

**HIGHLIGHTS OF PRESCRIBING INFORMATION**  
These highlights do not include all the information needed to use JELMYTO safely and effectively. See full prescribing information for JELMYTO.

**JELMYTO™**  
(mitomycin) for pyelocalyceal solution

Initial U.S. Approval: 1974

**INDICATIONS AND USAGE**

JELMYTO is an alkylating drug indicated for the treatment of adult patients with low-grade Upper Tract Urothelial Cancer (LG-UTUC). (1)

**DOSE AND ADMINISTRATION**

- JELMYTO is for pyelocalyceal use only and **not** for intravenous use, topical use, or oral administration. (2.1)
- Administer 1.3 g of sodium bicarbonate orally the evening prior to, the morning of, and 30 minutes prior to instillation procedure (total of 3.9 g). (2.1)
- The dose of JELMYTO to be instilled is 4 mg per mL via urethral catheter or nephrostomy tube, with total instillation volume based on volumetric measurements using urography, not to exceed 15 mL (60 mg of mitomycin). (2.2)
- Instill JELMYTO once weekly for six weeks. For patients with a complete response 3 months after JELMYTO initiation, JELMYTO instillations may be administered once a month for a maximum of 11 additional instillations. (2.2)

**DOSE FORMS AND STRENGTHS**

- For pyelocalyceal solution: A carton containing the following:
  - Two 40 mg (each) single-dose vials of mitomycin for pyelocalyceal solution (3)
  - One vial of 20 mL sterile hydrogel for reconstitution (3)

**FULL PRESCRIBING INFORMATION: CONTENTS\***

- INDICATIONS AND USAGE
- DOSE AND ADMINISTRATION
  - Important Administration Instructions
  - Recommended Dosage
  - Preparation and Handling
- DOSE FORMS AND STRENGTHS
- CONTRAINDICATIONS
- WARNINGS AND PRECAUTIONS
  - Ureteric Obstruction
  - Bone Marrow Suppression
  - Embryo-Fetal Toxicity
- ADVERSE REACTIONS
  - Clinical Trials Experience
- USE IN SPECIFIC POPULATIONS
  - Pregnancy
  - Lactation
  - Females and Males of Reproductive Potential
  - Pediatric Use

**FULL PRESCRIBING INFORMATION**

**1 INDICATIONS AND USAGE**

JELMYTO™ is indicated for the treatment of adult patients with low-grade Upper Tract Urothelial Cancer (LG-UTUC).

**2 DOSE AND ADMINISTRATION**

- Important Administration Instructions**  
See the Instructions for Administration provided separately.  
JELMYTO is for pyelocalyceal use only. JELMYTO is **not** for intravenous use, topical use, or oral administration. Prior to every instillation, instruct the patient to take 1.3 g of sodium bicarbonate orally the evening prior to, the morning of, and 30 minutes prior to the instillation procedure (total of 3.9 g).  
General anesthesia, local anesthesia, sedation, prophylactic antibiotics and/or anticholinergics may be used at the discretion of the treating urologist. If the patient is to be anesthetized, advise the patient not to take sodium bicarbonate within 30 minutes prior to the treatment. Consider withholding diuretics one day prior to instillation until 4 hours post-instillation.  
When instilling JELMYTO, the entire syringe must be emptied within one minute.  
Advise patients that JELMYTO may discolor urine to a violet to blue color following the instillation procedure. Advise patients to avoid contact with urine for at least six hours post-instillation, to void urine sitting on a toilet, and to flush the toilet several times after use.
- Recommended Dosage**  
The dose of JELMYTO to be instilled is 4 mg per mL via urethral catheter or a nephrostomy tube, with total instillation volume based on volumetric measurements using urography, not to exceed 15 mL (60 mg of mitomycin).  
Instill JELMYTO once weekly for six weeks. For patients with a complete response 3 months after JELMYTO initiation, JELMYTO instillations may be administered once a month for a maximum of 11 additional instillations.
- Preparation and Handling**  
See the Instructions for Pharmacy for preparation provided separately. JELMYTO is a cytotoxic drug. Follow applicable special handling and disposal procedures.  
JELMYTO must be prepared under chilled conditions. Once reconstituted, the admixture will have a concentration of 4 mg of mitomycin per mL and will appear as a viscous liquid for instillation. Reconstituted JELMYTO has reverse thermal properties with a gelation point of approximately 19°C (66°F). Reconstituted JELMYTO should be instilled as soon as possible after reconstitution. If immediate instillation is not possible store reconstituted JELMYTO at 20°C to 25°C (68°F to 77°F) for up to 8 hours. JELMYTO will appear as a semisolid gel when stored under these conditions. Protect reconstituted JELMYTO from light.  
JELMYTO must be instilled as a chilled solution using a Uroject12 Lever, a Luer lock syringe, and a urethral catheter with molded Luer lock connector. Once chilled at 3°C to 5°C (37°F to 41°F), JELMYTO will convert to a viscous liquid for instillation and is stable for up to 1 additional hour. Reconstituted JELMYTO must be instilled within 1 hour after it is converted to a viscous liquid.

**3 DOSE FORMS AND STRENGTHS**

For pyelocalyceal solution: A single-dose carton containing the following:

- Two 40 mg (each) single-dose vials of sterile, lyophilized, grey to greyish-purple, cake or powder of mitomycin for pyelocalyceal solution
- One single-dose vial of 20 mL of sterile, clear, colorless, gel with or without bubbles at room temperature or clear, colorless liquid at 2°C to 8°C (36°F to 46°F), to be used as a vehicle for reconstitution

**4 CONTRAINDICATIONS**

- JELMYTO is contraindicated in patients with:
  - perforation of the bladder or upper urinary tract.

**5 WARNINGS AND PRECAUTIONS**

- Ureteric Obstruction**  
Ureteric obstruction, including ureteral stenosis and hydronephrosis, occurred in patients receiving JELMYTO.  
In the OLYMPUS study, ureteric obstruction was reported in 58% (n=41) of patients receiving JELMYTO, including 17% (n=12) of patients who experienced Grade 3 obstruction. The median time to first onset was 72 days (range: 15-462). Interventions in the 41 patients experiencing ureteric obstruction included ureteral stent placement (88%), balloon dilatation (32%), and nephroureterostomy (4.9%). In the 36 patients who required ureteral stent placement, the median duration of indwelling stents was 51 days (range: 1-292). Ureteric obstruction did not resolve or resolved with sequelae in 51% (n=21) of these patients. Of the 41 patients who experienced ureteric obstruction, 17% (n=7) experienced Grades 1-2 increase in serum creatinine. In the 42 patients who only received JELMYTO during the treatment phase (no maintenance therapy), ureteric obstruction was reported in 40% (n=17).  
Monitor patients for signs and symptoms of ureteric obstruction, including flank pain, and fever, and for changes in renal function. Patients who experience obstruction may require transient or long-term ureteral stents or alternative procedures. Withhold or permanently discontinue JELMYTO based on the severity of the ureteric obstruction. (5.1)

**6 DOSE FORMS AND STRENGTHS**

- Two 40 mg (each) single-dose vials of sterile, lyophilized, grey to greyish-purple, cake or powder of mitomycin for pyelocalyceal solution
- One single-dose vial of 20 mL of sterile, clear, colorless, gel with or without bubbles at room temperature or clear, colorless liquid at 2°C to 8°C (36°F to 46°F), to be used as a vehicle for reconstitution

**4 CONTRAINDICATIONS**

- JELMYTO is contraindicated in patients with:
  - perforation of the bladder or upper urinary tract.

**5 WARNINGS AND PRECAUTIONS**

- Ureteric Obstruction**  
Ureteric obstruction, including ureteral stenosis and hydronephrosis, occurred in patients receiving JELMYTO.  
In the OLYMPUS study, ureteric obstruction was reported in 58% (n=41) of patients receiving JELMYTO, including 17% (n=12) of patients who experienced Grade 3 obstruction. The median time to first onset was 72 days (range: 15-462). Interventions in the 41 patients experiencing ureteric obstruction included ureteral stent placement (88%), balloon dilatation (32%), and nephroureterostomy (4.9%). In the 36 patients who required ureteral stent placement, the median duration of indwelling stents was 51 days (range: 1-292). Ureteric obstruction did not resolve or resolved with sequelae in 51% (n=21) of these patients. Of the 41 patients who experienced ureteric obstruction, 17% (n=7) experienced Grades 1-2 increase in serum creatinine. In the 42 patients who only received JELMYTO during the treatment phase (no maintenance therapy), ureteric obstruction was reported in 40% (n=17).  
Monitor patients for signs and symptoms of ureteric obstruction, including flank pain, and fever, and for changes in renal function. Patients who experience obstruction may require transient or long-term ureteral stents or alternative procedures. Withhold or permanently discontinue JELMYTO based on the severity of the ureteric obstruction. (5.1)

**CONTRAINDICATIONS**

- Perforation of the bladder or upper urinary tract. (4)

**WARNINGS AND PRECAUTIONS**

- Ureteric Obstruction:** Ureteric obstruction may occur. Monitor patients for signs and symptoms of ureteric obstruction. Transient or long-term ureteral stents or alternative procedures may be required. Withhold or permanently discontinue JELMYTO based on the severity of the ureteric obstruction. (5.1)
- Bone Marrow Suppression:** Thrombocytopenia and neutropenia may occur. Monitor blood counts. Withhold or permanently discontinue JELMYTO based on the severity. (5.2)
- Embryo-Fetal Toxicity:** Can cause fetal harm. Advise of potential risk to a fetus and to use effective contraception. (5.3, 8.1, 8.3)

**ADVERSE REACTIONS**

The most common adverse reactions (≥ 20%) are ureteric obstruction, flank pain, urinary tract infection, hematuria, renal dysfunction, fatigue, nausea, abdominal pain, dysuria, and vomiting. (6.1)

To report SUSPECTED ADVERSE REACTIONS, contact UroGen Pharma at 1-855-987-4436 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 FDA-approved patient labeling.

Revised: 04/2020

**11 DESCRIPTION**

- CLINICAL PHARMACOLOGY**
  - Mechanism of Action
  - Pharmacodynamics
  - Pharmacokinetics

**13 NONCLINICAL TOXICOLOGY**

- 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility**

**14 CLINICAL STUDIES**

**15 REFERENCES**

**16 HOW SUPPLIED/STORAGE AND HANDLING**

- How Supplied
- Storage and Handling

**17 PATIENT COUNSELING INFORMATION**

\*Sections or subsections omitted from the full prescribing information are not listed.

**6 ADVERSE REACTIONS**

The following clinically significant adverse reactions are discussed in greater detail in other sections of the labeling:

- Ureteric Obstruction [see **Warnings and Precautions** (5.1)]
- Bone Marrow Suppression [see **Warnings and Precautions** (5.2)]
- Clinical Trials Experience**  
Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect rates observed in practice.  
The safety of JELMYTO was evaluated in OLYMPUS, an open-label, single-arm study in 71 patients with LG-UTUC [see **Clinical Studies** (14)]. For the 71 patients treated with JELMYTO during the treatment period, the median number of instillations was 6 (range: 4-36). Following initial treatment, 29 patients were treated with up to 11 doses of maintenance instillations, with a median of 6 instillations (range: 0-11).  
Serious adverse reactions occurred in 37% of patients who received JELMYTO. Serious adverse reactions in ≥ 2% of patients included: ureteric obstruction (including ureteric stenosis and hydronephrosis), flank pain, and orosiphosis. Two deaths occurred due to a cerebrovascular accident and failure to thrive.  
JELMYTO was permanently discontinued due to an adverse reaction in 16 (23%) patients, including 11 patients who discontinued during the treatment phase and 5 who discontinued during the maintenance phase. Adverse reactions resulting in study drug discontinuation of JELMYTO in > 3% of patients who received JELMYTO included ureteric obstruction.  
Dosage interruptions due to an adverse reaction occurred in 34% of patients who received JELMYTO. Adverse reactions requiring dosage interruption in ≥ 3% of patients who received JELMYTO included renal dysfunction, ureteric obstruction, urinary tract infection, and flank pain. The most common adverse reactions (≥ 20%) reported were ureteric obstruction, flank pain, urinary tract infection, hematuria, renal dysfunction, fatigue, nausea, abdominal pain, dysuria, and vomiting. Table 1 summarizes the adverse reactions in OLYMPUS.

**6 ADVERSE REACTIONS**

The following clinically significant adverse reactions are discussed in greater detail in other sections of the labeling:

- Ureteric Obstruction [see **Warnings and Precautions** (5.1)]
- Bone Marrow Suppression [see **Warnings and Precautions** (5.2)]
- Clinical Trials Experience**  
Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect rates observed in practice.  
The safety of JELMYTO was evaluated in OLYMPUS, an open-label, single-arm study in 71 patients with LG-UTUC [see **Clinical Studies** (14)]. For the 71 patients treated with JELMYTO during the treatment period, the median number of instillations was 6 (range: 4-36). Following initial treatment, 29 patients were treated with up to 11 doses of maintenance instillations, with a median of 6 instillations (range: 0-11).  
Serious adverse reactions occurred in 37% of patients who received JELMYTO. Serious adverse reactions in ≥ 2% of patients included: ureteric obstruction (including ureteric stenosis and hydronephrosis), flank pain, and orosiphosis. Two deaths occurred due to a cerebrovascular accident and failure to thrive.  
JELMYTO was permanently discontinued due to an adverse reaction in 16 (23%) patients, including 11 patients who discontinued during the treatment phase and 5 who discontinued during the maintenance phase. Adverse reactions resulting in study drug discontinuation of JELMYTO in > 3% of patients who received JELMYTO included ureteric obstruction.  
Dosage interruptions due to an adverse reaction occurred in 34% of patients who received JELMYTO. Adverse reactions requiring dosage interruption in ≥ 3% of patients who received JELMYTO included renal dysfunction, ureteric obstruction, urinary tract infection, and flank pain. The most common adverse reactions (≥ 20%) reported were ureteric obstruction, flank pain, urinary tract infection, hematuria, renal dysfunction, fatigue, nausea, abdominal pain, dysuria, and vomiting. Table 1 summarizes the adverse reactions in OLYMPUS.

**6 ADVERSE REACTIONS**

The following clinically significant adverse reactions are discussed in greater detail in other sections of the labeling:

- Ureteric Obstruction [see **Warnings and Precautions** (5.1)]
- Bone Marrow Suppression [see **Warnings and Precautions** (5.2)]
- Clinical Trials Experience**  
Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect rates observed in practice.  
The safety of JELMYTO was evaluated in OLYMPUS, an open-label, single-arm study in 71 patients with LG-UTUC [see **Clinical Studies** (14)]. For the 71 patients treated with JELMYTO during the treatment period, the median number of instillations was 6 (range: 4-36). Following initial treatment, 29 patients were treated with up to 11 doses of maintenance instillations, with a median of 6 instillations (range: 0-11).  
Serious adverse reactions occurred in 37% of patients who received JELMYTO. Serious adverse reactions in ≥ 2% of patients included: ureteric obstruction (including ureteric stenosis and hydronephrosis), flank pain, and orosiphosis. Two deaths occurred due to a cerebrovascular accident and failure to thrive.  
JELMYTO was permanently discontinued due to an adverse reaction in 16 (23%) patients, including 11 patients who discontinued during the treatment phase and 5 who discontinued during the maintenance phase. Adverse reactions resulting in study drug discontinuation of JELMYTO in > 3% of patients who received JELMYTO included ureteric obstruction.  
Dosage interruptions due to an adverse reaction occurred in 34% of patients who received JELMYTO. Adverse reactions requiring dosage interruption in ≥ 3% of patients who received JELMYTO included renal dysfunction, ureteric obstruction, urinary tract infection, and flank pain. The most common adverse reactions (≥ 20%) reported were ureteric obstruction, flank pain, urinary tract infection, hematuria, renal dysfunction, fatigue, nausea, abdominal pain, dysuria, and vomiting. Table 1 summarizes the adverse reactions in OLYMPUS.

**6 ADVERSE REACTIONS**

The following clinically significant adverse reactions are discussed in greater detail in other sections of the labeling:

- Ureteric Obstruction [see **Warnings and Precautions** (5.1)]
- Bone Marrow Suppression [see **Warnings and Precautions** (5.2)]
- Clinical Trials Experience**  
Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect rates observed in practice.  
The safety of JELMYTO was evaluated in OLYMPUS, an open-label, single-arm study in 71 patients with LG-UTUC [see **Clinical Studies** (14)]. For the 71 patients treated with JELMYTO during the treatment period, the median number of instillations was 6 (range: 4-36). Following initial treatment, 29 patients were treated with up to 11 doses of maintenance instillations, with a median of 6 instillations (range: 0-11).  
Serious adverse reactions occurred in 37% of patients who received JELMYTO. Serious adverse reactions in ≥ 2% of patients included: ureteric obstruction (including ureteric stenosis and hydronephrosis), flank pain, and orosiphosis. Two deaths occurred due to a cerebrovascular accident and failure to thrive.  
JELMYTO was permanently discontinued due to an adverse reaction in 16 (23%) patients, including 11 patients who discontinued during the treatment phase and 5 who discontinued during the maintenance phase. Adverse reactions resulting in study drug discontinuation of JELMYTO in > 3% of patients who received JELMYTO included ureteric obstruction.  
Dosage interruptions due to an adverse reaction occurred in 34% of patients who received JELMYTO. Adverse reactions requiring dosage interruption in ≥ 3% of patients who received JELMYTO included renal dysfunction, ureteric obstruction, urinary tract infection, and flank pain. The most common adverse reactions (≥ 20%) reported were ureteric obstruction, flank pain, urinary tract infection, hematuria, renal dysfunction, fatigue, nausea, abdominal pain, dysuria, and vomiting. Table 1 summarizes the adverse reactions in OLYMPUS.

**6 ADVERSE REACTIONS**

The following clinically significant adverse reactions are discussed in greater detail in other sections of the labeling:

- Ureteric Obstruction [see **Warnings and Precautions** (5.1)]
- Bone Marrow Suppression [see **Warnings and Precautions** (5.2)]
- Clinical Trials Experience**  
Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect rates observed in practice.  
The safety of JELMYTO was evaluated in OLYMPUS, an open-label, single-arm study in 71 patients with LG-UTUC [see **Clinical Studies** (14)]. For the 71 patients treated with JELMYTO during the treatment period, the median number of instillations was 6 (range: 4-36). Following initial treatment, 29 patients were treated with up to 11 doses of maintenance instillations, with a median of 6 instillations (range: 0-11).  
Serious adverse reactions occurred in 37% of patients who received JELMYTO. Serious adverse reactions in ≥ 2% of patients included: ureteric obstruction (including ureteric stenosis and hydronephrosis), flank pain, and orosiphosis. Two deaths occurred due to a cerebrovascular accident and failure to thrive.  
JELMYTO was permanently discontinued due to an adverse reaction in 16 (23%) patients, including 11 patients who discontinued during the treatment phase and 5 who discontinued during the maintenance phase. Adverse reactions resulting in study drug discontinuation of JELMYTO in > 3% of patients who received JELMYTO included ureteric obstruction.  
Dosage interruptions due to an adverse reaction occurred in 34% of patients who received JELMYTO. Adverse reactions requiring dosage interruption in ≥ 3% of patients who received JELMYTO included renal dysfunction, ureteric obstruction, urinary tract infection, and flank pain. The most common adverse reactions (≥ 20%) reported were ureteric obstruction, flank pain, urinary tract infection, hematuria, renal dysfunction, fatigue, nausea, abdominal pain, dysuria, and vomiting. Table 1 summarizes the adverse reactions in OLYMPUS.

**6 ADVERSE REACTIONS**

The following clinically significant adverse reactions are discussed in greater detail in other sections of the labeling:

- Ureteric Obstruction [see **Warnings and Precautions** (5.1)]
- Bone Marrow Suppression [see **Warnings and Precautions** (5.2)]
- Clinical Trials Experience**  
Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect rates observed in practice.  
The safety of JELMYTO was evaluated in OLYMPUS, an open-label, single-arm study in 71 patients with LG-UTUC [see **Clinical Studies** (14)]. For the 71 patients treated with JELMYTO during the treatment period, the median number of instillations was 6 (range: 4-36). Following initial treatment, 29 patients were treated with up to 11 doses of maintenance instillations, with a median of 6 instillations (range: 0-11).  
Serious adverse reactions occurred in 37% of patients who received JELMYTO. Serious adverse reactions in ≥ 2% of patients included: ureteric obstruction (including ureteric stenosis and hydronephrosis), flank pain, and orosiphosis. Two deaths occurred due to a cerebrovascular accident and failure to thrive.  
JELMYTO was permanently discontinued due to an adverse reaction in 16 (23%) patients, including 11 patients who discontinued during the treatment phase and 5 who discontinued during the maintenance phase. Adverse reactions resulting in study drug discontinuation of JELMYTO in > 3% of patients who received JELMYTO included ureteric obstruction.  
Dosage interruptions due to an adverse reaction occurred in 34% of patients who received JELMYTO. Adverse reactions requiring dosage interruption in ≥ 3% of patients who received JELMYTO included renal dysfunction, ureteric obstruction, urinary tract infection, and flank pain. The most common adverse reactions (≥ 20%) reported were ureteric obstruction, flank pain, urinary tract infection, hematuria, renal dysfunction, fatigue, nausea, abdominal pain, dysuria, and vomiting. Table 1 summarizes the adverse reactions in OLYMPUS.

**6 ADVERSE REACTIONS**

The following clinically significant adverse reactions are discussed in greater detail in other sections of the labeling:

- Ureteric Obstruction [see **Warnings and Precautions** (5.1)]
- Bone Marrow Suppression [see **Warnings and Precautions** (5.2)]
- Clinical Trials Experience**  
Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect rates observed in practice.  
The safety of JELMYTO was evaluated in OLYMPUS, an open-label, single-arm study in 71 patients with LG-UTUC [see **Clinical Studies** (14)]. For the 71 patients treated with JELMYTO during the treatment period, the median number of instillations was 6 (range: 4-36). Following initial treatment, 29 patients were treated with up to 11 doses of maintenance instillations, with a median of 6 instillations (range: 0-11).  
Serious adverse reactions occurred in 37% of patients who received JELMYTO. Serious adverse reactions in ≥ 2% of patients included: ureteric obstruction (including ureteric stenosis and hydronephrosis), flank pain, and orosiphosis. Two deaths occurred due to a cerebrovascular accident and failure to thrive.  
JELMYTO was permanently discontinued due to an adverse reaction in 16 (23%) patients, including 11 patients who discontinued during the treatment phase and 5 who discontinued during the maintenance phase. Adverse reactions resulting in study drug discontinuation of JELMYTO in > 3% of patients who received JELMYTO included ureteric obstruction.  
Dosage interruptions due to an adverse reaction occurred in 34% of patients who received JELMYTO. Adverse reactions requiring dosage interruption in ≥ 3% of patients who received JELMYTO included renal dysfunction, ureteric obstruction, urinary tract infection, and flank pain. The most common adverse reactions (≥ 20%) reported were ureteric obstruction, flank pain, urinary tract infection, hematuria, renal dysfunction, fatigue, nausea, abdominal pain, dysuria, and vomiting. Table 1 summarizes the adverse reactions in OLYMPUS.

**6 ADVERSE REACTIONS**

The following clinically significant adverse reactions are discussed in greater detail in other sections of the labeling:

- Ureteric Obstruction [see **Warnings and Precautions** (5.1)]
- Bone Marrow Suppression [see **Warnings and Precautions** (5.2)]
- Clinical Trials Experience**  
Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect rates observed in practice.  
The safety of JELMYTO was evaluated in OLYMPUS, an open-label, single-arm study in 71 patients with LG-UTUC [see **Clinical Studies** (14)]. For the 71 patients treated with JELMYTO during the treatment period, the median number of instillations was 6 (range: 4-36). Following initial treatment, 29 patients were treated with up to 11 doses of maintenance instillations, with a median of 6 instillations (range: 0-11).  
Serious adverse reactions occurred in 37% of patients who received JELMYTO. Serious adverse reactions in ≥ 2% of patients included: ureteric obstruction (including ureteric stenosis and hydronephrosis), flank pain, and orosiphosis. Two deaths occurred due to a cerebrovascular accident and failure to thrive.  
JELMYTO was permanently discontinued due to an adverse reaction in 16 (23%) patients, including 11 patients who discontinued during the treatment phase and 5 who discontinued during the maintenance phase. Adverse reactions resulting in study drug discontinuation of JELMYTO in > 3% of patients who received JELMYTO included ureteric obstruction.  
Dosage interruptions due to an adverse reaction occurred in 34% of patients who received JELMYTO. Adverse reactions requiring dosage interruption in ≥ 3% of patients who received JELMYTO included renal dysfunction, ureteric obstruction, urinary tract infection, and flank pain. The most common adverse reactions (≥ 20%) reported were ureteric obstruction, flank pain, urinary tract infection, hematuria, renal dysfunction, fatigue, nausea, abdominal pain, dysuria, and vomiting. Table 1 summarizes the adverse reactions in OLYMPUS.

- Includes urinary tract infection, pyelonephritis, and urinary tract infection fungal.
- Includes hematuria and hemorrhagic urinary tract.
- Includes renal impairment, acute kidney injury and renal failure.
- Includes abdominal pain and abdominal pain lower.
- Includes asthenia and fatigue.

Selected clinically relevant adverse reactions in < 10% and ≥ 2% of patients who received JELMYTO in OLYMPUS include urinary tract inflammation, bladder spasm, orosiphosis, hypersensitivity, and instillation site pain.

**Table 2: Summarizes the laboratory abnormalities in OLYMPUS.**

**Table 2: Select Laboratory Abnormalities (> 10%) Worsening from Baseline in Patients Who Received JELMYTO in OLYMPUS**

Laboratory Abnormality*	JELMYTO	
	All Grades (%)	Grades ≥ 3 (%)
<b>Hematology</b>		
Anemia	37	0
Thrombocytopenia	21	2.9
Thrombocytopenia	21	2.8
<b>Chemistry</b>		
Estimated Glomerular Filtration Rate	37	10
Creatinine increase	32	0
Hypoalbuminemia	30	2.8
Hypocalcemia	17	0
Hyperuricemia	16	16
Hyperkalemia	13	1.4

\* Each test incidence is based on the number of patients who had both baseline and at least one on-study laboratory measurement available.

**8 USE IN SPECIFIC POPULATIONS**

**8.1 Pregnancy**

**Risk Summary**

Based on findings in animals and mechanism of action, JELMYTO can cause fetal harm when administered to a pregnant woman [see **Clinical Pharmacology** (12.1)]. There are no available data on JELMYTO use in pregnant women to inform the drug-associated risk. In animal reproduction studies, administration of mitomycin resulted in teratogenicity (see **Data**). Advise pregnant women of the potential risk to a fetus.

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

**Data**

**Animal Data**

Teratological changes have been noted with mitomycin in animal studies.

**8.2 Lactation**

**Risk Summary**

There are no data on the presence of mitomycin in human milk, the effects on the breastfed child, or the effects on milk production. Because of the potential for serious adverse reactions in a breastfed child, advise women not to breastfeed during treatment with JELMYTO and for 1 week following the last dose.

**8.3 Females and Males of Reproductive Potential**

JELMYTO can cause fetal harm when administered to pregnant women [see **Use in Specific Populations** (8.1)].

**Pregnancy Testing**

Verify pregnancy status in females of reproductive potential prior to initiating JELMYTO.

**Contraception**

Advise females of reproductive potential to use effective contraception during treatment with JELMYTO and for 6 months following the last dose.

**Males**

Advise male patients with female partners of reproductive potential to use effective contraception during treatment with JELMYTO and for 3 months following the last dose.

**8.4 Pediatric Use**

Safety and efficacy in pediatric patients have not been established.

**8.5 Geriatric Use**

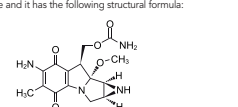
Of the total number of patients in the OLYMPUS trial, 75% (53 patients) were 65 years of age and over and 37% (26 patients) were 75 years of age and over. In the clinical studies of JELMYTO, did not include sufficient numbers of younger patients less than 65 years old to determine whether they respond differently from older patients.

**8.6 Renal Impairment**

No data are available in patients with severe renal impairment. Avoid use of JELMYTO in patients with a Glomerular Filtration Rate of < 30 mL/min.

**11 DESCRIPTION**

Mitomycin (also known as mitomycin-C) is an alkylating drug isolated from the broth of *Streptomyces caespitosus*. Mitomycin is a blue-violet crystalline powder with a molecular formula of C<sub>14</sub>H<sub>14</sub>N<sub>2</sub>O<sub>6</sub> and a molecular weight of 334.33. Its chemical name is 7-amino-9*α*-methoxymitocane and it has the following structural formula:



# Patient Information

## JELMYTO™ (jel-MYE-toe) (mitomycin) for pyelocalyceal solution

### What is JELMYTO?

JELMYTO is a prescription medicine used to treat adults with a type of cancer of the lining of the upper urinary tract including the kidney called low-grade Upper Tract Urothelial Cancer (LG-UTUC).

It is not known if JELMYTO is safe and effective for use in children.

### Who should not receive JELMYTO?

**Do not receive JELMYTO if you** have a hole or tear (perforation) of your bladder or upper urinary tract.

**Before receiving JELMYTO, tell your healthcare provider about all your medical conditions, including if you:**

- are pregnant or plan to become pregnant. JELMYTO can harm your unborn baby. You should not become pregnant during treatment with JELMYTO. Tell your healthcare provider right away if you become pregnant or think you may be pregnant during treatment with JELMYTO.

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

- Your healthcare provider will check to see if you are pregnant before starting treatment with JELMYTO.
- You should use effective birth control (contraception) during treatment with JELMYTO and for 6 months after the last dose.
- Talk to your healthcare provider if you have questions about birth control options that are right for you.

#### Males being treated with JELMYTO:

- If you have a female partner who is able to become pregnant, you should use effective birth control (contraception) during treatment with JELMYTO and for 3 months after the last dose.
- are breastfeeding or plan to breastfeed. It is not known if JELMYTO passes into your breast milk. Do not breastfeed during treatment with JELMYTO and for 1 week after the last dose.

**Tell your healthcare provider about all the medicines you take**, including prescription and over-the-counter medicines, vitamins, and herbal supplements. Know the medicines you take. Keep a list of them to show to your healthcare provider and pharmacist when you get a new medicine.

**Especially tell your healthcare provider if you take water pills (diuretic).**

### How will I receive JELMYTO?

- Your healthcare provider will tell you to take a medicine called sodium bicarbonate before each JELMYTO treatment. Your healthcare provider will provide instructions about how and when to take this.
- JELMYTO will be given to you by your healthcare provider.
- You will receive JELMYTO 1 time a week for 6 weeks. It is important that you receive all 6 doses of JELMYTO according to your healthcare provider's instructions. If you miss any appointments, call your healthcare provider as soon as possible to reschedule your appointment. Your healthcare provider may recommend up to an additional 11 monthly doses.
- JELMYTO is given to your kidney through a tube called a catheter.
- During treatment with JELMYTO, your healthcare provider may tell you to take additional medicines or change how you take your current medicines. Ask your healthcare provider if you have any questions.

### After receiving JELMYTO:

- JELMYTO may cause your urine color to change to a violet to blue color.
- Avoid contact between your skin and urine for at least 6 hours.
- To urinate, **males and females should sit** on a toilet and flush the toilet several times after you use it.
- After going to the bathroom, wash your hands, your inner thighs, and genital area well with soap and water.
- Clothing that comes in contact with urine should be washed right away and

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

**JELMYTO may cause serious side effects, including:**

- **Swelling and narrowing of the tube that carries urine from the kidney to the bladder (ureteric obstruction).** If you develop swelling and narrowing, and to protect your kidney from damage, your healthcare provider may recommend the placement of a small plastic tube (stent) in the ureter to help the kidney drain. Tell your healthcare provider right away if you develop side pain or fever during treatment with JELMYTO.
- **Bone marrow problems.** JELMYTO can affect your bone marrow and can cause a decrease in your white blood cell, red blood cell, and platelet counts. Your healthcare provider will do blood tests prior to each treatment to check your blood cell counts during treatment with JELMYTO. Your healthcare provider may need to temporarily or permanently stop JELMYTO if you develop bone marrow problems during treatment with JELMYTO.

**The most common side effects of JELMYTO include:**

- side pain
- urinary tract infection
- blood in your urine
- kidney problems
- tiredness
- nausea
- stomach pain
- trouble with urination
- vomiting
- low red blood cell count
- frequent urination
- itching
- chills
- fever

Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

You can also report side effects to UroGen Pharma at 1-855-987-6436.

### General information about JELMYTO.

Medicines are sometimes prescribed for purposes other than those listed in this Patient Information leaflet. You can ask your pharmacist or healthcare provider for information about JELMYTO that is written for healthcare professionals.

### What are the ingredients of JELMYTO?

**Active ingredient:** mitomycin

**Inactive ingredients:** hydroxypropyl methylcellulose, mannitol, poloxamer, polyethylene glycol, and water for injection

**Distributed by:**  
UroGen Pharma, Inc.  
Princeton, NJ 08540



JELMYTO™ and UroGen® are trademarks of UroGen Pharma, Ltd.  
U.S. Patent Nos. 9,040,074 and 9,950,069  
Copyright© 2020 UroGen Pharma, Inc.  
All rights reserved.


JEL-PPI-001

For more information go to [www.JELMYTO.com](http://www.JELMYTO.com) or call 1-855-987-6436.

This Patient Information has been approved by the U.S. Food and Drug Administration.

Issued: April 2020



<b>Date:</b>	<b>18-APR-2020</b>		
<b>Title</b>	29381 Jelmyto PIL JEL-PI-001 size: 11" x 17"		
<b>Component Type</b>	Leaflet		
<b>Proof N°</b>	v3	<b>Perigord N°</b>	29381
<b>Item N°</b>	N/A	<b>Barcode N°</b>	N/A
<b>Country</b>	N/A	<b>Size (mm)</b>	11" x 17"
<b>Client</b>	UroGen	<b>Min point size</b>	6 pt
<b>Printing Colours (1)</b>	Pro Black 		
<b>Technical colors</b>			