

# VONJO- pacritinib capsule

## CTI BioPharma Corp.

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### HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use VONJO safely and effectively. See full prescribing information for VONJO.

**VONJO™ (pacritinib) capsules, for oral use**  
**Initial U.S. Approval: 2022**

### INDICATIONS AND USAGE

VONJO is a kinase inhibitor indicated for the treatment of adults with intermediate or high-risk primary or secondary (post-polycythemia vera or post-essential thrombocythemia) myelofibrosis with a platelet count below  $50 \times 10^9/L$  (1).

This indication is approved under accelerated approval based on spleen volume reduction. Continued approval for this indication may be contingent upon verification and description of clinical benefit in a confirmatory trial(s).

### DOSAGE AND ADMINISTRATION

- Recommended dosage is 200 mg orally twice daily (2.1).
- May be taken with or without food (2.1).

### DOSAGE FORMS AND STRENGTHS

Capsules: 100 mg (3)

### CONTRAINDICATIONS

Concomitant use of strong CYP3A4 inhibitors or inducers (4)

### WARNINGS AND PRECAUTIONS

- Hemorrhage: Avoid use in patients with active bleeding and hold VONJO prior to any planned surgical procedures. May require dose interruption, dose reduction or permanent discontinuation depending on severity (5.1).
- Diarrhea: Manage significant diarrhea with anti-diarrheals, dose reduction, or dose interruption (5.2).
- Thrombocytopenia: Manage by dose reduction or interruption (5.3).
- Prolonged QT Interval: Avoid use in patients with baseline QTc >480 msec. Interrupt and reduce VONJO dosage in patients who have a QTcF >500 msec. Correct hypokalemia prior to and during VONJO administration (5.4).
- Major Adverse Cardiac Events (MACE): Risk may be increased in current/past smokers and patients with other cardiovascular risk factors. Monitor for signs, evaluate and treat promptly (5.5).
- Thrombosis: Including deep venous thrombosis, pulmonary embolism, and arterial thrombosis may occur. Monitor for signs, evaluate and treat promptly (5.6).
- Secondary Malignancies: Lymphoma and other malignancies may occur. Past/current smokers may be at increased risk (5.7).
- Risk of Infection: Delay starting VONJO until active serious infections have resolved. Observe for signs and symptoms of infection and manage promptly (5.8).

### ADVERSE REACTIONS

The most common ( $\geq 20\%$  of patients) adverse reactions are diarrhea, thrombocytopenia, nausea, anemia, and peripheral edema (6.1).

**To report SUSPECTED ADVERSE REACTIONS, contact CTI BioPharma Corp. at (844) 428-4246 (844-4CTIBIO) and [www.VONJO.com](http://www.VONJO.com) or FDA at 1-800-FDA-1088 or [www.fda.gov/medwatch](http://www.fda.gov/medwatch).**

### DRUG INTERACTIONS

Avoid use with moderate CYP3A4 inhibitors or inducers (7.1)

Coadministration of VONJO can alter the concentration of drugs that are P-gp, BCRP, or OCT1 substrates.

Avoid use with sensitive substrates (7.2)

### USE IN SPECIFIC POPULATIONS

Lactation: Advise not to breastfeed (8.2).

Hepatic Impairment: Avoid use in moderate (Child-Pugh B) and severe hepatic impairment (Child-Pugh C) (8.6).

Renal Impairment: Avoid use in patients with eGFR <30 mL/min (8.7).

**See 17 for PATIENT COUNSELING INFORMATION and FDA-approved patient labeling.**

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## **FULL PRESCRIBING INFORMATION**

### **1 INDICATIONS AND USAGE**

VONJO is indicated for the treatment of adults with intermediate or high-risk primary or secondary (post-polycythemia vera or post-essential thrombocythemia) myelofibrosis (MF) with a platelet count below  $50 \times 10^9/L$ .

This indication is approved under accelerated approval based on spleen volume reduction [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 Recommended Dosage**

The recommended dosage of VONJO is 200 mg orally twice daily. VONJO may be taken with or without food.

Swallow capsules whole. Do not open, break, or chew capsules.

Patients who are on treatment with other kinase inhibitors before the initiation of VONJO must taper or discontinue according to the prescribing information for that drug.

#### **2.2 Monitoring for Safety**

Perform a complete blood count (CBC; including white blood cell count differential and platelet count), coagulation testing (prothrombin time, partial thromboplastin time, thrombin time, and international normalized ratio) and a baseline electrocardiogram (ECG), prior to starting VONJO, and monitor as clinically indicated while the patient is on treatment.

#### **2.3 Missed Dose**

If a dose of VONJO is missed, the patient should take the next prescribed dose at its scheduled time. Extra capsules should not be taken to make up for the missed dose.

#### **2.4 Dose Interruption for Planned Surgical Procedures or Other Interventions**

Discontinue VONJO 7 days prior to elective surgery or invasive procedures because of the risk of hemorrhage and restart only after hemostasis is assured.

#### **2.5 Dose Modification for Adverse Reactions**

Dose modifications for diarrhea, thrombocytopenia, hemorrhage, and prolonged QT interval are described in Table 1, Table 2, Table 3, and Table 4 respectively. See Warning and Precautions (5.1, 5.2, 5.3, and 5.4) for additional risk minimization recommendations.

Dose levels for VONJO are as follows: 200 mg twice daily (initial starting dose), 100 mg twice daily (first dose reduction), 100 mg once daily (second dose reduction). Discontinue VONJO in patients unable to tolerate a dose of 100 mg daily.

**Table 1 Dosage Modification for Diarrhea**

<b>Toxicity</b>	<b>Management/Action</b>
New onset of diarrhea	<ul style="list-style-type: none"> <li>• Initiate anti-diarrheal medications.</li> <li>• Encourage adequate oral hydration.</li> </ul>
Grade 3 or 4 <sup>a</sup>	<ul style="list-style-type: none"> <li>• Hold VONJO until the diarrhea resolves to Grade 1<sup>b</sup> or lower or baseline. Restart VONJO at the last given dose.</li> <li>• Intensify anti-diarrheal regimen. Provide fluid replacement.</li> <li>• If diarrhea recurs, hold VONJO until the diarrhea resolves to Grade 1<sup>b</sup> or lower or baseline. Restart VONJO at 50% of the last given dose once the toxicity has resolved.</li> <li>• Concomitant antidiarrheal treatment is required for patients restarting VONJO.</li> </ul>

<sup>a</sup> Increase of at least 7 stools per day over baseline, or hospitalization indicated, or severe increase in ostomy output over baseline, or if limiting self care.

<sup>b</sup> Increase of <4 stools per day over baseline or mild increase in ostomy output compared to baseline.

**Table 2 Dose Modification for Thrombocytopenia**

<b>Worsening Thrombocytopenia</b>	<b>Action</b>
For clinically significant worsening of thrombocytopenia that lasts more than 7 days	<ul style="list-style-type: none"> <li>• Hold VONJO. Restart VONJO at 50% of the last given dose once the toxicity has resolved.</li> <li>• If toxicity recurs hold VONJO. Restart VONJO at 50% of the last given dose once the toxicity has resolved.</li> </ul>

**Table 3 Dose Modification for Hemorrhage**

<b>Toxicity</b>	<b>Action</b>
Moderate bleeding; intervention indicated	<ul style="list-style-type: none"> <li>• Hold VONJO until hemorrhage resolves. Restart VONJO at the last given dose.</li> <li>• If hemorrhage recurs, hold VONJO until resolution then restart at 50% of the last given dose.</li> </ul>

Severe bleeding; transfusion, invasive intervention, or hospitalization indicated	<ul style="list-style-type: none"> <li>• Hold VONJO until hemorrhage resolves.</li> <li>• Restart VONJO at 50% of the last given dose.</li> <li>• If bleeding recurs, discontinue VONJO.</li> </ul>
Life-threatening bleeding; urgent intervention indicated.	<ul style="list-style-type: none"> <li>• Discontinue VONJO.</li> </ul>

**Table 4 Dose Modification for Prolonged QT Interval**

<b>Toxicity</b>	<b>Action</b>
QTc prolongation >500 msec or >60 msec from baseline	<ul style="list-style-type: none"> <li>• Hold VONJO.</li> <li>• If QTc prolongation resolves to <math>\leq</math>480 msec or baseline within 1 week, restart VONJO at the same dose.</li> <li>• If time to resolution is greater than 1 week, restart VONJO at a reduced dose.</li> </ul>

### 3 DOSAGE FORMS AND STRENGTHS

Capsule: 100 mg, oblong, size 0 hard gelatin capsule with an opaque scarlet cap printed with “Pacritinib 100 mg” and opaque gray body printed with “C78837”.

### 4 CONTRAINDICATIONS

VONJO is contraindicated in patients concomitantly using strong CYP3A4 inhibitors or inducers as these medications can significantly alter exposure to pacritinib, which may increase the risk of adverse reactions or impair efficacy [see *Warnings and Precautions* (5.1, 5.2, 5.3,5.4), *Drug Interactions* (7.1), and *Clinical Pharmacology* (12.3)].

### 5 WARNINGS AND PRECAUTIONS

#### 5.1 Hemorrhage

Serious (11%) and fatal (2%) hemorrhages have occurred in VONJO-treated patients with platelet counts  $<100 \times 10^9/L$ . Serious (13%) and fatal (2%) hemorrhages have occurred in VONJO-treated patients with platelet counts  $<50 \times 10^9/L$ . Grade  $\geq 3$  bleeding events (defined as requiring transfusion or invasive intervention) occurred in 15% of patients treated with VONJO compared to 7% of patients treated on the control arm. Due to hemorrhage, VONJO dose-reductions, dose interruptions, or permanent discontinuations occurred in 3%, 3%, and 5% of patients, respectively.

Avoid use of VONJO in patients with active bleeding and hold VONJO 7 days prior to any planned surgical or invasive procedures.

Assess platelet counts periodically, as clinically indicated [see *Warnings and Precautions* (5.2)]. Manage hemorrhage using treatment interruption and medical intervention [see *Dosage and Administration* (2.5)].

#### 5.2 Diarrhea

VONJO causes diarrhea in approximately 48% of patients compared to 15% of patients treated on the control arm. The median time to resolution in VONJO-treated patients was 2 weeks. The incidence of reported diarrhea decreased over time with 41% of patients reporting diarrhea in the first 8 weeks of treatment, 15% in Weeks 8 through 16, and 8% in Weeks 16 through 24. Diarrhea resulted in treatment interruption in 3% of VONJO-treated patients. None of the VONJO-treated patients reported diarrhea that resulted in treatment discontinuation. Serious diarrhea adverse reactions occurred in 2% of patients treated with VONJO compared to no such adverse reactions in patients in the control arm.

Control pre-existing diarrhea before starting VONJO treatment. Manage diarrhea with antidiarrheal medications, fluid replacement, and dose-modification. Treat diarrhea with anti-diarrheal medications promptly at the first onset of symptoms. Interrupt or reduce VONJO dose in patients with significant diarrhea despite optimal supportive care [see *Dosage and Administration (2.5)*].

### **5.3 Thrombocytopenia**

VONJO can cause worsening thrombocytopenia. VONJO dosing was reduced due to worsening thrombocytopenia in 2% of patients with pre-existing moderate to severe thrombocytopenia (platelet count  $<100 \times 10^9/L$ ). VONJO dosing was reduced due to worsening thrombocytopenia in 2% of patients with pre-existing severe thrombocytopenia (platelet count  $<50 \times 10^9/L$ ).

Monitor platelet count prior to VONJO treatment and as clinically indicated during treatment [see *Dosage and Administration (2.2)*]. Interrupt VONJO in patients with clinically significant worsening of thrombocytopenia that lasts for more than 7 days. Restart VONJO at 50% of the last given dose once the toxicity has resolved. If toxicity recurs hold VONJO. Restart VONJO at 50% of the last given dose once the toxicity has resolved [see *Dosage and Administration (2.5)*].

### **5.4 Prolonged QT Interval**

VONJO can cause prolongation of the QTc interval. QTc prolongation of  $>500$  msec was higher in VONJO-treated patients than in patients in the control arm (1.4% vs 1%). QTc increase from baseline by 60 msec or higher was greater in VONJO-treated patients than in control arm patients (1.9% vs 1%). Adverse reactions of QTc prolongation were reported for 3.8% of VONJO-treated patients and 2% of control arm patients. No cases of torsades de pointes were reported.

Avoid use of VONJO in patients with a baseline QTc of  $>480$  msec. Avoid use of drugs with significant potential for QTc prolongation in combination with VONJO. Correct hypokalemia prior to and during VONJO treatment.

Manage QTc prolongation using VONJO interruption and electrolyte management [see *Dosage and Administration (2.5)*].

### **5.5 Major Adverse Cardiac Events (MACE)**

Another Janus associated kinase (JAK)-inhibitor has increased the risk of MACE, including cardiovascular death, myocardial infarction, and stroke (compared to those treated with TNF blockers) in patients with rheumatoid arthritis, a condition for which VONJO is not indicated.

Consider the benefits and risks for the individual patient prior to initiating or continuing therapy with VONJO particularly in patients who are current or past smokers and patients with other cardiovascular risk factors. Patients should be informed about the symptoms of serious cardiovascular events and the steps to take if they occur.

## **5.6 Thrombosis**

Another JAK-inhibitor has increased the risk of thrombosis, including deep venous thrombosis, pulmonary embolism, and arterial thrombosis (compared to those treated with TNF blockers) in patients with rheumatoid arthritis, a condition for which VONJO is not indicated.

Patients with symptoms of thrombosis should be promptly evaluated and treated appropriately.

## **5.7 Secondary Malignancies**

Another JAK-inhibitor has increased the risk of lymphoma and other malignancies excluding non-melanoma skin cancer (NMSC) (compared to those treated with TNF blockers) in patients with rheumatoid arthritis, a condition for which VONJO is not indicated. Patients who are current or past smokers are at additional increased risk.

Consider the benefits and risks for the individual patient prior to initiating or continuing therapy with VONJO, particularly in patients with a known malignancy (other than a successfully treated NMSC), patients who develop a malignancy, and patients who are current or past smokers.

## **5.8 Risk of Infection**

Another JAK-inhibitor increased the risk of serious infections (compared to best available therapy) in patients with myeloproliferative neoplasms. Serious bacterial, mycobacterial, fungal and viral infections may occur in patients treated with VONJO. Delay starting therapy with VONJO until active serious infections have resolved. Observe patients receiving VONJO for signs and symptoms of infection and manage promptly. Use active surveillance and prophylactic antibiotics according to clinical guidelines.

## **5.9 Interactions With CYP3A4 Inhibitors or Inducers**

Co-administration of VONJO with strong CYP3A4 inhibitors or inducers is contraindicated. Avoid concomitant use of VONJO with moderate CYP3A4 inhibitors or inducers [see *Contraindications (4)*, *Drug Interactions (7.1)*, and *Clinical Pharmacology (12.3)*].

## **6 ADVERSE REACTIONS**

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

- Hemorrhage [see *Warnings and Precautions (5.1)*]
- Diarrhea [see *Warnings and Precautions (5.2)*]
- Thrombocytopenia [see *Warnings and Precautions (5.3)*]
- Prolonged QT Interval [see *Warnings and Precautions (5.4)*]
- Major Adverse Cardiac Events [see *Warnings and Precautions (5.5)*]

- Thrombosis [see Warnings and Precautions (5.6)]
- Secondary Malignancies [see Warnings and Precautions (5.7)]
- Risk of Infection [see Warnings and Precautions (5.8)]

## 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 to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

### PERSIST-2 Trial

The safety of VONJO was evaluated in the randomized, controlled PERSIST-2 trial [see *Clinical Studies (14)*]. In PERSIST-2, key eligibility criteria included adults with intermediate or high-risk primary or secondary (post-polycythemia vera or post-essential thrombocythemia) MF with splenomegaly and a platelet count  $\leq 100 \times 10^9/L$ . Prior Janus associated kinase (JAK) inhibitor therapy was permitted. Patients received VONJO at 200 mg twice daily (n=106), 400 mg once daily (n=104), or best available therapy (BAT) (n=98). Forty-seven (44%) of the 106 patients treated with VONJO 200 mg twice daily had a baseline platelet count of  $< 50 \times 10^9/L$ . The 400 mg once daily dose could not be established to be safe, so further information on this arm is not provided.

In PERSIST-2, among the 106 patients treated with VONJO 200 mg twice daily, the median baseline hemoglobin was 9.7 g/dL and the median drug exposure was 25 weeks. Fifty-four percent of patients were exposed for 6 months, and 18% were exposed for approximately 12 months. Accounting for dose reductions, the average daily dose (mean relative dose intensity) and median daily dose (median relative dose intensity) were 380 mg (95%) and 400 mg (100%), respectively, for patients receiving VONJO twice daily.

The median age of patients who received VONJO 200 mg twice daily was 67 years (range: 39 to 85 years), 59% were male, 86% were White, 3% were Asian, 2% were Native Hawaiian or Other Pacific Islander, 0% were Black, 9% did not report race, and 87% had an Eastern Cooperative Oncology Group performance status of 0 to 1.

Serious adverse reactions occurred in 47% of patients treated with VONJO 200 mg twice daily and in 31% of patients treated with BAT. The most frequent serious adverse reactions occurring in  $\geq 3\%$  patients receiving VONJO 200 mg twice daily were anemia (8%), thrombocytopenia (6%), pneumonia (6%), cardiac failure (4%), disease progression (3%), pyrexia (3%), and squamous cell carcinoma of skin (3%). Fatal adverse reactions occurred in 8% of patients receiving VONJO 200 mg twice daily and in 9% of patients treated with BAT. The fatal adverse reactions among patients treated with VONJO 200 mg twice daily included events of disease progression (3%), and multiorgan failure, cerebral hemorrhage, meningorrhagia, and acute myeloid leukemia in  $< 1\%$  of patients each, respectively.

Permanent discontinuation due to an adverse reaction occurred in 15% of patients receiving VONJO 200 mg twice daily compared to 12% of patients treated with BAT. The most frequent reasons for permanent discontinuation in  $\geq 2\%$  of patients receiving VONJO 200 mg twice daily included anemia (3%) and thrombocytopenia (2%).

Drug interruptions due to an adverse reaction occurred in 27% of patients who received VONJO 200 mg twice daily compared to 10% of patients treated with BAT. The most frequent reasons for drug interruption in  $\geq 2\%$  of patients receiving VONJO

200 mg twice daily were anemia (5%), thrombocytopenia (4%), diarrhea (3%), nausea (3%), cardiac failure (3%), neutropenia (2%), and pneumonia (2%).

Dosage reductions due to an adverse reaction occurred in 12% of patients who received VONJO 200 mg twice daily compared to 7% of patients treated with BAT. Adverse reactions requiring dosage reduction in  $\geq 2\%$  of patients who received VONJO 200 mg twice daily included thrombocytopenia (2%), neutropenia (2%), conjunctival hemorrhage (2%), and epistaxis (2%).

The most common adverse reactions in  $\geq 20\%$  of patients (N=106) were diarrhea, thrombocytopenia, nausea, anemia, and peripheral edema.

Table 5 summarizes the common adverse reactions in PERSIST-2 during randomized treatment.

**Table 5 Adverse Reactions Reported in  $\geq 10\%$  Patients Receiving VONJO 200 mg Twice Daily or Best Available Therapy During Randomized Treatment in PERSIST-2**

Adverse Reactions	VONJO (200 mg Twice Daily) (N=106)		Best Available Therapy (N=98)	
	All Grades <sup>a</sup> %	Grade $\geq 3$ %	All Grades <sup>a</sup> %	Grade $\geq 3$ %
Diarrhea	48	4	15	0
Thrombocytopenia	34	32	23	18
Nausea	32	1	11	1
Anemia	24	22	15	14
Peripheral edema	20	1	15	0
Vomiting	19	0	5	1
Dizziness	15	1	5	0
Pyrexia	15	1	3	0
Epistaxis	12	5	13	1
Dyspnea	10	0	9	3
Pruritus	10	2	6	0
Upper respiratory tract infection	10	0	6	0
Cough	8	2	10	0

<sup>a</sup> Grade by CTCAE Version 4.03

## 7 DRUG INTERACTIONS

### 7.1 Effect of Other Drugs on VONJO

#### Strong and Moderate CYP3A4 inhibitors

VONJO is predominantly metabolized by CYP3A4. In a clinical drug interaction study, a single-dose of VONJO 400 mg was administered following treatment with clarithromycin, a strong CYP3A4 inhibitor. Clarithromycin was administered as 500 mg twice daily for 5 days, which is a submaximal regimen for CYP3A4 inhibition. Compared to VONJO

administered alone, the area under the concentration curve (AUC) and maximal concentration ( $C_{max}$ ) of pacritinib increased by 80% and 30%, respectively, upon coadministration with clarithromycin [see *Clinical Pharmacology (12.3)*]. The increase in exposure to pacritinib may be even higher when tested following a longer treatment with clarithromycin that results in maximal CYP3A4 inhibition. The impact of moderate CYP3A4 inhibitors on the pharmacokinetics of VONJO has not been investigated in clinical studies. Co-administration of VONJO with strong CYP3A4 inhibitors is contraindicated. Avoid concomitant use of VONJO with moderate CYP3A4 inhibitors [see *Contraindications (4)*, *Warnings and Precautions (5.4)*, and *Clinical Pharmacology (12.3)*].

#### Strong and Moderate CYP3A4 inducers

In a clinical drug interaction study, a single-dose of VONJO 400 mg was administered following treatment with rifampin, a strong CYP3A4 inducer, at 600 mg once daily for 10 days. Compared to VONJO administered alone, the AUC and  $C_{max}$  of pacritinib decreased by 87% and 51%, respectively, upon coadministration with rifampin [see *Clinical Pharmacology (12.3)*]. The impact of moderate CYP3A4 inducers on the pharmacokinetics of VONJO has not been investigated in clinical studies. Co-administration of VONJO with strong CYP3A4 inducers is contraindicated. Avoid concomitant use of VONJO with moderate CYP3A4 inducers [see *Contraindications (4)*, *Warnings and Precautions (5.4)*, and *Clinical Pharmacology (12.3)*].

## **7.2 Effect of VONJO on Other Drugs**

### CYP1A2 or CYP3A4 substrates

VONJO is an inhibitor of CYP1A2 and CYP3A4 in vitro. Concomitant administration of VONJO with CYP1A2 or CYP3A4 substrates may increase the plasma concentrations of these substrates. Avoid co-administration of VONJO with drugs that are sensitive substrates of CYP1A2 or CYP3A4 [see *Clinical Pharmacology (12.3)*].

### P-gp, BCRP, or OCT1 Substrates

VONJO is an inhibitor of P-glycoprotein (P-gp), breast cancer resistance protein (BCRP), and organic cation transporter 1 (OCT1) in vitro. Concomitant administration of VONJO with P-gp, BCRP, or OCT1 substrates may increase the plasma concentrations of these substrates. Avoid co-administration of VONJO with drugs that are sensitive substrates of P-gp, BCRP, or OCT1 [see *Clinical Pharmacology (12.3)*].

## **8 USE IN SPECIFIC POPULATIONS**

### **8.1 Pregnancy**

#### Risk Summary

There are no available data on VONJO use in pregnant women to evaluate for a drug-associated risk of major birth defects, miscarriage, or adverse maternal or fetal outcomes. In animal reproduction studies, administration of pacritinib to pregnant mice or rabbits at exposures that were considerably lower than those observed at the recommended human dose were associated with maternal toxicity and embryonic and fetal loss (see *Data*). Advise pregnant women of the potential risk to a fetus. Consider the benefits and risks of VONJO for the mother and possible risks to the fetus when prescribing VONJO to a pregnant woman.

The estimated background risk of major birth defects and miscarriage for the indicated population(s) is unknown. All pregnancies have a background risk of birth defect, loss, or other adverse outcomes. 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*

Pacritinib was administered orally to pregnant mice at doses of 30, 100, or 250 mg/kg/day from gestation day 6 to gestation day 15. Pacritinib was also administered orally to pregnant rabbits at doses of 15, 30, or 60 mg/kg/day from gestation day 7 until gestation day 20. In both species, pacritinib was associated with maternal toxicity, which resulted in post-implantation loss in mice, abortions in rabbits, and reduced fetal body weights in mice and rabbits at exposures 0.1 times (mice) and 0.3 times (rabbits) the exposure at the recommended human dose (AUC-based). In mice, the high dose was associated with an increased incidence of an external malformation (cleft palate) in the presence of maternal toxicity.

In a pre- and post-natal development study in mice, pregnant animals were dosed with pacritinib from implantation through lactation at 30, 100, or 250 mg/kg/day. Maternal toxicity was noted at 250 mg/kg and associated with increased gestation length and dystocia, lowered mean birth weights and neonatal survival, and transiently delayed startle response, learning, and memory development at weaning.

## **8.2 Lactation**

### Risk Summary

There are no data on the presence of pacritinib in either human or animal milk, the effects on the breastfed child, or the effects on milk production. It is not known whether VONJO is excreted in human milk. Because of the potential for serious adverse reactions in the breastfed child, advise patients that breastfeeding is not recommended during treatment with VONJO, and for 2 weeks after the last dose.

## **8.3 Females and Males of Reproductive Potential**

### Infertility

### Males

Pacritinib reduced male mating and fertility indices in BALB/c mice [see *Nonclinical Toxicology (13.1)*]. Pacritinib may impair male fertility in humans.

## **8.4 Pediatric Use**

Safety and effectiveness in pediatric patients have not been established.

## **8.5 Geriatric Use**

Clinical studies of VONJO did not include sufficient numbers of subjects aged 65 years and over to determine whether they respond differently from younger subjects.

## **8.6 Hepatic Impairment**

Administration of a single dose of VONJO 400 mg to subjects with hepatic impairment resulted in a decrease in the geometric mean AUC of pacritinib by 8.5%, 36%, and 45% in subjects with mild [Child-Pugh A], moderate [Child-Pugh B], or severe hepatic impairment [Child-Pugh C], respectively, compared to subjects with normal hepatic function.

Avoid use of VONJO in patients with moderate [Child-Pugh B] or severe hepatic impairment [Child-Pugh C] [see *Clinical Pharmacology* (12.3)].

## 8.7 Renal Impairment

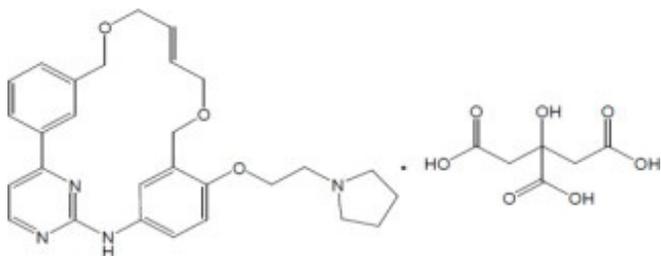
Administration of a single dose of VONJO 400 mg to subjects with renal impairment resulted in approximately 30% increase in  $C_{max}$  and AUC of pacritinib in subjects with eGFR 15 to 29 mL/min and eGFR <15 mL/min on hemodialysis compared to subjects with normal renal function (eGFR  $\geq$ 90 mL/min). Avoid use of VONJO in patients with eGFR <30 mL/min [see *Clinical Pharmacology* (12.3)].

## 10 OVERDOSAGE

Overdosage may lead to gastrointestinal toxicities, myelosuppression, blurred vision, dizziness, worsening performance status, and sepsis. There is no known antidote for overdose with VONJO. Hemodialysis is not expected to enhance the elimination of VONJO.

## 11 DESCRIPTION

VONJO contains pacritinib citrate, a kinase inhibitor with the chemical name (2E,16E)-11-[2-(pyrrolidin-1-yl)ethoxy]-14,19-dioxo-5,7,27-triazatetracyclo[19.3.1.1(2,6).1(8,12)]heptacos-1(25),2,4,6,8,10,12(26),16,21,23-decaene citrate and a molecular weight of 664.7 as citrate salt and 472.59 as a free base. The molecular formula is  $C_{28}H_{32}N_4O_3 \cdot C_6H_8O_7$  and the structural formula is:



VONJO capsule is for oral administration. Each capsule contains 100 mg of pacritinib equivalent to 140.65 mg of pacritinib citrate and the inactive ingredients are microcrystalline cellulose NF, polyethylene glycol 8000 (PEG 8000) NF, and magnesium stearate NF. The gelatin capsule is bovine derived. The capsule shell contains gelatin, titanium dioxide, black iron oxide, erythrosine, red iron oxide, and printing ink containing shellac, propylene glycol, titanium dioxide, sodium hydroxide, and povidone.

## 12 CLINICAL PHARMACOLOGY

### 12.1 Mechanism of Action

Pacritinib is an oral kinase inhibitor with activity against wild type Janus associated kinase 2 (JAK2), mutant JAK2<sup>V617F</sup>, and FMS-like tyrosine kinase 3 (FLT3), which contribute to signaling of a number of cytokines and growth factors that are important for hematopoiesis and immune function. MF is often associated with dysregulated JAK2 signaling. Pacritinib has higher inhibitory activity for JAK2 compared to JAK3 and TYK2. At clinically relevant concentrations, pacritinib does not inhibit JAK1. Pacritinib exhibits inhibitory activity against additional cellular kinases (such as CSF1R and IRAK1) the clinical relevance of which is unknown.

## 12.2 Pharmacodynamics

Pacritinib inhibited the phosphorylation of signal transducer and activator of transcription 5 (STAT5) protein in a dose-dependent manner (ex vivo) in expanded erythroid progenitor cells derived from healthy subjects. Administration of single doses of 400 mg pacritinib resulted in modest inhibition of interleukin-6-induced STAT3 phosphorylation in whole blood derived from healthy subjects.

### Cardiac Electrophysiology

In a 24-week study of 54 patients with MF treated with VONJO 200 mg twice daily, the maximum mean (90% confidence interval) change in QTcF from baseline was 11 (90% CI: 5-17) msec.

## 12.3 Pharmacokinetics

Pacritinib steady-state mean (CV%)  $C_{max}$  is 8.4 mg/L (32.4%) and  $AUC_{0-12}$  is 95.6 mg×h/L (33.1%) following administration of VONJO 200 mg twice daily in patients with MF. Pharmacokinetics of pacritinib increases in a less than dose-proportional manner. VONJO 200 mg twice daily accumulates 386% and reaches steady-state within a week.

### *Absorption*

Pacritinib achieves  $C_{max}$  within approximately 4 to 5 hours post-dose.

### *Effect of Food*

There was no significant effect of food on the pharmacokinetics of pacritinib following oral administration of VONJO 200 mg with a high-fat meal.

### *Distribution*

The median (range) apparent volume of distribution of pacritinib at steady state is 229 L (156 to 591 L) in patients with MF taking 200 mg twice daily. Plasma protein binding of pacritinib is approximately 98.8%.

### *Metabolism*

Pacritinib is predominantly metabolized by the CYP3A4 isozyme. Pacritinib is the major circulating component and the pharmacologic activity is mainly attributed to the parent molecule. Two major metabolites, M1 and M2, in human whole plasma represent 9.6% and 10.5% of parent drug exposure, respectively.

### *Elimination*

The mean apparent clearance at steady-state (CV%) of pacritinib is 2.09 L/h (33.1%), and mean effective half-life (CV%) is 27.7 hours (17.0%).

## Excretion

Following a single oral administration of radiolabeled pacritinib 400 mg in healthy adult subjects, 87% of the radioactivity was recovered in feces, and 6% was recovered in urine. No unchanged drug was excreted in feces and 0.12% of unchanged drug was excreted in urine.

## Specific Populations

No clinically significant differences in the pharmacokinetics of pacritinib were observed based on age, sex, body weight, or race.

## Patients With Renal Impairment

Pacritinib  $C_{max}$  and AUC were similar in subjects with eGFR 30 to 89 mL/min, as estimated by the MDRD study equation, compared to subjects with eGFR  $\geq$ 90 mL/min. The  $C_{max}$  and AUC increased approximately 30% in subjects with eGFR 15 to 29 mL/min and eGFR <15 mL/min on hemodialysis.

## Patients With Hepatic Impairment

The effect of hepatic impairment on the pharmacokinetics of pacritinib was studied in 28 healthy subjects with normal or impaired hepatic function after a single VONJO 400 mg dose. Compared to subjects with normal hepatic function, the geometric mean AUC of pacritinib decreased by 8.5%, 36%, and 45% in subjects with mild [Child-Pugh A], moderate [Child-Pugh B], or severe hepatic impairment [Child-Pugh C], respectively. The geometric mean  $C_{max}$  to pacritinib decreased by 22%, 47%, and 57% in subjects with mild [Child-Pugh A], moderate [Child-Pugh B], or severe hepatic impairment [Child-Pugh C], respectively, compared to subjects with normal hepatic function.

## Drug Interactions

### Effects of Other Drugs on the Pharmacokinetics of VONJO

The effect of co-administered drugs on the exposure of pacritinib is shown in Table 6.

**Table 6 Change in Pharmacokinetics of Pacritinib Following Administration of a Single 400 mg Dose VONJO in the Presence of Co-administered Drugs**

Co-administered Drug	Regimen of Co-administered Drug	Ratio (90% CI) <sup>1</sup>	
		$C_{max}$	AUC
Clarithromycin (strong CYP3A4 inhibitor)	500 mg every 12 hours for 5 days	1.30 (1.22, 1.39)	1.80 (1.67, 1.94)
Rifampin (strong CYP3A4 inducer)	600 mg once daily for 10 days	0.49 (0.43, 0.55)	0.13 (0.11, 0.15)

Notes: CI = Confidence interval; CYP = Cytochrome P450

<sup>1</sup> Ratios for  $C_{max}$  and AUC compare co-administration of the medication with VONJO vs. administration of single-dose 400 mg VONJO alone

## In Vitro Studies

Cytochrome P450 (CYP) Enzymes: Pacritinib is a time-dependent inhibitor of CYP1A2 and CYP3A4, and a reversible inhibitor of CYP3A4 and CYP2C19 ( $K_i \leq 10 \mu\text{M}$ ). Pacritinib shows less direct inhibition towards CYP1A2, CYP2B6, CYP2C8, CYP2C9, and CYP2D6 ( $K_i$

>10 µM). Pacritinib is an inducer of CYP1A2 and CYP3A4.

Transporter Systems: Pacritinib is not a substrate of BCRP, MRP2, OAT1, OAT3, OATP1B1, OATP1B3, OCT1, OCT2, or P-gp. Pacritinib is an inhibitor of BCRP, OCT1, OCT2, and P-gp. Pacritinib is not an inhibitor of BSEP, MRP2, OAT1, or OAT3.

## **13 NONCLINICAL TOXICOLOGY**

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

Pacritinib was not carcinogenic in the 6-month Tg.rasH2 transgenic mouse model. Pacritinib was not carcinogenic in a 2-year carcinogenicity study in rats at 0.004 times and 0.014 times, in males and females, respectively, the recommended human dose (AUC-based). Pacritinib exposures achieved in mice and rats during the carcinogenicity assessments were considerably lower than the exposure observed at the recommended human dose.

Pacritinib was not mutagenic in a bacterial mutagenicity assay (Ames test) or clastogenic in vitro in a chromosomal aberration assay (Chinese hamster ovary cells) or in vivo in a micronucleus test in mice.

In a fertility study in male BALB/c mice, pacritinib was administered for at least 70 days prior to cohabitation with untreated partners. Pacritinib had no effects at any dose level on uterine implantation, macroscopic findings, reproductive organ weights, and sperm evaluations. At 213.4 mg/kg/day (3.0 times, the recommended human dose, based on body surface area), reduced mating and fertility indices were observed in male BALB/c mice. In a fertility and early embryonic development study in CD-1 mice, no effects on male or female reproductive performance, including assessments of mating, fertility, estrous cyclicity, and intrauterine survival, were observed at doses up to 250 mg/kg/day (3.0 times, the recommended human dose, based on body surface area).

## **14 CLINICAL STUDIES**

### **PERSIST-2**

The efficacy of VONJO in the treatment of patients with intermediate or high-risk primary or secondary (post-polycythemia vera or post-essential thrombocythemia) MF was established in the PERSIST-2 trial.

PERSIST-2 enrolled patients with intermediate or high-risk primary or secondary (post-polycythemia vera or post-essential thrombocythemia) MF with splenomegaly and a platelet count  $\leq 100 \times 10^9/L$ . Both JAK2 naïve patients and patients with prior JAK2 inhibitor therapy were included. Patients were randomized 1:1:1 to receive VONJO 400 mg once daily, VONJO 200 mg twice daily, or best available therapy (BAT). BAT agents could be used alone, in combinations, sequentially, and intermittently, as clinically indicated by standards of care. BAT included any physician-selected treatment for MF and may have included ruxolitinib, hydroxyurea, glucocorticoids, erythropoietic agents, immunomodulatory agents, mercaptopurine, danazol, interferons, cytarabine, melphalan. BAT also included no treatment (“watch and wait”) or symptom-directed treatment without MF-specific treatment.

In this trial, 311 patients were randomized to receive VONJO 400 mg once daily (n=104),

VONJO 200 mg twice daily (n=107), or BAT (n=100). The VONJO dose of 400 mg once daily was not established as safe and is not an approved dosage regimen.

The demographic characteristics of the efficacy population were median age of 68 years (range 32 to 91), 55% male, 86% Caucasian, and 14% non-Caucasian. The VONJO and BAT treatment arms were well balanced with respect to age, gender, race, ethnicity, body mass index, and geographic region. Sixty-eight percent of patients had primary MF, 20% had post-polycythemia vera MF, and 12% had post-essential thrombocythemia MF. Forty-six percent and 51% of patients in the VONJO and BAT treatment arms, respectively, had received prior ruxolitinib therapy. The median baseline hemoglobin level was 9.5 g/dL and 23% of patients were red blood cell (RBC) transfusion dependent at study entry. The median baseline platelet count was  $55 \times 10^9/L$ ; 45% of patients had a platelet count  $<50 \times 10^9/L$ . Patients had a baseline median spleen length of 14 cm assessed by magnetic resonance imaging (MRI) or computerized axial tomography (CAT).

Efficacy was established in patients who received VONJO 200 mg twice daily and had a platelet count  $<50 \times 10^9$  (N=31).

The most common agents used in the BAT treatment arm in patients with baseline platelet counts  $<50 \times 10^9/L$  (N=32) were ruxolitinib (39%), watchful waiting (32%), and hydroxyurea (26%).

#### *Spleen Volume Reduction*

The efficacy of VONJO in the treatment of patients with primary or secondary MF was established based upon the proportion of patients in the efficacy population receiving VONJO 200 mg twice daily or BAT achieving  $\geq 35\%$  spleen volume reduction from baseline to Week 24 as measured by magnetic resonance imaging or computed tomography. Efficacy results for spleen volume reduction in patients with a platelet count  $<50 \times 10^9/L$  are presented in Table 7.

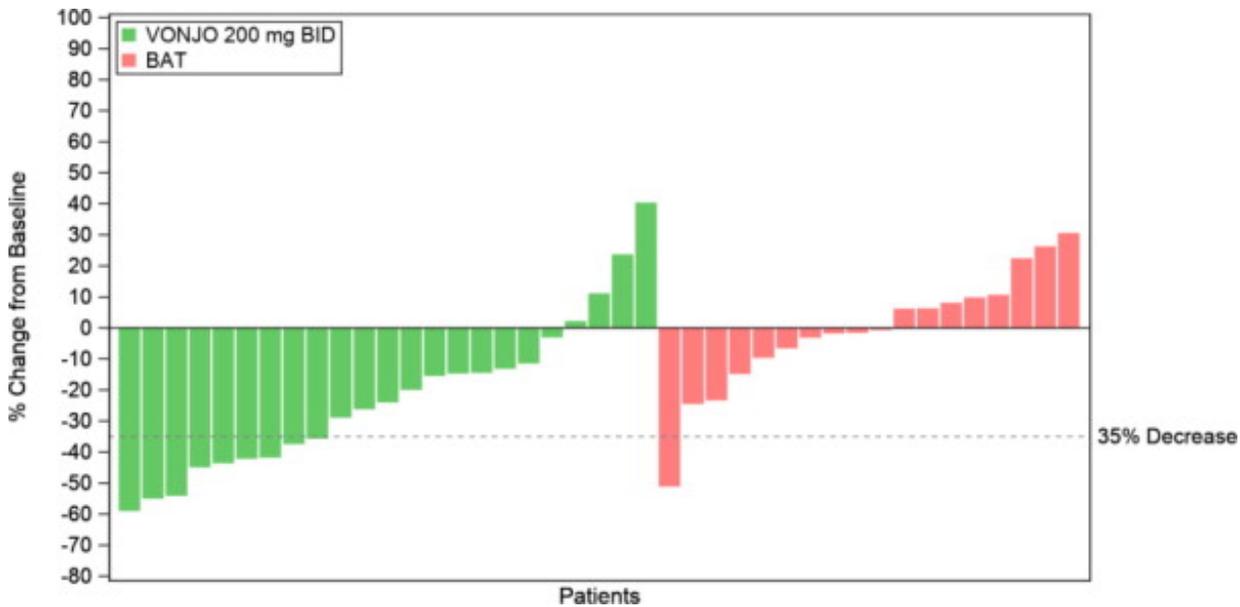
**Table 7 Percentage of Patients Achieving  $\geq 35\%$  Reduction in Spleen Volume From Baseline to Week 24 in the Phase 3 Study, PERSIST-2 (Efficacy Population)**

<b>Patient Population</b>	<b>VONJO 200mg Twice Daily N=31</b>	<b>Best Available Therapy N=32</b>
Baseline Platelets $<50 \times 10^9/L$	9 (29.0%)	1 (3.1%)
95% Confidence Interval (CI)	14.2, 48.0	0.1, 16.2
Difference (VONJO-BAT) 95% CI	25.9 (4.3,44.5)	

A waterfall plot of the percentage of change in spleen volume from baseline to Week 24 is presented in Figure 1 for the PERSIST-2 patients with baseline platelet counts  $<50 \times 10^9/L$ . The median reduction in spleen volume for patients with a platelet count  $<50 \times 10^9/L$  was 27.3% for patients in the VONJO 200 mg twice daily group compared to 0.9% in the BAT group.

#### **Figure 1 Waterfall Plot of Median Percent Change From Baseline in Spleen**

## Volume at Week 24 in Patients With $<50 \times 10^9/L$ Platelet Counts in PERSIST-2<sup>a</sup>



<sup>a</sup>Dropout rates in VONJO and BAT arms were 26% and 44%, respectively.

## 16 HOW SUPPLIED/STORAGE AND HANDLING

### 16.1 How Supplied

VONJO is supplied in the following strength and package configuration:

Strength	NDC Number	Description	Capsules per Bottle
100 mg	72482-100-12	Hard, oblong, opaque, gelatin capsule with scarlet cap and gray body, printed with "Pacritinib 100 mg" on the cap and "C78837" on the body	120

### 16.2 Storage

Store at room temperature, below 30°C (86°F). Keep the bottle tightly closed and protect from light. Store in original package. Dispense in original package or in a light-resistant container.

## 17 PATIENT COUNSELING INFORMATION

See FDA approved patient labeling (Patient Information).

Discuss the following with the patient prior to and during treatment with VONJO:

*Current therapy with another kinase inhibitor*

Advise patients who are currently taking a kinase inhibitor that they must taper or discontinue their current kinase inhibitor therapy according to the package insert for that drug prior to starting VONJO.

### *Hemorrhage*

Advise patients that VONJO can cause hemorrhage and instruct them to consult their healthcare provider right away if bleeding occurs. Advise patients about how to recognize bleeding and of the urgent need to report any unusual bleeding to their physician. Patients should urgently seek emergency medical attention for any bleeding that cannot be stopped [see *Warnings and Precautions (5.1)*].

### *Diarrhea*

Advise patients that VONJO can cause diarrhea. Advise patients to stay hydrated while taking VONJO and to inform their physician if they experience diarrhea. Instruct patients to initiate anti-diarrheal medications (e.g., loperamide) if diarrhea occurs. Advise patients to urgently seek emergency medical attention if diarrhea becomes severe [see *Warnings and Precautions (5.5.21)*].

### *Thrombocytopenia*

Advise patients that VONJO can cause thrombocytopenia, and of the need to monitor complete blood counts before and during treatment [see *Warnings and Precautions (5.3)*].

### *Prolonged QT Interval*

Advise patients to consult their healthcare provider immediately if they feel faint, lose consciousness, or have signs or symptoms suggestive of arrhythmia. Advise patients with a history of hypokalemia of the importance of monitoring their electrolytes [see *Warnings and Precautions (5.4)*].

### *Major Adverse Cardiac Events (MACE)*

Advise patients that events of major adverse cardiac events (MACE) including myocardial infarction, stroke, and cardiovascular death, have been reported in clinical studies with another JAK-inhibitor used to treat rheumatoid arthritis, a condition for which VONJO is not indicated. Advise patients, especially current or past smokers or patients with other cardiovascular risk factors, to be alert for the development of signs and symptoms of cardiovascular events [see *Warnings and Precautions (5.5)*].

### *Thrombosis*

Advise patients that events of deep vein thrombosis and pulmonary embolism have been reported in clinical studies with another JAK-inhibitor used to treat rheumatoid arthritis, a condition for which VONJO is not indicated. Advise patients to tell their healthcare provider if they develop any signs or symptoms of a DVT or PE [see *Warnings and Precautions (5.6)*].

### *Secondary Malignancies*

Advise patients, especially current or past smokers and patients with a known secondary malignancy (other than a successfully treated NMSC), that lymphoma and other malignancies (excluding NMSC) have been reported in clinical studies with another JAK-inhibitor used to treat rheumatoid arthritis, a condition for which VONJO is not indicated [see *Warnings and Precautions (5.7)*].

### *Infections*

Advise patients that treatment with another JAK-inhibitor has increased the risk of serious infections in patients with myeloproliferative neoplasms and that serious bacterial, mycobacterial, fungal and viral infections may occur in patients treated with VONJO. Inform patients of the signs and symptoms of infection and to report any such signs and symptoms promptly [see *Warnings and Precautions (5.8)*].

### *Nausea and Vomiting*

Advise patients that nausea and vomiting may occur during treatment with VONJO. Instruct them on how to manage nausea and vomiting and to immediately inform their healthcare provider if nausea/vomiting become severe.

### *Drug-Drug Interactions*

Advise patients to inform their healthcare providers of all medications they are taking, including prescription and over-the-counter medications, vitamins, herbal products, and dietary supplements [see *Drug Interactions (7)*].

### *Dosing*

Advise patients to take VONJO twice a day, with or without food or drink. VONJO should be taken at similar times each day. Instruct patients to swallow the VONJO capsules whole and not to open, break, or chew the capsules [see *Dosage and Administration (2.1)*].

Instruct patients that if they miss a dose of VONJO, to skip the dose and take the next dose when it is due and return to the normal schedule [see *Dosage and Administration (2.1)*]. Warn patients not to take 2 doses to make up for the missed dose.

Instruct patients to discontinue VONJO 7 days prior to any surgery or invasive procedures (such as cardiac catheterization, coronary stenting or varicose vein ablation) due to the risk of bleeding and to only restart VONJO on the instruction of their healthcare provider.

Patients should not change or stop taking VONJO without first consulting their physician.

### *Lactation*

Advise patients to avoid breastfeeding while taking VONJO and for 2 weeks after the final dose [see *Use in Specific Populations (8.2)*].

Manufactured and marketed by:

CTI BioPharma Corp.

3101 Western Ave #800

Seattle, WA 98121

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**PATIENT INFORMATION**  
**VONJO (VON-joh)**  
**(pacritinib)**

## capsules

### **What is VONJO?**

VONJO is a prescription medicine used to treat adults with certain types of myelofibrosis who have a platelet count below  $50 \times 10^9/L$ .

It is not known if VONJO is safe and effective in children.

### **Before taking VONJO, tell your healthcare provider about all of your medical conditions, including if you:**

- smoke or were a smoker in the past
- have had any other cancers. See “Possible increased risk of new (secondary) cancers” in the section “**What are the possible side effects of VONJO?**”
- have had a blood clot, heart attack, other heart problems, or stroke
- have an infection. See “**Risk of infection**” in the section “**What are the possible side effects of VONJO?**”
- have diarrhea or commonly have loose stools
- have nausea or vomiting
- have active bleeding, have had severe bleeding, or plan to have surgery. You should stop taking VONJO 7 days before any planned surgery or invasive procedures (such as a heart catheterization, stent placement in a coronary artery in your heart, or a procedure for varicose veins). See “**What are the possible side effects of VONJO?**”
- have liver or kidney problems
- are pregnant or plan to become pregnant. It is not known if VONJO will harm your unborn baby
- are breastfeeding or plan to breastfeed. It is not known if VONJO passes into your breast milk. You should not breastfeed during treatment and for 2 weeks after your last dose of VONJO. Talk to your healthcare provider about the best way to feed your baby during this time.

**Tell your healthcare provider about all the medicines you take**, including prescription and over-the-counter medicines, vitamins, and herbal supplements. Taking VONJO with certain other medicines may affect the amount of VONJO in your blood, and may increase your risk of side effects or affect how well VONJO works.

Know the medicines you take. Keep a list of the medicines you take to show your healthcare provider and pharmacist when you get a new medicine.

### **How should I take VONJO?**

- Take VONJO exactly as your healthcare provider tells you to take it.
- Do not change your dose or stop taking VONJO without first talking to your healthcare provider.
- If you take other kinase inhibitors, carefully follow your healthcare provider's instructions about how to slowly decrease (taper) your dose or stop the other kinase inhibitor medicines before you begin taking VONJO.
- VONJO is usually taken by mouth 2 times each day.
- Swallow VONJO capsules whole. Do not open, break, or chew capsules.
- You can take VONJO with or without food.
- Take your VONJO doses at about the same time every day.
- If you notice any change in how often you have bowel movements, if they become softer or you have diarrhea, start taking an antidiarrheal medicine (for example, loperamide) as soon as you notice changes, as directed by your healthcare provider.
- If you take too much VONJO, call your healthcare provider or go to the nearest

emergency room right away and take your bottle of VONJO with you.

- If you miss a dose of VONJO, skip the dose and just take your next dose at your regularly scheduled time. Do not take 2 doses at the same time to make up for the missed dose.
- Your healthcare provider will do blood tests before you start taking VONJO and as needed during treatment.
- Your healthcare provider may change your dose or how often you take VONJO, temporarily stop or permanently stop treatment with VONJO if you have certain side effects.

## **What are the possible side effects of VONJO?**

### **VONJO can cause serious side effects including:**

- **Bleeding.** VONJO may cause severe bleeding, which can be serious and in some cases may lead to death. Avoid taking VONJO if you are bleeding. If you develop bleeding, stop VONJO and call your healthcare provider.
- Your healthcare provider will do a blood test to check your blood cell counts before you start VONJO and regularly during your treatment with VONJO. Tell your healthcare provider right away if you develop any of these symptoms: unusual bleeding, bruising, and fever. You will need to stop taking VONJO 7 days before any planned surgery or invasive procedure (such as a heart catheterization, stent placement in a coronary artery in your heart, or a procedure for varicose veins). Your healthcare provider should tell you when you can start taking VONJO again.
- **Diarrhea.** Diarrhea is common with VONJO, but can also be severe, and cause loss of too much body fluid (dehydration). Tell your healthcare provider if you have diarrhea and follow instructions for what to do to help treat diarrhea. Drink plenty of fluids to help prevent dehydration. Your healthcare provider may change your dose of VONJO if you have severe diarrhea.
- **Worsening low platelet counts.** Your healthcare provider will do blood tests to check your blood counts before you start taking and during treatment with VONJO.
- **Changes in the electrical activity of your heart called QTc prolongation.** QTc prolongation can cause irregular heartbeats that can be life-threatening. Your healthcare provider will check the electrical activity of your heart with a test called an electrocardiogram (ECG) before you start VONJO and during treatment with VONJO, as needed. If you have a history of low blood potassium, it is important that you get your blood tests done as ordered by your healthcare provider to monitor your body salts (electrolytes) in your blood. **Tell your healthcare provider right away if you feel dizzy, lightheaded, or faint.**
- **Increased risk of major cardiovascular events such as heart attack, stroke, or death in people who have cardiovascular risk factors and who are current or past smokers** have happened in some people taking another JAK inhibitor to treat rheumatoid arthritis.

**Get emergency help right away if you have any symptoms of a heart attack or stroke while taking VONJO, including:**

- discomfort in the center of your chest that lasts for more than a few minutes, or that goes away and comes back
- severe tightness, pain, pressure, or heaviness in your chest, throat, neck, or jaw
- pain or discomfort in your arms, back, neck, jaw, or stomach
- shortness of breath with or without chest discomfort
- breaking out in a cold sweat

- nausea or vomiting
- feeling lightheaded
- weakness in one part or on one side of your body
- slurred speech
- **Increased risk of blood clots.** Blood clots in the veins of your legs (deep vein thrombosis, DVT) or lungs (pulmonary embolism, PE) have happened in some people taking another JAK inhibitor, and may be life-threatening. Tell your healthcare provider if you have had blood clots in the veins of your legs or lungs in the past.  
**Tell your healthcare provider right away if you have any signs and symptoms of blood clots during treatment with VONJO, including:**
  - swelling, pain, or tenderness in one or both legs
  - sudden, unexplained chest pain
  - shortness of breath or difficulty breathing
- **Possible increased risk of new (secondary) cancers.** People who take another JAK inhibitor for rheumatoid arthritis have an increased risk of new (secondary) cancers, including lymphoma and other cancers, except non-melanoma skin cancer. The risk of new cancers is further increased in people who smoke or who smoked in the past.
- **Risk of Infection.** People who have certain blood cancers and take another JAK inhibitor have an increased risk of serious infections. Infections are common with VONJO, but people who take VONJO may also develop serious infections, including bacterial, mycobacterial, fungal, and viral infections. If you have a serious infection, your healthcare provider may not start you on VONJO until your infection is gone. Your healthcare provider will monitor you and treat you for any infections that you get during treatment with VONJO.  
**Tell your healthcare provider right away if you develop any of the following symptoms of infection:**
  - chills
  - aches
  - fever
  - nausea
  - vomiting
  - weakness
  - painful skin rash or blisters

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

- nausea and vomiting
- low red blood cell count (anemia)
- swelling of your ankles, legs, and feet

VONJO may affect fertility in males. You may have problems fathering a child. Talk to your healthcare provider if this is a concern for you.

These are not all of the possible side effects with VONJO.

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

**How should I store VONJO?**

- Store VONJO at room temperature, below 86°F (30°C).
- Store VONJO in the original package.
- Keep the bottle tightly closed to protect VONJO from light.

**Keep VONJO and all medicines out of the reach of children.**

**General information about the safe and effective use of VONJO.**

Medicines are sometimes prescribed for purposes other than those listed in a Patient Information leaflet. Do not use VONJO for a condition for which it was not prescribed. Do not give VONJO to other people, even if they have the same symptoms that you have. It may harm them.

You can ask your pharmacist or healthcare provider for information about VONJO that is written for health professionals.

**What are the ingredients in VONJO?**

**Active ingredient:** pacritinib

**Inactive ingredients:** microcrystalline cellulose, polyethylene glycol 8000 (PEG 8000), and magnesium stearate. The capsule shell contains gelatin, titanium dioxide, black iron oxide, erythrosine, red iron oxide and printing ink containing shellac, titanium dioxide, propylene glycol, sodium hydroxide, and povidone.

Manufactured and Marketed by: CTI BioPharma Corp., 3101 Western Ave #800, Seattle WA 98121

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For more information call 1-844-428-4246 (1-844-4CTIBIO) or go to [www.VONJO.com](http://www.VONJO.com).

**This Patient Information has been approved by the U.S. Food and Drug Administration. Issued: February 2022**

**Principal Display Panel - 100 mg Carton Label**

NDC 72482-**100**-12

**Rx only**

**VONJO™**

(pacritinib) capsules

**100 mg**

**120 capsules**

**Swallow capsules whole.**

**Do not open, break, or chew capsules.**

**Keep out of the sight and reach of children.**



## Principal Display Panel - 100 mg Bottle Label

NDC 72482-100-12

**Rx only**

**VONJO™**  
(pacritinib) capsules

**100 mg**

**120 capsules**

**Swallow capsules whole.**

**Do not open, break, or chew capsules.**

**Keep out of the sight and reach of children.**

NDC 72482-100-12 Rx only

3 72482 10012 8

**VONJO™**  
(pacritinib) capsules

120 capsules

**100 mg**

Manufactured and distributed by:  
CTI BioPharma Corp.  
3101 Western Ave., #800  
Seattle, WA 98121  
U.S.A.

Swallow capsules whole.  
Do not open, break, or chew capsules.  
Keep out of the sight and reach of children.

**Each capsule contains:**  
Pacritinib ..... 100 mg  
(equivalent to 140.7 mg  
of pacritinib citrate)

**Recommended dosage:**  
See prescribing  
information.

**Attention:** Store VONJO™  
in original package.  
Dispense in original  
package or a light-  
resistant container  
[See USP].

**Storage:** Store at room  
temperature, below 30°C  
(86°F). Keep the bottle  
tightly closed. Protect  
from light.

Lot XXXXXXXX  
Exp YYYYMM  
659615-02

## VONJO

pacritinib capsule

### Product Information

<b>Product Type</b>	HUMAN PRESCRIPTION DRUG	<b>Item Code (Source)</b>	NDC:72482-100
<b>Route of Administration</b>	ORAL		

### Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
<b>Pacritinib</b> (UNII: G22N65IL3O) (Pacritinib - UNII:G22N65IL3O)	Pacritinib	100 mg

### Inactive Ingredients

Ingredient Name	Strength
<b>Microcrystalline cellulose</b> (UNII: OP1R32D61U)	
<b>Polyethylene glycol 8000</b> (UNII: Q662QK8M3B)	
<b>Magnesium stearate</b> (UNII: 70097M6I3O)	
<b>GELATIN, UNSPECIFIED</b> (UNII: 2G86QN327L)	

### Product Characteristics

<b>Color</b>	gray (Gray) , red (Red)	<b>Score</b>	no score
<b>Shape</b>	CAPSULE (Capsule)	<b>Size</b>	22mm
<b>Flavor</b>		<b>Imprint Code</b>	Pacritinib;100mg;C78837

**Contains****Packaging**

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:72482-100-12	40 in 1 BOX	02/28/2022	
1		1 in 1 CARTON		
1		120 in 1 BOTTLE; Type 0: Not a Combination Product		

**Marketing Information**

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA208712	02/28/2022	

**Labeler** - CTI BioPharma Corp. (788479103)**Establishment**

Name	Address	ID/FEI	Business Operations
AndersonBrecon Inc.		053217022	LABEL(72482-100) , PACK(72482-100)

**Establishment**

Name	Address	ID/FEI	Business Operations
Eurofins Analytics & Services Austria GmbH		301161092	ANALYSIS(72482-100)

**Establishment**

Name	Address	ID/FEI	Business Operations
Evonik Operations GmbH		343230955	ANALYSIS(72482-100)

Revised: 3/2022

CTI BioPharma Corp.