### HIGHLIGHTS OF PRESCRIBING INFORMATION

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

PROMACTA (eltrombopag) tablets, for oral use PROMACTA (eltrombopag) for oral suspension Initial U.S. Approval: 2008

### WARNING: RISK FOR HEPATIC DECOMPENSATION IN PATIENTS WITH CHRONIC HEPATITIS C

See full prescribing information for complete boxed warning.

In patients with chronic hepatitis C, PROMACTA in combination with interferon and ribavirin may increase the risk of hepatic decompensation. (5.1)

-----RECENT MAJOR CHANGES ------

Indications and Usage, Treatment of Thrombocytopenia in	08/2015
Patients with Chronic ITP (1.1)	
Indications and Usage, Treatment of Severe Aplastic Anemia	08/2014
(1.3)	
Dosage and Administration, Chronic Immune (Idiopathic)	08/2015
Thrombocytopenia (2.1)	
Dosage and Administration, Severe Aplastic Anemia (2.3)	08/2014
Dosage and Administration, Administration (2.4)	08/2015

-----INDICATIONS AND USAGE -----

PROMACTA is a thrombopoietin receptor agonist indicated for the treatment of:

- thrombocytopenia in adult and pediatric patients 1 year and older with chronic immune (idiopathic) thrombocytopenia (ITP) who have had an insufficient response to corticosteroids, immunoglobulins, or splenectomy. (1.1)
- thrombocytopenia in patients with chronic hepatitis C to allow the initiation and maintenance of interferon-based therapy. (1.2)
- patients with severe aplastic anemia who have had an insufficient response to immunosuppressive therapy. (1.3)

Limitations of Use:

- PROMACTA should be used only in patients with ITP whose degree of thrombocytopenia and clinical condition increase the risk for bleeding. (1.4)
- PROMACTA should be used only in patients with chronic hepatitis C whose degree of thrombocytopenia prevents the initiation of interferonbased therapy or limits the ability to maintain interferon-based therapy. (1.4)
- Safety and efficacy have not been established in combination with directacting antiviral agents used without interferon for treatment of chronic hepatitis C infection. (1.4)

### ----- DOSAGE AND ADMINISTRATION -----

- Take on an empty stomach (1 hour before or 2 hours after a meal). (2.4)
- Chronic ITP: Initiate PROMACTA at 50 mg once daily for most adult and pediatric patients 6 years and older and at 25 mg once daily for pediatric patients aged 1 to 5 years. Dose reductions are needed for patients with hepatic impairment and some patients of East Asian ancestry. Adjust to maintain platelet count greater than or equal to 50 x 10<sup>9</sup>/L. Do not exceed 75 mg per day. (2.1, 8.6, 8.8)

- Chronic Hepatitis C-associated Thrombocytopenia: Initiate PROMACTA at 25 mg once daily for all patients. Adjust to achieve target platelet count required to initiate antiviral therapy. Do not exceed a daily dose of 100 mg. (2.2)
- Severe Aplastic Anemia: Initiate PROMACTA at 50 mg once daily for most patients. Reduce initial dose in patients with hepatic impairment or patients of East Asian ancestry. Adjust to maintain platelet count greater than 50 x 10<sup>9</sup>/L. Do not exceed 150 mg per day. (2.3, 8.6, 8.8)

### ----- DOSAGE FORMS AND STRENGTHS ------

- Tablets: 12.5 mg, 25 mg, 50 mg, 75 mg, and 100 mg (3)
- For oral suspension: 25 mg (3)

-----CONTRAINDICATIONS------

None. (4)

- ------ WARNINGS AND PRECAUTIONS ------
- Hepatotoxicity: Monitor liver function before and during therapy. (5.2)
   Thrombotic/Thromboembolic Complications: Portal vein thrombosis has been reported in patients with chronic liver disease receiving PROMACTA. Monitor platelet counts regularly. (5.3)

#### ----- ADVERSE REACTIONS ------

- In adult patients with ITP, the most common adverse reactions (greater than or equal to 5% and greater than placebo) were: nausea, diarrhea, upper respiratory tract infection, vomiting, increased ALT, myalgia, and urinary tract infection. (6.1)
- In pediatric patients age 1 year and older with ITP, the most common adverse reactions (greater than or equal to 10% and greater than placebo) were upper respiratory tract infection, and nasopharyngitis. (6.1)
- In patients with chronic hepatitis C-associated thrombocytopenia, the most common adverse reactions (greater than or equal to 10% and greater than placebo) were: anemia, pyrexia, fatigue, headache, nausea, diarrhea, decreased appetite, influenza-like illness, asthenia, insomnia, cough, pruritus, chills, myalgia, alopecia, and peripheral edema. (6.1)
- In patients with severe aplastic anemia, the most common adverse reactions (greater than or equal to 20%) were: nausea, fatigue, cough, diarrhea, and headache. (6.1)

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

### -----DRUG INTERACTIONS ------

Take PROMACTA at least 2 hours before or 4 hours after any medications or products containing polyvalent cations such as antacids, calcium-rich foods, and mineral supplements. (2.4, 7.1)

------USE IN SPECIFIC POPULATIONS ------

- Pregnancy: Based on animal data, PROMACTA may cause fetal harm. (8.1)
- Nursing Mothers: A decision should be made to discontinue PROMACTA or nursing, taking into account the importance of PROMACTA to the mother. (8.3)

See 17 for PATIENT COUNSELING INFORMATION and Medication Guide.

Revised: 08/2015

### FULL PRESCRIBING INFORMATION: CONTENTS\* WARNING: RISK FOR HEPATIC **DECOMPENSATION IN PATIENTS WITH CHRONIC HEPATITIS C**

- **INDICATIONS AND USAGE** 
  - 1.1 Treatment of Thrombocytopenia in
  - Patients with Chronic ITP 1.2 Treatment of Thrombocytopenia in
  - Patients with Hepatitis C Infection

  - 1.3 Treatment of Severe Aplastic Anemia 1.4

#### Limitations of Use 2 **DOSAGE AND ADMINISTRATION**

- 2.1 Chronic Immune (Idiopathic)
- Thrombocytopenia
- 2.2 Chronic Hepatitis C-associated
- Thrombocytopenia
- Severe Aplastic Anemia 2.3
- 2.4 Administration

#### DOSAGE FORMS AND STRENGTHS 3

- 3.1 Tablets
- For Oral Suspension 3.2
- CONTRAINDICATIONS

#### 5 WARNINGS AND PRECAUTIONS

- Hepatic Decompensation in Patients 5.1 with Chronic Hepatitis C
  - 5.2 Hepatotoxicity
  - Thrombotic/Thromboembolic 5.3
  - Complications
  - 5.4 Cataracts

#### **ADVERSE REACTIONS** 6

- 6.1 Clinical Trials Experience
- 6.2 Postmarketing Experience

#### **DRUG INTERACTIONS** 7

- 7.1 Polyvalent Cations (Chelation)
- Transporters 7.2
- Protease Inhibitors 7.3
- Peginterferon alfa-2a/b Therapy 7.4 USE IN SPECIFIC POPULATIONS 8
  - 8.1 Pregnancy
  - Nursing Mothers 8.3
  - 8.4 Pediatric Use
  - Geriatric Use 8.5
  - 8.6 Hepatic Impairment
  - Renal Impairment 8.7
  - 8.8 Ethnicity
- 10 OVERDOSAGE
- **11 DESCRIPTION**

### 12 CLINICAL PHARMACOLOGY

- 12.1 Mechanism of Action
- 12.3 Pharmacokinetics
- 12.6 Assessment of Risk of QT/QTc
- Prolongation
- **13 NONCLINICAL TOXICOLOGY** 
  - 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility
  - 13.2 Animal Pharmacology and/or Toxicology
- 14 CLINICAL STUDIES
  - 14.1 Chronic ITP
  - 14.2 Chronic Hepatitis C-associated Thrombocytopenia
- 14.3 Severe Aplastic Anemia 16 HOW SUPPLIED/STORAGE AND HANDLING
  - 16.1 Tablets
- 16.2 For Oral Suspension 17 PATIENT COUNSELING INFORMATION

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

# FULL PRESCRIBING INFORMATION

1 2	WARNING: RISK FOR HEPATIC DECOMPENSATION IN PATIENTS WITH CHRONIC HEPATITIS C In patients with chronic hepatitis C, PROMACTA <sup>®</sup> in combination with interferon and			
3				
4	ribavirin may increase the risk of hepatic decompensation [see Warnings and Precautions			
5	(5.1)]	•		
6	1	INDICATIONS AND USAGE		
7	1.1	Treatment of Thrombocytopenia in Patients with Chronic ITP		
8		PROMACTA is indicated for the treatment of thrombocytopenia in adult and pediatric		
9	patier	ts 1 year and older with chronic immune (idiopathic) thrombocytopenia (ITP) who have		
10	had a	n insufficient response to corticosteroids, immunoglobulins, or splenectomy.		
11	1.2	Treatment of Thrombocytopenia in Patients with Hepatitis C Infection		
12		PROMACTA is indicated for the treatment of thrombocytopenia in patients with chronic		
13	hepat	itis C to allow the initiation and maintenance of interferon-based therapy.		
14	1.3	Treatment of Severe Aplastic Anemia		
15		PROMACTA is indicated for the treatment of patients with severe aplastic anemia who		
16	have	had an insufficient response to immunosuppressive therapy.		
17	1.4	Limitations of Use		
18	• Pl	ROMACTA should be used only in patients with ITP whose degree of thrombocytopenia		
19	ar	d clinical condition increase the risk for bleeding.		
20	• PROMACTA should be used only in patients with chronic hepatitis C whose degree of			
21	th	rombocytopenia prevents the initiation of interferon-based therapy or limits the ability to		
22	maintain interferon-based therapy.			
23	• Safety and efficacy have not been established in combination with direct-acting antiviral			
24	agents used without interferon for treatment of chronic hepatitis C infection.			
25	2	DOSAGE AND ADMINISTRATION		
26	2.1	Chronic Immune (Idiopathic) Thrombocytopenia		
27		Use the lowest dose of PROMACTA to achieve and maintain a platelet count greater than		
28	or equ	hal to 50 x $10^9$ /L as necessary to reduce the risk for bleeding. Dose adjustments are based		
29	upon	the platelet count response. Do not use PROMACTA to normalize platelet counts [see		
30	Warn	ings and Precautions (5.3)]. In clinical trials, platelet counts generally increased within 1 to		
31	2 wee	ks after starting PROMACTA and decreased within 1 to 2 weeks after discontinuing		
32	PRON	MACTA [see Clinical Studies (14.1)].		
33		Initial Dose Regimen: Adult and Pediatric Patients 6 Years and Older with ITP:		
34	Initiat	e PROMACTA at a dose of 50 mg once daily, except in patients who are of East Asian		

35 ancestry (such as Chinese, Japanese, Taiwanese, or Korean) or who have mild to severe hepatic 36 impairment (Child-Pugh Class A, B, C). 37 For patients of East Asian ancestry with ITP, initiate PROMACTA at a reduced dose of 25 mg once daily [see Use in Specific Populations (8.8), Clinical Pharmacology (12.3)]. 38 39 For patients with ITP and mild, moderate, or severe hepatic impairment (Child-Pugh 40 Class A, B, C), initiate PROMACTA at a reduced dose of 25 mg once daily [see Use in Specific 41 Populations (8.6), Clinical Pharmacology (12.3)]. 42 For patients of East Asian ancestry with ITP and hepatic impairment (Child-Pugh Class 43 A, B, C), consider initiating PROMACTA at a reduced dose of 12.5 mg once daily [see Clinical 44 Pharmacology (12.3)]. 45 Pediatric Patients with ITP Aged 1 to 5 Years: Initiate PROMACTA at a dose of 46 25 mg once daily [see Use in Specific Populations (8.8), Clinical Pharmacology (12.3)]. Monitoring and Dose Adjustment: After initiating PROMACTA, adjust the dose to 47 achieve and maintain a platelet count greater than or equal to  $50 \ge 10^9/L$  as necessary to reduce 48 49 the risk for bleeding. Do not exceed a dose of 75 mg daily. Monitor clinical hematology and liver tests regularly throughout therapy with PROMACTA and modify the dosage regimen of 50 51 PROMACTA based on platelet counts as outlined in Table 1. During therapy with PROMACTA, 52 assess CBCs with differentials, including platelet counts, weekly until a stable platelet count has 53 been achieved. Obtain CBCs with differentials, including platelet counts, monthly thereafter. 54 When switching between the oral suspension and tablet, assess platelet counts weekly for 55 2 weeks, and then follow standard monthly monitoring. 56

# Table 1. Dose Adjustments of PROMACTA in Patients with Chronic Immune (Idiopathic) Thrombocytopenia

Platelet Count Result	Dose Adjustment or Response	
$<50 \text{ x } 10^9/\text{L}$ following at least	Increase daily dose by 25 mg to a maximum of 75 mg/day.	
2 weeks of PROMACTA	For patients taking 12.5 mg once daily, increase the dose to 25 mg daily before increasing the dose amount by 25 mg.	
$\geq 200 \text{ x } 10^9/\text{L to} \leq 400 \text{ x } 10^9/\text{L}$	Decrease the daily dose by 25 mg. Wait 2 weeks to assess	
at any time	the effects of this and any subsequent dose adjustments.	
	For patients taking 25 mg once daily, decrease the dose to 12.5 mg once daily.	
>400 x 10 <sup>9</sup> /L	Stop PROMACTA; increase the frequency of platelet monitoring to twice weekly.	
	Once the platelet count is $<150 \times 10^9$ /L, reinitiate therapy at a daily dose reduced by 25 mg.	
	For patients taking 25 mg once daily, reinitiate therapy at a daily dose of 12.5 mg.	
>400 x 10 <sup>9</sup> /L after 2 weeks of therapy at lowest dose of PROMACTA	Discontinue PROMACTA.	

59

In patients with ITP and hepatic impairment (Child-Pugh Class A, B, C), after initiating
 PROMACTA or after any subsequent dosing increase, wait 3 weeks before increasing the dose.
 Modify the dosage regimen of concomitant ITP medications, as medically appropriate, to
 avoid excessive increases in platelet counts during therapy with PROMACTA. Do not administer

- 64 more than one dose of PROMACTA within any 24-hour period.
- 65 <u>Discontinuation:</u> Discontinue PROMACTA if the platelet count does not increase to a 66 level sufficient to avoid clinically important bleeding after 4 weeks of therapy with
- 67 PROMACTA at the maximum daily dose of 75 mg. Excessive platelet count responses, as
- 68 outlined in Table 1, or important liver test abnormalities also necessitate discontinuation of
- 69 PROMACTA [see Warnings and Precautions (5.2)]. Obtain CBCs with differentials, including
- 70 platelet counts, weekly for at least 4 weeks following discontinuation of PROMACTA.

71 2.2 Chronic Hepatitis C-associated Thrombocytopenia

- 72 Use the lowest dose of PROMACTA to achieve and maintain a platelet count necessary
- 73 to initiate and maintain antiviral therapy with pegylated interferon and ribavirin. Dose
- 74 adjustments are based upon the platelet count response. Do not use PROMACTA to normalize

75 platelet counts [see Warnings and Precautions (5.3)]. In clinical trials, platelet counts generally

began to rise within the first week of treatment with PROMACTA [see Clinical Studies (14.2)].

Initial Dose Regimen: Initiate PROMACTA at a dose of 25 mg once daily.

78 Monitoring and Dose Adjustment: Adjust the dose of PROMACTA in 25-mg

increments every 2 weeks as necessary to achieve the target platelet count required to initiate

antiviral therapy. Monitor platelet counts every week prior to starting antiviral therapy.

81 During antiviral therapy, adjust the dose of PROMACTA to avoid dose reductions of

82 peginterferon. Monitor CBCs with differentials, including platelet counts, weekly during

83 antiviral therapy until a stable platelet count is achieved. Monitor platelet counts monthly

- thereafter. Do not exceed a dose of 100 mg daily. Monitor clinical hematology and liver tests
   regularly throughout therapy with PROMACTA.
- 86 For specific dosage instructions for peginterferon or ribavirin, refer to their respective 87 prescribing information.
- 88

77

# 89 Table 2. Dose Adjustments of PROMACTA in Adults with Thrombocytopenia due to 90 Chronic Hepatitis C

Platelet Count Result	Dose Adjustment or Response
$<50 \times 10^{9}$ /L following at least 2 weeks of PROMACTA	Increase daily dose by 25 mg to a maximum of 100 mg/day.
$\geq 200 \text{ x } 10^9/\text{L} \text{ to} \leq 400 \text{ x } 10^9/\text{L}$	Decrease the daily dose by 25 mg.
at any time	Wait 2 weeks to assess the effects of this and any subsequent dose adjustments.
>400 x 10 <sup>9</sup> /L	Stop PROMACTA; increase the frequency of platelet monitoring to twice weekly.
	Once the platelet count is $<150 \times 10^9$ /L, reinitiate therapy at a daily dose reduced by 25 mg.
	For patients taking 25 mg once daily, reinitiate therapy at a daily dose of 12.5 mg.
$>400 \times 10^9/L$ after 2 weeks of	Discontinue PROMACTA.
therapy at lowest dose of	
PROMACTA	

91

92 Discontinuation: The prescribing information for pegylated interferon and ribavirin

93 include recommendations for antiviral treatment discontinuation for treatment futility. Refer to

94 pegylated interferon and ribavirin prescribing information for discontinuation recommendations95 for antiviral treatment futility.

96 PROMACTA should be discontinued when antiviral therapy is discontinued. Excessive

- 97 platelet count responses, as outlined in Table 2, or important liver test abnormalities also
- 98 necessitate discontinuation of PROMACTA [see Warnings and Precautions (5.2)].

# 99 **2.3 Severe Aplastic Anemia**

Use the lowest dose of PROMACTA to achieve and maintain a hematologic response.
Dose adjustments are based upon the platelet count. Hematologic response requires dose
titration, generally up to 150 mg, and may take up to 16 weeks after starting PROMACTA [see *Clinical Studies (14.3)*].

Initial Dose Regimen: Initiate PROMACTA at a dose of 50 mg once daily.

For patients with severe aplastic anemia of East Asian ancestry or those with mild,
moderate, or severe hepatic impairment (Child-Pugh Class A, B, C), initiate PROMACTA at a
reduced dose of 25 mg once daily *[see Use in Specific Populations (8.6, 8.8), Clinical Pharmacology (12.3)*].

- 109 <u>Monitoring and Dose Adjustment:</u> Adjust the dose of PROMACTA in 50-mg 110 increments every 2 weeks as necessary to achieve the target platelet count greater than or equal 111 to  $50 \ge 10^9$ /L as necessary. Do not exceed a dose of 150 mg daily. Monitor clinical hematology 112 and liver tests regularly throughout therapy with PROMACTA and modify the dosage regimen 113 of PROMACTA based on platelet counts as outlined in Table 3.
- 114

104

Table 5. Dose Aujustments of I NOWACTA III I attents with Severe Aplastic Alternia		
Platelet Count Result	Dose Adjustment or Response	
$<50 \text{ x } 10^9$ /L following at least	Increase daily dose by 50 mg to a maximum of 150 mg/day.	
2 weeks of PROMACTA	For patients taking 25 mg once daily, increase the dose to	
	50 mg daily before increasing the dose amount by 50 mg.	
$\geq 200 \text{ x } 10^9/\text{L} \text{ to } \leq 400 \text{ x } 10^9/\text{L}$	Decrease the daily dose by 50 mg. Wait 2 weeks to assess the	
at any time	effects of this and any subsequent dose adjustments.	
>400 x 10 <sup>9</sup> /L	Stop PROMACTA for 1 week.	
	Once the platelet count is $<150 \times 10^9$ /L, reinitiate therapy at a dose reduced by 50 mg.	
$>400 \text{ x } 10^9/\text{L}$ after 2 weeks of	Discontinue PROMACTA.	
therapy at lowest dose of		
PROMACTA		

### 115 Table 3. Dose Adjustments of PROMACTA in Patients with Severe Aplastic Anemia

116

117 For patients who achieve tri-lineage response, including transfusion independence,

118 lasting at least 8 weeks: the dose of PROMACTA may be reduced by 50% *[see Clinical Studies*]

119 (14.3)]. If counts remain stable after 8 weeks at the reduced dose, then discontinue PROMACTA

120 and monitor blood counts. If platelet counts drop to less than  $30 \ge 10^9$ /L, hemoglobin to less than

121 9 g/dL, or ANC to less than  $0.5 \ge 10^9$ /L, PROMACTA may be reinitiated at the previous

- 122 effective dose.
- 123 Discontinuation: If no hematologic response has occurred after 16 weeks of therapy with
- 124 PROMACTA, discontinue therapy. If new cytogenetic abnormalities are observed, consider
- 125 discontinuation of PROMACTA [see Adverse Reactions (6.1)]. Excessive platelet count

- 126 responses (as outlined in Table 3) or important liver test abnormalities also necessitate
- 127 discontinuation of PROMACTA [see Warnings and Precautions (5.2)].
- 128 2.4 Administration 129 Preparation of the Oral Suspension: Prior to use of the oral suspension, ensure 130 patients or caregivers receive training on proper dosing, preparation, and administration of 131 PROMACTA for oral suspension. 132 Administer the oral suspension immediately after preparation. Discard any suspension 133 not administered within 30 minutes after preparation. 134 Prepare the suspension with water only. NOTE: Do not use hot water to prepare the 135 suspension. 136 For details on preparation and administration of the suspension, see Instructions for Use. 137 Administration of Tablets and Oral Suspension: Take PROMACTA on an empty 138 stomach (1 hour before or 2 hours after a meal) [see Clinical Pharmacology (12.3)]. Take 139 PROMACTA at least 2 hours before or 4 hours after other medications (e.g., antacids), calcium-140 rich foods (e.g., dairy products and calcium-fortified juices), or supplements containing 141 polyvalent cations such as iron, calcium, aluminum, magnesium, selenium, and zinc [see Drug 142 Interactions (7.1), Clinical Pharmacology (12.3)]. 143 Do not crush tablets and mix with food or liquids. 144 Prepare the oral suspension with water only. 145 3 DOSAGE FORMS AND STRENGTHS 146

#### 3.1 **Tablets**

- 147 12.5-mg tablets — round, biconvex, white, film-coated tablets debossed with GS MZ1 and • 148 12.5 on one side. Each tablet, for oral administration, contains eltrombopag olamine, 149 equivalent to 12.5 mg of eltrombopag free acid.
- 150 25-mg tablets — round, biconvex, orange, film-coated tablets debossed with GS NX3 and • 25 on one side. Each tablet, for oral administration, contains eltrombopag olamine, 151 152 equivalent to 25 mg of eltrombopag free acid.
- 153 50-mg tablets — round, biconvex, blue, film-coated tablets debossed with GS UFU and • 154 50 on one side. Each tablet, for oral administration, contains eltrombopag olamine, 155 equivalent to 50 mg of eltrombopag free acid.
- 156 75-mg tablets — round, biconvex, pink, film-coated tablets debossed with GS FFS and 75 on • 157 one side. Each tablet, for oral administration, contains eltrombopag olamine, equivalent to 158 75 mg of eltrombopag free acid.
- 159 100-mg tablets — round, biconvex, green, film-coated tablets debossed with GS 1L5. Each • 160 tablet, for oral administration, contains eltrombopag olamine, equivalent to 100 mg of 161 eltrombopag free acid.

#### 162 3.2 For Oral Suspension

25-mg packet — contains a reddish-brown to yellow powder for reconstitution. 163

# 164 4 CONTRAINDICATIONS

165 None.

## 166 5 WARNINGS AND PRECAUTIONS

### 167 **5.1** Hepatic Decompensation in Patients with Chronic Hepatitis C

168 In patients with chronic hepatitis C, PROMACTA in combination with interferon and 169 ribavirin may increase the risk of hepatic decompensation. In two controlled clinical trials in 170 patients with chronic hepatitis C and thrombocytopenia, ascites and encephalopathy occurred

171 more frequently on the arm receiving treatment with PROMACTA plus antivirals (7%) than the

172 placebo plus antivirals arm (4%). Patients with low albumin levels (less than 3.5 g/dL) or Model

- 173 for End-Stage Liver Disease (MELD) score greater than or equal to 10 at baseline had a greater
- risk for hepatic decompensation on the arm receiving treatment with PROMACTA plus

175 antivirals. Discontinue PROMACTA if antiviral therapy is discontinued.

# 176 **5.2 Hepatotoxicity**

177 PROMACTA can cause liver enzyme elevations [see Adverse Reactions (6.1)]. Measure

178 serum ALT, AST, and bilirubin prior to initiation of PROMACTA, every 2 weeks during the

179 dose adjustment phase, and monthly following establishment of a stable dose. PROMACTA

180 inhibits UDP-glucuronosyltransferase (UGT)1A1 and organic anion-transporting polypeptide

181 (OATP)1B1, which may lead to indirect hyperbilirubinemia. If bilirubin is elevated, perform

182 fractionation. Evaluate abnormal serum liver tests with repeat testing within 3 to 5 days. If the

abnormalities are confirmed, monitor serum liver tests weekly until resolved or stabilized.

184 Discontinue PROMACTA if ALT levels increase to greater than or equal to 3 x ULN in patients

185 with normal liver function or greater than or equal to 3 x baseline in patients with pre-treatment

- 186 elevations in transaminases and are:
- 187 progressively increasing, or
- 188 persistent for greater than or equal to 4 weeks, or
- 189 accompanied by increased direct bilirubin, or
- accompanied by clinical symptoms of liver injury or evidence for hepatic decompensation.

191 If the potential benefit for reinitiating treatment with PROMACTA is considered to

192 outweigh the risk for hepatotoxicity, then consider cautiously reintroducing PROMACTA and

193 measure serum liver tests weekly during the dose adjustment phase. Hepatotoxicity may reoccur

194 if PROMACTA is reinitiated. If liver test abnormalities persist, worsen, or recur, then

195 permanently discontinue PROMACTA.

# 196 5.3 Thrombotic/Thromboembolic Complications

- 197 In two controlled clinical trials in patients with chronic hepatitis C and
- 198 thrombocytopenia, 3% (31/955) treated with PROMACTA experienced a thrombotic event
- 199 compared with 1% (5/484) on placebo. The majority of events were of the portal venous system
- 200 (1% in patients treated with PROMACTA versus less than 1% for placebo).

Thrombotic/thromboembolic complications may result from increases in platelet counts
 with PROMACTA. Reported thrombotic/thromboembolic complications included both venous
 and arterial events and were observed at low and at normal platelet counts.

Consider the potential for an increased risk of thromboembolism when administering PROMACTA to patients with known risk factors for thromboembolism (e.g., Factor V Leiden, ATIII deficiency, antiphospholipid syndrome, chronic liver disease). To minimize the risk for thrombotic/thromboembolic complications, do not use PROMACTA in an attempt to normalize platelet counts. Follow the dose adjustment guidelines to achieve and maintain target platelet counts *[see Dosage and Administration (2.1, 2.2, 2.3)]*.

In a controlled trial in patients with chronic liver disease and thrombocytopenia not related to ITP undergoing elective invasive procedures (N = 292), the risk of thrombotic events

212 was increased in patients treated with 75 mg of PROMACTA once daily. Seven thrombotic

213 complications (six patients) were reported in the group that received PROMACTA and three

thrombotic complications were reported in the placebo group (two patients). All of the

215 thrombotic complications reported in the group that received PROMACTA were portal vein

thrombosis (PVT). Symptoms of PVT included abdominal pain, nausea, vomiting, and diarrhea.

217 Five of the six patients in the group that received PROMACTA experienced a thrombotic

218 complication within 30 days of completing treatment with PROMACTA and at a platelet count

above  $200 \ge 10^{9}$ /L. The risk of portal venous thrombosis was increased in thrombocytopenic

patients with chronic liver disease treated with 75 mg of PROMACTA once daily for 2 weeks in

221 preparation for invasive procedures.

# 222 5.4 Cataracts

In the three controlled clinical trials in adults with chronic ITP, cataracts developed or worsened in 15 (7%) patients who received 50 mg of PROMACTA daily and 8 (7%) placebogroup patients. In the extension trial, cataracts developed or worsened in 4% of patients who underwent ocular examination prior to therapy with PROMACTA. In the two controlled clinical trials in patients with chronic hepatitis C and thrombocytopenia, cataracts developed or worsened in 8% of patients treated with PROMACTA and 5% of patients treated with placebo.

Cataracts were observed in toxicology studies of eltrombopag in rodents *[see Nonclinical Toxicology (13.2)]*. Perform a baseline ocular examination prior to administration of PPOMACTA and during therapy with PPOMACTA regularly monitor patients for signs and

- PROMACTA and, during therapy with PROMACTA, regularly monitor patients for signs andsymptoms of cataracts.
- 233

# 6 ADVERSE REACTIONS

The following serious adverse reactions associated with PROMACTA are described in other sections.

- Hepatic Decompensation in Patients with Chronic Hepatitis C [see Warnings and
   *Precautions (5.1)*]
- Hepatotoxicity [see Warnings and Precautions (5.2)]
- Thrombotic/Thromboembolic Complications [see Warnings and Precautions (5.3)]

- Cataracts [see Warnings and Precautions (5.4)]
- 241 6.1 Clinical Trials Experience
- 242 Because clinical trials are conducted under widely varying conditions, adverse reaction 243 rates observed in the clinical trials of a drug cannot be directly compared with rates in the
- clinical trials of another drug and may not reflect the rates observed in practice.
- 245 <u>Chronic Immune (Idiopathic) Thrombocytopenia:</u> *Adults:* In clinical trials,
- hemorrhage was the most common serious adverse reaction and most hemorrhagic reactions
- 247 followed discontinuation of PROMACTA. Other serious adverse reactions included
- thrombotic/thromboembolic complications [see Warnings and Precautions (5.3)]. The data
- described below reflect exposure of PROMACTA to 446 patients with chronic ITP aged 18 to
- 250 85 years, of whom 65% were female, across the ITP clinical development program including
- three placebo-controlled trials. PROMACTA was administered to 277 patients for at least
- 252 6 months and 202 patients for at least 1 year.
- Table 4 presents the most common adverse drug reactions (experienced by greater than or equal to 3% of patients receiving PROMACTA) from the three placebo-controlled trials, with a higher incidence in PROMACTA versus placebo.
- 256

# Table 4. Adverse Reactions (≥3%) from Three Placebo-controlled Trials in Adults with Chronic Immune (Idiopathic) Thrombocytopenia

	PROMACTA 50 mg	Placebo
	n = 241	n = 128
Adverse Reaction	(%)	(%)
Nausea	9	3
Diarrhea	9	7
Upper respiratory tract infection	7	6
Vomiting	6	<1
Increased ALT	5	3
Myalgia	5	2
Urinary tract infection	5	3
Oropharyngeal pain	4	3
Increased AST	4	2
Pharyngitis	4	2
Back pain	3	2
Influenza	3	2
Paresthesia	3	2
Rash	3	2

259

- In the three controlled clinical chronic ITP trials, alopecia, musculoskeletal pain, blood alkaline phosphatase increased, and dry mouth were the adverse reactions reported in 2% of patients treated with PROMACTA and in no patients who received placebo.
- Among 299 patients with chronic ITP who received PROMACTA in the single-arm extension trial, the adverse reactions occurred in a pattern similar to that seen in the placebo-
- 265 controlled trials. Table 5 presents the most common treatment-related adverse reactions
- (experienced by greater than or equal to 3% of patients receiving PROMACTA) from theextension trial.
- 268

# Table 5. Treatment-related Adverse Reactions (≥3%) from Extension Trial in Adults with Chronic Immune (Idiopathic) Thrombocytopenia

	PROMACTA 50 mg
	n = 299
Adverse Reaction	(%)
Headache	10
Hyperbilirubinemia	6
ALT increased	6
Cataract	5
AST increased	4
Fatigue	4
Nausea	4

271

272 In the three controlled chronic ITP trials, serum liver test abnormalities (predominantly 273 Grade 2 or less in severity) were reported in 11% and 7% of patients for PROMACTA and 274 placebo, respectively. Four patients (1%) treated with PROMACTA and three patients in the 275 placebo group (2%) discontinued treatment due to hepatobiliary laboratory abnormalities. Seven 276 of the patients treated with PROMACTA in the controlled trials with hepatobiliary laboratory 277 abnormalities were re-exposed to PROMACTA in the extension trial. Six of these patients again 278 experienced liver test abnormalities (predominantly Grade 1) resulting in discontinuation of 279 PROMACTA in one patient. In the extension chronic ITP trial, one additional patient had 280 PROMACTA discontinued due to liver test abnormalities (less than or equal to Grade 3). 281 In a placebo-controlled trial of PROMACTA in patients with chronic liver disease and 282 thrombocytopenia not related to ITP, six patients treated with PROMACTA and one patient in 283 the placebo group developed portal vein thromboses [see Warnings and Precautions (5.3)]. 284 *Pediatric Patients:* The data described below reflect median exposure to PROMACTA 285 of 91 days for 107 pediatric patients (aged 1 to 17 years) with chronic ITP, of whom 53% were 286 female, across the randomized phase of two placebo-controlled trials. 287 Table 6 presents the most common adverse drug reactions (experienced by greater than or 288 equal to 3% of pediatric patients 1 year and older receiving PROMACTA) across the two 289 placebo-controlled trials, with a higher incidence for PROMACTA versus placebo.

- 290
- 291 Table 6. Adverse Reactions (≥3%) with a Higher Incidence for PROMACTA versus
- 292 Placebo from Two Placebo-controlled Trials in Pediatric Patients 1 Year and Older with
- 293 Chronic Immune (Idiopathic) Thrombocytopenia

	PROMACTA n = 107	Placebo n = 50
Adverse Reaction	(%)	(%)
Upper respiratory tract infection	17	6
Nasopharyngitis	12	4
Cough	9	0
Diarrhea	9	2
Pyrexia	9	8
Rhinitis	9	6
Abdominal pain	8	4
Oropharyngeal pain	8	2
Toothache	6	0
ALT increased <sup>a</sup>	6	0
Rash	5	2
AST increased	4	0
Rhinorrhea	4	0

<sup>a</sup> Includes adverse reactions or laboratory abnormalities  $>3 \times$  ULN.

295

296 Chronic Hepatitis C-associated Thrombocytopenia: In the two placebo-controlled

trials, 955 patients with chronic hepatitis C-associated thrombocytopenia received PROMACTA.

Table 7 presents the most common adverse drug reactions (experienced by greater than or equal

to 10% of patients receiving PROMACTA compared with placebo).

300

	PROMACTA	Placebo
	+ Peginterferon/Ribavirin	+ Peginterferon/Ribavirin
	n = 955	n = 484
<b>Adverse Reaction</b>	(%)	(%)
Anemia	40	35
Pyrexia	30	24
Fatigue	28	23
Headache	21	20
Nausea	19	14
Diarrhea	19	11
Decreased appetite	18	14
Influenza-like illness	18	16
Asthenia	16	13
Insomnia	16	15
Cough	15	12
Pruritus	15	13
Chills	14	9
Myalgia	12	10
Alopecia	10	6
Peripheral edema	10	5

# 301 Table 7. Adverse Reactions (≥10% and Greater than Placebo) from Two Placebo-

302	controlled Trials in	Adults with	Chronic H	onatitic (
502	controlleu i mais m	Audits with	CHIOMC III	ipanns c

303

304 In the two controlled clinical trials in patients with chronic hepatitis C,

hyperbilirubinemia was reported in 8% of patients receiving PROMACTA compared with 3%
 for placebo. Total bilirubin greater than or equal to 1.5 x ULN was reported in 76% and 50% of
 patients receiving PROMACTA and placebo, respectively. ALT or AST greater than or equal to

308 3 x ULN was reported in 34% and 38% of patients for PROMACTA and placebo, respectively.

309 Severe Aplastic Anemia: In the single-arm, open-label trial, 43 patients with severe

aplastic anemia received PROMACTA. Eleven patients (26%) were treated for greater than

311 6 months and 7 patients (16%) were treated for greater than 1 year. The most common adverse

reactions (greater than or equal to 20%) were nausea, fatigue, cough, diarrhea, and headache.

313

314	Table 8. Adverse Reactions (≥10%) from One Open-label Trial in Adults with Severe
315	Aplastic Anemia

### 315

	PROMACTA
	(n = 43)
Adverse Reaction	(%)
Nausea	33
Fatigue	28
Cough	23
Diarrhea	21
Headache	21
Pain in extremity	19
Dyspnea	14
Pyrexia	14
Dizziness	14
Oropharyngeal pain	14
Febrile neutropenia	14
Abdominal pain	12
Ecchymosis	12
Muscle spasms	12
Transaminases increased	12
Arthralgia	12
Rhinorrhea	12

316

317

In this trial, patients had bone marrow aspirates evaluated for cytogenetic abnormalities. Eight patients had a new cytogenetic abnormality reported on therapy, including 5 patients who

318 319 had complex changes in chromosome 7.

#### 320 6.2 Postmarketing Experience

- 321 The following adverse reactions have been identified during post approval use of
- 322 PROMACTA. Because these reactions are reported voluntarily from a population of uncertain
- 323 size, it is not always possible to reliably estimate the frequency or establish a causal relationship 324 to drug exposure.
- 325 Vascular Disorders: Thrombotic microangiopathy with acute renal failure.

#### 326 **DRUG INTERACTIONS** 7

- In vitro, CYP1A2, CYP2C8, UGT1A1, and UGT1A3 are involved in the metabolism of 327 328 eltrombopag. In vitro, eltrombopag inhibits the following metabolic or transporter systems:
- 329 CYP2C8, CYP2C9, UGT1A1, UGT1A3, UGT1A4, UGT1A6, UGT1A9, UGT2B7, UGT2B15,
- 330 OATP1B1, and breast cancer resistance protein (BCRP) [see Clinical Pharmacology (12.3)].

# 331 7.1 Polyvalent Cations (Chelation)

Eltrombopag chelates polyvalent cations (such as iron, calcium, aluminum, magnesium, selenium, and zinc) in foods, mineral supplements, and antacids. In a clinical trial, administration of PROMACTA with a polyvalent cation-containing antacid decreased plasma eltrombopag systemic exposure by approximately 70% *[see Clinical Pharmacology (12.3)]*.

Take PROMACTA at least 2 hours before or 4 hours after any medications or products containing polyvalent cations such as antacids, dairy products, and mineral supplements to avoid

338 significant reduction in absorption of PROMACTA due to chelation *[see Dosage and* 

339 Administration (2.4), Clinical Pharmacology (12.3)].

### 340 **7.2 Transporters**

- 341 Coadministration of PROMACTA with the OATP1B1 and BCRP substrate, rosuvastatin,
- to healthy adult subjects increased plasma rosuvastatin AUC<sub>0- $\infty$ </sub> by 55% and C<sub>max</sub> by 103% [see
- 343 *Clinical Pharmacology (12.3)*].
- 344 Use caution when concomitantly administering PROMACTA and drugs that are
- 345 substrates of OATP1B1 (e.g., atorvastatin, bosentan, ezetimibe, fluvastatin, glyburide,
- 346 olmesartan, pitavastatin, pravastatin, rosuvastatin, repaglinide, rifampin, simvastatin acid, SN-38

347 [active metabolite of irinotecan], valsartan) or BCRP (e.g., imatinib, irinotecan, lapatinib,

- 348 methotrexate, mitoxantrone, rosuvastatin, sulfasalazine, topotecan). Monitor patients closely for
- 349 signs and symptoms of excessive exposure to the drugs that are substrates of OATP1B1 or
- BCRP and consider reduction of the dose of these drugs, if appropriate. In clinical trials with
- 351 PROMACTA, a dose reduction of rosuvastatin by 50% was recommended.

# 352 **7.3 Protease Inhibitors**

- HIV Protease Inhibitors: In a drug interaction trial, coadministration of PROMACTA with lopinavir/ritonavir (LPV/RTV) decreased plasma eltrombopag exposure by 17% [see *Clinical Pharmacology (12.3)*]. No dose adjustment is recommended when PROMACTA is coadministered with LPV/RTV. Drug interactions with other HIV protease inhibitors have not
- been evaluated.
- 358 Hepatitis C Virus (HCV) Protease Inhibitors: Coadministration of PROMACTA with
- 359 either boceprevir or telaprevir did not affect eltrombopag or protease inhibitor exposure
- 360 significantly [see Clinical Pharmacology (12.3)]. No dose adjustments are recommended. Drug
- 361 interactions with other HCV protease inhibitors have not been evaluated.
- 362 7.4 Peginterferon alfa-2a/b Therapy
- Coadministration of peginterferon alfa-2a (PEGASYS<sup>®</sup>) or -2b (PEGINTRON<sup>®</sup>) did not affect eltrombopag exposure in two randomized, double-blind, placebo-controlled trials with adult patients with chronic hepatitis C *[see Clinical Pharmacology (12.3)]*.

# 366 8 USE IN SPECIFIC POPULATIONS

- 367 8.1 Pregnancy
- 368 Pregnancy Category C

- 369
- 370

There are no adequate and well-controlled studies of eltrombopag use in pregnancy. In animal reproduction and developmental toxicity studies, there was evidence of embryolethality 371 and reduced fetal weights at maternally toxic doses. PROMACTA should be used in pregnancy 372 only if the potential benefit to the mother justifies the potential risk to the fetus.

373 In an early embryonic development study, female rats received oral eltrombopag at doses 374 of 10, 20, or 60 mg/kg/day (0.8, 2, and 6 times, respectively, the human clinical exposure based 375 on AUC in patients with ITP at 75 mg/day and 0.3, 1, and 3 times, respectively, the human 376 clinical exposure based on AUC in patients with chronic hepatitis C at 100 mg/day). Increased 377 pre- and post-implantation loss and reduced fetal weight were observed at the highest dose which 378 also caused maternal toxicity.

379 Eltrombopag was administered orally to pregnant rats at 10, 20, or 60 mg/kg/day (0.8, 2, 1)380 and 6 times, respectively, the human clinical exposure based on AUC in patients with ITP at 381 75 mg/day and 0.3, 1, and 3 times, respectively, the human clinical exposure based on AUC in 382 patients with chronic hepatitis C at 100 mg/day). Decreased fetal weights (6% to 7%) and a 383 slight increase in the presence of cervical ribs were observed at the highest dose which also 384 caused maternal toxicity. However, no evidence of major structural malformations was observed.

385 Pregnant rabbits were treated with oral eltrombopag doses of 30, 80, or 150 mg/kg/day 386 (0.04, 0.3, and 0.5 times, respectively, the human clinical exposure based on AUC in patients 387 with ITP at 75 mg/day and 0.02, 0.1, and 0.3 times, respectively, the human clinical exposure based on AUC in patients with chronic hepatitis C at 100 mg/day). No evidence of fetotoxicity, 388 389 embryolethality, or teratogenicity was observed.

390 In a pre- and post-natal developmental toxicity study in pregnant rats (F0), no adverse 391 effects on maternal reproductive function or on the development of the offspring (F1) were 392 observed at doses up to 20 mg/kg/day (2 times the human clinical exposure based on AUC in 393 patients with ITP at 75 mg/day and similar to the human clinical exposure based on AUC in 394 patients with chronic hepatitis C at 100 mg/day). Eltrombopag was detected in the plasma of 395 offspring (F1). The plasma concentrations in pups increased with dose following administration 396 of drug to the F0 dams.

#### 397 8.3 **Nursing Mothers**

398 It is not known whether eltrombopag is excreted in human milk. Because many drugs are 399 excreted in human milk and because of the potential for serious adverse reactions in nursing 400 infants from PROMACTA, a decision should be made whether to discontinue nursing or to 401 discontinue PROMACTA taking into account the importance of PROMACTA to the mother.

402 8.4 Pediatric Use

403 The safety and efficacy of PROMACTA in pediatric patients 1 year and older with 404 chronic ITP were evaluated in two double-blind, placebo-controlled trials [see Adverse Reactions 405 (6.2), Clinical Studies (14.2)]. The pharmacokinetics of eltrombopag have been evaluated in 168 406 pediatric patients 1 year and older with ITP dosed once daily *[see Clinical Pharmacology*] 407 (12.3)]. See Dosage and Administration (2.1) for dosing recommendations for pediatric patients

- 408 1 years and older. The safety and efficacy of PROMACTA in pediatric patients younger than409 1 year with ITP have not yet been established.
- 410 The safety and efficacy of PROMACTA in pediatric patients with thrombocytopenia 411 associated with chronic hepatitis C and severe aplastic anemia have not been established.

# 412 8.5 Geriatric Use

- 413 Of the 106 patients in two randomized clinical trials of PROMACTA 50 mg in chronic
- 414 ITP, 22% were 65 years of age and over, while 9% were 75 years of age and over. In the two
- 415 randomized clinical trials of PROMACTA in patients with chronic hepatitis C and
- 416 thrombocytopenia, 7% were 65 years of age and over, while fewer than 1% were 75 years of age
- 417 and over. No overall differences in safety or effectiveness were observed between these patients
- and younger patients in the placebo-controlled trials, but greater sensitivity of some olderindividuals cannot be ruled out.
- 419 individuals cannot be ruled out.

## 420 **8.6 Hepatic Impairment**

- 421 Hepatic impairment influences the exposure of PROMACTA [see Clinical
- 422 *Pharmacology (12.3)]*.
- 423 Reduce the initial dose of PROMACTA in patients with chronic ITP (adults and pediatric
- 424 patients 6 years and older only) or severe aplastic anemia who also have hepatic impairment
- 425 (Child-Pugh Class A, B, C) [see Dosage and Administration (2.1, 2.3), Warnings and
- 426 *Precautions (5.2)]*. No dosage adjustment is necessary for patients with chronic hepatitis C and 427 hepatic impairment *[see Clinical Pharmacology (12.3)]*.
- 428 8.7 Renal Impairment
- 429 No adjustment in the initial dose of PROMACTA is needed for patients with renal
  430 impairment *[see Clinical Pharmacology (12.3)]*. Closely monitor patients with impaired renal
  431 function when administering PROMACTA.

# 432 8.8 Ethnicity

Patients of East Asian ethnicity (i.e., Japanese, Chinese, Taiwanese, and Korean) exhibit higher eltrombopag exposures. A reduction in the initial dose of PROMACTA is recommended for patients of East Asian ancestry with ITP (adult and pediatric patients 6 years and older only) or severe aplastic anemia *[see Dosage and Administration (2.1, 2.3)]*. No dose reduction is needed in patients of East Asian ethnicity with chronic hepatitis C *[see Clinical Pharmacology* (*12.3)]*.

# 439 **10 OVERDOSAGE**

- 440 In the event of overdose, platelet counts may increase excessively and result in441 thrombotic/thromboembolic complications.
- 442 In one report, a subject who ingested 5,000 mg of PROMACTA had a platelet count
- 443 increase to a maximum of 929 x  $10^{9}$ /L at 13 days following the ingestion. The patient also
- 444 experienced rash, bradycardia, ALT/AST elevations, and fatigue. The patient was treated with
- 445 gastric lavage, oral lactulose, intravenous fluids, omeprazole, atropine, furosemide, calcium,

446 dexamethasone, and plasmapheresis; however, the abnormal platelet count and liver test

447 abnormalities persisted for 3 weeks. After 2 months' follow-up, all events had resolved without448 sequelae.

449 In case of an overdose, consider oral administration of a metal cation-containing

450 preparation, such as calcium, aluminum, or magnesium preparations to chelate eltrombopag and

451 thus limit absorption. Closely monitor platelet counts. Reinitiate treatment with PROMACTA in

- 452 accordance with dosing and administration recommendations [see Dosage and Administration
- 453 *(2.1, 2.2)*].

## 454 **11 DESCRIPTION**

PROMACTA (eltrombopag) tablets contain eltrombopag olamine, a small molecule
 thrombopoietin (TPO) receptor agonist for oral administration. Eltrombopag interacts with the
 transmembrane domain of the TPO receptor (also known as cMpl) leading to increased platelet
 production.

Eltrombopag olamine is a biphenyl hydrazone. The chemical name for eltrombopag olamine is 3'-{(2Z)-2-[1-(3,4-dimethylphenyl)-3-methyl-5-oxo-1,5-dihydro-4H-pyrazol-4-

461 ylidene]hydrazino}-2'-hydroxy-3-biphenylcarboxylic acid - 2-aminoethanol (1:2). It has the

462 molecular formula  $C_{25}H_{22}N_4O_4 \cdot 2(C_2H_7NO)$ . The molecular weight is 564.65 for eltrombopag

doing and 442.5 for eltrombopag free acid. Eltrombopag olamine has the following structural
 formula:

 $\begin{pmatrix} 0 & 0H \\ 0H \\ 0H \\ 0H \\ H_2N \end{pmatrix}_2$ 

- 465
- Eltrombopag olamine is practically insoluble in aqueous buffer across a pH range of 1 to 7.4, and is sparingly soluble in water.
- 468 PROMACTA (eltrombopag) tablets contain eltrombopag olamine in the amount
- 469 equivalent to 12.5 mg, 25 mg, 50 mg, 75 mg, or 100 mg of eltrombopag free acid. The inactive
- 470 ingredients of PROMACTA tablets are: Tablet Core: magnesium stearate, mannitol,
- 471 microcrystalline cellulose, povidone, and sodium starch glycolate. Coating: hypromellose (12.5-
- 472 mg, 25-mg, 50-mg, and 75-mg tablets) or polyvinyl alcohol and talc (100-mg tablet),
- 473 polyethylene glycol 400, titanium dioxide, polysorbate 80 (12.5-mg tablet), FD&C Yellow No. 6
- 474 aluminum lake (25-mg tablet), FD&C Blue No. 2 aluminum lake (50-mg tablet), Iron Oxide Red

and Iron Oxide Black (75-mg tablet), or Iron Oxide Yellow and Iron Oxide Black (100-mgtablet).

PROMACTA (eltrombopag) for oral suspension packets contain a reddish-brown to
yellow powder which produces a reddish-brown suspension when reconstituted with water. Each
25-mg packet delivers eltrombopag olamine equivalent to 25 mg of eltrombopag free acid. The

479 inactive ingredients of PROMACTA for oral suspension are mannitol, sucralose, and xanthan

481 gum.

# 482 12 CLINICAL PHARMACOLOGY

### 483 **12.1 Mechanism of Action**

Eltrombopag is an orally bioavailable, small-molecule TPO-receptor agonist that interacts with the transmembrane domain of the human TPO-receptor and initiates signaling cascades that induce proliferation and differentiation from bone marrow progenitor cells.

## 487 **12.3 Pharmacokinetics**

488 <u>Absorption:</u> Eltrombopag is absorbed with a peak concentration occurring 2 to 6 hours 489 after oral administration. Based on urinary excretion and biotransformation products eliminated 490 in feces, the oral absorption of drug-related material following administration of a single 75-mg 491 solution dose was estimated to be at least 52%.

- 492 An open-label, randomized, crossover trial was conducted to assess the effect of food on 493 the bioavailability of eltrombopag. A standard high-fat breakfast significantly decreased plasma 494 eltrombopag  $AUC_{0-\infty}$  by approximately 59% and  $C_{max}$  by 65% and delayed  $T_{max}$  by 1 hour. The 495 calcium content of this meal may have also contributed to this decrease in exposure.
- In a second trial, administration of a single 25-mg dose of eltrombopag for oral suspension to adults with a high-calcium, moderate-fat, moderate-calorie meal reduced plasma eltrombopag AUC<sub>0- $\infty$ </sub> by 75% (90% CI: 71%, 88%) and C<sub>max</sub> by 79% (90% CI: 76%, 82%).
- 499 Administration of a single 25-mg dose of eltrombopag for oral suspension 2 hours after the high-
- 500 calcium meal reduced plasma eltrombopag AUC<sub>0- $\infty$ </sub> by 47% (90% CI: 40%, 53%) and C<sub>max</sub> by 501 48% (90% CI: 40%, 54%). Administration of a single 25-mg dose of eltrombopag for oral
- solution of a single 25-ing dose of entomotipag for oral suspension 2 hours before the high-calcium meal reduced plasma eltrombopag  $AUC_{0-\infty}$  by 20%
- 503 (90% CI: 9%, 29%) and C<sub>max</sub> by 14% (90% CI: 2%, 25%).
- 504 In a relative bioavailability trial in adults, the eltrombopag for oral suspension delivered 505 22% higher plasma  $AUC_{0-\infty}$  than the tablet formulation.
- 506 Distribution: The concentration of eltrombopag in blood cells is approximately 50% to
- 507 79% of plasma concentrations based on a radiolabel study. *In vitro* studies suggest that
- 508 eltrombopag is highly bound to human plasma proteins (greater than 99%). Eltrombopag is a
- substrate of BCRP, but is not a substrate for P-glycoprotein (P-gp) or OATP1B1.
- 510 <u>Metabolism:</u> Absorbed eltrombopag is extensively metabolized, predominantly through 511 pathways including cleavage, oxidation, and conjugation with glucuronic acid, glutathione, or
- 512 cysteine. *In vitro* studies suggest that CYP1A2 and CYP2C8 are responsible for the oxidative

513 metabolism of eltrombopag. UGT1A1 and UGT1A3 are responsible for the glucuronidation of 514 eltrombopag. 515 Elimination: The predominant route of eltrombopag excretion is via feces (59%), and 516 31% of the dose is found in the urine. Unchanged eltrombopag in feces accounts for 517 approximately 20% of the dose; unchanged eltrombopag is not detectable in urine. The plasma 518 elimination half-life of eltrombopag is approximately 21 to 32 hours in healthy subjects and 26 519 to 35 hours in patients with ITP. 520 Drug Interactions: *Polyvalent Cation-containing Antacids:* In a clinical trial, 521 coadministration of 75 mg of PROMACTA with a polyvalent cation-containing antacid 522 (1,524 mg aluminum hydroxide, 1,425 mg magnesium carbonate, and sodium alginate) to 26 523 healthy adult subjects decreased plasma eltrombopag AUC<sub>0- $\infty$ </sub> and C<sub>max</sub> by approximately 70%. 524 The contribution of sodium alginate to this interaction is not known. 525 Cytochrome P450 Enzymes (CYPs): In a clinical trial, PROMACTA 75 mg once 526 daily was administered for 7 days to 24 healthy male subjects did not show inhibition or 527 induction of the metabolism of a combination of probe substrates for CYP1A2 (caffeine), 528 CYP2C19 (omeprazole), CYP2C9 (flurbiprofen), or CYP3A4 (midazolam) in humans. Probe 529 substrates for CYP2C8 were not evaluated in this trial. 530 Rosuvastatin: In a clinical trial, coadministration of 75 mg of PROMACTA once daily 531 for 5 days with a single 10-mg dose of the OATP1B1 and BCRP substrate, rosuvastatin to 39 532 healthy adult subjects increased plasma rosuvastatin AUC<sub>0- $\infty$ </sub> by 55% and C<sub>max</sub> by 103%. 533 Protease Inhibitors: HIV Protease Inhibitors: In a clinical trial, coadministration of 534 repeat-dose lopinavir 400 mg/ritonavir 100 mg twice daily with a single dose of PROMACTA 535 100 mg to 40 healthy adult subjects decreased plasma eltrombopag AUC<sub>0- $\infty$ </sub> by 17%. HCV Protease Inhibitors: In a clinical trial, coadministration of repeat-dose 536 537 telaprevir 750 mg every 8 hours or boceprevir 800 mg every 8 hours with a single dose of 538 PROMACTA 200 mg to healthy adult subjects did not alter plasma telaprevir, boceprevir, or 539 eltrombopag AUC<sub>0- $\infty$ </sub> or C<sub>max</sub> to a significant extent. 540 Pegylated Interferon alfa-2a + Ribavirin and Pegylated Interferon alfa-2b + 541 *Ribavirin:* The pharmacokinetics of eltrombopag in both the presence and absence of pegylated 542 interferon alfa-2a and -2b therapy were evaluated using a population pharmacokinetic analysis in 543 635 patients with chronic hepatitis C. The population PK model estimates of clearance indicate 544 no significant difference in eltrombopag clearance in the presence of pegylated interferon alfa 545 plus ribavirin therapy. 546 *In vitro Studies*: Eltrombopag is an inhibitor of CYP2C8 and CYP2C9 *in vitro*. 547 Eltrombopag is an inhibitor of UGT1A1, UGT1A3, UGT1A4, UGT1A6, UGT1A9, UGT2B7, 548 and UGT2B15 *in vitro*. Eltrombopag is an inhibitor of the organic anion transporting polypeptide 549 OATP1B1 and BCRP in vitro. 550 Specific Populations: Ethnicity: Based on two population PK analyses of eltrombopag

551 concentrations in patients with ITP or chronic hepatitis C, East Asian (i.e., Japanese, Chinese,

- Taiwanese, Korean) subjects exhibited 50% to 55% higher eltrombopag plasma concentrations compared with non-East Asian subjects *[see Dosage and Administration (2.1, 2.3)]*.
- 554 An approximately 40% higher systemic eltrombopag exposure in healthy African-555 American subjects was noted in at least one clinical pharmacology trial. The effect of African-556 American ethnicity on exposure and related safety and efficacy of eltrombopag has not been 557 established.
- 558 *Hepatic Impairment:* In a pharmacokinetic trial, the disposition of a single 50-mg dose 559 of PROMACTA in patients with mild, moderate, and severe hepatic impairment was compared 560 with subjects with normal hepatic function. The degree of hepatic impairment was based on 561 Child-Pugh score. Plasma eltrombopag AUC<sub> $0-\infty$ </sub> was 41% higher in patients with mild hepatic 562 impairment (Child-Pugh Class A) compared with subjects with normal hepatic function. Plasma 563 eltrombopag AUC<sub>0-∞</sub> was approximately 2-fold higher in patients with moderate (Child-Pugh 564 Class B) and severe hepatic impairment (Child-Pugh Class C). The half-life of eltrombopag was 565 prolonged 2-fold in these patients. This clinical trial did not evaluate protein-binding effects.
- 566 Chronic Liver Disease: A population PK analysis in thrombocytopenic patients with 567 chronic liver disease following repeat doses of eltrombopag demonstrated that mild hepatic impairment resulted in an 87% to 110% higher plasma eltrombopag AUC<sub>(0- $\tau$ )</sub> and patients with 568 569 moderate hepatic impairment had approximately 141% to 240% higher plasma eltrombopag 570  $AUC_{(0,\tau)}$  values compared with patients with normal hepatic function. The half-life of 571 eltrombopag was prolonged 3-fold in patients with mild hepatic impairment and 4-fold in 572 patients with moderate hepatic impairment. This clinical trial did not evaluate protein-binding 573 effects.
- 574 *Chronic Hepatitis C:* A population PK analysis in 28 healthy adults and 635 patients 575 with chronic hepatitis C demonstrated that patients with chronic hepatitis C treated with 576 PROMACTA had higher plasma  $AUC_{(0-\tau)}$  values as compared with healthy subjects, and  $AUC_{(0-\tau)}$ 577  $_{\tau)}$  increased with increasing Child-Pugh score. Patients with chronic hepatitis C and mild hepatic 578 impairment had approximately 100% to 144% higher plasma  $AUC_{(0-\tau)}$  compared with healthy 579 subjects. This clinical trial did not evaluate protein-binding effects.
- 580Renal Impairment: The disposition of a single 50-mg dose of PROMACTA in patients581with mild (creatinine clearance [CrCl] of 50 to 80 mL/min), moderate (CrCl of 30 to58249 mL/min), and severe (CrCl less than 30 mL/min) renal impairment was compared with583subjects with normal renal function. Average total plasma eltrombopag AUC<sub>0-∞</sub> was 32% to 36%584lower in subjects with mild to moderate renal impairment and 60% lower in subjects with severe585renal impairment compared with healthy subjects. The effect of renal impairment on unbound586(active) eltrombopag exposure has not been assessed.
- 587 *Pediatric Patients:* The pharmacokinetics of eltrombopag have been evaluated in 168
   588 pediatric patients 1 year and older with ITP dosed once daily in two trials. Plasma eltrombopag
   589 apparent clearance following oral administration (CL/F) increased with increasing body weight.
   590 East Asian pediatric patients with ITP had approximately 43% higher plasma eltrombopag
   591 AUC<sub>(0-τ</sub>) values as compared with non-East Asian patients.

592 Plasma eltrombopag AUC<sub>(0- $\tau$ )</sub> and C<sub>max</sub> in pediatric patients aged 12 to 17 years was

593 similar to that observed in adults. The pharmacokinetic parameters of eltrombopag in pediatric 594 patients with ITP are shown in Table 9.

595

#### 596 Table 9. Geometric Mean (95% CI) Steady-state Plasma Eltrombopag Pharmacokinetic 597 Parameters<sup>a</sup> in Patients with ITP (Normalized to a Once-daily 50-mg Dose)

	$\mathbf{C_{max}}^{\mathrm{b}}$	AUC <sub>(0-τ)</sub> <sup>b</sup>
Age	(mcg/mL)	(mcg.h/mL)
Adults $(n = 108)$	7.03	101
	(6.44, 7.68)	(91.4, 113)
12 to 17 years $(n = 62)$	6.80	103
	(6.17, 7.50)	(91.1, 116)
6 to 11 years $(n = 68)$	10.3	153
	(9.42, 11.2)	(137, 170)
1 to 5 years $(n = 38)$	11.6	162
	(10.4, 12.9)	(139, 187)

<sup>a</sup> PK parameters presented as geometric mean (95% CI). 598

599 <sup>b</sup> Based on population PK post-hoc estimates.

- 600
- 601

# 12.6 Assessment of Risk of QT/QTc Prolongation

602 There is no indication of a QT/QTc prolonging effect of PROMACTA at doses up to 603 150 mg daily for 5 days. The effects of PROMACTA at doses up to 150 mg daily for 5 days 604 (supratherapeutic doses) on the QT/QTc interval were evaluated in a double-blind, randomized, 605 placebo- and positive-controlled (moxifloxacin 400 mg, single oral dose) crossover trial in 606 healthy adult subjects. Assay sensitivity was confirmed by significant OTc prolongation by 607 moxifloxacin.

#### 608 13 NONCLINICAL TOXICOLOGY

#### 609 13.1 Carcinogenesis, Mutagenesis, Impairment of Fertility

610 Eltrombopag does not stimulate platelet production in rats, mice, or dogs because of 611 unique TPO receptor specificity. Data from these animals do not fully model effects in humans.

612 Eltrombopag was not carcinogenic in mice at doses up to 75 mg/kg/day or in rats at doses 613 up to 40 mg/kg/day (exposures up to 4 times the human clinical exposure based on AUC in

614 patients with ITP at 75 mg/day and 2 times the human clinical exposure based on AUC in

615 patients with chronic hepatitis C at 100 mg/day).

616 Eltrombopag was not mutagenic or clastogenic in a bacterial mutation assay or in two in

vivo assays in rats (micronucleus and unscheduled DNA synthesis, 10 times the human clinical 617

618 exposure based on C<sub>max</sub> in patients with ITP at 75 mg/day and 7 times the human clinical

exposure based on C<sub>max</sub> in patients with chronic hepatitis C at 100 mg/day). In the *in vitro* mouse 619

620 lymphoma assay, eltrombopag was marginally positive (less than 3-fold increase in mutation621 frequency).

Eltrombopag did not affect female fertility in rats at doses up to 20 mg/kg/day (2 times the human clinical exposure based on AUC in patients with ITP at 75 mg/day and similar to the human clinical exposure based on AUC in patients with chronic hepatitis C at 100 mg/day). Eltrombopag did not affect male fertility in rats at doses up to 40 mg/kg/day, the highest dose tested (3 times the human clinical exposure based on AUC in patients with ITP at 75 mg/day and 2 times the human clinical exposure based on AUC in patients with chronic hepatitis C at

628 100 mg/day).

### 629 13.2 Animal Pharmacology and/or Toxicology

Eltrombopag is phototoxic *in vitro*. There was no evidence of *in vivo* cutaneous or ocularphototoxicity in rodents.

632 Treatment-related cataracts were detected in rodents in a dose- and time-dependent 633 manner. At greater than or equal to 6 times the human clinical exposure based on AUC in 634 patients with ITP at 75 mg/day and 3 times the human clinical exposure based on AUC in 635 patients with chronic hepatitis C at 100 mg/day, cataracts were observed in mice after 6 weeks 636 and in rats after 28 weeks of dosing. At greater than or equal to 4 times the human clinical 637 exposure based on AUC in patients with ITP at 75 mg/day and 2 times the human clinical 638 exposure based on AUC in patients with chronic hepatitis C at 100 mg/day, cataracts were 639 observed in mice after 13 weeks and in rats after 39 weeks of dosing [see Warnings and 640 Precautions (5.4)].

641 Renal tubular toxicity was observed in studies up to 14 days in duration in mice and rats 642 at exposures that were generally associated with morbidity and mortality. Tubular toxicity was 643 also observed in a 2-year oral carcinogenicity study in mice at doses of 25, 75, and 644 150 mg/kg/day. The exposure at the lowest dose was 1.2 times the human clinical exposure

644 150 mg/kg/day. The exposure at the lowest dose was 1.2 times the human clinical exposure
645 based on AUC in patients with ITP at 75 mg/day and 0.6 times the human clinical exposure

based on AUC in patients with chronic hepatitis C at 100 mg/day. No similar effects were

647 observed in mice after 13 weeks at exposures greater than those associated with renal changes in

648 the 2-year study, suggesting that this effect is both dose- and time-dependent.

# 649 14 CLINICAL STUDIES

### 650 **14.1 Chronic ITP**

<u>Adults:</u> The efficacy and safety of PROMACTA in adult patients with chronic ITP were
 evaluated in three randomized, double-blind, placebo-controlled trials and in an open-label
 extension trial.

654 *Trials 1 and 2:* In Trials 1 and 2, patients who had completed at least one prior ITP 655 therapy and who had a platelet count less than  $30 \ge 10^9$ /L were randomized to receive either 656 PROMACTA or placebo daily for up to 6 weeks, followed by 6 weeks off therapy. During the 657 trials, PROMACTA or placebo was discontinued if the platelet count exceeded 200  $\ge 10^9$ /L.

- The median age of the patients was 50 years and 60% were female. Approximately 70%
- of the patients had received at least 2 prior ITP therapies (predominantly corticosteroids,
- 660 immunoglobulins, rituximab, cytotoxic therapies, danazol, and azathioprine) and 40% of the
- 661 patients had undergone splenectomy. The median baseline platelet counts (approximately
- $18 \times 10^{9}$ /L) were similar among all treatment groups.
- Trial 1 randomized 114 patients (2:1) to PROMACTA 50 mg or placebo. Trial 2
  randomized 117 patients (1:1:1) among placebo or 1 of 3 dose regimens of PROMACTA,
  30 mg, 50 mg, or 75 mg each administered daily.
- 666 The efficacy of PROMACTA in this trial was evaluated by response rate, defined as a 667 shift from a baseline platelet count of less than  $30 \ge 10^9$ /L to greater than or equal to  $50 \ge 10^9$ /L 668 at any time during the treatment period (Table 10).
- 669

# Table 10. Trials 1 and 2 Platelet Count Response (≥50 x 10<sup>9</sup>/L) Rates in Adults with Chronic Immune (Idiopathic) Thrombocytopenia

	PROMACTA	
Trial	50 mg Daily	Placebo
1	43/73 (59%) <sup>a</sup>	6/37 (16%)
2	19/27 (70%) <sup>a</sup>	3/27 (11%)

# $^{a}$ *P* value <0.001 for PROMACTA versus placebo.

673

The platelet count response to PROMACTA was similar among patients who had or had not undergone splenectomy. In general, increases in platelet counts were detected 1 week following initiation of PROMACTA and the maximum response was observed after 2 weeks of therapy. In the placebo and 50-mg–dose groups of PROMACTA, the trial drug was discontinued due to an increase in platelet counts to greater than  $200 \times 10^9$ /L in 3% and 27% of the patients, respectively. The median duration of treatment with the 50-mg dose of PROMACTA was

- 680 42 days in Trial 1 and 43 days in Trial 2.
- 681 Of 7 patients who underwent hemostatic challenges, additional ITP medications were 682 required in 3 of 3 placebo group patients and 0 of 4 patients treated with PROMACTA. Surgical 683 procedures accounted for most of the hemostatic challenges. Hemorrhage requiring transfusion 684 occurred in one placebo group patient and no patients treated with PROMACTA.
- $\begin{array}{ll} 685 & \textit{Trial 3: In this trial, 197 patients were randomized (2:1) to receive either PROMACTA} \\ 686 & 50 mg once daily (n = 135) or placebo (n = 62) for 6 months, during which time the dose of \\ 687 & PROMACTA could be adjusted based on individual platelet counts. Patients were allowed to \\ 688 & taper or discontinue concomitant ITP medications after being treated with PROMACTA for \\ 689 & 6 weeks. Patients were permitted to receive rescue treatments at any time during the trial as \\ \end{array}$
- 690 clinically indicated.
- 691The median ages of the patients treated with PROMACTA and placebo were 47 years692and 52.5 years, respectively. Approximately half of the patients treated with PROMACTA and
- 693 placebo (47% and 50%, respectively) were receiving concomitant ITP medication

694 (predominantly corticosteroids) at randomization and had baseline platelet counts less than or 695 equal to  $15 \times 10^{9}$ /L (50% and 48%, respectively). A similar percentage of patients treated with 696 PROMACTA and placebo (37% and 34%, respectively) had a prior splenectomy.

697 The efficacy of PROMACTA in this trial was evaluated by the odds of achieving a platelet count greater than or equal to 50 x  $10^{9}$ /L and less than or equal to 400 x  $10^{9}$ /L for 698 699 patients receiving PROMACTA relative to placebo and was based on patient response profiles 700 throughout the 6-month treatment period. In 134 patients who completed 26 weeks of treatment, a sustained platelet response (platelet count greater than or equal to  $50 \ge 10^9$ /L and less than or 701 equal to  $400 \ge 10^9$ /L for 6 out of the last 8 weeks of the 26-week treatment period in the absence 702 703 of rescue medication at any time) was achieved by 60% of patients treated with PROMACTA, 704 compared with 10% of patients treated with placebo (splenectomized patients: PROMACTA 705 51%, placebo 8%; non-splenectomized patients: PROMACTA 66%, placebo 11%). The 706 proportion of responders in the group of patients treated with PROMACTA was between 37% 707 and 56% compared with 7% and 19% in the placebo treatment group for all on-therapy visits. 708 Patients treated with PROMACTA were significantly more likely to achieve a platelet count 709 between 50 x  $10^9$ /L and 400 x  $10^9$ /L during the entire 6-month treatment period compared with

- those patients treated with placebo.
- 711

### Outcomes of treatment are presented in Table 11 for all patients enrolled in the trial.

712

# 713 Table 11. Outcomes of Treatment from Trial 3 in Adults with Chronic Immune 714 (Idiopathic) Thrombocytopenia

	PROMACTA	Placebo
Outcome	N = 135	N = 62
Mean number of weeks with platelet counts $\geq 50 \times 10^9/L$	11.3	2.4
Requiring rescue therapy, n (%)	24 (18)	25 (40)

715

Among 94 patients receiving other ITP therapy at baseline, 37 (59%) of 63 patients treated with PROMACTA and 10 (32%) of 31 patients in the placebo group discontinued concomitant therapy at some time during the trial.

*Extension Trial:* Patients who completed any prior clinical trial with PROMACTA were
 enrolled in an open-label, single-arm trial in which attempts were made to decrease the dose or
 eliminate the need for any concomitant ITP medications. PROMACTA was administered to
 299 patients; 249 completed 6 months, 210 patients completed 12 months, and 138 patients
 completed 24 months of therapy. The median baseline platelet count was 19 x 10<sup>9</sup>/L prior to
 administration of PROMACTA.

Pediatric Patients: The efficacy and safety of PROMACTA in pediatric patients 1 year
 and older with chronic ITP were evaluated in two double-blind, placebo-controlled trials. The
 trials differed in time since ITP diagnosis: at least 6 months versus at least 12 months. During the
 trials, doses could be increased every 2 weeks to a maximum of 75 mg once daily. The dose of

PROMACTA was reduced if the platelet count exceeded  $200 \times 10^9$ /L and interrupted and reduced if it exceeded  $400 \times 10^9$ /L.

- 731 *Trial 4*: Patients refractory or relapsed to at least one prior ITP therapy with a platelet 732 count less than 30 x  $10^{9}/L$  (n = 92) were stratified by age and randomized (2:1) to PROMACTA 733 (n = 63) or placebo (n = 29). The starting dose for patients aged 6 to 17 years was 50 mg once
- daily for those at least 27 kg and 37.5 mg once daily for those less than 27 kg, administered as
- oral tablets. A reduced dose of 25 mg once daily was used for East Asian patients aged 6 to
- 17 years regardless of weight. The starting dose for patients aged 1 to 5 years was 1.2 mg/kg
- once daily (0.8 mg/kg once daily for East Asian patients) administered as oral suspension.
- The 13-week, randomized, double-blind period was followed by a 24-week, open-labelperiod where patients from both arms were eligible to receive PROMACTA.
- The median age of the patients was 9 years and 48% were female. Approximately 62% of patients had a baseline platelet count less than or equal to  $15 \times 10^9$ /L, a characteristic that was

similar between treatment arms. The percentage of patients with at least 2 prior ITP therapies

743 (predominantly corticosteroids and immunoglobulins) was 73% in the group treated with

744 PROMACTA and 90% in the group treated with placebo. Four patients in the group treated with

- 745 PROMACTA had undergone splenectomy.
- The efficacy of PROMACTA in this trial was evaluated by the proportion of subjects on PROMACTA achieving platelet counts  $\geq 50 \times 10^9$ /L (in the absence of rescue therapy) for at least 6 out of 8 weeks between Weeks 5 to 12 of the randomized, double-blind period (Table 12).
- 749

# 750 Table 12. Trial 4 Platelet Count Response (≥50 x 10<sup>9</sup>/L without Rescue) for 6 out of 8

# 751 Weeks (between Weeks 5 to 12) Overall and by Age Cohort in Pediatric Patients 1 Year

752 and Older with Chronic Immune (Idiopathic) Thrombocytopenia

Age Cohort	PROMACTA	Placebo
Overall	26/63 (41%) <sup>a</sup>	1/29 (3%)
12 to 17 years	10/24 (42%)	1/10 (10%)
6 to 11 years	11/25 (44%)	0/13 (0%)
1 to 5 years	5/14 (36%)	0/6 (0%)

### 753 <sup>a</sup> P value = <0.001 for PROMACTA versus placebo.

754

755 More pediatric patients treated with PROMACTA (75%) compared with placebo (21%) 756 had at least one platelet count greater than or equal to  $50 \ge 10^9$ /L during the first 12 weeks of randomized treatment in absence of rescue therapy. Fewer pediatric patients treated with 757 PROMACTA required rescue treatment during the randomized, double-blind period compared 758 759 with placebo-treated patients (19% [12/63] versus 24% [7/29]). In the patients who achieved a platelet response ( $\geq$ 50 x 10<sup>9</sup>/L without rescue) for 6 out of 8 weeks (between weeks 5 to 12), 760 761 62% (16/26) had an initial response in the first 2 weeks after starting PROMACTA. 762 Patients were permitted to reduce or discontinue baseline ITP therapy only during the

open-label phase of the trial. Among 15 patients receiving other ITP therapy at baseline, 53%

764 (8/15) reduced (n = 1) or discontinued (n = 7) concomitant therapy, mainly corticosteroids, 765 without needing rescue therapy.

766	Trial 5: Patients refractory or relapsed to at least one prior ITP therapy with a platelet
767	count less than 30 x $10^{9}/L$ (n = 67) were stratified by age and randomized (2:1) to PROMACTA
768	(n = 45) or placebo $(n = 22)$ . The starting dose for patients aged 12 to 17 years was 37.5 mg once
769	daily regardless of weight or race. The starting dose for patients aged 6 to 11 years was 50 mg
770	once daily for those greater than or equal to 27 kg and 25 mg once daily for those less than
771	27 kg, administered as oral tablets. Reduced doses of 25 mg (for those greater than or equal to
772	27 kg) and 12.5 mg (for those less than 27 kg), each once daily, were used for East Asian
773	patients in this age range. The starting dose for patients aged 1 to 5 years was 1.5 mg/kg once
774	daily (0.8 mg/kg once daily for East Asian patients) administered as oral suspension.
775	The 7-week, randomized, double-blind period was followed by an open-label period of

776 up to 24 weeks where patients from both arms were eligible to receive PROMACTA.

The median age of the patients was 10 years and 60% were female. Approximately 51% of patients had a baseline platelet count less than or equal to  $15 \times 10^{9}$ /L. The percentage of patients with at least 2 prior ITP therapies (predominantly corticosteroids and immunoglobulins) was 84% in the group treated with PROMACTA and 86% in the group treated with placebo. Five patients in the group treated with PROMACTA had undergone splenectomy.

The efficacy of PROMACTA in this trial was evaluated by the proportion of patients achieving platelet counts greater than or equal to  $50 \times 10^{9}$ /L (in absence of rescue therapy) at least once between Weeks 1 and 6 of the randomized, double-blind period (Table 13). Platelet response to PROMACTA was consistent across the age cohorts.

786

# Table 13. Trial 5 Platelet Count Response (≥50 x 10<sup>9</sup>/L without Rescue) Rates in Pediatric Patients 1 Year and Older with Chronic Immune (Idiopathic) Thrombocytopenia

	PROMACTA	Placebo
Overall	28/45 (62%) <sup>a</sup>	7/22 (32%)
12 to 17 years	10/16 (62%)	0/8 (0%)
6 to 11 years	12/19 (63%)	3/9 (33%)
1 to 5 years	6/10 (60%)	4/5 (80%)

```
789 <sup>a</sup> P value = 0.011 for PROMACTA versus placebo.
```

- Patients were permitted to reduce or discontinue baseline ITP therapy only during the
- open-label phase of the trial. Among 13 patients receiving other ITP therapy at baseline, 46%
- 796 (6/13) reduced (n = 3) or discontinued (n = 3) concomitant therapy, mainly corticosteroids,
- 797 without needing rescue therapy.

<sup>790</sup> 

<sup>Fewer pediatric patients treated with PROMACTA required rescue treatment during the
randomized, double-blind period compared with placebo-treated patients (13% [6/45] versus
50% [11/22]).</sup> 

### 798 14.2 Chronic Hepatitis C-associated Thrombocytopenia

799 The efficacy and safety of PROMACTA for the treatment of thrombocytopenia in adult 800 patients with chronic hepatitis C were evaluated in two randomized, double-blind, placebo-801 controlled trials. Trial 1 utilized peginterferon alfa-2a (PEGASYS<sup>®</sup>) plus ribavirin for antiviral treatment and Trial 2 utilized peginterferon alfa-2b (PEGINTRON<sup>®</sup>) plus ribavirin. In both trials, 802 patients with a platelet count of less than 75 x  $10^{9}$ /L were enrolled and stratified by platelet 803 804 count, screening HCV RNA, and HCV genotype. Patients were excluded if they had evidence of 805 decompensated liver disease with Child-Pugh score greater than 6 (class B and C), history of 806 ascites, or hepatic encephalopathy. The median age of the patients in both trials was 52 years, 807 63% were male, and 74% were Caucasian. Sixty-nine percent of patients had HCV genotypes 1, 808 4, 6, with the remainder genotypes 2 and 3. Approximately 30% of patients had been previously 809 treated with interferon and ribavirin. The majority of patients (90%) had bridging fibrosis and 810 cirrhosis, as indicated by noninvasive testing. A similar proportion (95%) of patients in both 811 treatment groups had Child-Pugh Class A (score 5 to 6) at baseline. A similar proportion of 812 patients (2%) in both treatment groups had baseline international normalized ratio (INR) greater than 1.7. Median baseline platelet counts (approximately  $60 \ge 10^9/L$ ) were similar in both 813 treatment groups. The trials consisted of 2 phases – a pre-antiviral treatment phase and an 814 815 antiviral treatment phase. In the pre-antiviral treatment phase, patients received open-label 816 PROMACTA to increase the platelet count to a threshold of greater than or equal to 90 x  $10^{9}/L$ for Trial 1 and greater than or equal to 100 x 10<sup>9</sup>/L for Trial 2. PROMACTA was administered at 817 an initial dose of 25 mg once daily for 2 weeks and increased in 25-mg increments over 2- to 3-818 819 week periods to achieve the optimal platelet count to initiate antiviral therapy. The maximal time 820 patients could receive open-label PROMACTA was 9 weeks. If threshold platelet counts were 821 achieved, patients were randomized (2:1) to the same dose of PROMACTA at the end of the pretreatment phase or to placebo. PROMACTA was administered in combination with pegylated 822 823 interferon and ribavirin per their respective prescribing information for up to 48 weeks. 824 The efficacy of PROMACTA for both trials was evaluated by sustained virologic 825 response (SVR) defined as the percentage of patients with undetectable HCV-RNA at 24 weeks 826 after completion of antiviral treatment. The median time to achieve the target platelet count greater than or equal to 90 x  $10^9$ /L was approximately 2 weeks. Ninety-five percent of patients 827 828 were able to initiate antiviral therapy. 829 In both trials, a significantly greater proportion of patients treated with PROMACTA 830 achieved SVR (see Table 14). The improvement in the proportion of patients who achieved SVR

831 was consistent across subgroups based on baseline platelet count (less than 50 x  $10^9$ /L versus

greater than or equal to  $50 \times 10^{9}$ /L). In patients with high baseline viral loads (greater than or equal to 800,000), the SVR rate was 18% (82/452) for PROMACTA versus 8% (20/239) for

833 equal to 8834 placebo.

835

	Trial	1 <sup>a</sup>	Trial	2 <sup>b</sup>
Pre-antiviral Treatment Phase	N = 7	15	N = 8	05
% Patients who achieved target platelet counts and initiated antiviral therapy <sup>c</sup>	95%		94%	)
	PROMACTA	Placebo	PROMACTA	Placebo
	N = 450	N = 232	N = 506	N = 253
Antiviral Treatment Phase	%	%	%	%
Overall SVR <sup>d</sup>	23	14	19	13
HCV Genotype 2,3	35	24	34	25
HCV Genotype 1,4,6	18	10	13	7

836 Table 14. Trials 1 and 2 Sustained Virologic Response in Adults with Chronic Hepatitis C

<sup>a</sup> PROMACTA given in combination with peginterferon alfa-2a (180 mcg once weekly for
48 weeks for genotypes 1/4/6; 24 weeks for genotype 2 or 3) plus ribavirin (800 to 1,200 mg
daily in 2 divided doses orally).

<sup>c</sup> Target platelet count was  $\ge 90 \ge 10^9/L$  for Trial 1 and  $\ge 100 \ge 10^9/L$  for Trial 2.

844 <sup>d</sup> P value <0.05 for PROMACTA versus placebo.

845

846 The majority of patients treated with PROMACTA (76%) maintained a platelet count 847 greater than or equal to  $50 \ge 10^9$ /L compared with 19% for placebo. A greater proportion of 848 patients on PROMACTA did not require any antiviral dose reduction as compared with placebo 849 (45% versus 27%).

850 14.3 Severe Aplastic Anemia

PROMACTA was studied in a single-arm, single-center, open-label trial in 43 patients
 with severe aplastic anemia who had an insufficient response to at least one prior
 immunosuppressive therapy and who had a platelet count less than or equal to 30 x 10<sup>9</sup>/L.
 PROMACTA was administered at an initial does of 50 mg area daily for 2 weaks and increased

PROMACTA was administered at an initial dose of 50 mg once daily for 2 weeks and increased

over 2-week periods up to a maximum dose of 150 mg once daily. The efficacy of PROMACTA
 in the study was evaluated by the hematologic response assessed after 12 weeks of treatment.

- Hematologic response was defined as meeting 1 or more of the following criteria: 1) platelet
- 858 count increases to 20 x  $10^{9}$ /L above baseline, or stable platelet counts with transfusion
- 859 independence for a minimum of 8 weeks; 2) hemoglobin increase by greater than 1.5 g/dL, or a
- reduction in greater than or equal to 4 units of RBC transfusions for 8 consecutive weeks; 3)
- ANC increase of 100% or an ANC increase greater than  $0.5 \ge 10^{9}$ /L. PROMACTA was
- 862 discontinued after 16 weeks if no hematologic response was observed. Patients who responded
- 863 continued therapy in an extension phase of the trial.

<sup>&</sup>lt;sup>b</sup> PROMACTA given in combination with peginterferon alfa-2b (1.5 mcg/kg once weekly for
48 weeks for genotypes 1/4/6; 24 weeks for genotype 2 or 3) plus ribavirin (800 to 1,400 mg
daily in 2 divided doses orally).

- 864 The treated population had median age of 45 years (range: 17 to 77 years) and 56% were
- male. At baseline, the median platelet count was  $20 \times 10^9$ /L, hemoglobin was 8.4 g/dL, ANC was 865
- $0.58 \times 10^{9}$ /L, and absolute reticulocyte count was 24.3 x  $10^{9}$ /L. Eighty-six percent of patients 866
- were RBC transfusion dependent and 91% were platelet transfusion dependent. The majority of 867
- 868 patients (84%) received at least 2 prior immunosuppressive therapies. Three patients had
- 869 cytogenetic abnormalities at baseline.
- 870
- 871

Table 15 presents the efficacy results.

#### 872 Table 15. Hematologic Response in Patients with Severe Aplastic Anemia

	PROMACTA
Outcome	N = 43
Response rate <sup>a</sup> , n (%)	17 (40)
95% CI (%)	(25, 56)
Median of duration of response in months (95%CI)	$NR^{b}$ (3.0, $NR^{b}$ )

- 873 <sup>a</sup> Includes single- and multi-lineage.
- <sup>b</sup> NR = Not reached due to few events (relapsed). 874
- 875

879 In the extension phase, 8 patients achieved a multi-lineage response; 4 of these patients 880 subsequently tapered off treatment with PROMACTA and maintained the response (median 881 follow up: 8.1 months, range: 7.2 to 10.6 months).

#### 882 16 HOW SUPPLIED/STORAGE AND HANDLING

#### 883 16.1 Tablets

- 884 • The 12.5-mg tablets are round, biconvex, white, film-coated tablets debossed with GS MZ1 885 and 12.5 on one side and are available in bottles of 30: NDC 0007-4643-13.
- 886 • The 25-mg tablets are round, biconvex, orange, film-coated tablets debossed with GS NX3 887 and 25 on one side and are available in bottles of 30: NDC 0007-4640-13.
- 888 • The 50-mg tablets are round, biconvex, blue, film-coated tablets debossed with GS UFU and 889 50 on one side and are available in bottles of 30: NDC 0007-4641-13.
- 890 • The 75-mg tablets are round, biconvex, pink, film-coated tablets debossed with GS FFS and 891 75 on one side and are available in bottles of 30: NDC 0007-4642-13.
- 892 The 100-mg tablets are round, biconvex, green, film-coated tablets debossed with GS 1L5 • 893 and are available in bottles of 30: NDC 0007-4646-13. This product contains a desiccant.
- 894
- 895 Store at room temperature between 20°C and 25°C (68°F to 77°F); excursions permitted 896 to 15°C to 30°C (59°F to 86°F) [see USP Controlled Room Temperature]. Do not remove
- 897 desiccant if present. Dispense in original bottle.

<sup>876</sup> In the 17 responders, the platelet transfusion-free period ranged from 8 to 1,096 days with 877 a median of 200 days, and the RBC transfusion-free period ranged from 15 to 1,082 days with a 878 median of 208 days.

### 898 16.2 For Oral Suspension

- The 25-mg for oral suspension is a reddish-brown to yellow powder in unit-dose packets, co-packaged in a kit with a 40-cc reconstitution vessel, an oral dosing syringe, and a threaded
- 901 closure with syringe-port capability.
- 902 Each kit (NDC 0007-4515-27) contains 30 packets: NDC 0007-4515-01.
- Store at room temperature between 20°C and 25°C (68°F to 77°F); excursions permitted
- to 15°C to 30°C (59°F to 86°F) [see USP Controlled Room Temperature]. Following
- 905 reconstitution, the product should be administered immediately but may be stored for a
  906 maximum period of 30 minutes between 20°C and 25°C (68°F to 77°F); excursions permitted to
- 907 15°C to 30°C (59°F to 86°F) [see USP Controlled Room Temperature]. Throw away (discard)
  908 the mixture if not used within 30 minutes.
- 908 the mixture if not used within 30 minutes.

# 909 17 PATIENT COUNSELING INFORMATION

- Advise the patient or caregiver to read the FDA-approved patient labeling (MedicationGuide and Instructions for Use).
- Prior to treatment, patients should fully understand and be informed of the following risksand considerations for PROMACTA:
- For patients with chronic ITP, therapy with PROMACTA is administered to achieve and
   maintain a platelet count greater than or equal to 50 x 10<sup>9</sup>/L as necessary to reduce the risk
   for bleeding.
- For patients with chronic hepatitis C, therapy with PROMACTA is administered to achieve
   and maintain a platelet count necessary to initiate and maintain antiviral therapy with
   pegylated interferon and ribavirin.
- Therapy with PROMACTA may be associated with hepatobiliary laboratory abnormalities.
- Advise patients with chronic hepatitis C and cirrhosis that they may be at risk for hepatic
   decompensation when receiving alfa interferon therapy.
- Advise patients that they should report any of the following signs and symptoms of liver
   problems to their healthcare provider right away.
  - yellowing of the skin or the whites of the eyes (jaundice)
  - unusual darkening of the urine
- unusual tiredness
- 928 right upper stomach area pain
- 929 confusion

925

926

- swelling of the stomach area (abdomen)
- Advise patients that thrombocytopenia and risk of bleeding may reoccur upon discontinuing
   PROMACTA, particularly if PROMACTA is discontinued while the patient is on
- 933 anticoagulants or antiplatelet agents.
  - Advise patients that too much PROMACTA may result in excessive platelet counts and a risk
     for thrombotic/thromboembolic complications.

- Advise patients that during therapy with PROMACTA, they should continue to avoid situations or medications that may increase the risk for bleeding.
- Advise patients to have a baseline ocular examination prior to administration of
   PROMACTA and be monitored for signs and symptoms of cataracts during therapy.
- Advise patients to take PROMACTA at least 2 hours before or 4 hours after foods, mineral
   supplements, and antacids which contain polyvalent cations such as iron, calcium, aluminum,
- 942 magnesium, selenium, and zinc.
- Prior to use of the oral suspension, ensure patients or caregivers receive training on proper
   dosing, preparation, and administration.
- Inform patients or caregivers how many packets to administer to get the full dose.
- 946
- 947 PROMACTA is a registered trademark of the GSK group of companies. The following are
- 948 registered trademarks of their respective owners: PEGASYS/Hoffmann-La Roche Inc.;
- 949 PEGINTRON/Schering Corporation.
- 950



- 951 952 GlaxoSmithKline
- 953 Research Triangle Park, NC 27709
- 954
- 955 ©Year, the GSK group of companies. All rights reserved.
- 956
- 957 PRM:XXPI

### **MEDICATION GUIDE**

### PROMACTA<sup>®</sup> (pro-MAC-ta) (eltrombopag) tablets

PROMACTA<sup>®</sup> (pro-MAC-ta) (eltrombopag) for oral suspension

Read this Medication Guide before you start taking PROMACTA and each time you get a refill. There may be new information. This Medication Guide does not take the place of talking with your healthcare provider about your medical condition or treatment.

### What is the most important information I should know about PROMACTA?

PROMACTA can cause serious side effects, including:

**Liver problems.** If you have chronic hepatitis C virus, and take PROMACTA with interferon and ribavirin treatment, PROMACTA may increase your risk of liver problems. Tell your healthcare provider right away if you have any of these signs and symptoms of liver problems:

- yellowing of the skin or the whites of the eyes (jaundice)
- unusual darkening of the urine

- right upper stomach area (abdomen) pain
- confusion

• unusual tiredness

• swelling of the stomach area (abdomen)

See "What are the possible side effects of PROMACTA?" for other side effects of PROMACTA.

### What is **PROMACTA**?

PROMACTA is a prescription medicine used to treat adults and children 1 year of age and older with low blood platelet counts due to chronic immune (idiopathic) thrombocytopenia (ITP), when other medicines to treat ITP or surgery to remove the spleen have not worked well enough.

PROMACTA is also used to treat patients with:

- low blood platelet counts due to chronic hepatitis C virus (HCV) infection before and during treatment with interferon.
- severe aplastic anemia (SAA) when other medicines to treat SAA have not worked well enough.
- PROMACTA is used to try to raise platelet counts in order to lower your risk for bleeding.

PROMACTA is not used to make platelet counts normal.

PROMACTA is for treatment of certain people with low platelet counts caused by chronic ITP, chronic HCV, or SAA, not low platelet counts caused by other conditions or diseases.

It is not known if PROMACTA is safe and effective when used with other antiviral medicines that are approved to treat chronic hepatitis C.

It is not known if PROMACTA is safe and effective in children with chronic hepatitis C or severe aplastic anemia or in children younger than 1 year with ITP.

### What should I tell my healthcare provider before taking PROMACTA?

### Before you take PROMACTA, tell your healthcare provider if you:

- have liver or kidney problems
- have or had a blood clot
- have a history of cataracts
- have had surgery to remove your spleen (splenectomy)
- have bleeding problems
- are Asian and you are of Chinese, Japanese, Taiwanese, or Korean ancestry. You may need a lower dose of PROMACTA.
- have any other medical conditions
- are pregnant or plan to become pregnant. It is not known if PROMACTA will harm an unborn baby.
- are breastfeeding or plan to breastfeed. It is not known if PROMACTA passes into your breast milk. You and your healthcare provider should decide whether you will take PROMACTA or breastfeed. You should not do both.

**Tell your healthcare provider about all the medicines you take**, including prescription and over-the-counter medicines, vitamins, and herbal supplements. PROMACTA may affect the way certain medicines work. Certain other medicines may affect the way PROMACTA works.

Especially tell your healthcare provider if you take:

- certain medicines used to treat high cholesterol, called "statins".
- a blood thinner medicine.

Certain medicines may keep PROMACTA from working correctly. Take PROMACTA at least 2 hours before or 4 hours after taking these products:

- antacid medicine used to treat stomach ulcers or heartburn
- multivitamins or products that contain iron, calcium, aluminum, magnesium, selenium, and zinc which may be found in mineral supplements

Ask your healthcare provider if you are not sure if your medicine is one that is listed above.

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

### How should I take PROMACTA?

- Take PROMACTA exactly as your healthcare provider tells you to take it. Your healthcare provider will prescribe the dose of PROMACTA tablets or PROMACTA oral suspension that is right for you.
- If your healthcare provider prescribes PROMACTA oral suspension, see "Instructions for Use" that comes with your medicine for instructions on how to prepare and take your dose.
- Do not stop taking PROMACTA without talking with your healthcare provider first. Do not change your dose or schedule for taking PROMACTA unless your healthcare provider tells you to change it.
- Take PROMACTA on an empty stomach, either 1 hour before or 2 hours after eating food.
- Take PROMACTA at least 2 hours before or 4 hours after eating dairy products and calcium-fortified juices.
- Take PROMACTA tablets whole. Do not crush PROMACTA tablets and mix with food or liquids. If you miss a dose of PROMACTA, wait and take your next scheduled dose. Do not take more than one dose of PROMACTA in one day.
- If you take too much PROMACTA, you may have a higher risk of serious side effects. Call your healthcare provider right away.
- Your healthcare provider will check your platelet count during your treatment with PROMACTA and change your dose of PROMACTA as needed.
- Tell your healthcare provider about any bruising or bleeding that happens while you take and after you stop taking PROMACTA.

### What should I avoid while taking PROMACTA?

Avoid situations and medicines that may increase your risk of bleeding.

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

### PROMACTA may cause serious side effects, including:

- See "What is the most important information I should know about PROMACTA?"
- Abnormal liver function tests. Your healthcare provider will order blood tests to check your liver before you start taking PROMACTA and during your treatment. In some cases treatment with PROMACTA may need to be stopped due to changes in your liver function tests.
- High platelet counts and higher risk for blood clots. Your risk of getting a blood clot is increased if your platelet count is too high during treatment with PROMACTA. Your risk of getting a blood clot may also be increased during treatment with PROMACTA if you have normal or low platelet counts. You may have severe problems or die from some forms of blood clots, such as clots that travel to the lungs or that cause heart attacks or strokes. Your healthcare provider will check your blood platelet counts, and change your dose or stop PROMACTA if your platelet counts get too high. Tell your healthcare provider right away if you have signs and symptoms of a blood clot in the leg, such as swelling, pain, or tenderness in your leg.

People with chronic liver disease may be at risk for a type of blood clot in the stomach area. Tell your healthcare provider right away if you have stomach area pain that may be a symptom of this type of blood clot.

• New or worsened cataracts (a clouding of the lens in the eye). New or worsened cataracts have happened in people taking PROMACTA. Your healthcare provider will check your eyes before and during your treatment with PROMACTA. Tell your healthcare provider about any changes in your eyesight while taking PROMACTA.

The most common side effects of PROMACTA in adults	when used to treat chronic ITP are:
<ul> <li>nausea</li> <li>diarrhea</li> <li>upper respiratory tract infection. Symptoms may include runny nose, stuffy nose, and sneezing</li> <li>vomiting</li> <li>muscle aches</li> <li>urinary tract infection. Symptoms may include frequent or urgent need to urinate, low fever in some people, pain or burning with urination.</li> </ul>	<ul> <li>pain or swelling (inflammation) in your throat or mouth (oropharyngeal pain and pharyngitis)</li> <li>abnormal liver function tests</li> <li>back pain</li> <li>"flu"-like symptoms (influenza) including fever, headache, tiredness, cough, sore throat, and body aches</li> <li>skin tingling, itching, or burning</li> <li>rash</li> </ul>
The most common side effects of PROMACTA in children	n 1 year and older when used to treat chronic ITP are:
<ul> <li>upper respiratory tract infection. Symptoms may include runny nose, stuffy nose, and sneezing.</li> <li>pain or swelling (inflammation) in your nose or throat (nasopharyngitis)</li> <li>cough</li> <li>diarrhea</li> <li>fever</li> </ul> The most common side effects when PROMACTA is used	<ul> <li>runny, stuffy nose (rhinitis)</li> <li>stomach (abdominal) pain</li> <li>pain or swelling (inflammation) in your throat or mouth (oropharyngeal pain)</li> <li>toothache</li> <li>rash</li> <li>abnormal liver function tests</li> <li>d in combination with other medicines to treat chronic</li> </ul>
HCV are:	
low red blood cell count (anemia)	feeling weak
<ul> <li>headache</li> </ul>	• itching
<ul> <li>nausea</li> </ul>	chills
• diarrhea	muscle aches
decreased appetite	hair loss
<ul> <li>"flu"-like symptoms (influenza) including fever, headache, tiredness, cough, sore throat, and body aches</li> </ul>	<ul> <li>swelling in your ankles, feet, and legs</li> </ul>
The most common side effects when PROMACTA is used	d to treat severe aplastic anemia are:
nausea	dizziness
feeling tired	<ul> <li>pain in the nose or throat</li> </ul>
• cough	abdominal pain
diarrhea	bruising
<ul> <li>neadache</li> <li>nain in arms logs hands or foot</li> </ul>	muscle spasms     abnormal liver function tests
<ul> <li>pair in arris, legs, narros, or reet</li> <li>shortness of breath</li> </ul>	ioint pain

fever ٠

- runny nose

Laboratory tests may show abnormal changes to the cells in your bone marrow.

Tell your healthcare provider if you have any side effect that bothers you or that does not go away. These are not all the possible side effects of PROMACTA. For more information, ask your healthcare provider or pharmacist.

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 PROMACTA tablets and oral suspension?

### **Tablets:**

- Store PROMACTA tablets at room temperature between 68°F to 77°F (20°C to 25°C). ٠
- Keep PROMACTA tightly closed in the bottle given to you.
- The PROMACTA bottle may contain a desiccant pack to help keep your medicine dry. Do not remove the desiccant • pack from the bottle.

### For oral suspension:

- Store PROMACTA for oral suspension at room temperature between 68°F to 77°F (20°C to 25°C). •
- After mixing, PROMACTA should be taken right away but may be stored for no more than 30 minutes between 68°F to • 77°F (20°C to 25°C). Throw away (discard) the mixture if not used within 30 minutes.

### Keep PROMACTA and all medicines out of the reach of children.

### General information about the safe and effective use of PROMACTA

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

This Medication Guide summarizes the most important information about PROMACTA. If you would like more information, talk with your healthcare provider. You can ask your healthcare provider or pharmacist for information about PROMACTA that is written for health professionals.

For more information about PROMACTA, go to www.PROMACTA.com or call 1-888-825-5249.

# What are the ingredients in PROMACTA?

Tablets:

Active ingredient: eltrombopag olamine. Inactive ingredients:

- Tablet Core: magnesium stearate, mannitol, microcrystalline cellulose, povidone, and sodium starch glycolate.
- Coating: hypromellose (12.5-mg, 25-mg, 50-mg, and 75-mg tablets) or polyvinyl alcohol and talc (100-mg tablet), polyethylene glycol 400, titanium dioxide, polysorbate 80 (12.5-mg tablet), and FD&C Yellow No. 6 aluminum lake (25-mg tablet), FD&C Blue No. 2 aluminum lake (50-mg tablet), Iron Oxide Red and Iron Oxide Black (75-mg tablet), or Iron Oxide Yellow and Iron Oxide Black (100-mg tablet).

### For oral suspension:

Active ingredient: eltrombopag olamine. Inactive ingredients: mannitol, sucralose, xanthan gum. PROMACTA is a registered trademark of the GSK group of companies. GlaxoSmithKline Research Triangle Park, NC 27709 ©Year, the GSK group of companies. All rights reserved. PRM:XMG



This Medication Guide has been approved by the U.S. Food and Drug Administration

Revised August 2015

### INSTRUCTIONS FOR USE PROMACTA<sup>®</sup> (pro-MAC-ta) (eltrombopag) for oral suspension

Read all the Instructions for Use and follow the steps below to mix and give a dose of PROMACTA for oral suspension.

### Important:

- Do not take PROMACTA for oral suspension or give it to someone else until you have been shown how to properly give PROMACTA for oral suspension. Your healthcare provider or nurse will show you how to prepare and give a dose of PROMACTA for oral suspension properly.
- **PROMACTA for oral suspension must be mixed with cool or cold water only.** Do not use hot water to prepare the oral suspension.
- Give the dose of suspension right away after mixing with water. If medicine is not given within 30 minutes, you will have to mix a new dose. Throw away (discard) the unused mixture into the trash. Do not pour it down the drain.
- Avoid letting the medicine touch your skin. If this happens, wash the affected area right away with soap and water. Call your doctor if you have a skin reaction or if you have any questions. If you spill any powder or liquid, follow the clean up instructions in **Step 12**.
- Contact your doctor or pharmacist if you have any questions about how to mix or give PROMACTA to the child or if you damage or lose any of the supplies in your kit.
- After you have used all 30 packets, throw all the remaining supplies (mixing bottle, lid with cap, and oral dosing syringe) away in the trash.

### Each PROMACTA for oral suspension kit contains the following supplies:



### You will need the following to give a single dose of PROMACTA for oral suspension.

### From the kit:

- prescribed number of packets
- 1 reusable mixing bottle with lid and cap. NOTE: Due to its small size, the cap may pose a danger of choking to small children.
- 1 reusable 20-mL oral dosing syringe

### Not included in the kit:

- 1 clean glass or cup filled with drinking water
- scissors to cut packet
- paper towels or disposable cloth
- gloves (optional)

How do I prepare a dose of PROMACTA for oral suspension?		
<b>Step 1.</b> Make sure that the mixing bottle, cap, lid and oral syringe are dry before use. Remove the lid from the mixing bottle.		
<ul> <li>Prepare a clean, flat work surface.</li> <li>Wash and dry your hands before preparing the medicine.</li> </ul>		
<ul> <li>Step 2. Fill the oral syringe with 20 mL of drinking water from the glass or cup.</li> <li>Start with the plunger pushed all the way into the syringe.</li> <li>Put the tip of the syringe all the way into the water and pull back on the plunger to the 20 mL mark on the barrel of the syringe.</li> </ul>	20 mL	
<b>Step 3.</b> Place the oral syringe into the open mixing bottle. Empty water into open mixing bottle by slowly pushing the plunger all the way into the oral syringe.		
<b>Step 4.</b> Take only the prescribed number of packets for one dose more than one packet to prepare the entire dose.	out of the kit. You may need to use	
<ul> <li>12.5-mg dose (1 packet) Note: See Step 9 for instructions</li> <li>25-mg dose (1 packet)</li> <li>50-mg dose (2 packets)</li> <li>75-mg dose (3 packets)</li> </ul>	s on how to give a 12.5-mg dose.	
<ul> <li>Step 5. Add the prescribed number of packets to the mixing bottle.</li> <li>Tap the top of each packet to make sure the contents fall to the bottom.</li> <li>Cut off the top of the packet with scissors and empty the entire contents of the packet into the mixing bottle.</li> <li>Make sure not to spill the powder outside the mixing bottle.</li> </ul>	Contraction of the second seco	
Step 6. Screw the lid tightly onto the bottle. Make sure the cap is pushed onto the lid.		
<ul> <li>Step 7. Gently and slowly shake the bottle back and forth for at least 20 seconds to mix the water with the powder.</li> <li>To prevent the mixture from foaming, do not shake the bottle hard.</li> </ul>		
How should I give a dose of PROMACTA for oral suspension?		
<b>Step 8.</b> Make sure the plunger is pushed all the way into the oral syringe. Pull cap off the mixing bottle lid and insert the syringe tip into the hole in the lid.		

Ste be	e <b>p 9</b> darl Tu	Transfer the mixture into the oral syringe. The liquid will brown in color. In the mixing bottle upside down along with the syringe.	
•	Pu	Il back the plunger:	
	0	to the 10 mL mark on the syringe for a <b>12.5-mg dose</b> only	XIII
		OR	13737
	0	until all the medicine is in the syringe (25-mg, 50-mg, or 75-mg dose).	A
Ste syr	e <b>p 1</b> inge	<b>0.</b> Return the bottle to the upright position and remove the from the bottle.	
Ste chi •	e <b>p 1</b> Id. Pla che Slo dos	<ol> <li>Giving a dose of PROMACTA for oral suspension to a accepted to the oral syringe into the inside of the child's eek.</li> <li>wyly push the plunger all the way down to give the entire se. Make sure the child has time to swallow the medicine.</li> </ol>	
Но	w s	hould I clean up?	
Ste clo •	e <b>p 1</b> th. To Th	2. Carefully clean up any spill of the powder or suspension variable avoid possibly staining your skin, consider using disposable row away (discard) used paper towel and gloves in the trash	with a damp paper towel or disposable gloves.
Ste • •	<b>p 1</b> Do Thi dra Re Rir ma Wa	3. Clean the mixing supplies. not reuse any of the mixture remaining in the bottle. row away (discard) any mixture remaining in the mixing bottl in. move the plunger from the oral syringe. use the mixing bottle, lid, syringe, and plunger under running by become stained from the medicine. This is normal. ash hands with soap and water.	e in the trash. Do not pour down the water and air dry. The mixing bottle

### Keep PROMACTA and all medicines out of the reach of children.

This Instructions for Use has been approved by the U.S. Food and Drug Administration.

PROMACTA is a registered trademark of the GSK group of companies.



GlaxoSmithKline Research Triangle Park, NC 27709

©Year, the GSK group of companies. All rights reserved. Issued: August 2015 PRM:XIFU