WARNINGS AND PRECAUTIONS

- Immune-mediated adverse reactions, which may be severe or fatal, can occur in any organ system or tissue, including the following: immune-mediated pneumonitis, immune-mediated colitis, immune-mediated hepatitis, immune-mediated endocrinopathies, immune-mediated nephritis with renal dysfunction, immune-mediated dermatologic adverse reactions, and solid organ transplant rejection.
- Monitor for signs and symptoms of immune-mediated adverse reactions. Evaluate clinical chemistries, including liver enzymes, creatinine, and thyroid function, at baseline and periodically during treatment. Withhold or permanently discontinue JEMPERLI and administer corticosteroids based on the severity of reaction. (2.3, 5.1)
- Infusion-related reactions: Interrupt, slow the rate of infusion, or permanently discontinue JEMPERLI based on severity of reaction. (2.3, 5.2)
- Complications of allogeneic hematopoietic stem cell transplantation (HSCT): Fatal and other serious complications can occur in patients who receive allogeneic HSCT before or after being treated with a PD-1/PD-L1–blocking antibody. (5.3)
- Embryo-fetal toxicity: Can cause fetal harm. Advise females of reproductive potential of the potential risk to a fetus and to use effective contraception. (5.4, 8.1, 8.3)

ADVERSE REACTIONS

Most common adverse reactions (≥20%) in patients with dMMR solid tumors are fatigue/asthenia, anemia, diarrhea, and nausea. Most common Grade 3 or 4 laboratory abnormalities (≥2%) are decreased lymphocytes, decreased sodium, increased alkaline phosphatase, and decreased albumin. (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact GlaxoSmithKline at 1-888-825-5249 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

USE IN SPECIFIC POPULATIONS

Lactation: Advise not to breastfeed. (8.2)

See 17 for PATIENT COUNSELING INFORMATION and Medication Guide.

Revised: 2/2023
FULL PRESCRIBING INFORMATION

1 INDICATIONS AND USAGE

JEMPERLI is indicated for the treatment of adult patients with mismatch repair deficient (dMMR) recurrent or advanced:

- endometrial cancer (EC), as determined by an FDA-approved test, that has progressed on or following prior treatment with a platinum-containing regimen in any setting and are not candidates for curative surgery or radiation [see Dosage and Administration (2.1)], or

- solid tumors, as determined by an FDA-approved test, that have progressed on or following prior treatment and who have no satisfactory alternative treatment options [see Dosage and Administration (2.1)]. This indication is approved under accelerated approval based on tumor response rate and durability of response [see Clinical Studies (14.2)]. Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial(s).

2 DOSAGE AND ADMINISTRATION

2.1 Patient Selection

Mismatch Repair Deficient Recurrent or Advanced Endometrial Cancer or Mismatch Repair Deficient Recurrent or Advanced Solid Tumors

Select patients for treatment with JEMPERLI based on the presence of dMMR in tumor specimens [see Clinical Studies (14)]. Information on FDA-approved tests for the detection of dMMR status is available at https://www.fda.gov/companiondiagnostics.

Because the effect of prior chemotherapy on test results for dMMR in patients with high-grade gliomas is unclear, it is recommended to test for this marker in the primary tumor specimen obtained prior to initiation of temozolomide chemotherapy in patients with high-grade gliomas.

2.2 Recommended Dosage

The recommended dosage of JEMPERLI is:

- Dose 1 through Dose 4: 500 mg every 3 weeks
- Subsequent dosing beginning 3 weeks after Dose 4 (Dose 5 onwards): 1,000 mg every 6 weeks

Administer JEMPERLI as an intravenous infusion over 30 minutes. Treat patients until disease progression or unacceptable toxicity.

2.3 Dosage Modifications for Adverse Reactions

No dose reductions of JEMPERLI are recommended. In general, withhold JEMPERLI for severe (Grade 3) immune-mediated adverse reactions. Permanently discontinue JEMPERLI for
life-threatening (Grade 4) immune-mediated adverse reactions, recurrent severe (Grade 3) immune-mediated reactions that require systemic immunosuppressive treatment, or an inability to reduce corticosteroid dose to 10 mg or less of prednisone equivalent per day within 12 weeks of initiating steroids.

Dosage modifications for JEMPERLI for adverse reactions that require management different from these general guidelines are summarized in Table 1.

### Table 1. Recommended Dosage Modifications for Adverse Reactions

<table>
<thead>
<tr>
<th>Adverse Reaction</th>
<th>Severitya</th>
<th>Dosage Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Immune-Mediated Adverse Reactions [see Warnings and Precautions (5.1)]</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumonitis</td>
<td>Grade 2</td>
<td>Withholdb</td>
</tr>
<tr>
<td></td>
<td>Grade 3 or 4 or recurrent Grade 2</td>
<td>Permanently discontinue</td>
</tr>
<tr>
<td>Colitis</td>
<td>Grade 2 or 3</td>
<td>Withholdb</td>
</tr>
<tr>
<td></td>
<td>Grade 4</td>
<td>Permanently discontinue</td>
</tr>
<tr>
<td>Hepatitis with no tumor involvement of the liver</td>
<td>AST or ALT increases to more than 3 and up to 8 times ULN or Total bilirubin increases to more than 1.5 and up to 3 times ULN</td>
<td>Withholdb</td>
</tr>
<tr>
<td></td>
<td>AST or ALT increases to more than 8 times ULN or Total bilirubin increases to more than 3 times ULN</td>
<td>Permanently discontinue</td>
</tr>
<tr>
<td></td>
<td>Baseline AST or ALT is more than 1 and up to 3 times ULN and increases to more than 5 and up to 10 times ULN or Baseline AST or ALT is more than 3 and up to 5 times ULN and increases to more than 8 and up to 10 times ULN</td>
<td>Withholdb</td>
</tr>
<tr>
<td></td>
<td>AST or ALT increases to more than 10 times ULN</td>
<td>Permanently discontinue</td>
</tr>
</tbody>
</table>

Reference ID: 5123352
<table>
<thead>
<tr>
<th>Endocrinopathies</th>
<th>Grade 2, 3, or 4</th>
<th>Withhold until clinically stable or permanently discontinue, depending on severity&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nephritis with renal dysfunction</td>
<td>Grade 2 or 3 increased blood creatinine</td>
<td>Withhold&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Grade 4 increased blood creatinine</td>
<td>Permanently discontinue</td>
</tr>
<tr>
<td>Exfoliative dermatologic conditions</td>
<td>Suspected SJS, TEN, or DRESS</td>
<td>Withhold&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Confirmed SJS, TEN, or DRESS</td>
<td>Permanently discontinue</td>
</tr>
<tr>
<td>Myocarditis</td>
<td>Grade 2, 3, or 4</td>
<td>Permanently discontinue</td>
</tr>
<tr>
<td>Neurological toxicities</td>
<td>Grade 2</td>
<td>Withhold&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Grade 3 or 4</td>
<td>Permanently discontinue</td>
</tr>
</tbody>
</table>

### Other Adverse Reactions

<table>
<thead>
<tr>
<th>Infusion-related reactions [see Warnings and Precautions (5.2)]</th>
<th>Grade 1 or 2</th>
<th>Interrupt or slow the rate of infusion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Grade 3 or 4</td>
<td>Permanently discontinue</td>
</tr>
</tbody>
</table>

**AST** = aspartate aminotransferase, **ALT** = alanine aminotransferase, **ULN** = upper limit of normal, **SJS** = Stevens-Johnson syndrome, **TEN** = toxic epidermal necrolysis, **DRESS** = drug rash with eosinophilia and systemic symptoms.

<sup>a</sup> Based on National Cancer Institute Common Terminology Criteria for Adverse Events, Version 4.0.

<sup>b</sup> Resume in patients with complete or partial resolution (Grade 0 to 1) after corticosteroid taper. Permanently discontinue if no complete or partial resolution within 12 weeks of initiating steroids or inability to reduce prednisone to less than 10 mg/day (or equivalent) within 12 weeks of initiating steroids.

<sup>c</sup> If AST and ALT are less than or equal to ULN at baseline in patients with liver involvement, withhold or permanently discontinue JEMPERLI based on recommendations for hepatitis with no liver involvement.

### 2.4 Preparation and Administration

**Preparation for Intravenous Infusion**

- Visually inspect the solution for particulate matter and discoloration. The solution is clear to slightly opalescent, colorless to yellow. Discard the vial if visible particles are observed.
• Do not shake.

• For the 500-mg dose, withdraw 10 mL of JEMPERLI from a vial using a disposable sterile syringe made of polypropylene and dilute into an intravenous infusion bag containing 0.9% Sodium Chloride Injection, USP or 5% Dextrose Injection, USP to a final concentration between 2 to 10 mg/mL (maximum 250 mL). JEMPERLI is compatible with an infusion bag made of polyolefin, ethylene vinyl acetate, or polyvinyl chloride with di(2-ethylhexyl) phthalate (DEHP).

• For the 1,000-mg dose, withdraw 10 mL from each of 2 vials (withdraw 20 mL total) and dilute into an intravenous bag containing 0.9% Sodium Chloride Injection, USP or 5% Dextrose Injection, USP to a final concentration between 4 to 10 mg/mL (maximum 250 mL).

• Mix diluted solution by gentle inversion. Do not shake.

• Discard any unused portion left in the vial.

Storage of Infusion Solution
Store in the original carton until time of preparation in order to protect from light. The prepared dose may be stored either:

• At room temperature for no more than 6 hours from the time of preparation until the end of infusion.

• Under refrigeration at 2°C to 8°C (36ºF to 46ºF) for no more than 24 hours from time of preparation until end of infusion. If refrigerated, allow the diluted solution to come to room temperature prior to administration.

Discard after 6 hours at room temperature or after 24 hours under refrigeration.

Do not freeze.

Administration
Administer infusion solution intravenously over 30 minutes through an intravenous line using tubing made of polyvinyl chloride or platinum cured silicon; fittings made of polyvinyl chloride or polycarbonate; and a sterile, non-pyrogenic, low-protein binding, 0.2-micron, in-line or add-on filter.

JEMPERLI must not be administered as an intravenous push or bolus injection. Do not co-administer other drugs through the same infusion line.

3 DOSAGE FORMS AND STRENGTHS
Injection: 500 mg/10 mL (50 mg/mL) clear to slightly opalescent, colorless to yellow solution in a single-dose vial for intravenous infusion after dilution.
4 CONTRAINDICATIONS

None.

5 WARNINGS AND PRECAUTIONS

5.1 Severe and Fatal Immune-Mediated Adverse Reactions

JEMPERLI is a monoclonal antibody that belongs to a class of drugs that bind to either the programmed death receptor-1 (PD-1) or PD-ligand 1 (PD-L1), blocking the PD-1/PD-L1 pathway, thereby removing inhibition of the immune response, potentially breaking peripheral tolerance, and inducing immune-mediated adverse reactions. Important immune-mediated adverse reactions listed in WARNINGS AND PRECAUTIONS may not include all possible severe and fatal immune-mediated reactions.

Immune-mediated adverse reactions, which can be severe or fatal, can occur in any organ system or tissue. Immune-mediated adverse reactions can occur at any time after starting a PD-1/PD-L1–blocking antibody. While immune-mediated adverse reactions usually manifest during treatment with PD-1/PD-L1–blocking antibodies, they can also manifest after discontinuation of PD-1/PD-L1–blocking antibodies.

Early identification and management of immune-mediated adverse reactions are essential to ensure safe use of PD-1/PD-L1–blocking antibodies. Monitor closely for symptoms and signs that may be clinical manifestations of underlying immune-mediated adverse reactions. Evaluate liver enzymes, creatinine, and thyroid function tests at baseline and periodically during treatment. In cases of suspected immune-mediated adverse reactions, initiate appropriate workup to exclude alternative etiologies, including infection. Institute medical management promptly, including specialty consultation as appropriate.

Withhold or permanently discontinue JEMPERLI depending on severity [see Dosage and Administration (2.3)]. In general, if JEMPERLI requires interruption or discontinuation, administer systemic corticosteroids (1 to 2 mg/kg/day prednisone or equivalent) until improvement to Grade 1 or less. Upon improvement to Grade 1 or less, initiate corticosteroid taper and continue to taper over at least 1 month. Consider administration of other systemic immunosuppressants in patients whose immune-mediated adverse reaction is not controlled with corticosteroids.

Toxicity management guidelines for adverse reactions that do not necessarily require systemic steroids (e.g., endocrinopathies, dermatologic reactions) are discussed below.

Immune-Mediated Pneumonitis

JEMPERLI can cause immune-mediated pneumonitis, which can be fatal. In patients treated with other PD-1/PD-L1–blocking antibodies, the incidence of pneumonitis is higher in patients who have received prior thoracic radiation.
Immune-mediated pneumonitis occurred in 2.3% (14/605) of patients receiving JEMPERLI, including Grade 2 (1.3%), Grade 3 (0.8%) and Grade 4 (0.2%) pneumonitis. Pneumonitis led to discontinuation of JEMPERLI in 1.3% of patients.

Systemic corticosteroids were required in 79% (11/14) of patients with pneumonitis. Pneumonitis resolved in 11 of the 14 patients. JEMPERLI was withheld for 9 patients. Five patients reinitiated JEMPERLI after symptom improvement; of these, 2 patients had recurrence of pneumonitis.

Immune-Mediated Colitis


Immune-mediated colitis occurred in 1.3% (8/605) of patients receiving JEMPERLI, including Grade 2 (0.7%) and Grade 3 (0.7%) adverse reactions. Colitis led to discontinuation of JEMPERLI in 1 (0.2%) patient.

Systemic corticosteroids were required in 75% (6/8) of patients with colitis. Colitis resolved in 5 of the 8 patients. Of the 4 patients in whom JEMPERLI was withheld for colitis, all reinitiated treatment with JEMPERLI; of these, 1 patient had recurrence of colitis.

Immune-Mediated Hepatitis

JEMPERLI can cause immune-mediated hepatitis, which can be fatal.

Immune-mediated hepatitis occurred in 0.5% (3/605) of patients receiving JEMPERLI, all were Grade 3. Hepatitis led to discontinuation of JEMPERLI in 1 (0.2%) patient. Systemic corticosteroids were required in 2 patients with hepatitis and the events resolved in 2 of the 3 patients.

Immune-Mediated Endocrinopathies

Adrenal Insufficiency: JEMPERLI can cause primary or secondary adrenal insufficiency. For Grade 2 or higher adrenal insufficiency, initiate symptomatic treatment per institutional guidelines, including hormone replacement as clinically indicated. Withhold or permanently discontinue JEMPERLI depending on severity [see Dosage and Administration (2.3)].

Adrenal insufficiency occurred in 1.2% (7/605) patients receiving JEMPERLI, including Grade 2 (0.5%) and Grade 3 (0.7%). Adrenal insufficiency resulted in discontinuation in 1 (0.2%) patient and resolved in 4 of the 7 patients. Of the 4 patients in whom JEMPERLI was withheld for adrenal insufficiency, all reinitiated treatment with JEMPERLI. Systemic corticosteroids were required in 5 of the 7 patients with adrenal insufficiency.

Hypophysitis: JEMPERLI can cause immune-mediated hypophysitis. Hypophysitis can present with acute symptoms associated with mass effect such as headache, photophobia, or visual field
cuts. Hypophysitis can cause hypopituitarism. Initiate hormone replacement as clinically indicated. Withhold or permanently discontinue JEMPERLI depending on severity [see Dosage and Administration (2.3)].

Hypophysitis occurred in 0.2% (1/605) of patients receiving JEMPERLI, which was Grade 2. Systemic corticosteroids were required and the event did not resolve. JEMPERLI was withheld and the patient reinitiated treatment.

**Thyroid Disorders:** JEMPERLI can cause immune-mediated thyroid disorders. Thyroiditis can present with or without endocrinopathy. Hypothyroidism can follow hyperthyroidism. Initiate hormone replacement or medical management of hyperthyroidism as clinically indicated. Withhold or permanently discontinue JEMPERLI depending on severity [see Dosage and Administration (2.3)].

**Thyroiditis:** Thyroiditis occurred in 0.5% (3/605) of patients receiving JEMPERLI; all were Grade 2. Systemic corticosteroids were required in 1 of 3 patients and hormone replacement therapy was required for 2 of 3 patients with thyroiditis. JEMPERLI was withheld for 1 patient and the patient reinitiated treatment. None of the events of thyroiditis resolved; there were no discontinuations of JEMPERLI due to thyroiditis.

**Hypothyroidism:** Hypothyroidism occurred in 7.6% (46/605) of patients receiving JEMPERLI, all of which were Grade 2. Hypothyroidism did not lead to discontinuation of JEMPERLI and resolved in 37% (17/46) of patients. JEMPERLI was withheld for 2 patients and both reinitiated treatment. Hormone replacement therapy was required for 45 of the 46 patients with hypothyroidism.

**Hyperthyroidism:** Hyperthyroidism occurred in 2.3% (14/605) of patients receiving JEMPERLI, including Grade 2 (2.1%) and Grade 3 (0.2%). Hyperthyroidism did not lead to discontinuation of JEMPERLI and resolved in 10 of the 14 patients. JEMPERLI was withheld for 2 patients and both reinitiated treatment. Hormone replacement therapy was required for 10 of the 14 patients with hyperthyroidism.

**Type 1 Diabetes Mellitus, Which Can Present with Diabetic Ketoacidosis:** JEMPERLI can cause type 1 diabetes mellitus, which can present with diabetic ketoacidosis. Monitor patients for hyperglycemia or other signs and symptoms of diabetes. Initiate treatment with insulin as clinically indicated. Withhold or permanently discontinue JEMPERLI depending on severity [see Dosage and Administration (2.3)].

Type 1 diabetes mellitus occurred in 0.2% (1/605) of patients receiving JEMPERLI, which was Grade 3. Type 1 diabetes mellitus did not result in treatment discontinuation and did not resolve.

**Immune-Mediated Nephritis with Renal Dysfunction**

JEMPERLI can cause immune-mediated nephritis, which can be fatal. Nephritis, including tubulointerstitial nephritis, occurred in 0.5% (3/605) of patients receiving JEMPERLI; all were Grade 2. Nephritis led to discontinuation of JEMPERLI in 1 (0.2%) patient and resolved in all
patients. JEMPERLI was withheld for 1 patient and the patient reinitiated treatment. Systemic corticosteroids were required in 2 of the 3 patients experiencing nephritis.

**Immune-Mediated Dermatologic Adverse Reactions**

JEMPERLI can cause immune-mediated rash or dermatitis. Bullous and exfoliative dermatitis, including Stevens-Johnson syndrome (SJS), toxic epidermal necrolysis (TEN), and drug rash with eosinophilia and systemic symptoms (DRESS), have occurred with PD-1/PD-L1–blocking antibodies. Topical emollients and/or topical corticosteroids may be adequate to treat mild to moderate non-bullous/exfoliative rashes. Withhold or permanently discontinue JEMPERLI depending on severity [see Dosage and Administration (2.3)].

**Other Immune-Mediated Adverse Reactions**

The following clinically significant immune-mediated adverse reactions occurred in <1% of the 605 patients treated with JEMPERLI or were reported with the use of other PD-1/PD-L1–blocking antibodies. Severe or fatal cases have been reported for some of these adverse reactions.

*Nervous System:* Meningitis, encephalitis, myelitis and demyelination, myasthenic syndrome/myasthenia gravis, Guillain-Barre syndrome, nerve paresis, autoimmune neuropathy.

*Cardiac/Vascular:* Myocarditis, pericarditis, vasculitis.

*Ocular:* Uveitis, iritis, other ocular inflammatory toxicities. Some cases can be associated with retinal detachment. Various grades of visual impairment to include blindness can occur. If uveitis occurs in combination with other immune-mediated adverse reactions, consider a Vogt-Koyanagi-Harada–like syndrome, as this may require treatment with systemic steroids to reduce the risk of permanent vision loss.

*Gastrointestinal:* Pancreatitis, including increases in serum amylase and lipase levels, gastritis, duodenitis.

*Musculoskeletal and Connective Tissue:* Myositis/polymyositis, rhabdomyolysis and associated sequelae including renal failure, arthritis, polymyalgia rheumatica.

*Endocrine:* Hypoparathyroidism.

*Other (Hematologic/Immune):* Autoimmune hemolytic anemia, aplastic anemia, hemophagocytic lymphohistiocytosis, systemic inflammatory response syndrome, histiocytic necrotizing lymphadenitis (Kikuchi lymphadenitis), sarcoidosis, immune thrombocytopenia, solid organ transplant rejection.

**5.2 Infusion-Related Reactions**

Severe or life-threatening infusion-related reactions have been reported with PD-1/PD-L1–blocking antibodies. Severe infusion-related reactions (Grade 3) occurred in 0.2% (1/605) of patients receiving JEMPERLI. All patients recovered from the infusion-related reactions.
Monitor patients for signs and symptoms of infusion-related reactions. Interrupt or slow the rate of infusion or permanently discontinue JEMPERLI based on severity of reaction [see Dosage and Administration (2.3)].

5.3 Complications of Allogeneic HSCT

Fatal and other serious complications can occur in patients who receive allogeneic hematopoietic stem cell transplantation (HSCT) before or after being treated with a PD-1/PD-L1–blocking antibody. Transplant-related complications include hyperacute graft-versus-host disease (GVHD), acute GVHD, chronic GVHD, hepatic veno-occlusive disease after reduced intensity conditioning, and steroid-requiring febrile syndrome (without an identified infectious cause). These complications may occur despite intervening therapy between PD-1/PD-L1 blockade and allogeneic HSCT.

Follow patients closely for evidence of transplant-related complications and intervene promptly. Consider the benefit versus risks of treatment with a PD-1/PD-L1–blocking antibody prior to or after an allogeneic HSCT.

5.4 Embryo-Fetal Toxicity

Based on its mechanism of action, JEMPERLI can cause fetal harm when administered to a pregnant woman. Animal studies have demonstrated that inhibition of the PD-1/PD-L1 pathway can lead to increased risk of immune-mediated rejection of the developing fetus, resulting in fetal death. Advise pregnant women of the potential risk to a fetus. Advise females of reproductive potential to use effective contraception during treatment with JEMPERLI and for 4 months after the last dose [see Use in Specific Populations (8.1, 8.3)].

6 ADVERSE REACTIONS

The following clinically significant adverse reactions are described elsewhere in the labeling:

- Severe and fatal immune-mediated adverse reactions [see Warnings and Precautions (5.1)]
- Infusion-related reactions [see Warnings and Precautions (5.2)]

6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared with rates in the clinical trials of another drug and may not reflect the rates observed in practice.

The pooled safety population described in WARNINGS AND PRECAUTIONS reflects exposure to JEMPERLI as a single-agent in 605 patients with advanced or recurrent solid tumors in the non-randomized, open-label, multicohort GARNET trial that enrolled 314 patients with endometrial cancer and 291 patients with other solid tumors. JEMPERLI was administered intravenously at doses of 500 mg every 3 weeks for 4 doses followed by 1,000 mg every 6 weeks.
until disease progression or unacceptable toxicity. Among the 605 patients, 32% were exposed for >1 year and 19% were exposed for >2 years.

Mismatch Repair Deficient (dMMR) Endometrial Cancer

The safety of JEMPERLI was evaluated in GARNET in 150 patients with advanced or recurrent dMMR EC who received at least 1 dose of JEMPERLI [see Clinical Studies (14.1)]. Patients received JEMPERLI 500 mg every 3 weeks for 4 doses followed by 1,000 mg every 6 weeks as an intravenous infusion until disease progression or unacceptable toxicity. Patients with autoimmune disease that required systemic therapy within 2 years of treatment or a medical condition that required immunosuppression were ineligible. Among patients receiving JEMPERLI, 41% were exposed for >1 year and 23% were exposed for >2 years.

A fatal adverse reaction occurred in one patient (0.7%) who received JEMPERLI, due to concurrent immune-mediated encephalitis and urinary tract infection.

Serious adverse reactions occurred in 38% of patients receiving JEMPERLI. Serious adverse reactions in >2% of patients included urinary tract infection (4%), sepsis (3.3%), acute kidney injury (2.7%), and abdominal pain (2.7%).

JEMPERLI was permanently discontinued due to adverse reactions in 15 (10%) patients, including increased transaminases, sepsis, bronchitis, pneumonitis, rash, pruritus, pancreatitis, encephalitis, and nephritis. Dosage interruptions due to an adverse reaction occurred in 28% of patients who received JEMPERLI. Adverse reactions that required dosage interruption in >1% of patients who received JEMPERLI were anemia, diarrhea, asthenia, colitis, sepsis, and pneumonitis.

The most common adverse reactions (≥20%) were fatigue/asthenia, anemia, rash, nausea, diarrhea, constipation, and vomiting. The most common Grade 3 or 4 adverse reactions (≥2%) were anemia, increased transaminases, urinary tract infection, fatigue/asthenia, and diarrhea. The most common Grade 3 or 4 laboratory abnormalities (≥2%) were decreased lymphocytes, decreased sodium, increased alanine aminotransferase, increased creatinine, decreased neutrophils, decreased albumin, and increased alkaline phosphatase.

Table 2 summarizes the adverse reactions that occurred in ≥10% of patients with dMMR EC on JEMPERLI in GARNET.

| Table 2. Adverse Reactions (≥10%) in Patients with dMMR Endometrial Cancer Who Received JEMPERLI in GARNET |
| Adverse Reaction | JEMPERLI N = 150 |
|                 | All Grades | Grade 3 or 4 |
| General and administration site | | |
| Fatiguea | 49 | 3.3 |

Reference ID: 5123352
<table>
<thead>
<tr>
<th>Category</th>
<th>Incidence</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pyrexia</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>Blood and lymphatic system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anemia(^b)</td>
<td>35</td>
<td>18</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nausea</td>
<td>32</td>
<td>0.7</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>29</td>
<td>2.7</td>
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<tr>
<td>Constipation</td>
<td>23</td>
<td>0.7</td>
</tr>
<tr>
<td>Vomiting</td>
<td>23</td>
<td>0.7</td>
</tr>
<tr>
<td>Skin and subcutaneous tissue</td>
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<td></td>
</tr>
<tr>
<td>Rash(^c)</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>Pruritus</td>
<td>19</td>
<td>1.3</td>
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<tr>
<td>Infections</td>
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<tr>
<td>Urinary tract infection</td>
<td>19</td>
<td>4</td>
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<tr>
<td>Metabolism and nutrition</td>
<td></td>
<td></td>
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<tr>
<td>Decreased appetite</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Respiratory, thoracic, and mediastinal</td>
<td></td>
<td></td>
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<tr>
<td>Cough</td>
<td>15</td>
<td>0</td>
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<td>Musculoskeletal and connective tissue</td>
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</tr>
<tr>
<td>Myalgia</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Investigations</td>
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</tr>
<tr>
<td>Increased transaminases(^d)</td>
<td>13</td>
<td>4</td>
</tr>
<tr>
<td>Endocrine Disorders</td>
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</tr>
<tr>
<td>Hypothyroidism</td>
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</tr>
</tbody>
</table>

\(^d\)MMR = Mismatch Repair Deficient

Toxicity was graded per National Cancer Institute Common Terminology Criteria for Adverse Events Version 4.03.

\(^a\) Includes fatigue and asthenia.

\(^b\) Includes anemia, decreased hemoglobin, iron deficiency, and iron deficiency anemia.

\(^c\) Includes rash, rash maculo-papular, rash pruritic, erythema, and pemphigoid.

\(^d\) Includes increased alanine aminotransferase, increased aspartate aminotransferase, increased transaminases, and hypertransaminasemia.

Clinically relevant adverse reactions in <10% of patients who received JEMPERLI included:

**Endocrine Disorders:** Hyperthyroidism, adrenal insufficiency, hypophysitis.

**Eye Disorders:** Iridocyclitis, uveitis.

**Gastrointestinal Disorders:** Colitis, pancreatitis, enterocolitis, gastritis.

**General Disorders and Administration Site Conditions:** Chills.

**Musculoskeletal and Connective Tissue Disorders:** Immune-mediated myositis, immune-
mediated arthritis.

*Nervous System Disorders:* Encephalitis.

*Renal and Urinary Disorders:* Nephritis.

*Respiratory, Thoracic, and Mediastinal Disorders:* Pneumonitis, interstitial lung disease.

Table 3 summarizes laboratory abnormalities worsening from baseline to Grade 3 or 4 in ≥1% of patients with dMMR EC on JEMPERLI in GARNET.

**Table 3. Laboratory Abnormalities that Worsened from Baseline to Grade 3 or 4 Occurring in ≥1% of Patients with dMMR Endometrial Cancer Receiving JEMPERLI in GARNET**

<table>
<thead>
<tr>
<th>Laboratory Test</th>
<th>JEMPERLI N = 150</th>
<th>All Grades(a)</th>
<th>Grade 3 or 4(a)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Hematology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreased lymphocytes</td>
<td>46</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Decreased leukocytes</td>
<td>21</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Decreased neutrophils</td>
<td>17</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreased albumin</td>
<td>36</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Increased creatinine</td>
<td>33</td>
<td>3.4</td>
<td></td>
</tr>
<tr>
<td>Increased alkaline phosphatase</td>
<td>31</td>
<td>2.7</td>
<td></td>
</tr>
<tr>
<td>Increased aspartate aminotransferase</td>
<td>31</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Increased alanine aminotransferase</td>
<td>25</td>
<td>4.7</td>
<td></td>
</tr>
<tr>
<td>Electrolytes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decreased sodium</td>
<td>29</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Decreased magnesium</td>
<td>28</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Decreased potassium</td>
<td>22</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Increased calcium</td>
<td>8</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

\(a\) Consists of new onset of laboratory abnormality or worsening of baseline laboratory abnormality.

Mismatch Repair Deficient Recurrent or Advanced Solid Tumors

The safety of JEMPERLI was investigated in 267 patients with recurrent or advanced dMMR solid tumors enrolled in GARNET [see Clinical Studies (14.2)]. Patients received JEMPERLI 500 mg every 3 weeks for 4 doses followed by 1,000 mg every 6 weeks as an intravenous infusion until disease progression or unacceptable toxicity. Patients with autoimmune disease that required systemic therapy within 2 years of treatment or a medical condition that required
immunosuppression were ineligible. The median duration of exposure to JEMPERLI was 25 weeks (range: 1 to 139 weeks).

Serious adverse reactions occurred in 34% of patients receiving JEMPERLI. Serious adverse reactions in >2% of patients included abdominal pain (3.7%), sepsis (2.6%), and acute kidney injury (2.2%). Fatal adverse reaction occurred in 1 patient who received JEMPERLI due to respiratory failure.

JEMPERLI was permanently discontinued due to adverse reactions in 9% patients; the most common adverse reaction (≥1%) leading to discontinuation was increased alanine aminotransferase (1.1%).

Dosage interruptions due to an adverse reaction occurred in 23% of patients who received JEMPERLI. Adverse reactions that required dosage interruption in ≥1% of patients who received JEMPERLI were anemia, pneumonitis, diarrhea, adrenal insufficiency, increased alanine aminotransferase, and increased aspartate aminotransferase.

The most common adverse reactions (≥20%) were fatigue/asthenia, anemia, diarrhea, and nausea. The most common Grade 3 or 4 adverse reactions (≥2%) were anemia, fatigue/asthenia, increased transaminases, sepsis, and acute kidney injury. The most common Grade 3 or 4 laboratory abnormalities (≥2%) were decreased lymphocytes, decreased sodium, increased alkaline phosphatase, and decreased albumin.

Table 4 summarizes the adverse reactions that occurred in ≥10% of patients with dMMR recurrent or advanced solid tumors in GARNET.

### Table 4. Adverse Reactions (≥10%) in Patients with dMMR Recurrent or Advanced Solid Tumors in GARNET

<table>
<thead>
<tr>
<th>Adverse Reaction</th>
<th>JEMPERLI N = 267</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Grades %</td>
<td>Grade 3 or 4 %</td>
</tr>
<tr>
<td>General and administration site</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fatiguea</td>
<td>42</td>
<td>3.4</td>
</tr>
<tr>
<td>Pyrexia</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Blood and lymphatic system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anemiab</td>
<td>30</td>
<td>11</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diarrhea</td>
<td>25</td>
<td>1.5</td>
</tr>
<tr>
<td>Nausea</td>
<td>22</td>
<td>0.4</td>
</tr>
<tr>
<td>Vomiting</td>
<td>17</td>
<td>1.5</td>
</tr>
<tr>
<td>Constipation</td>
<td>16</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Reference ID: 5123352
Skin and subcutaneous tissue

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pruritus</td>
<td>15</td>
<td>0.4</td>
</tr>
<tr>
<td>Rash(^c)</td>
<td>14</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Respiratory, thoracic, and mediastinal

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cough</td>
<td>13</td>
<td>0</td>
</tr>
</tbody>
</table>

Metabolism and nutrition

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased appetite</td>
<td>12</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Investigations

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased transaminases(^d)</td>
<td>12</td>
<td>3</td>
</tr>
</tbody>
</table>

dMMR = Mismatch Repair Deficient
Toxicity was graded per National Cancer Institute Common Terminology Criteria for Adverse Events Version 4.03.

\(^a\) Includes fatigue and asthenia.
\(^b\) Includes anemia, decreased hemoglobin, iron deficiency, and iron deficiency anemia.
\(^c\) Includes rash, rash maculopapular, rash macular, rash erythematous, rash papular, erythema, toxic skin eruption, and pemphigoid.
\(^d\) Includes increased alanine aminotransferase, increased aspartate aminotransferase, increased transaminases, and hypertransaminasemia.

Clinically relevant adverse reactions in <10% of patients who received JEMPERLI included:

**Endocrine Disorders:** Hypothyroidism, hyperthyroidism, adrenal insufficiency, hypophysitis, autoimmune thyroiditis.

**Eye Disorders:** Uveitis.

**Gastrointestinal Disorders:** Colitis, enterocolitis, enterocolitis hemorrhage, pancreatitis, acute pancreatitis.

**General Disorders and Administration Site Conditions:** Chills.

**Injury, Poisoning, and Procedural Complications:** Infusion related reaction.

**Hepatobiliary Disorders:** Hepatocellular injury.

**Musculoskeletal and Connective Tissue Disorders:** Myalgia.

**Renal and Urinary Disorders:** Nephritis, tubulointerstitial nephritis.

**Respiratory, Thoracic, and Mediastinal Disorders:** Pneumonitis, interstitial lung disease.

Table 5 summarizes laboratory abnormalities worsening from baseline to Grade 3 or 4 in ≥1% of patients with dMMR recurrent or advanced solid tumors in GARNET.
**Table 5. Laboratory Abnormalities that Worsened from Baseline to Grade 3 or 4 Occurring in ≥1% of Patients with dMMR Recurrent or Advanced Solid Tumors in GARNET**

<table>
<thead>
<tr>
<th>Laboratory Test</th>
<th>JEMPERLI N = 267</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Grades&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Hematology</td>
<td></td>
</tr>
<tr>
<td>Decreased lymphocytes</td>
<td>33</td>
</tr>
<tr>
<td>Decreased leukocytes</td>
<td>18</td>
</tr>
<tr>
<td>Decreased neutrophils</td>
<td>12</td>
</tr>
<tr>
<td>Chemistry</td>
<td></td>
</tr>
<tr>
<td>Decreased albumin</td>
<td>26</td>
</tr>
<tr>
<td>Increased alkaline phosphatase</td>
<td>26</td>
</tr>
<tr>
<td>Increased aspartate aminotransferase</td>
<td>26</td>
</tr>
<tr>
<td>Increased alanine aminotransferase</td>
<td>22</td>
</tr>
<tr>
<td>Increased creatinine</td>
<td>21</td>
</tr>
<tr>
<td>Increased total bilirubin</td>
<td>7</td>
</tr>
<tr>
<td>Electrolytes</td>
<td></td>
</tr>
<tr>
<td>Decreased sodium</td>
<td>21</td>
</tr>
<tr>
<td>Decreased magnesium</td>
<td>16</td>
</tr>
<tr>
<td>Decreased potassium</td>
<td>14</td>
</tr>
<tr>
<td>Increased potassium</td>
<td>14</td>
</tr>
<tr>
<td>Increased calcium</td>
<td>6</td>
</tr>
<tr>
<td>Increased magnesium</td>
<td>4.1</td>
</tr>
<tr>
<td>Decreased calcium</td>
<td>2.6</td>
</tr>
</tbody>
</table>

dMMR = Mismatch Repair Deficient

<sup>a</sup> Consists of new onset of laboratory abnormality or worsening of baseline laboratory abnormality.

### 6.2 Immunogenicity

As with all therapeutic proteins, there is potential for immunogenicity. The detection of antibody formation is highly dependent on the sensitivity and specificity of the assay. Additionally, the observed incidence of antibody (including neutralizing antibody) positivity in an assay may be influenced by several factors including assay methodology, sample handling, timing of sample collection, concomitant medications, and underlying disease. For these reasons, comparison of the incidence of antibodies to dostarlimab-gxly in the studies described below with the incidence of antibodies in other studies or to other products may be misleading.
The immunogenicity of dostarlimab was evaluated in GARNET. Treatment-emergent anti-drug antibodies (ADAs) against dostarlimab-gxly were detected in 2.1% of 384 patients who received dostarlimab-gxly at the recommended dosage. Neutralizing antibodies were detected in 1% of patients. Because of the small number of patients who developed ADAs, the effect of immunogenicity on the efficacy and safety of dostarlimab-gxly is inconclusive.

8 USE IN SPECIFIC POPULATIONS

8.1 Pregnancy

Risk Summary

Based on its mechanism of action, JEMPERLI can cause fetal harm when administered to a pregnant woman [see Clinical Pharmacology (12.1)]. There are no available data on the use of JEMPERLI in pregnant women. Animal studies have demonstrated that inhibition of the PD-1/PD-L1 pathway can lead to increased risk of immune-mediated rejection of the developing fetus resulting in fetal death (see Data). Human IgG4 immunoglobulins (IgG4) are known to cross the placental barrier; therefore, dostarlimab-gxly has the potential to be transmitted from the mother to the developing fetus. Advise women of the potential risk to a fetus.

In the U.S. general population, the estimated background risk of major birth defects and miscarriage in clinically recognized pregnancies is 2% to 4% and 15% to 20%, respectively.

Data

Animal Data: Animal reproduction studies have not been conducted with JEMPERLI to evaluate its effect on reproduction and fetal development. A central function of the PD-1/PD-L1 pathway is to preserve pregnancy by maintaining maternal immune tolerance to the fetus. In murine models of pregnancy, blockade of PD-L1 signaling has been shown to disrupt tolerance to the fetus and to result in an increase in fetal loss; therefore, potential risks of administering JEMPERLI during pregnancy include increased rates of abortion or stillbirth. As reported in the literature, there were no malformations related to the blockade of PD-1/PD-L1 signaling in the offspring of these animals; however, immune-mediated disorders occurred in PD-1 and PD-L1 knockout mice. Based on its mechanism of action, fetal exposure to dostarlimab-gxly may increase the risk of developing immune-mediated disorders or altering the normal immune response.

8.2 Lactation

Risk Summary

There is no information regarding the presence of dostarlimab-gxly in human milk or its effects on the breastfed child or on milk production. Maternal IgG is known to be present in human milk. The effects of local gastrointestinal exposure and limited systemic exposure in the breastfed child to JEMPERLI are unknown. Because of the potential for serious adverse
reactions in a breastfed child, advise women not to breastfeed during treatment and for 4 months after the last dose of JEMPERLI.

8.3 Females and Males of Reproductive Potential

JEMPERLI can cause fetal harm when administered to a pregnant woman [see Use in Specific Populations (8.1)].

Pregnancy Testing

Verify pregnancy status in females of reproductive potential prior to initiating JEMPERLI [see Use in Specific Populations (8.1)].

Contraception

*Females:* Advise females of reproductive potential to use effective contraception during treatment with JEMPERLI and for 4 months after the last dose.

8.4 Pediatric Use

The safety and efficacy of JEMPERLI have not been established in pediatric patients.

8.5 Geriatric Use

Of the 605 patients treated with JEMPERLI, 51.6% were younger than 65 years, 36.9% were aged 65 through 75 years, and 11.5% were 75 years or older. No overall differences in safety or effectiveness were observed between these patients and younger patients.

11 DESCRIPTION

Dostarlimab-gxly is a programmed death receptor-1 (PD-1)–blocking IgG4 humanized monoclonal antibody. Dostarlimab-gxly is produced in Chinese hamster ovary cells and has a calculated molecular weight of about 144 kDa.

JEMPERLI (dostarlimab-gxly) injection is a sterile, clear to slightly opalescent, colorless to yellow solution essentially free from visible particles. It is supplied as single-dose vials.

Each vial contains 500 mg of JEMPERLI in 10 mL of solution with a pH of 6. Each mL of solution contains 50 mg of dostarlimab-gxly, citric acid monohydrate (0.48 mg), L-arginine hydrochloride (21.07 mg), polysorbate 80 (0.2 mg), sodium chloride (1.81 mg), trisodium citrate dihydrate (6.68 mg), and Water for Injection, USP.

12 CLINICAL PHARMACOLOGY

12.1 Mechanism of Action

Binding of the PD-1 ligands, PD-L1 and PD-L2, to the PD-1 receptor found on T cells inhibits T-cell proliferation and cytokine production. Upregulation of PD-1 ligands occurs in some tumors, and signaling through this pathway can contribute to inhibition of active T-cell immune surveillance of tumors. Dostarlimab-gxly is a humanized monoclonal antibody of the IgG4
isotype that binds to the PD-1 receptor and blocks its interaction with PD-L1 and PD-L2, releasing PD-1 pathway-mediated inhibition of the immune response, including the anti-tumor immune response. In syngeneic mouse tumor models, blocking PD-1 activity resulted in decreased tumor growth.

### 12.2 Pharmacodynamics

The exposure-response relationship and time course of pharmacodynamic response for safety and effectiveness of dostarlimab-gxly have not been fully characterized.

Dostarlimab-gxly provides sustained target engagement as measured by direct PD-1 binding and stimulation of IL-2 production throughout the dosing interval at the recommended dose.

### 12.3 Pharmacokinetics

The pharmacokinetics of dostarlimab-gxly were evaluated in patients with various solid tumors, including 288 patients with EC. Mean $C_{\text{max}}$, AUC$_{0-\text{inf}}$, and AUC$_{0-\text{tau}}$ increased proportionally over the dose range of 1 to 10 mg/kg. The Cycle 1 mean (coefficient of variation [%CV]) $C_{\text{max}}$ and AUC$_{0-\text{tau}}$ of dostarlimab-gxly were 171 mcg/mL (20%) and 35,730 mcg*h/mL (20%) at the dosage of 500 mg once every 3 weeks and 309 mcg/mL (31%) and 95,820 mcg*h/mL (29%) at the dosage of 1,000 mg every 6 weeks, respectively.

**Distribution**

The mean (%CV) volume of distribution of dostarlimab-gxly at steady state is approximately 5.3 L (14%).

**Elimination**

The mean terminal elimination half-life of dostarlimab-gxly at steady state is 23.5 days and its mean (%CV) clearance is 0.007 L/h (30%) at steady state.

**Metabolism:** Dostarlimab-gxly is expected to be metabolized into small peptides and amino acids by catabolic pathways.

**Specific Populations**

No clinically significant differences in the pharmacokinetics of dostarlimab-gxly were observed based on age (24 to 86 years), sex, race/ethnicity (75% White, 2% Asian, and 4% African American), tumor type, and renal impairment based on the estimated creatinine clearance and mild [total bilirubin (TB) > ULN to 1.5 times ULN or aspartate aminotransferase (AST) > ULN] to moderate (TB > 1.5 to 3 times ULN and any AST) hepatic impairment.

### 13 NONCLINICAL TOXICOLOGY

#### 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

No studies have been performed to assess the potential of dostarlimab-gxly for carcinogenicity or genotoxicity.

Reference ID: 5123352
Fertility studies have not been conducted with dostarlimab-gxly. In 1- and 3-month repeat-dose toxicology studies in monkeys, there were no notable effects in the male and female reproductive organs; however, many animals in these studies were not sexually mature.

13.2 Animal Toxicology and/or Pharmacology

In animal models, inhibition of PD-L1/PD-1 signaling increased the severity of some infections and enhanced inflammatory responses. *Mycobacterium tuberculosis*-infected PD-1 knockout mice exhibit markedly decreased survival compared with wild-type controls, which correlated with increased bacterial proliferation and inflammatory responses in these animals. PD-1 blockade using a primate anti-PD-1 antibody was also shown to exacerbate *M. tuberculosis* infection in rhesus macaques. PD-L1 and PD-1 knockout mice and mice receiving PD-L1–blocking antibody have also shown decreased survival following infection with lymphocytic choriomeningitis virus.

14 CLINICAL STUDIES

14.1 Mismatch Repair Deficient Recurrent or Advanced Endometrial Cancer

The efficacy of JEMPERLI was evaluated in the GARNET trial (NCT02715284), a multicenter, multicohort, open-label trial conducted in patients with advanced solid tumors. The efficacy population consisted of a cohort of 141 patients with mismatch repair deficient (dMMR) recurrent or advanced EC who had progressed on or after treatment with a platinum-containing regimen. Patients with prior treatment with PD-1/PD-L1–blocking antibodies or other immune checkpoint inhibitor therapy and patients with autoimmune disease that required systemic therapy with immunosuppressant agents within 2 years were excluded from the trial.

Patients received JEMPERLI 500 mg intravenously every 3 weeks for 4 doses followed by 1,000 mg intravenously every 6 weeks. Treatment continued until disease progression or unacceptable toxicity. The major efficacy outcome measures were Overall Response Rate (ORR) and Duration of Response (DOR) as assessed by blinded independent central review (BICR) according to the Response Evaluation Criteria in Solid Tumors (RECIST) v 1.1.

The baseline characteristics were: median age 65 years (53% aged 65 years or older); 77% White, 4% Asian, 3% Black, 4% Hispanic or Latino; and Eastern Cooperative Oncology Group Performance Status 0 (38%) or 1 (62%).

The most common histology seen was endometrioid carcinoma type 1 (65%), Grade 3 endometriod (15%), followed by serous (5%), mixed (5%) and undifferentiated (2.8%).

All patients with dMMR EC had received prior anticancer treatment, with 89% of patients receiving prior anticancer surgery and 71% receiving prior anticancer radiotherapy. Sixty-three percent of patients had one prior line of anticancer treatment and 37% had two or more prior lines. Forty-eight patients (34%) received treatment only in the neoadjuvant or adjuvant setting before participating in the study.
The dMMR tumor status was retrospectively confirmed using the VENTANA MMR RxDx Panel assay.

Efficacy results are presented in Table 6.

**Table 6. Efficacy Results in GARNET dMMR Endometrial Cancer Population**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>JEMPERLI N = 141</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall response rate&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>ORR (95%CI)</td>
<td>45.4% (37.0, 54.0)</td>
</tr>
<tr>
<td>Complete response rate</td>
<td>15.6%</td>
</tr>
<tr>
<td>Partial response rate</td>
<td>29.8%</td>
</tr>
<tr>
<td>Duration of response&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td>Median in months (range)</td>
<td>Not reached (1.2+, 52.8+)</td>
</tr>
<tr>
<td>Patients with duration ≥12 months</td>
<td>85.9%</td>
</tr>
<tr>
<td>Patients with duration ≥24 months</td>
<td>54.7%</td>
</tr>
</tbody>
</table>

dMMR = Mismatch Repair Deficient, + = ongoing at last assessment.
<sup>a</sup> Based on confirmed response by blinded independent central review.
<sup>b</sup> Median follow up for duration of response was 27.9 months measured from time of first response.

### 14.2 Mismatch Repair Deficient Recurrent or Advanced Solid Tumors

The efficacy of JEMPERLI was evaluated in GARNET (NCT02715284), a non-randomized, multicenter, open-label, multicohort trial. The efficacy population consisted of a cohort of 209 patients with dMMR recurrent or advanced solid tumors who progressed following systemic therapy and had no satisfactory alternative treatment options. Patients with dMMR endometrial cancer must have progressed on or after treatment with a platinum-containing regimen. Patients with dMMR colorectal cancer must have progressed after or been intolerant to a fluoropyrimidine, oxaliplatin, and irinotecan.

Patients with prior treatment with PD-1/PD-L1–blocking antibodies or other immune checkpoint inhibitor therapy and patients with autoimmune disease that required systemic therapy with immunosuppressant agents within 2 years were excluded from the trial.

Patients received JEMPERLI 500 mg intravenously every 3 weeks for 4 doses followed by 1,000 mg intravenously every 6 weeks. Treatment continued until disease progression or unacceptable toxicity.

The major efficacy outcome measures were ORR and DOR as determined by a BICR according to RECIST v 1.1.
The baseline characteristics were female (77%); median age 63 years (47% aged 65 years or older); 63% White, 3% Asian, 2% Black; and Eastern Cooperative Oncology Group Performance Status 0 (39%) or 1 (61%).

At time of trial entry, 97.2% of patients (103/106) with non-endometrial dMMR solid tumors had Stage IV disease, and 68.0% (70/103) of patients with dMMR endometrial tumors had FIGO Stage IV disease.

Approximately 43% of patients had received 1 prior line of systemic anticancer treatment, 36% had received 2 prior lines, and 21% had received 3 or more prior lines.

The dMMR tumor status was retrospectively confirmed using the VENTANA MMR RxDx Panel assay.

Efficacy results are presented in Tables 7 and 8.

### Table 7. Efficacy Results in GARNET dMMR Recurrent or Advanced Solid Tumors

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>JEMPERLI N = 209</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall response rate a</td>
<td></td>
</tr>
<tr>
<td>ORR (95% CI)</td>
<td>41.6% (34.9, 48.6)</td>
</tr>
<tr>
<td>Complete response rate</td>
<td>9.1%</td>
</tr>
<tr>
<td>Partial response rate</td>
<td>32.5%</td>
</tr>
<tr>
<td>Duration of response b</td>
<td></td>
</tr>
<tr>
<td>Median in months</td>
<td>34.7</td>
</tr>
<tr>
<td>(range)</td>
<td>2.6, 35.8+</td>
</tr>
<tr>
<td>Patients with duration ≥6 months</td>
<td>95.4%</td>
</tr>
</tbody>
</table>

**dMMR** = Mismatch Repair Deficient, + = ongoing at last assessment.

a Based on confirmed response by blinded independent central review.
b Median follow-up for duration of response was 17.5 months measured from time of first response.

### Table 8. Efficacy Results in GARNET dMMR Tumor Types

<table>
<thead>
<tr>
<th>Tumor Type</th>
<th>Patients N</th>
<th>ORR (per RECIST v 1.1)</th>
<th>DOR Range (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n (%)</td>
<td>95% CI a</td>
<td></td>
</tr>
<tr>
<td>EC</td>
<td>103</td>
<td>46 (44.7) (34.9, 54.8)</td>
<td>2.6, 35.8+</td>
</tr>
<tr>
<td>non-EC</td>
<td>106</td>
<td>41 (38.7) (29.4, 48.6)</td>
<td>5.6, 30.1+</td>
</tr>
<tr>
<td>CRC</td>
<td>69</td>
<td>25 (36.2) (25.0, 48.7)</td>
<td>5.6, 30.1+</td>
</tr>
<tr>
<td>Small intestinal cancer</td>
<td>12</td>
<td>4 (33.3) (9.9, 65.1)</td>
<td>11.1+, 28.0+</td>
</tr>
<tr>
<td>Gastric cancers</td>
<td>8</td>
<td>3 (37.5) (8.5, 75.5)</td>
<td>8.4+, 17.5</td>
</tr>
<tr>
<td>Pancreatic carcinoma</td>
<td>4</td>
<td>0 (0.0) (0.0, 60.2)</td>
<td>NA</td>
</tr>
</tbody>
</table>

Reference ID: 5123352
<table>
<thead>
<tr>
<th>diagnosis</th>
<th>CR, CR</th>
<th>PR, PD</th>
<th>PR, SD</th>
<th>PR</th>
<th>CR</th>
<th>PD</th>
<th>PR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biliary neoplasm</td>
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<td>Liver cancer</td>
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<td>Adrenal cortical cancer</td>
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<td>Renal cell carcinoma</td>
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+ = ongoing at last assessment.

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<tr>
<th>diagnosis</th>
<th>NA</th>
<th>8.4+, 13.5+</th>
<th>13.8+</th>
<th>25.1+</th>
<th>19.5+</th>
<th>16.8+</th>
<th>NA</th>
<th>22.2+</th>
<th>15.2+</th>
<th>NA</th>
<th>20.4+</th>
</tr>
</thead>
<tbody>
<tr>
<td>dMMR = Mismatch Repair Deficient, ORR = Overall Response Rate, DOR = Duration of Response, EC = endometrial cancer, CRC = colorectal cancer, PR = partial response, PD = progressive disease, CR = complete response, SD = stable disease.</td>
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\[a\] Exact, 2-sided 95% CI for binomial proportion.

16 HOW SUPPLIED/STORAGE AND HANDLING

JEMPERLI (dostarlimab-gxly) injection is a clear to slightly opalescent, colorless to yellow solution supplied in a carton containing one 500 mg/10 mL (50 mg/mL), single-dose vial (NDC 0173-0898-03).

Store vial refrigerated at 2°C to 8°C (36°F to 46°F) in original carton to protect from light. Do not freeze or shake.

17 PATIENT COUNSELING INFORMATION

Advise the patient to read the FDA-approved patient labeling (Medication Guide).

Immune-Mediated Adverse Reactions

Inform patients of the risk of immune-mediated adverse reactions that may be severe or fatal, may occur after discontinuation of treatment, and may require corticosteroid or other treatment and interruption or discontinuation of JEMPERLI. These reactions may include:

- Pneumonitis: Advise patients to contact their healthcare provider immediately for new or worsening cough, chest pain, or shortness of breath [see Warnings and Precautions (5.1)].

- Colitis: Advise patients to contact their healthcare provider immediately for diarrhea or severe abdominal pain [see Warnings and Precautions (5.1)].

- Hepatitis: Advise patients to contact their healthcare provider immediately for jaundice, severe nausea or vomiting, or easy bruising or bleeding [see Warnings and Precautions (5.1)].
• Immune-mediated endocrinopathies: Advise patients to contact their healthcare provider immediately for signs or symptoms of hypothyroidism, hyperthyroidism, thyroiditis, adrenal insufficiency, hypophysitis, or type 1 diabetes mellitus [see Warnings and Precautions (5.1)].

• Nephritis: Advise patients to contact their healthcare provider immediately for signs or symptoms of nephritis [see Warnings and Precautions (5.1)].

• Severe skin reactions: Advise patients to contact their healthcare provider immediately for any signs or symptoms of severe skin reactions, SJS, TEN, or DRESS [see Warnings and Precautions (5.1)].

• Other immune-mediated adverse reactions:
  • Advise patients that immune-mediated adverse reactions can occur and may involve any organ system, and to contact their healthcare provider immediately for any new signs or symptoms [see Warnings and Precautions (5.1)].
  • Advise patients of the risk of solid organ transplant rejection and to contact their healthcare provider immediately for signs or symptoms of organ transplant rejection [see Warnings and Precautions (5.1)].

Infusion-Related Reactions
  • Advise patients to contact their healthcare provider immediately for signs or symptoms of infusion-related reactions [see Warnings and Precautions (5.2)].

Complications of Allogeneic HSCT
  • Advise patients of the risk of post-allogeneic hematopoietic stem cell transplantation complications [see Warnings and Precautions (5.3)].

Embryo-Fetal Toxicity
  • Advise females of reproductive potential of the potential risk to a fetus and to inform their healthcare provider of a known or suspected pregnancy [see Warnings and Precautions (5.4), Use in Specific Populations (8.1, 8.3)].
  • Advise females of reproductive potential to use effective contraception during treatment with JEMPERLI and for 4 months after the last dose [see Warnings and Precautions (5.4), Use in Specific Populations (8.1, 8.3)].

Lactation
  • Advise women not to breastfeed during treatment with JEMPERLI and for 4 months after the last dose [see Use in Specific Populations (8.2)].

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What is the most important information I should know about JEMPERLI?

JEMPERLI is a medicine that may treat certain cancers by working with your immune system. JEMPERLI can cause your immune system to attack normal organs and tissues in any area of your body and can affect the way they work. These problems can sometimes become severe or life-threatening and can lead to death. You can have more than one of these problems at the same time. These problems may happen anytime during treatment or even after your treatment has ended. Call or see your healthcare provider right away if you develop any new or worsening signs or symptoms, including:

**Lung problems.**
- cough
- shortness of breath
- chest pain

**Intestinal problems.**
- diarrhea or more bowel movements than usual
- stools that are black, tarry, sticky, or have blood or mucus
- severe stomach-area (abdomen) pain or tenderness

**Liver problems.**
- yellowing of your skin or the whites of your eyes
- dark urine (tea colored)
- severe nausea or vomiting
- bleeding or bruising more easily than usual
- pain on the right side of your stomach area (abdomen)

**Hormone gland problems.**
- headaches that will not go away or unusual headaches
- eye sensitivity to light
- eye problems
- rapid heartbeat
- increased sweating
- extreme tiredness
- weight gain or weight loss
- urinating more often than usual
- hair loss
- feeling cold
- constipation
- your voice gets deeper
- dizziness or fainting
- changes in mood or behavior, such as decreased sex drive, irritability, or forgetfulness

**Kidney problems.**
- change in the amount or color of your urine
- swelling in your ankles
- blood in your urine
- loss of appetite

**Skin problems.**
- rash
- itching
- skin blistering or peeling
- painful sores or ulcers in your mouth or in your nose, throat, or genital area
- fever or flu-like symptoms
- swollen lymph nodes
Problems can also happen in other organs and tissues. These are not all of the signs and symptoms of immune system problems that can happen with JEMPERLI. Call or see your healthcare provider right away for any new or worse signs or symptoms.

- chest pain, irregular heartbeat, shortness of breath, swelling of ankles
- confusion, sleepiness, memory problems, changes in mood or behavior, stiff neck, balance problems, tingling or numbness of the arms or legs
- double vision, blurry vision, sensitivity to light, eye pain, changes in eyesight
- persistent or severe muscle pain or weakness, muscle cramps
- low red blood cells, bruising

Infusion reactions that can sometimes be severe or life-threatening. Signs and symptoms of infusion reactions may include:

- chills or shaking
- itching or rash
- flushing
- shortness of breath or wheezing
- dizziness
- feel like passing out
- fever
- back or neck pain

Rejection of a transplanted organ. Your healthcare provider should tell you what signs and symptoms you should report and monitor you, depending on the type of organ transplant that you have had.

Complications, including graft-versus-host-disease (GVHD), in people who have received a bone marrow (stem cell) transplant that uses donor stem cells (allogeneic). These complications can be serious and can lead to death. These complications may happen if you underwent transplantation either before or after being treated with JEMPERLI. Your healthcare provider will monitor you for these complications.

Getting medical treatment right away may help keep these problems from becoming more serious.

Your healthcare provider will check you for these problems during treatment with JEMPERLI. Your healthcare provider may treat you with corticosteroid or hormone replacement medicines. Your healthcare provider may also need to delay or completely stop treatment with JEMPERLI, if you have severe side effects.

What is JEMPERLI?

JEMPERLI is a prescription medicine used to treat adults with certain cancers that have been shown by a laboratory test to be mismatch repair deficient (dMMR), and your cancer has returned, or it has spread (advanced cancer). JEMPERLI may be used when:

- you have a kind of uterine cancer called endometrial cancer, and you have received chemotherapy that contains platinum and it did not work or is no longer working and your cancer cannot be treated by surgery or radiation.
- you have a solid tumor that progressed during treatment or after treatment, and you have no satisfactory treatment options.

It is not known if JEMPERLI is safe and effective in children.
Before receiving JEMPERLI, tell your healthcare provider about all of your medical conditions, including if you:

- have immune system problems, such as Crohn’s disease, ulcerative colitis, or lupus.
- have received an organ transplant.
- have received or plan to receive a stem cell transplant that uses donor stem cells (allogeneic).
- have received radiation treatment to your chest area.
- have a condition that affects your nervous system, such as myasthenia gravis or Guillain-Barré syndrome.
- are pregnant or plan to become pregnant. JEMPERLI can harm your unborn baby.

**Females who are able to become pregnant:**

- Your healthcare provider will do a pregnancy test before you start treatment with JEMPERLI.
- You should use an effective method of birth control during your treatment and for 4 months after your last dose of JEMPERLI. Talk to your healthcare provider about birth control methods that you can use during this time.
- Tell your healthcare provider right away if you become pregnant or think you may be pregnant during treatment with JEMPERLI.
- are breastfeeding or plan to breastfeed. It is not known if JEMPERLI passes into your breast milk. Do not breastfeed during treatment and for 4 months after your last dose of JEMPERLI.

**Tell your healthcare provider about all the medicines you take**, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

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### How will I receive JEMPERLI?

- Your healthcare provider will give you JEMPERLI into your vein through an intravenous (IV) line over 30 minutes.
- JEMPERLI is usually given every 3 weeks for the first 4 doses, and then beginning 3 weeks later, it is usually given every 6 weeks.
- Your healthcare provider will decide how many treatments you need.
- Your healthcare provider will do blood tests to check you for side effects.
- If you miss any appointments, call your healthcare provider as soon as possible to reschedule your appointment.

### What are the possible side effects of JEMPERLI?

**JEMPERLI can cause serious side effects.**

- **See “What is the most important information I should know about JEMPERLI?”**

The most common side effects of JEMPERLI in people with dMMR solid tumors include:

- tiredness and weakness
- low red blood cell count (anemia)
- diarrhea
- nausea
- decreased number of certain white blood cells
- decreased albumin in the blood
- increase in certain liver blood tests
- decreased salt (sodium) in the blood

These are not all of the possible side effects of JEMPERLI. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.
**General information about the safe and effective use of JEMPERLI.**

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. If you would like more information about JEMPERLI, talk with your healthcare provider. You can ask your healthcare provider for information about JEMPERLI that is written for healthcare professionals.

<table>
<thead>
<tr>
<th><strong>What are the ingredients in JEMPERLI?</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Active ingredient:</strong> dostarlimab-gxly</td>
</tr>
<tr>
<td><strong>Inactive ingredients:</strong> citric acid monohydrate, L-arginine hydrochloride, polysorbate 80, sodium chloride, trisodium citrate dihydrate, and Water for Injection.</td>
</tr>
</tbody>
</table>

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JMP:MG
For more information, call 1-888-825-5249 or go to www.gsk.com.

This Medication Guide has been approved by the U.S. Food and Drug Administration. Revised: February 2023