

## Cabazitaxel: Drug information

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(For additional information [see "Cabazitaxel: Patient drug information "](#))

For abbreviations and symbols that may be used in Lexicomp ([show table](#))

### ALERT: US Boxed Warning

#### Neutropenia:

Neutropenic deaths have been reported. In order to monitor the occurrence of neutropenia, frequently perform blood cell counts on all patients receiving cabazitaxel. Cabazitaxel is contraindicated in patients with neutrophil counts of 1,500 cells/mm<sup>3</sup> or less.

#### Hypersensitivity reactions:

Severe hypersensitivity reactions can occur and may include generalized rash/erythema, hypotension, and bronchospasm. Severe hypersensitivity reactions require immediate discontinuation of the cabazitaxel infusion and administration of appropriate therapy. Patients should receive premedication. Cabazitaxel is contraindicated in patients who have a history of severe hypersensitivity reactions to cabazitaxel or to other drugs formulated with polysorbate 80.

**Brand Names: US** Jevtana

**Brand Names: Canada** Jevtana

**Pharmacologic Category** Antineoplastic Agent, Antimicrotubular; Antineoplastic Agent, Taxane Derivative

**Dosing: Adult** **Note:** Premedicate at least 30 minutes prior to each dose of cabazitaxel with an antihistamine (eg, diphenhydramine IV 25 mg or equivalent), a corticosteroid (eg, dexamethasone 8 mg IV or equivalent), and an H<sub>2</sub> antagonist (eg, ranitidine 50 mg IV or equivalent). Per the manufacturer, antiemetic prophylaxis (oral or IV) is also recommended.

**Prostate cancer, metastatic:** IV: 25 mg/m<sup>2</sup> once every 3 weeks (in combination with prednisone) (de Bono 2010).

*Off-label dosing:* IV: A lower dose of 20 mg/m<sup>2</sup> once every 3 weeks (in combination with prednisone) has been studied and was found to be non-inferior to the 25 mg/m<sup>2</sup> dose. The lower dose also had a decreased incidence of grade 3 and 4 toxicities compared to the 25 mg/m<sup>2</sup> dose (de Bono 2016).

**Dosage adjustment for concomitant medications:**

**Strong CYP3A inhibitors:** Concomitant use with strong CYP3A inhibitors (eg, ketoconazole, itraconazole, clarithromycin, protease inhibitors, nefazodone, telithromycin, voriconazole) may increase cabazitaxel plasma concentrations; avoid concurrent use. If concomitant use cannot be avoided, consider reducing cabazitaxel dose by 25%.

## Dosing: Renal Impairment

Mild to moderate renal impairment (CrCl  $\geq$ 30 mL/minute): No dosage adjustment necessary.

Severe renal impairment (CrCl <30 mL/minute) or end-stage renal disease: Use with caution; monitor closely.

## Dosing: Hepatic Impairment

Mild impairment (total bilirubin >1 to  $\leq$ 1.5 times ULN or AST  $\geq$ 1.5 times ULN): Reduce dose to 20 mg/m<sup>2</sup>; use with caution and monitor closely.

Moderate impairment (total bilirubin >1.5 to  $\leq$ 3 times ULN with any AST): Reduce dose to 15 mg/m<sup>2</sup> (based on tolerability; efficacy of this dose is not known); use with caution and monitor closely.

Severe impairment (total bilirubin >3 times ULN): Use is contraindicated.

**Dosing: Obesity** ASCO Guidelines for appropriate chemotherapy dosing in obese adults with cancer: Utilize patient's actual body weight (full weight) for calculation of body surface area- or weight-based dosing, particularly when the intent of therapy is curative; manage regimen-related toxicities in the same manner as for nonobese patients; if a dose reduction is utilized due to toxicity, consider resumption of full weight-based dosing with subsequent cycles, especially if cause of toxicity (eg, hepatic or renal impairment) is resolved (Griggs 2012).

## Dosing: Adjustment for Toxicity

### *Hematologic toxicity:*

Neutropenia  $\geq$  grade 3 for >1 week despite WBC growth factors: Delay treatment until ANC >1,500/mm<sup>3</sup> and then reduce dose to 20 mg/m<sup>2</sup> with continued WBC growth factor secondary prophylaxis.

Neutropenic fever or neutropenic infection: Delay treatment until improvement/resolution and ANC >1,500/mm<sup>3</sup> and then reduce dose to 20 mg/m<sup>2</sup> with continued WBC growth factor secondary prophylaxis.

Persistent hematologic toxicity (despite dosage reduction): Discontinue treatment.

### *Nonhematologic toxicity:*

Severe hypersensitivity: Discontinue immediately.

Diarrhea  $\geq$  grade 3 or persistent despite appropriate medication, fluids, and electrolyte replacement: Delay treatment until improves or resolves and then reduce dose to 20 mg/m<sup>2</sup>.

Persistent diarrhea (despite dosage reduction): Discontinue treatment.

Peripheral neuropathy (grade 2): Delay treatment until improves or resolves and then reduce dose to 20 mg/m<sup>2</sup>

Persistent peripheral neuropathy (despite dosage reduction) or ≥ grade 3 peripheral neuropathy: Discontinue treatment

Pulmonary symptoms (new or worsening): Interrupt cabazitaxel treatment, monitor closely and promptly investigate and manage symptoms. May require discontinuation (carefully evaluate the potential benefits of treatment resumption).

**Dosage Forms** Excipient information presented when available (limited, particularly for generics); consult specific product labeling.

Solution, Intravenous:

Jevtana: 60 mg/1.5 mL (1.5 mL) [contains alcohol, usp, polysorbate 80]

**Generic Equivalent Available (US)** No

**Administration** IV: Infuse over 1 hour using a 0.22-micron inline filter. Do not use polyurethane-containing infusion sets for administration. Allow to reach room temperature prior to infusion. Premedicate with an antihistamine, a corticosteroid, and an H<sub>2</sub> antagonist at least 30 minutes prior to infusion. Observe closely during infusion (for hypersensitivity). Per the manufacturer, antiemetic prophylaxis (oral or IV) is also recommended.

## Hazardous Drugs Handling Considerations

Hazardous agent (NIOSH 2016 [group 1]).

Use appropriate precautions for receiving, handling, administration, and disposal. Gloves (single) should be worn during receiving, unpacking, and placing in storage.

NIOSH recommends double gloving, a protective gown, ventilated engineering controls (a class II biological safety cabinet or a compounding aseptic containment isolator), and closed system transfer devices (CSTDs) for preparation. Double gloving, a gown, and (if dosage form allows) CSTDs are required during administration (NIOSH 2016).

**Use Prostate cancer, metastatic:** Treatment of hormone-refractory metastatic prostate cancer (in combination with prednisone) in patients previously treated with a docetaxel-containing regimen

## Medication Safety Issues

**Sound-alike/look-alike issues:**

Cabazitaxel may be confused with DOCEtaxel, PACLitaxel

Jevtana may be confused with Xgeva, Xofigo, Xtandi, Zometa, Zytiga

**High alert medication:**

This medication is in a class the Institute for Safe Medication Practices (ISMP) includes among its list of drug classes that have a heightened risk of causing significant patient harm when used in error.

### **Administration issues:**

Cabazitaxel requires a two-step dilution process prior to administration. The entire contents of the diluent vial must be added to the concentrate during reconstitution to ensure appropriate concentration/dose.

### **Adverse Reactions** Adverse reactions reported for combination therapy with prednisone.

>10%:

Central nervous system: Fatigue (37%), peripheral neuropathy (13%; grades 3/4: <1%)

Gastrointestinal: Diarrhea (47%), nausea (34%), vomiting (22%), constipation (20%), abdominal pain (17%), anorexia (16%), dysgeusia (11%)

Genitourinary: Hematuria (17%)

Hematologic & oncologic: Anemia (98%; grades 3/4: 11%), leukopenia (96%; grades 3/4: 69%), neutropenia (94%; grades 3/4: 82%), thrombocytopenia (48%; grades 3/4: 4%)

Neuromuscular & skeletal: Weakness (20%), back pain (16%), arthralgia (11%)

Respiratory: Dyspnea (12%), cough (11%)

Miscellaneous: Fever (12%)

1% to 10%:

Cardiovascular: Peripheral edema (9%), cardiac arrhythmia (5%), hypotension (5%)

Central nervous system: Dizziness (8%), headache (8%), pain (5%)

Dermatologic: Alopecia (10%)

Endocrine & metabolic: Weight loss (9%), dehydration (5%)

Gastrointestinal: Dyspepsia (10%), mucosal inflammation (6%)

Genitourinary: Urinary tract infection (8%), dysuria (7%)

Hematologic & oncologic: Febrile neutropenia (7%; grades 3/4: 7%)

Hepatic: Increased serum ALT, increased serum AST, increased serum bilirubin

Neuromuscular & skeletal: Muscle spasm (7%)

Renal: Renal failure (4%)

Frequency not defined:

Endocrine & metabolic: Electrolyte disturbance

<1%, postmarketing, and/or case reports: Adult respiratory distress syndrome, enterocolitis, gastritis, gastrointestinal hemorrhage, gastrointestinal perforation, hypersensitivity reaction (includes bronchospasm, erythema, hypotension, skin rash), interstitial pneumonitis, interstitial pulmonary disease, intestinal obstruction, neutropenic enterocolitis, sepsis, septic shock

## Contraindications

Severe hypersensitivity to cabazitaxel or any component of the formulation, or to other medications formulated with polysorbate 80; neutrophil count  $\leq 1,500/\text{mm}^3$ ; severe hepatic impairment (total bilirubin >3 times ULN)

*Canadian labeling:* Additional contraindications (not in the US labeling): Concomitant vaccination with yellow fever vaccine

## Warnings/Precautions

### **Concerns related to adverse effects:**

- Bone marrow suppression: **[US Boxed Warning]: Deaths due to neutropenia have been reported. Cabazitaxel is contraindicated in patients with neutrophil count  $\leq 1,500/\text{mm}^3$ . Monitor blood counts frequently.** Neutropenia, anemia, thrombocytopenia, and/or pancytopenia may occur with use; grade 3 and 4 neutropenia was observed in over 80% of patients treated with cabazitaxel in a clinical trial. Dose reductions are recommended following neutropenic fever or prolonged neutropenia. Administration of WBC growth factors may reduce the risk of complications due to neutropenia. Consider primary WBC growth factor prophylaxis in high-risk patients (eg, >65 years of age, poor performance status, history of neutropenic fever, extensive prior radiation, poor nutrition status, other serious comorbidities); secondary prophylaxis and therapeutic WBC growth factors should be considered in all patients with increased risk for neutropenic complications. Use cautiously in patients with hemoglobin <10 g/dL. Monitor complete blood counts weekly during cycle 1 and prior to subsequent treatment cycles, or as clinically indicated.
- Gastrointestinal toxicity: Nausea, vomiting and diarrhea may occur. Diarrhea may be severe and may result in dehydration and electrolyte imbalance; fatalities have been reported. Per the manufacturer, antiemetic prophylaxis is recommended. Antidiarrheal medication and fluid and electrolyte replacement may be necessary. Diarrhea  $\geq$  grade 3 may require treatment delay and or dosage reduction. Gastrointestinal hemorrhage and perforation, enterocolitis, neutropenic enterocolitis, and ileus (some fatal) have also been observed. Use with caution in patients at risk of developing gastrointestinal complications (eg, elderly patients, those with neutropenia or a prior history of pelvic radiation, adhesions, GI ulceration or bleeding, concomitant use of steroids, NSAIDs, antiplatelet or anticoagulant medications). Evaluate promptly if symptoms such as abdominal pain and tenderness, fever, persistent constipation, and diarrhea (with or without neutropenia) occur. May require treatment interruption and/or therapy discontinuation.
- Hypersensitivity reactions: **[US Boxed Warning]: Severe hypersensitivity reactions, including generalized rash, erythema, hypotension, and bronchospasm may occur. Immediate discontinuation is required if hypersensitivity is severe; administer appropriate supportive medications. Premedicate with an IV antihistamine, corticosteroid, and H<sub>2</sub> antagonist prior to infusion. Use in patients with history of severe hypersensitivity to cabazitaxel or other medications formulated with polysorbate 80 is contraindicated.** Observe closely during

infusion, especially during the first and second infusions; reaction may occur within minutes. Do not rechallenge after severe hypersensitivity reactions.

- Pulmonary toxicity: Interstitial pneumonia/pneumonitis, interstitial lung disease, and acute respiratory distress syndrome have been observed; may be fatal. Patients with underlying pulmonary disease may be at higher risk for these events. Acute respiratory distress syndrome may occur in the setting of infection. If new or worsening pulmonary symptoms develop, interrupt cabazitaxel treatment, monitor closely and promptly investigate and manage symptoms. May require discontinuation (carefully evaluate the potential benefits of treatment resumption).
- Renal failure: Renal failure (including rare fatalities) has been reported from clinical trials; generally associated with dehydration, sepsis, or obstructive uropathy. Use with caution in patients with severe renal impairment (CrCl <30 mL/minute) and end-stage renal disease.

***Disease-related concerns:***

- Hepatic impairment: Use is contraindicated in patients with severe hepatic impairment (total bilirubin >3 times ULN). Dose reduction is necessary in patients with mild impairment (total bilirubin >1 to ≤1.5 times ULN or AST >1.5 times ULN) and moderate impairment (total bilirubin >1.5 to ≤3 times ULN); use with caution and monitor closely. Due to extensive hepatic metabolism, cabazitaxel exposure is increased in patients with hepatic impairment.

***Concurrent drug therapy issues:***

- Drug-drug interactions: Potentially significant interactions may exist, requiring dose or frequency adjustment, additional monitoring, and/or selection of alternative therapy. Consult drug interactions database for more detailed information.

***Dosage form specific issues:***

- Polysorbate 80: Some dosage forms may contain polysorbate 80 (also known as Tweens). Hypersensitivity reactions, usually a delayed reaction, have been reported following exposure to pharmaceutical products containing polysorbate 80 in certain individuals (Isaksson 2002; Lucente 2000; Shelley 1995). Thrombocytopenia, ascites, pulmonary deterioration, and renal and hepatic failure have been reported in premature neonates after receiving parenteral products containing polysorbate 80 (Alade 1986; CDC 1984). See manufacturer's labeling.

***Special populations:***

- Elderly: Patients ≥65 years of age are more likely to experience certain adverse reactions, including grade 3 and 4 neutropenia and neutropenic fever. Fatigue, asthenia, pyrexia, dizziness, urinary tract infection, and dehydration also occurred more frequently in elderly patients compared to younger patients. Death due to causes other than disease progression (within 30 days of the last cabazitaxel dose) was higher in elderly patients versus younger patients.

***Other warnings/precautions:***

- Preparation for administration: Failure to properly reconstitute the concentrated vial of cabazitaxel with the correct amount of diluent may lead to higher dosage being administered and increased risk of toxicity. Follow manufacturer instructions carefully.

**Metabolism/Transport Effects** Substrate of CYP2C8 (minor), CYP3A4 (major); **Note:**

## Drug Interactions

(For additional information: [Launch drug interactions program](#)) Lexicomp®

Antineoplastic Agents (Anthracycline, Systemic): Taxane Derivatives may enhance the adverse/toxic effect of Antineoplastic Agents (Anthracycline, Systemic). Taxane Derivatives may increase the serum concentration of Antineoplastic Agents (Anthracycline, Systemic). Taxane Derivatives may also increase the formation of toxic anthracycline metabolites in heart tissue. *Risk D: Consider therapy modification*

Aprepitant: May increase the serum concentration of CYP3A4 Substrates. *Risk C: Monitor therapy*

BCG (Intravesical): Immunosuppressants may diminish the therapeutic effect of BCG (Intravesical). *Risk X: Avoid combination*

BCG (Intravesical): Myelosuppressive Agents may diminish the therapeutic effect of BCG (Intravesical). *Risk X: Avoid combination*

Bosentan: May decrease the serum concentration of CYP3A4 Substrates. *Risk C: Monitor therapy*

CloZAPine: Myelosuppressive Agents may enhance the adverse/toxic effect of CloZAPine. Specifically, the risk for neutropenia may be increased. *Risk C: Monitor therapy*

Coccidioides immitis Skin Test: Immunosuppressants may diminish the diagnostic effect of Coccidioides immitis Skin Test. *Risk C: Monitor therapy*

Conivaptan: May increase the serum concentration of CYP3A4 Substrates. *Risk X: Avoid combination*

CYP3A4 Inducers (Moderate): May decrease the serum concentration of CYP3A4 Substrates. *Risk C: Monitor therapy*

CYP3A4 Inducers (Strong): May increase the metabolism of CYP3A4 Substrates. Management: Consider an alternative for one of the interacting drugs. Some combinations may be specifically contraindicated. Consult appropriate manufacturer labeling. *Risk D: Consider therapy modification*

CYP3A4 Inhibitors (Moderate): May decrease the metabolism of CYP3A4 Substrates. *Risk C: Monitor therapy*

CYP3A4 Inhibitors (Strong): May increase the serum concentration of Cabazitaxel. Management: Concurrent use of cabazitaxel with strong inhibitors of CYP3A4 should be avoided when possible. If such a combination must be used, consider a 25% reduction in the cabazitaxel dose. *Risk D: Consider therapy modification*

Dabrafenib: May decrease the serum concentration of CYP3A4 Substrates. Management: Seek alternatives to the CYP3A4 substrate when possible. If concomitant therapy cannot be avoided, monitor clinical effects of the substrate closely (particularly therapeutic effects). *Risk D: Consider therapy modification*

Dasatinib: May increase the serum concentration of CYP3A4 Substrates. *Risk C: Monitor therapy*

Deferasirox: May decrease the serum concentration of CYP3A4 Substrates. *Risk C: Monitor therapy*

Deferiprone: Myelosuppressive Agents may enhance the neutropenic effect of Deferiprone. *Risk X:*

### *Avoid combination*

Denosumab: May enhance the adverse/toxic effect of Immunosuppressants. Specifically, the risk for serious infections may be increased. *Risk C: Monitor therapy*

Dipyrrone: May enhance the adverse/toxic effect of Myelosuppressive Agents. Specifically, the risk for agranulocytosis and pancytopenia may be increased *Risk X: Avoid combination*

DOXOrubicin (Conventional): Taxane Derivatives may decrease the metabolism of DOXOrubicin (Conventional). Management: Consider using docetaxel instead of paclitaxel as a way to avoid this potential interaction, and monitor closely for toxic effects of doxorubicin. Administer doxorubicin prior to paclitaxel when used concomitantly. *Risk D: Consider therapy modification*

Echinacea: May diminish the therapeutic effect of Immunosuppressants. *Risk D: Consider therapy modification*

Enzalutamide: May decrease the serum concentration of CYP3A4 Substrates. Management: Concurrent use of enzalutamide with CYP3A4 substrates that have a narrow therapeutic index should be avoided. Use of enzalutamide and any other CYP3A4 substrate should be performed with caution and close monitoring. *Risk D: Consider therapy modification*

Fingolimod: Immunosuppressants may enhance the immunosuppressive effect of Fingolimod. Management: Avoid the concomitant use of fingolimod and other immunosuppressants when possible. If combined, monitor patients closely for additive immunosuppressant effects (eg, infections). *Risk D: Consider therapy modification*

Fosaprepitant: May increase the serum concentration of CYP3A4 Substrates. *Risk C: Monitor therapy*

Fusidic Acid (Systemic): May increase the serum concentration of CYP3A4 Substrates. *Risk X: Avoid combination*

Idelalisib: May increase the serum concentration of CYP3A4 Substrates. *Risk X: Avoid combination*

Leflunomide: Immunosuppressants may enhance the adverse/toxic effect of Leflunomide. Specifically, the risk for hematologic toxicity such as pancytopenia, agranulocytosis, and/or thrombocytopenia may be increased. Management: Consider not using a leflunomide loading dose in patients receiving other immunosuppressants. Patients receiving both leflunomide and another immunosuppressant should be monitored for bone marrow suppression at least monthly. *Risk D: Consider therapy modification*

Lenograstim: Antineoplastic Agents may diminish the therapeutic effect of Lenograstim. *Risk D: Consider therapy modification*

MiFEPRIStone: May increase the serum concentration of CYP3A4 Substrates. Management: Minimize doses of CYP3A4 substrates, and monitor for increased concentrations/toxicity, during and 2 weeks following treatment with mifepristone. Avoid cyclosporine, dihydroergotamine, ergotamine, fentanyl, pimozide, quinidine, sirolimus, and tacrolimus. *Risk D: Consider therapy modification*

Mitotane: May decrease the serum concentration of CYP3A4 Substrates. Management: Doses of CYP3A4 substrates may need to be adjusted substantially when used in patients being treated with mitotane. *Risk D: Consider therapy modification*

Natalizumab: Immunosuppressants may enhance the adverse/toxic effect of Natalizumab. Specifically, the risk of concurrent infection may be increased. *Risk X: Avoid combination*



Netupitant: May increase the serum concentration of CYP3A4 Substrates. *Risk C: Monitor therapy*

Nivolumab: Immunosuppressants may diminish the therapeutic effect of Nivolumab. *Risk D: Consider therapy modification*

Ocrelizumab: May enhance the immunosuppressive effect of Immunosuppressants. *Risk C: Monitor therapy*

Palbociclib: May increase the serum concentration of CYP3A4 Substrates. *Risk C: Monitor therapy*

Palifermin: May enhance the adverse/toxic effect of Antineoplastic Agents. Specifically, the duration and severity of oral mucositis may be increased. Management: Do not administer palifermin within 24 hours before, during infusion of, or within 24 hours after administration of myelotoxic chemotherapy. *Risk D: Consider therapy modification*

Pimecrolimus: May enhance the adverse/toxic effect of Immunosuppressants. *Risk X: Avoid combination*

Platinum Derivatives: May enhance the myelosuppressive effect of Taxane Derivatives. Administer Taxane derivative before Platinum derivative when given as sequential infusions to limit toxicity. *Risk D: Consider therapy modification*

Promazine: May enhance the myelosuppressive effect of Myelosuppressive Agents. *Risk C: Monitor therapy*

Roflumilast: May enhance the immunosuppressive effect of Immunosuppressants. *Risk D: Consider therapy modification*

Sarilumab: May decrease the serum concentration of CYP3A4 Substrates. *Risk C: Monitor therapy*

Siltuximab: May decrease the serum concentration of CYP3A4 Substrates. *Risk C: Monitor therapy*

Simeprevir: May increase the serum concentration of CYP3A4 Substrates. *Risk C: Monitor therapy*

Sipuleucel-T: Immunosuppressants may diminish the therapeutic effect of Sipuleucel-T. *Risk C: Monitor therapy*

St John's Wort: May decrease the serum concentration of CYP3A4 Substrates. Management: Consider an alternative for one of the interacting drugs. Some combinations may be specifically contraindicated. Consult appropriate manufacturer labeling. *Risk D: Consider therapy modification*

Stiripentol: May increase the serum concentration of CYP3A4 Substrates. Management: Use of stiripentol with CYP3A4 substrates that are considered to have a narrow therapeutic index should be avoided due to the increased risk for adverse effects and toxicity. Any CYP3A4 substrate used with stiripentol requires closer monitoring. *Risk D: Consider therapy modification*

Tacrolimus (Topical): May enhance the adverse/toxic effect of Immunosuppressants. *Risk X: Avoid combination*

Tertomotide: Immunosuppressants may diminish the therapeutic effect of Tertomotide. *Risk C: Monitor therapy*

Tocilizumab: May decrease the serum concentration of CYP3A4 Substrates. *Risk C: Monitor therapy*

Tofacitinib: Immunosuppressants may enhance the immunosuppressive effect of Tofacitinib. Management: Concurrent use with antirheumatic doses of methotrexate or nonbiologic disease

modifying antirheumatic drugs (DMARDs) is permitted, and this warning seems particularly focused on more potent immunosuppressants. *Risk X: Avoid combination*

Trastuzumab: May enhance the neutropenic effect of Immunosuppressants. *Risk C: Monitor therapy*

Vaccines (Inactivated): Immunosuppressants may diminish the therapeutic effect of Vaccines (Inactivated). Management: Vaccine efficacy may be reduced. Complete all age-appropriate vaccinations at least 2 weeks prior to starting an immunosuppressant. If vaccinated during immunosuppressant therapy, revaccinate at least 3 months after immunosuppressant discontinuation. *Risk D: Consider therapy modification*

Vaccines (Live): Immunosuppressants may enhance the adverse/toxic effect of Vaccines (Live). Immunosuppressants may diminish the therapeutic effect of Vaccines (Live). Management: Avoid use of live organism vaccines with immunosuppressants; live-attenuated vaccines should not be given for at least 3 months after immunosuppressants. *Risk X: Avoid combination*

**Food Interactions** Grapefruit juice may increase the levels/effects of cabazitaxel. Management: Avoid grapefruit juice.

**Pregnancy Risk Factor** D ([show table](#))

**Pregnancy Implications** Adverse events have been observed in animal reproduction studies. Cabazitaxel is not indicated for use in women. May cause fetal harm if administered during pregnancy. Pregnant women should avoid exposure to cabazitaxel.

**Breast-Feeding Considerations** It is not known if cabazitaxel is excreted in breast milk. Cabazitaxel is not indicated for use in women. Due to the potential for serious adverse reactions in the nursing infant, the manufacturer recommends a decision be made to discontinue nursing or to discontinue the drug, taking into account the importance of treatment to the mother.

**Dietary Considerations** Avoid grapefruit juice.

**Monitoring Parameters** CBC with differential and platelets (weekly during first cycle, then prior to each treatment cycle and as clinically indicated); hepatic/renal function. Monitor for hypersensitivity reactions (especially during the first and second infusions). Monitor for signs/symptoms of gastrointestinal disorders (eg, nausea, vomiting, diarrhea, gastrointestinal hemorrhage and perforation, ileus, colitis, abdominal pain/tenderness). Monitor for new or worsening pulmonary symptoms.

**Mechanism of Action** Cabazitaxel is a taxane derivative which is a microtubule inhibitor; it binds to tubulin promoting assembly into microtubules and inhibiting disassembly which stabilizes microtubules. This inhibits microtubule depolymerization and cell division, arresting the cell cycle and inhibiting tumor proliferation. Unlike other taxanes, cabazitaxel has a poor affinity for multidrug resistance (MDR) proteins, therefore conferring activity in resistant tumors.

## Pharmacodynamics/Kinetics

Distribution:  $V_{dss}$ : 4,864 L; has greater CNS penetration than other taxanes

Protein binding: 89% to 92%; primarily to serum albumin and lipoproteins

Metabolism: Extensively hepatic; primarily via CYP3A4 and 3A5; also via CYP2C8 (minor)

Half-life elimination: Terminal: 95 hours

Excretion: Feces (76% as metabolites); Urine (~4%)

## Pricing: US

### Solution (Jevtana Intravenous)

60 mg/1.5 mL (1.5 mL): \$11863.08

**Disclaimer:** The pricing data provide a representative AWP and/or AAWP price from a single manufacturer of the brand and/or generic product, respectively. The pricing data should be used for benchmarking purposes only, and as such should not be used to set or adjudicate any prices for reimbursement or purchasing functions. Pricing data is updated monthly.

**International Brand Names** Jevtana (AE, AR, AT, AU, BE, BR, CH, CL, CR, CY, CZ, DE, DK, DO, EE, ES, FR, GB, GT, HK, HN, HR, HU, ID, IE, IL, IS, JO, JP, KR, LB, LT, LU, LV, MT, MX, MY, NI, NL, NO, PA, PE, PH, PL, PT, QA, RO, SE, SG, SI, SK, SV, TH, TR); Zhevtana (UA)

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