactions

DARZALEX® can cause severe and/or serious infusion-related reactions including anaphylactic reactions. In clinical trials (monotherapy and combination: N=2066), infusion-related reactions occurred in 37% of patients with the Week 1 (16 mg/kg) infusion, 2% with the Week 2 infusion, and cumulatively 6% with subsequent infusions. Less than 1% of patients had a Grade 3/4 infusion-related reaction at Week 2 or subsequent infusions. The median time to onset was 1.5 hours (range: 0 to 73 hours). Nearly all reactions occurred during infusion or within 4 hours of completing DARZALEX®. Severe reactions have occurred, including bronchospasm, hypoxia, dyspnea, hypertension, laryngeal edema, and pulmonary edema. Signs and symptoms may include respiratory symptoms, such as nasal congestion, cough, throat irritation, as well as chills, vomiting, and nausea. Less common symptoms were wheezing, allergic rhinitis, pyrexia, chest discomfort, pruritus, and hypotension.

When DARZALEX® dosing was interrupted in the setting of ASCT (CASSIOPEIA) for a median of 3.75 months (range: 2.4 to 6.9 months), upon re-initiation of DARZALEX®, the incidence of infusion-related reactions was 11% for the first infusion following ASCT. Infusion-related reactions occurring at re-initiation of DARZALEX® following ASCT were consistent in terms of symptoms and severity (Grade 3 or 4: <1%) with those reported in previous studies at Week 2 or subsequent infusions. In EQUULEUS, patients receiving combination treatment (n=97) were administered the first 16 mg/kg dose at Week 1 split over two days, ie, 8 mg/kg on Day 1 and Day 2, respectively. The incidence of any grade infusion-related reactions was 42%, with 36% of patients experiencing infusion-related reactions on Day 1 of Week 1, 4% on Day 2 of Week 1, and 8% with subsequent infusions.

Pre-medicate patients with antihistamines, antipyretics, and corticosteroids. Frequently monitor patients during the entire infusion. Interrupt DARZALEX® infusion for reactions of any severity and institute medical management as needed. Permanently discontinue DARZALEX® therapy if an anaphylactic reaction or life-threatening (Grade 4) reaction occurs and institute appropriate emergency care. For patients with Grade 1, 2, or 3 reactions, reduce the infusion rate when re-starting the infusion.

To reduce the risk of delayed infusion-related reactions, administer oral corticosteroids to all patients following DARZALEX[®] infusions. Patients with a history of chronic obstructive pulmonary disease may require additional post-infusion medications to manage respiratory complications. Consider prescribing short- and long-acting bronchodilators and inhaled corticosteroids for patients with chronic obstructive pulmonary disease.

Interference With Serological Testing

Daratumumab binds to CD38 on red blood cells (RBCs) and results in a positive Indirect Antiglobulin Test (Indirect Coombs test). Daratumumab-mediated positive Indirect Antiglobulin Test may persist for up to 6 months after the last daratumumab infusion. Daratumumab bound to RBCs masks detection of antibodies to minor antigens in the patient's serum. The determination of a patient's ABO and Rh blood type is not impacted. Notify blood transfusion centers of this interference with serological testing and inform blood banks that a patient has received DARZALEX[®]. Type and screen patients prior to starting DARZALEX[®].

Neutropenia and Thrombocytopenia

DARZALEX[®] may increase neutropenia and thrombocytopenia induced by background therapy. Monitor complete blood cell counts periodically during treatment according to manufacturer's prescribing information for background therapies. Monitor patients with neutropenia for signs of infection. Consider withholding DARZALEX[®] until recovery of neutrophils or for recovery of platelets.

Interference With Determination of Complete Response

Daratumumab is a human IgG kappa monoclonal antibody that can be detected on both the serum protein electrophoresis (SPE) and immunofixation (IFE) assays used for the clinical monitoring of endogenous M-protein. This interference can impact the determination of complete response and of disease progression in some patients with IgG kappa myeloma protein.

Embryo-Fetal Toxicity

Based on the mechanism of action, DARZALEX[®] can cause fetal harm when administered to a pregnant woman. DARZALEX[®] may cause depletion of fetal immune cells and decreased bone density. Advise pregnant women of the potential risk to a fetus. Advise females with reproductive potential to use effective contraception during treatment with DARZALEX[®] and for 3 months after the last dose.

The combination of DARZALEX[®] with lenalidomide, pomalidomide, or thalidomide is contraindicated in pregnant women, because lenalidomide, pomalidomide, and thalidomide may

cause birth defects and death of the unborn child. Refer to the lenalidomide, pomalidomide, or thalidomide prescribing information on use during pregnancy.

ADVERSE REACTIONS

The most frequently reported adverse reactions (incidence $\geq 20\%$) were: upper respiratory infection, neutropenia, infusion-related reactions, thrombocytopenia, diarrhea, constipation, anemia, peripheral sensory neuropathy, fatigue, peripheral edema, nausea, cough, pyrexia, dyspnea, and asthenia. The most common hematologic laboratory abnormalities ($\geq 40\%$) with DARZALEX[®] are: neutropenia, lymphopenia, thrombocytopenia, leukopenia, and anemia.

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ERLEADA[®] IMPORTANT SAFETY INFORMATION Error! Bookmark not defined.

WARNINGS AND PRECAUTIONS

Cerebrovascular and Ischemic Cardiovascular Events —

In a randomized study (SPARTAN) of patients with nmCRPC, ischemic cardiovascular events occurred in 4% of patients treated with ERLEADA and 3% of patients treated with placebo. In a randomized study (TITAN) in patients with mCSPC, ischemic cardiovascular events occurred in 4% of patients treated with ERLEADA and 2% of patients treated with placebo. Across the SPARTAN and TITAN studies, 5 patients (0.5%) treated with ERLEADA, and 2 patients (0.2%) treated with placebo died from an ischemic cardiovascular event.

In the SPARTAN study, cerebrovascular events occurred in 4.7% of patients treated with ERLEADA and 0.8% of patients treated with placebo.

In the TITAN study, cerebrovascular events occurred in 1.9% of patients treated with ERLEADA and 2.1% of patients treated with placebo. Across the SPARTAN and TITAN studies, 3 patients (0.2%) treated with ERLEADA, and 2 patients (0.2%) treated with placebo died from a cerebrovascular event. Cerebrovascular and ischemic cardiovascular events, including events leading to death, occurred in patients receiving ERLEADA[®]. Monitor for signs and symptoms of ischemic heart disease and cerebrovascular disorders. Optimize management of cardiovascular risk factors, such as hypertension, diabetes, or dyslipidemia. Consider discontinuation of ERLEADA[®] for Grade 3 and 4 events.

Fractures — In a randomized study (SPARTAN) of patients with nmCRPC, fractures occurred in 12% of patients treated with ERLEADA[®] and in 7% of patients treated with placebo. In a randomized study (TITAN) of patients with mCSPC, fractures occurred in 9% of patients treated with ERLEADA[®] and in 6% of patients treated with placebo. Evaluate patients for fracture risk.

Monitor and manage patients at risk for fractures according to established treatment guidelines and consider use of bone-targeted agents.

Falls — In a randomized study (SPARTAN), falls occurred in 16% of patients treated with ERLEADA[®] compared with 9% of patients treated with placebo. Falls were not associated with loss of consciousness or seizure. Falls occurred in patients receiving ERLEADA[®] with increased frequency in the elderly. Evaluate patients for fall risk.

Seizure — In 2 randomized studies (SPARTAN and TITAN), 5 patients (0.4%) treated with ERLEADA[®] and 1 patient treated with placebo (0.1%) experienced a seizure. Permanently discontinue ERLEADA[®] in patients who develop a seizure during treatment. It is unknown whether anti-epileptic medications will prevent seizures with ERLEADA[®]. Advise patients of the risk of developing a seizure while receiving ERLEADA[®] and of engaging in any activity where sudden loss of consciousness could cause harm to themselves or others.

Embryo-Fetal Toxicity — The safety and efficacy of ERLEADA[®] have not been established in females. Based on its mechanism of action, ERLEADA[®] can cause fetal harm and loss of pregnancy when administered to a pregnant female. Advise males with female partners of reproductive potential to use effective contraception during treatment and for 3 months after the last dose of ERLEADA[®] [see *Use in Specific Populations (8.1, 8.3)*].

ADVERSE REACTIONS

Adverse Reactions — The most common adverse reactions ($\geq 10\%$) that occurred more frequently in the ERLEADA[®]-treated patients ($\geq 2\%$ over placebo) from the randomized placebo-controlled clinical trials (TITAN and SPARTAN) were fatigue, arthralgia, rash, decreased appetite, fall, weight decreased, hypertension, hot flush, diarrhea and fracture.

Laboratory Abnormalities — All Grades (Grade 3-4)

- Hematology — In the TITAN study: white blood cell decreased ERLEADA[®] 27% (0.4%), placebo 19% (0.6%). In the SPARTAN study: anemia ERLEADA[®] 70% (0.4%), placebo 64% (0.5%); leukopenia ERLEADA[®] 47% (0.3%), placebo 29% (0%); lymphopenia ERLEADA[®] 41% (2%), placebo 21% (2%)
- Chemistry — In the TITAN study: hypertriglyceridemia ERLEADA[®] 17% (3%), placebo 12% (2%). In the SPARTAN study: hypercholesterolemia ERLEADA[®] 76% (0.1%), placebo 46% (0%); hyperglycemia ERLEADA[®] 70% (2%), placebo 59% (1%); hypertriglyceridemia ERLEADA[®] 67% (2%), placebo 49% (0.8%); hyperkalemia ERLEADA[®] 32% (2%), placebo 22% (0.5%)

Rash — In 2 randomized studies, rash was most commonly described as macular or maculopapular. Adverse reactions of rash were 26% with ERLEADA[®] vs 8% with placebo. Grade 3 rashes (defined as covering >30% body surface area [BSA]) were reported with ERLEADA[®] treatment (6%) vs placebo (0.5%).

The onset of rash occurred at a median of 83 days. Rash resolved in 78% of patients within a median of 78 days from onset of rash. Rash was commonly managed with oral antihistamines, topical corticosteroids, and 19% of patients received systemic corticosteroids. Dose reduction or dose interruption occurred in 14% and 28% of patients, respectively. Of the patients who had dose interruption, 59% experienced recurrence of rash upon reintroduction of ERLEADA[®].

Hypothyroidism — In 2 randomized studies, hypothyroidism was reported for 8% of patients treated with ERLEADA[®] and 2% of patients treated with placebo based on assessments of thyroid-stimulating hormone (TSH) every 4 months. Elevated TSH occurred in 25% of patients treated with ERLEADA[®] and 7% of patients treated with placebo. The median onset was at the first scheduled assessment. There were no Grade 3 or 4 adverse reactions. Thyroid replacement therapy, when clinically indicated, should be initiated or dose-adjusted.

DRUG INTERACTIONS

Effect of Other Drugs on ERLEADA[®] — Co-administration of a strong CYP2C8 or CYP3A4 inhibitor is predicted to increase the steady-state exposure of the active moieties. No initial dose adjustment is necessary; however, reduce the ERLEADA[®] dose based on tolerability [*see Dosage and Administration (2.2)*].

Effect of ERLEADA[®] on Other Drugs — ERLEADA[®] is a strong inducer of CYP3A4 and CYP2C19, and a weak inducer of CYP2C9 in humans. Concomitant use of ERLEADA[®] with medications that are primarily metabolized by CYP3A4, CYP2C19, or CYP2C9 can result in lower exposure to these medications. Substitution for these medications is recommended when possible or evaluate for loss of activity if medication is continued. Concomitant administration of ERLEADA[®] with medications that are substrates of UDP-glucuronosyl transferase (UGT) can result in decreased exposure. Use caution if substrates of UGT must be co-administered with ERLEADA[®] and evaluate for loss of activity.

P-gp, BCRP or OATP1B1 Substrates — Apalutamide is a weak inducer of P-glycoprotein (P-gp), breast cancer resistance protein (BCRP), and organic anion transporting polypeptide 1B1 (OATP1B1) clinically. Concomitant use of ERLEADA[®] with medications that are substrates of P-gp, BCRP, or OATP1B1 can result in lower exposure of these medications. Use caution if

substrates of P-gp, BCRP or OATP1B1 must be co-administered with ERLEADA® and evaluate for loss of activity if medication is continued.

Please see the full [Prescribing Information](#) for ERLEADA®.

BALVERSA® IMPORTANT SAFETY INFORMATION

Warnings and Precautions

Ocular Disorders – BALVERSA® can cause ocular disorders, including central serous retinopathy/retinal pigment epithelial detachment (CSR/RPED) resulting in visual field defect. CSR/RPED was reported in 25% of patients treated with BALVERSA®, with a median time to first onset of 50 days. Grade 3 CSR/RPED, involving central field of vision, was reported in 3% of patients. CSR/RPED resolved in 13% of patients and was ongoing in 13% of patients at the study cutoff. CSR/RPED led to dose interruptions and reductions in 9% and 14% of patients, respectively, and 3% of patients discontinued BALVERSA®. Dry eye symptoms occurred in 28% of patients during treatment with BALVERSA® and were Grade 3 in 6% of 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, funduscopy, and optical coherence tomography. Withhold BALVERSA® when CSR occurs and permanently discontinue if it does not resolve within 4 weeks or if Grade 4 in severity. For ocular adverse reactions, follow the dose modification guidelines [*see Dosage and Administration (2.3)*].

Hyperphosphatemia – Increases in phosphate levels are a pharmacodynamic effect of BALVERSA® [*see Pharmacodynamics (12.2)*]. Hyperphosphatemia was reported as adverse reaction in 76% of patients treated with BALVERSA®. The median onset time for any grade event of hyperphosphatemia was 20 days (range: 8–116) after initiating BALVERSA®. Thirty-two percent of patients received phosphate binders during treatment with BALVERSA®. Monitor for hyperphosphatemia and follow the dose modification guidelines when required [*see Dosage and Administration (2.2, 2.3)*].

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 woman. In a rat embryo-fetal toxicity study, erdafitinib was embryotoxic and teratogenic at exposures less than the human exposures at all doses studied. Advise pregnant women 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 [see *Use in Specific Populations (8.1, 8.3) and Clinical Pharmacology (12.1)*].

Most common adverse reactions including laboratory abnormalities ≥20% :

Phosphate increased (76%), stomatitis (56%), fatigue (54%), creatinine increased (52%), diarrhea (47%), dry mouth (45%), onycholysis (41%), alanine aminotransferase increased (41%), alkaline phosphatase increased (41%), sodium decreased (40%), decreased appetite (38%), albumin decreased (37%), dysgeusia (37%), hemoglobin decreased (35%), dry skin (34%), aspartate aminotransferase increased (30%), magnesium decreased (30%), dry eye (28%), alopecia (26%), palmar-plantar erythrodysesthesia syndrome (26%), constipation (28%), phosphate decreased (24%), abdominal pain (23%), calcium increased (22%), nausea (21%), and musculoskeletal pain (20%). The most common Grade 3 or greater adverse reactions (>1%) were stomatitis (9%), nail dystrophy*, palmar-plantar erythrodysesthesia syndrome (6%), paronychia (3%), nail disorder*, keratitis[†], onycholysis* (10%), and hyperphosphatemia.

*Included within onycholysis. †Included within dry eye.

- An adverse reaction with a fatal outcome in 1% of patients was acute myocardial infarction.
- Serious adverse reactions occurred in 41% of patients, including eye disorders (10%).
- Permanent discontinuation due to an adverse reaction occurred in 13% of patients. The most frequent reasons for permanent discontinuation included eye disorders (6%).
- Dosage interruptions occurred in 68% of patients. The most frequent adverse reactions requiring dosage interruption included hyperphosphatemia (24%), stomatitis (17%), eye disorders (17%), and palmar-plantar erythrodysesthesia syndrome (8%).
- Dose reductions occurred in 53% of patients. The most frequent adverse reactions for dose reductions included eye disorders (23%), stomatitis (15%), hyperphosphatemia (7%), palmar-plantar erythrodysesthesia syndrome (7%), paronychia (7%), and nail dystrophy (6%).

Drug Interactions

- Moderate CYP2C9 or strong CYP3A4 Inhibitors: Consider alternative agents or monitor closely for adverse reactions. (7.1)
- Strong CYP2C9 or CYP3A4 inducers: Avoid concomitant use with BALVERSA®. (7.1)
- Moderate CYP2C9 or CYP3A4 inducers: Increase BALVERSA® dose up to 9 mg. (7.1)
- Serum phosphate level-altering agents: Avoid concomitant use with agents that can alter serum phosphate levels before the initial dose modification period. (2.3, 7.1)

- CYP3A4 substrates: Avoid concomitant use with sensitive CYP3A4 substrates with narrow therapeutic indices. (7.2)
- OCT2 substrates: Consider alternative agents or consider reducing the dose of OCT2 substrates based on tolerability. (7.2)
- P-gp substrates: Separate BALVERSA® administration by at least 6 hours before or after administration of P-gp substrates with narrow therapeutic indices. (7.2)

Use in Specific Populations

Lactation – Because of the potential for serious adverse reactions from erdafitinib in a breastfed child, advise lactating women not to breastfeed during treatment with BALVERSA® and for one month following the last dose.

Please see the full [Prescribing Information](#) for BALVERSA®.

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, Immunology, Infectious Diseases & Vaccines, Neuroscience, Oncology and Pulmonary Hypertension.

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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 amivantamab, cilta-cel, teclistamab, talquetamab, IMBRUVICA® (ibrutinib) DARZALEX® (daratumumab), DARZALEX FASPRO® (daratumumab and hyaluronidase-fihj), ERLEADA® (apalutamide), BALVERSA® (erdafitinib) and TAR-200. 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 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 3, 2021, including in the sections captioned "Cautionary Note Regarding Forward-Looking Statements" and "Item 1A. Risk Factors," and in the company's most recently filed Quarterly Report on Form 10-Q, and the company's subsequent 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.

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¹ ClinicalTrials.gov. A Study of Amivantamab and Lazertinib Combination Therapy Versus Osimertinib in Locally Advanced or Metastatic Non-Small Cell Lung Cancer (MARIPOSA). Available at: <https://clinicaltrials.gov/ct2/show/NCT04487080>. Accessed June 2021.

² ClinicalTrials.gov. A Study of Combination Amivantamab and Carboplatin-Pemetrexed Therapy, Compared With Carboplatin-Pemetrexed, in Participants With Advanced or Metastatic Non-Small Cell Lung Cancer Characterized by Epidermal Growth Factor Receptor (EGFR) Exon 20 Insertions (PAPILLON). Available at: <https://clinicaltrials.gov/ct2/show/NCT04538664?term=PAPILLON&cond=NSCLC&draw=2&rank=1>. Accessed June 2021.

³ RYBREVANT™ Prescribing Information. Horsham, PA: Janssen Biotech, Inc.

⁴ Clinicaltrials.gov. Clinical Trial of YH25448 in Patients With EGFR Mutation Positive Advanced NSCLC. <https://clinicaltrials.gov/ct2/show/NCT03046992>. Accessed June 2021.

⁵ Tai Y.T., et al. Targeting B-cell maturation antigen in multiple myeloma. <https://www.ncbi.nlm.nih.gov/pubmed/26370838>. Accessed June 2021.

⁶ Janssen Initiates Rolling Submission of a Biologics License Application to U.S. FDA for BCMA CAR-T Therapy Ciltacabtagene Autoleucl (cilta-cel) for the Treatment of Relapsed and/or Refractory Multiple Myeloma. <https://www.janssen.com/janssen-initiates-rolling-submission-biologics-license-application-us-fda-bcma-car-t-therapy>. Accessed June 2021.

⁷ Janssen Announces BCMA CAR-T Therapy JNJ-4528 Granted U.S. FDA Breakthrough Therapy Designation for the Treatment of Relapsed or Refractory Multiple Myeloma. <https://www.janssen.com/janssen-announces-bcma-car-t-therapy-jnj-4528-granted-us-fda-breakthrough-therapy-designation>. Accessed June 2021.

⁸ Janssen Announces Investigational CAR-T Therapy JNJ-68284528 Granted PRIME Designation by the European Medicines Agency. <https://www.jnj.com/janssen-announces-investigational-car-t-therapy-jnj-68284528-granted-prime-designation-by-the-european-medicines-agency>. Accessed June 2021.

⁹ Chari A., et al. A Phase 1, First-in-Human Study of Talquetamab, a G Protein-Coupled Receptor Family C Group 5 Member D (GPC5D) x CD3 Bispecific Antibody, in Patients with Relapsed and/or Refractory Multiple Myeloma (RRMM): <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7408718/>. Accessed June 2021.

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- ¹⁰ Labrijn AF et al. Proc Natl Acad Sci USA. 2013;110:5145.
- ¹¹ Cohen Y., et al. Hematology. 2013 Nov; 18(6):348-51.
- ¹² Labrijn A.F., et al. Proc Natl Acad Sci USA. 2013;110:5145.
- ¹³ Cancer Research Institute. "Adoptive Cell Therapy: TIL, TCR, CAR T, AND NK CELL THERAPIES." Available at: <https://www.cancerresearch.org/immunotherapy/treatment-types/adoptive-cell-therapy>. Accessed June 2021.
- ¹⁴ Frerichs K.A., et al. Clin Cancer Res. 2020; doi: 10.1158/1078-0432.CCR-19-2299.
- ¹⁵ Cho S.F., et al. Frontiers in Immunology. 2018; 9: 1821.
- ¹⁶ Benonis H., et al. Molecular Cancer Therapeutics. 2019 (18) (2) 312-322.
- ¹⁷ Cancer Research Institute. "Adoptive Cell Therapy: TIL, TCR, CAR T, AND NK CELL THERAPIES." Available at: <https://www.cancerresearch.org/immunotherapy/treatment-types/adoptive-cell-therapy>
- ¹⁸ Cho SF et al. Frontiers in Immunology. 2018; 9: 1821.
- ¹⁹ IMBRUVICA® U.S. Prescribing Information, December 2020.
- ²⁰ DARZALEX® Prescribing Information, March 2021.
- ²¹ Janssen Biotech, Inc. "Janssen Biotech Announces Global License and Development Agreement for Investigational Anti-Cancer Agent Daratumumab." Issued August 30, 2012.
- ²² ERLEADA® Prescribing Information, November 2020.
- ²³ BALVERSA® U.S. Prescribing Information, April 2020.
- ²⁴ Daneshmand S. et al. Effect of GemRIS (gemcitabine-releasing intravesical system, TAR-200) on antitumor activity in muscle-invasive bladder cancer (MIBC). Journal of Clinical Oncology. 10.1200/JCO.2017.35.15_suppl.e16000. Accessed June 2021.