

**ANNEX I**

**SUMMARY OF PRODUCT CHARACTERISTICS**

▼ This medicinal product is subject to additional monitoring. This will allow quick identification of new safety information. Healthcare professionals are asked to report any suspected adverse reactions. See section 4.8 for how to report adverse reactions.

## **1. NAME OF THE MEDICINAL PRODUCT**

Hympavzi 150 mg solution for injection in pre-filled syringe  
Hympavzi 150 mg solution for injection in pre-filled pen

## **2. QUALITATIVE AND QUANTITATIVE COMPOSITION**

Hympavzi 150 mg solution for injection in pre-filled syringe

Each pre-filled syringe contains 150 mg marstacimab in 1 mL of solution.

Hympavzi 150 mg solution for injection in pre-filled pen

Each pre-filled pen contains 150 mg marstacimab in 1 mL of solution.

Marstacimab is a human monoclonal immunoglobulin G Type 1 (IgG1) antibody produced in Chinese hamster ovary (CHO) cells by recombinant DNA technology.

Excipients with known effect

Hympavzi contains 0.2 mg polysorbate 80 in each mL of solution.

For the full list of excipients, see section 6.1.

## **3. PHARMACEUTICAL FORM**

Solution for injection (injection).

Clear, colourless to light yellow solution with pH of 5.8.

## **4. CLINICAL PARTICULARS**

### **4.1 Therapeutic indications**

Hympavzi is indicated for routine prophylaxis of bleeding episodes in patients 12 years of age and older, weighing at least 35 kg, with:

- severe haemophilia A (congenital factor VIII deficiency, FVIII < 1%) without factor VIII inhibitors, or
- severe haemophilia B (congenital factor IX deficiency, FIX < 1%) without factor IX inhibitors.

### **4.2 Posology and method of administration**

Treatment should be initiated under the supervision of a healthcare professional experienced in the treatment of haemophilia. Treatment should be initiated in a non-bleeding state.

## Posology

The recommended dose for patients 12 years of age and older, weighing at least 35 kg, is an initial loading dose of 300 mg by subcutaneous injection followed thereafter by 150 mg by subcutaneous injection once weekly, at any time of day.

### *Duration of treatment*

Hympavzi is intended for long-term prophylactic treatment.

### *Dose adjustments during treatment*

A dose adjustment to 300 mg subcutaneous injection weekly can be considered in patients weighing  $\geq 50$  kg when control of bleeding events is judged to be inadequate by the healthcare professional. The maximum weekly dose of 300 mg should not be exceeded.

### *Guidance on treating breakthrough bleeds*

Additional doses of Hympavzi should not be used to treat breakthrough bleeding events. For guidance on treatment in the event of breakthrough bleeds, see section 4.4.

### *Management in patients with acute severe illness*

In acute severe illnesses with increased tissue factor expression, such as infection, sepsis, and crush injuries, potentiation of the inflammatory response via concomitant tissue factor pathway inhibitor (TFPI) inhibition could pose a risk of adverse reactions, especially thrombosis (see section 4.4).

Treatment of acute severe illness should be managed per local standard of care, and continued treatment with Hympavzi in this situation should be weighed against the potential risks involved. Additional monitoring for adverse reactions and the development of thromboembolism may be warranted in these patients when marstacimab is administered. Hympavzi should be temporarily interrupted if clinical symptoms, imaging, and/or laboratory findings consistent with thrombotic events occur, and managed as clinically indicated. Hympavzi therapy may be resumed once the patient has clinically recovered at the clinical judgement of the healthcare provider (see Missed dose section below).

### *Missed dose*

If a dose is missed, administer as soon as possible before the day of the next scheduled dose, and then resume usual weekly dosing schedule.

If the missed dose is more than 13 days after the last dose, then a loading dose of 300 mg by subcutaneous injection should be administered followed thereafter by a resumption of 150 mg by subcutaneous injection once weekly.

### *Switching to Hympavzi*

Switching from prophylactic factor replacement therapy to Hympavzi: Prior to initiation of Hympavzi, patients should discontinue treatment with clotting factor concentrates (factor VIII or factor IX concentrates). Patients can initiate Hympavzi at any time after discontinuing clotting factor concentrates.

Switching from non-factor-based haemophilia medicinal products to Hympavzi: No clinical study data are available to guide converting patients from non-factor-based medicinal products to marstacimab. Although a washout period has not been studied, one approach is to allow an adequate washout period (at least 5 half-lives) of the prior agent based on labelled half-life before initiating treatment with Hympavzi. Haemostatic support with clotting factor concentrates may be needed during the switch from other non-factor-based haemophilia medicinal products to Hympavzi.

## Special populations

### *Hepatic impairment*

No dose adjustments are recommended in patients with mild hepatic impairment (see section 5.2). Marstacimab has not been studied in patients with moderate or severe hepatic impairment.

### *Renal impairment*

No dose adjustments are recommended in patients with mild renal impairment (see section 5.2). Marstacimab has not been studied in patients with moderate or severe renal impairment.

### *Elderly*

No dose adjustments are recommended in patients over 65 years of age (see section 5.2).

## Paediatric population

Hympavzi should not be used in children less than 1 year of age because of potential safety issues. The safety and efficacy of marstacimab in paediatric patients < 12 years of age have not yet been established. The safety and efficacy of marstacimab in adolescents with a body weight < 35 kg have not been established. No data are available.

## Management in the perioperative setting

The safety and efficacy of marstacimab have not been formally evaluated in the surgical setting. Patients have had minor surgical procedures without discontinuing Hympavzi prophylaxis in clinical studies.

For major surgery, it is recommended to discontinue Hympavzi 6 to 12 days prior and initiate management per local standard of care with clotting factor concentrate and measures to manage the risk of venous thrombosis which can be elevated in the perioperative period. The product information for the clotting factor concentrate should be consulted for dose guidelines in patients with haemophilia undergoing major surgery. Resumption of Hympavzi therapy should take into account the overall clinical status of the patient, including the presence of post-surgical thromboembolic risk factors, use of other haemostatic products and other concomitant medicinal products (see Missed dose section above).

## Method of administration

Hympavzi is for subcutaneous use only.

Hympavzi is intended for use under the guidance of a healthcare professional. After proper training in subcutaneous injection technique, a patient or caregiver may inject with the medicinal product if a healthcare professional determines that it is appropriate.

Prior to subcutaneous administration, Hympavzi may be removed from the refrigerator and allowed to warm at room temperature in the carton for about 15 to 30 minutes away from direct sunlight (see sections 6.4 and 6.6). The medicinal product should not be warmed by using a heat source such as hot water or a microwave.

The recommended injection sites are the abdomen and thigh. Other locations are acceptable if required. Administration of Hympavzi in the upper arm (pre-filled syringe only) and buttocks (pre-filled pen only) should be performed by a caregiver or healthcare professional only. The medicinal product should not be administered into bony areas or areas where the skin is bruised, red, tender or hard, or areas where there are scars or stretch marks.

For the 300 mg loading dose, each of the two Hympavzi 150 mg injections should be administered at different injection sites.

It is recommended to rotate the injection site with each injection.

Hympavzi should not be injected into a vein or muscle.

During treatment with Hympavzi, other medicinal products for subcutaneous administration should, preferably, be injected at different anatomical sites.

For comprehensive instructions on the administration of the medicinal product, see section 6.6 and the 'Instructions for Use' provided at the end of the package leaflet.

### **4.3 Contraindications**

Hypersensitivity to the active substance or to any of the excipients listed in section 6.1.

### **4.4 Special warnings and precautions for use**

#### Traceability

In order to improve the traceability of biological medicinal products, the name and the batch number of the administered product should be clearly recorded.

#### Thromboembolic events

Removal of TFPI inhibition may increase a patient's coagulation potential and contribute to a patient's individual, multifactorial risk for thromboembolic events. The following patients may be at an increased risk of thromboembolic events with use of this medicinal product:

- patients with a history of coronary artery disease, venous or arterial thrombosis or ischaemic disease,
- patients currently experiencing an acute severe illness with increased tissue factor expression (such as serious infection, sepsis, trauma, crush injuries, cancer).

Marstacimab has not been studied in patients with a history of previous thromboembolic events (see section 5.1) and there is limited experience in patients with acute severe illness.

The use of other anti-tissue factor pathway inhibitor (anti-TFPI) products has been associated with the development of thromboembolic complications in patients exposed to additional haemostatic agents (i.e. bypassing agents) in close proximity. No cases of thromboembolic events were observed in haemophilia patients who had received marstacimab prophylaxis in the clinical studies. Factor VIII and factor IX products have been safely administered for the treatment of breakthrough bleeds in patients receiving marstacimab. If factor VIII or factor IX products are indicated in a patient receiving Hympavzi prophylaxis, the minimum effective dose of factor VIII or factor IX product according to the product label is recommended.

The benefit and risk of using Hympavzi in patients with a history of thromboembolic events or currently experiencing an acute severe illness should be considered. Patients at risk should be monitored for early signs of thrombosis, and prophylaxis measures against thromboembolism should be instituted according to current recommendations and standard of care. Hympavzi prophylaxis should be interrupted if diagnostic findings consistent with thromboembolism occur and manage as clinically indicated.

#### Guidance on treating breakthrough bleeds

Factor VIII and factor IX products can be administered for the treatment of breakthrough bleeds in patients receiving Hympavzi. Additional doses of Hympavzi should not be used to treat breakthrough bleeding events. Healthcare professionals should discuss with all patients and/or caregivers about the

dose and schedule of clotting factor concentrates to use, if required, while receiving Hympavzi prophylaxis, including using the lowest possible effective dose of clotting factor concentrate. Please refer to the product information for the clotting factor concentrate being used.

#### Hypersensitivity reactions

Cutaneous reactions of rash and pruritus that may reflect drug hypersensitivity have occurred in marstacimab-treated patients (see section 4.8). If Hympavzi-treated patients develop a severe hypersensitivity reaction, advise patients to discontinue Hympavzi and seek immediate emergency treatment.

#### Patient with factor inhibitor

In an ongoing clinical study outside the approved indication, in haemophilia patients with inhibitors treated with marstacimab, one (2.9%) patient with severe haemophilia B and a history of allergic reaction to exogenous factor IX experienced severe rash with onset at approximately 9 months. The patient required a prolonged course of oral corticosteroids for resolution, and treatment with marstacimab was discontinued.

#### Effects of marstacimab on coagulation tests

Marstacimab therapy does not produce clinically meaningful changes in standard measures of coagulation including activated Partial Thromboplastin Time (aPTT) and Prothrombin Time (PT).

#### Excipients

##### *Polysorbate content*

This medicinal product contains polysorbate 80. Polysorbate 80 may cause hypersensitivity reactions.

##### *Sodium content*

This medicinal product contains less than 1 mmol sodium (23 mg) per 1 mL, that is to say essentially 'sodium-free'.

## **4.5 Interaction with other medicinal products and other forms of interaction**

No clinical drug interaction studies with marstacimab have been conducted.

As a monoclonal antibody (mAb), marstacimab is expected to be cleared through catabolic pathways. Thus an impact on its clearance via an interaction with concomitant medicinal products cleared via non-catabolic pathways is unlikely. Indirect effect of a biologic such as marstacimab on the expression of cytochrome P450 enzymes is also not expected.

## **4.6 Fertility, pregnancy and lactation**

#### Women of childbearing potential

Women of childbearing potential receiving Hympavzi should use effective contraception during, and for at least 1 month after cessation of Hympavzi treatment.

#### Pregnancy

There are no clinical studies of marstacimab use in pregnant women. Animal reproduction studies have not been conducted with marstacimab. It is not known whether Hympavzi can cause foetal harm when administered to a pregnant woman or can affect reproduction capacity. Hympavzi should be used during pregnancy only if the potential benefit for the mother outweighs the risk to the foetus taking into account that, during pregnancy and after parturition, the risk for thrombosis is increased

and that several pregnancy complications are linked to an increased risk for disseminated intravascular coagulation (DIC).

### Breast-feeding

It is not known whether marstacimab is excreted in human milk. No studies have been conducted to assess the impact of marstacimab on milk production or its presence in breast milk. Human IgG is known to be excreted in breast milk during the first few days after birth, which is decreasing to low concentrations soon afterwards; consequently, a risk to the breast-fed infant cannot be excluded during this short period. Afterwards, marstacimab could be used during breast-feeding if clinically needed.

### Fertility

Animal studies do not indicate direct or indirect harmful effects with respect to fertility (see section 5.3). No fertility data are available in humans. Thus, the effect of marstacimab on male and female fertility is unknown.

## **4.7 Effects on ability to drive and use machines**

Hympavzi has no or negligible influence on the ability to drive and use machines.

## **4.8 Undesirable effects**

### Summary of the safety profile

The most frequently reported adverse reactions after treatment with marstacimab were injection site reactions (ISRs) (11.2%).

### Tabulated list of adverse reactions

Safety data in Table 1 are based on pooled data from the Phase 3 safety and efficacy study (BASIS) and its open-label extension (OLE) study (see section 5.1). The data from the pivotal Phase 3 study 12-month active treatment period reflects exposure of 116 male patients with haemophilia A or B without inhibitors to marstacimab administered once weekly. Ninety-seven (83.6%) patients were adults (18 years of age and older) and 19 (16.4%) were adolescents (12 years up to < 18 years). At the time of data cut-off, a total of 87 of the 116 patients completing the 12-month treatment period subsequently enrolled in the OLE study. The median duration of exposure was 518.5 days (range 28 to 847 days).

Table 1 summarises the adverse reactions reported in patients who received marstacimab prophylaxis. The adverse reactions listed in the table below are presented by system organ class (SOC) and frequency categories, defined using the following convention: very common ( $\geq 1/10$ ); common ( $\geq 1/100$  to  $< 1/10$ ), uncommon ( $\geq 1/1\ 000$  to  $< 1/100$ ), rare ( $\geq 1/10\ 000$  to  $< 1/1\ 000$ ), very rare ( $< 1/10\ 000$ ) or frequency not known (cannot be estimated from the available data). Within each frequency grouping, adverse reactions are presented in the order of decreasing seriousness.

**Table 1. Adverse reactions**

System organ class	Adverse reaction	Frequency
Nervous system disorders	Headache	Common
Vascular disorders	Hypertension	Common
Skin and subcutaneous tissue disorders	Rash Pruritus	Uncommon Common
General disorders and administrations site conditions	Injection site reactions <sup>a</sup>	Very common

a. see 'Description of selected adverse reactions'

## Description of selected adverse reactions

### *Injection site reactions*

In total, 11.2% of patients treated with marstacimab reported ISRs. The majority of ISRs observed in marstacimab clinical studies were transient and reported as mild to moderate in severity. No occurrences of injection site reaction led to a dose adjustment or drug discontinuation. ISRs include injection site bruising, injection site erythema, injection site haematoma, injection site induration, injection site oedema, injection site pain, injection site pruritus, and injection site swelling.

### *Rash*

In the non-inhibitor population, 0.9% of patients reported non-serious rash (Grade 1).

## Paediatric population

The paediatric population studied comprises a total of 19 adolescent patients (from 12 to < 18 years of age). The safety profile of marstacimab was overall consistent between adolescents and adults.

## Reporting of suspected adverse reactions

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions via the national reporting system listed in [Appendix V](#).

## **4.9 Overdose**

There is limited experience with overdose of marstacimab.

No serious adverse events occurred in a small number of adult patients weighing  $\geq 50$  kg who had up to 3 months of exposure to marstacimab at 450 mg administered subcutaneously weekly during early phase studies. However, this was a small group, and the effect of longer-term high exposures is unknown. Receiving higher doses than recommended may result in hypercoagulability.

Patients who receive an accidental overdose should immediately contact their healthcare provider and be monitored closely. In the event of overdose, it is recommended that the patient be monitored for any signs or symptoms of adverse reactions and/or hypercoagulability and appropriate symptomatic treatment be instituted immediately.

## Paediatric population

Doses in excess of 150 mg per week for adolescents aged 12 to 17 years weighing < 50 kg have not been studied. No case of overdose has been reported in the paediatric population. The principles described above apply to the management of overdose in the paediatric population.

## **5. PHARMACOLOGICAL PROPERTIES**

### **5.1 Pharmacodynamic properties**

Pharmacotherapeutic group: antihemorrhagics, other systemic hemostatics, ATC code: B02BX11

## Mechanism of action

Marstacimab is a human monoclonal IgG1 antibody directed against the Kunitz domain 2 (K2) of tissue factor pathway inhibitor (TFPI), the primary inhibitor of the extrinsic coagulation cascade. TFPI initially binds to and inhibits the factor Xa active site via its second Kunitz inhibitor domain (K2). The action of marstacimab to neutralise the inhibitory activity of TFPI may serve to enhance the extrinsic



pathway and bypass deficiencies in the intrinsic pathway of coagulation by increasing free factor Xa available to increase thrombin generation and promote haemostasis.

### Pharmacodynamic effects

Consistent with its anti-TFPI mechanism, marstacimab administration to haemophilia patients causes an increase in total TFPI and downstream biomarkers of thrombin generation such as prothrombin fragments 1+2, peak thrombin, and D-Dimer. These changes were reversible after treatment discontinuation. Sporadic or transient increases in D-Dimer and prothrombin fragments 1+2 above physiological values were reported in the Phase 3 study with no associated safety concerns.

### Clinical efficacy and safety

*Clinical studies in adult and adolescent patients with haemophilia A without FVIII inhibitors or haemophilia B without FIX inhibitors*

*Patients (aged > 12 years old and ≥ 35 kg) with haemophilia A without inhibitors and haemophilia B without inhibitors (Study B7841005)*

The pivotal Phase 3 study was a one-way, cross-over, open-label, multi-centre study in 116 adult and adolescent males (aged 12 years and older and ≥ 35 kg) with severe haemophilia A without FVIII inhibitors or severe haemophilia B without FIX inhibitors who previously received “on-demand” (N = 33) or prophylactic (N = 83) treatment with FVIII or FIX. Patients with previous or current treatment for or history of coronary artery disease, venous or arterial thrombosis or ischaemic disease were excluded from the study.

The study population was characterised by a severe bleeding phenotype. The mean annualised bleeding rates (ABRs) were 38.00 and 7.85 in a 6-month Observational Phase for the on-demand and prophylaxis cohorts, respectively, prior to crossing over to weekly marstacimab prophylaxis. All (100%) patients in the on-demand cohort had one or more target joints at study entry and 36% had 3 or more target joints at study entry. In the routine prophylaxis cohort, 56.6% of the patients had one or more target joints at study entry and 15.7% had 3 or more target joints at study entry.

After the 6-month Observational Phase in which patients received either on-demand or routine prophylactic factor-based replacement therapy, patients received an initial 300 mg loading dose of marstacimab followed by maintenance doses of 150 mg of marstacimab once weekly for 12 months. Dose escalation to 300 mg of marstacimab once weekly was allowed after 6 months for patients weighing ≥ 50 kg experiencing 2 or more breakthrough bleeds. Fourteen (12.1%) out of 116 patients who received marstacimab for at least 6 months underwent dose escalation of their maintenance dose.

The mean age across the treatment groups was 32.4 years (min 13, max 66); 16.4% of patients were 12 to < 18 years, and 83.6% were ≥ 18 years, 100% were male. In this study 48.3% of patients were White, 50.0% were Asian, 0.9% were Black or African American, and 0.9% race information missing; 10.3% of patients identified as Hispanic or Latino. All patients were non-inhibitors (78.4% haemophilia A, 21.6% haemophilia B).

The primary efficacy objective of the study was to compare marstacimab prophylaxis during the Active Treatment Phase versus routine prophylactic factor-based therapy in the Observational Phase as measured by the ABR of treated bleeds. Other key efficacy objectives of the study included evaluation of marstacimab prophylaxis in comparison with routine prophylactic factor-based therapy as measured by the incidences of spontaneous bleeds, joint bleeds, target joint bleeds and total bleeds, as well as assessing patients’ health-related quality of life (HRQoL).

Table 2 shows the efficacy results of marstacimab prophylaxis compared with routine prophylactic factor-based therapy. Marstacimab showed non-inferiority and statistical superiority over routine prophylactic factor-based therapy as measured by ABR of treated bleeds.

**Table 2. Comparison of ABR with Hympavzi prophylaxis versus previous routine factor-based prophylaxis in patients  $\geq 12$  years of age without factor VIII or factor IX inhibitors**

Endpoints in the order of testing hierarchy	Routine factor-based prophylaxis during 6-month OP (N = 83)	Hympavzi prophylaxis during 12-month ATP (N = 83)
Treated bleeds (Primary)		
ABR, model-based (95% CI)	7.85 (5.09, 10.61)	5.08 (3.40, 6.77)
Difference vs. RP (95% CI)	-2.77 (-5.37, -0.16) p-value = 0.0376*	
Participants with 0 bleeds, n (%)	33 (39.8)	29 (34.9)
Spontaneous bleeds, treated		
ABR, model-based (95% CI)	5.86 (3.54, 8.19)	3.78 (2.25, 5.31)
Difference vs. RP (95% CI)	-2.09 (-4.23, 0.06) Non-inferiority*	
Joint bleeds, treated		
ABR, model-based (95% CI)	5.66 (3.33, 7.98)	4.13 (2.59, 5.67)
Difference vs. RP (95% CI)	-1.53 (-3.70, 0.64) Non-inferiority*	
Total bleeds, treated and untreated		
ABR, model-based (95% CI)	8.84 (5.97, 11.72)	5.97 (4.13, 7.81)
Difference vs. RP (95% CI)	-2.87 (-5.61, -0.12) Non-inferiority*	
Target joint bleeds, treated		
ABR, model-based (95% CI)	3.36 (1.59, 5.14)	2.51 (1.25, 3.76)
Difference vs. RP (95% CI)	-0.86 (-2.41, 0.70) Non-inferiority*	

\*Criterion Met (Non-inferiority/p-value if met superiority)

- The protocol specified non-inferiority criterion (upper bound of the 95% CI for the difference) was 2.5 for treated bleeds, spontaneous bleeds, joint bleeds; 1.2 for target joint bleeds; 2.9 for total bleeds. If the non-inferiority criterion was met, superiority was subsequently tested and established if the confidence interval excluded zero.
- p-value is for the superiority testing.
- The estimated mean, difference, and confidence intervals (CIs) for the ABR come from negative binomial regression model.
- Bleed definitions adapted based on International Society on Thrombosis and Haemostasis (ISTH) criteria.
- Treated bleeds = bleeds treated with FVIII or FIX
- Total bleeds = bleeds treated and not treated with FVIII or FIX
- ABR = Annualised Bleeding Rate; CI = Confidence Interval; OP = Observational Phase; ATP = Active Treatment Phase; RP = Routine Prophylaxis

#### Study B7841007 interim analysis

In the OLE of the pivotal Phase 3 study, 87 patients received marstacimab at the doses established during participation in the B7841005 study (i.e. 150 mg or 300 mg subcutaneously once weekly) for up to an additional 16 months (mean 7 months) where marstacimab was shown to maintain long-term (> 12 months) efficacy with no new safety signals identified.

Descriptive analyses were conducted to assess marstacimab prophylaxis over time. The model-based mean and other descriptive summaries for the ABR of treated bleeds are shown in Table 3.

**Table 3. ABR with Hympavzi prophylaxis over time in patients  $\geq 12$  years of age without factor VIII or factor IX inhibitors**

Endpoint	Time interval		
	First 6 months of ATP (N = 116)	Second 6 months of ATP (N = 112)	B7841007* (N = 87)
<b>Treated Bleeds</b>			
Mean ABR (95% CI)	4.95 (3.67, 6.68)	3.25 (2.38, 4.42)	2.79 (1.90, 4.09)
Median ABR (IQR)	2.00 (0.00, 5.99)	1.91 (0.00, 4.09)	0.00 (0.00, 4.10)

\*Patients received marstacimab for up to an additional 16 months (mean 7 months) during B7841007.

- The estimated mean and confidence intervals (CIs) for the ABR come from negative binomial regression model.
- The median and the interquartile range (IQR), 25<sup>th</sup> percentile to 75<sup>th</sup> percentile, for the ABR comes from the descriptive summary.
- ABR = Annualised Bleeding Rate; CI = Confidence Interval; IQR = Interquartile Range; ATP = Active Treatment Phase (B7841005); N = number of patients who contributed data for analyses at each time interval

### Immunogenicity

During the 12-month treatment period in the pivotal Phase 3 Study B7841005, 23 of the 116 (19.8%) ADA-evaluable marstacimab-treated patients developed ADAs. ADAs were transient in 61% (14/23) and persistent in 39% (9/23) of the ADA-positive patients, indicative of a transient ADA profile in the majority of the patients. ADA titres resolved in 22/23 (95.7%) patients by the end of the study. Neutralising antibodies (NABs) developed in 6/116 (5.2%) ADA-evaluable marstacimab-treated patients during the study. The NABs were transient in all patients and no patients were NAB positive at the end of the study. Although slightly lower mean marstacimab concentrations (approximately 24%-32% lower) were reported in ADA-positive patients compared to ADA-negative patients, concentrations largely overlapped between these 2 groups and there was no identified clinically significant effect of ADAs, including NABs, on safety or efficacy of marstacimab over the treatment duration of 12 months. Overall, the safety profile of marstacimab was similar between those patients with ADAs (including NABs) and those without.

In the Phase 3 OLE study, only one of the 44 ADA-evaluable patients continuing to receive marstacimab for at least 6 months was persistently positive for ADAs.

### Paediatric population

The European Medicines Agency has deferred the obligation to submit the results of studies with Hympavzi in one or more subsets of the paediatric population in the treatment of congenital haemophilia A and congenital haemophilia B.

## **5.2 Pharmacokinetic properties**

The pharmacokinetics of marstacimab were determined via non-compartmental analysis in healthy participants and haemophilia A and B patients as well as using a population pharmacokinetic analysis on a database composed of 213 participants (150 haemophilia patients and 63 healthy participants) who received once weekly subcutaneous (30 mg to 450 mg) or intravenous (150 and 440 mg) doses of marstacimab.

Marstacimab exhibited non-linear pharmacokinetics with systemic exposure to marstacimab, as measured by AUC and  $C_{max}$ , increasing in a greater than dose-proportional manner. This non-linear pharmacokinetic behaviour is caused by target-mediated drug disposition (TMDD) and concentration dependent non-linear elimination of marstacimab which occurs when marstacimab binds to endothelial TFPI.

Mean steady-state accumulation ratio for marstacimab was approximately 3 to 4, relative to the first dose exposure following weekly subcutaneous dosing of 150 mg and 300 mg. Steady-state concentrations of marstacimab are expected to be achieved by approximately 60 days, i.e. by the 8<sup>th</sup> or 9<sup>th</sup> subcutaneous dose when administered once weekly. For marstacimab 150 mg subcutaneous once weekly, population estimates of mean  $C_{max,ss}$ ,  $C_{min,ss}$ , and  $C_{avg,ss}$  for adults and adolescents are shown in Table 4.

**Table 4. Steady-state marstacimab plasma concentrations following once-weekly subcutaneous administration of 150 mg (with a loading dose of 300 mg subcutaneous)**

Parameter	Adults	Adolescents
$C_{min,ss}$ (ng/mL)	13 700 (90.4%)	27 300 (53.2%)
$C_{max,ss}$ (ng/mL)	17 900 (77.5%)	34 700 (48.5%)
$C_{avg,ss}$ (ng/mL)	16 500 (81.2%)	32 100 (49.5%)

- Data are presented as arithmetic mean (%CV).
- $C_{min,ss}$  = minimum plasma concentration at steady state;  $C_{max,ss}$  = maximum plasma concentration at steady state;  $C_{avg,ss}$  = average plasma concentration at steady state

### Absorption

Following multiple subcutaneous administrations of marstacimab to haemophilia patients, median  $T_{max}$  ranged from 23 to 59 hours. Bioavailability of marstacimab following subcutaneous administration was estimated to be about 71% by population pharmacokinetic modeling. No relevant differences were seen in marstacimab bioavailability between arm, thigh and abdomen.

### Distribution

Marstacimab steady-state volume of distribution in haemophilia patients was 8.6 L based on a population pharmacokinetic analysis. This limited extravascular distribution suggests that marstacimab is restricted to the intravascular space.

### Biotransformation

Metabolism studies were not conducted with marstacimab. Similar to other therapeutic proteins with molecular weights above the glomerular filtration cut-off, marstacimab is expected to undergo proteolytic catabolism and receptor-mediated clearance. In addition, based on the TMDD, marstacimab is expected to be also cleared by target-mediated clearance as formation of marstacimab/TFPI complex.

### Elimination

Excretion studies were not conducted with marstacimab. Based on the molecular weight, marstacimab is expected to undergo catabolic degradation and is not expected to be renally cleared. Marstacimab is cleared via linear and non-linear mechanisms. Following multiple subcutaneous doses and based on a population PK analysis, marstacimab linear clearance was approximately 0.019 L/hr. Mean effective steady-state half-life of marstacimab was estimated to be approximately 16 to 18 days for both adults and adolescents and across dose groups.

### Special populations

#### *Body weight, age group, race, and haemophilia type*

Although weight was an important covariate to describe the pharmacokinetics of marstacimab, no alteration in dosing is required based on weight in patients weighing  $\geq 35$  kg. Marstacimab clearance (CL) was 29% lower in adolescents (12 to  $< 18$  years of age) compared to adults (18 years and older). After adjusting for weight, CL (L/hr/kg) in adolescents was estimated to be approximately 3% lower compared to that in adults, indicating that weight accounts for most of the differences in CL. This difference in PK did not translate to a clinically relevant difference in levels of the downstream pharmacodynamic marker peak thrombin between the 2 groups.

The impact of haemophilia type on the pharmacokinetics of marstacimab was not found to be clinically relevant in the patient population.

Race (Asian vs. non-Asian) was not identified as a covariate influencing marstacimab pharmacokinetics. Marstacimab weight-adjusted clearance was 32% higher in Asian patients as compared to non-Asian patients. This difference is not considered clinically relevant. There are insufficient data to evaluate potential differences in the exposure of marstacimab in other races or ethnicity.

Clinical studies of marstacimab did not include a sufficient number of patients aged 65 years and older to determine whether there are differences in exposure compared with younger patients.

#### *Renal impairment*

Renal clearance is not considered important for elimination of mAbs due to their large size and inefficient filtration through the glomerulus. Clinical studies have not been conducted to evaluate the effect of renal impairment on the PK of marstacimab.

All patients with haemophilia A and B in the population pharmacokinetic analysis had normal renal function ( $N = 129$ ;  $eGFR \geq 90 \text{ mL/min/1.73 m}^2$ ) or mild renal impairment ( $N = 21$ ;  $eGFR$  of 60 to  $89 \text{ mL/min/1.73 m}^2$ ). Mild renal impairment did not affect the pharmacokinetics of marstacimab. There are no data available on the use of marstacimab in patients with moderate or severe renal impairment.

Marstacimab is a monoclonal antibody and is cleared via catabolism rather than renal excretion and a change in dose is not expected to be required for patients with renal impairment.

#### *Hepatic impairment*

Clinical studies have not been conducted to evaluate the effect of hepatic impairment on the PK of marstacimab, as it is generally not considered clinically relevant for mAbs.

All patients with haemophilia A and B in the clinical studies had normal hepatic function ( $N = 135$ ; total bilirubin and  $AST \leq ULN$ ) or mild hepatic impairment ( $N = 15$ ; total bilirubin  $> 1\times$  to  $\leq 1.5\times ULN$ ). Mild hepatic impairment did not affect the pharmacokinetics of marstacimab. No data are available on the use of marstacimab in patients with moderate or severe hepatic impairment.

Marstacimab is a monoclonal antibody and is cleared via catabolism rather than hepatic metabolism and a change in dose is not expected to be required for patients with hepatic impairment.

### **5.3 Preclinical safety data**

Nonclinical data reveal no special hazard for humans based on repeat-dose toxicity, including safety pharmacology endpoints, and local tolerance. Reversible mixed cell infiltration, haemorrhage, and necrosis were observed at the injection sites in rats following subcutaneous injection. No studies have been conducted to assess the potential for carcinogenicity, mutagenicity, or effects on embryo-foetal development.

#### Impairment of fertility

Marstacimab did not affect fertility or early embryonic development when administered as a repeat dose to male rats at doses up to  $1\,000 \text{ mg/kg/dose}$  and an exposure margin of  $212\times$  the AUC exposure at a clinical dose of  $300 \text{ mg subcutaneous weekly}$ .

## **6. PHARMACEUTICAL PARTICULARS**

### **6.1 List of excipients**

Disodium edetate  
L-Histidine  
L-Histidine monohydrochloride  
Polysorbate 80 (E 433)  
Sucrose  
Water for injections

### **6.2 Incompatibilities**

In the absence of compatibility studies, this medicinal product must not be mixed with other medicinal products.

### **6.3 Shelf life**

3 years.

### **6.4 Special precautions for storage**

Store in a refrigerator (2 °C - 8 °C).

Do not freeze.

Keep the pre-filled syringe or pre-filled pen in its original carton in order to protect from light.

The medicinal product may be removed from refrigerated storage and stored in its original carton for one single period of maximum 7 days at room temperature (up to 30 °C). The medicinal product must not be returned to refrigerated storage. Prior to the end of this period of room temperature storage, the medicinal product must be used or discarded.

### **6.5 Nature and contents of container**

#### Hympavzi 150 mg solution for injection in pre-filled syringe

Each carton contains one single-dose pre-filled syringe (Type I glass) with a plunger stopper (chlorobutyl elastomer) and a stainless steel 27 gauge, ½ inch staked needle with a needle shield (thermoplastic elastomer).

Each pre-filled syringe contains 1 mL solution for injection.

#### Hympavzi 150 mg solution for injection in pre-filled pen

Each carton contains one single-dose pre-filled pen.

The syringe inside the pen is made from Type I glass with a plunger stopper (chlorobutyl elastomer) and a stainless steel 27 gauge, ½ inch staked needle with a needle shield (thermoplastic elastomer).

Each pre-filled pen contains 1 mL solution for injection.

### **6.6 Special precautions for disposal and other handling**

This medicinal product is for single use only.

Do not shake.

For a more comfortable injection, allow the medicinal product to warm up to room temperature in the carton protected from direct sunlight for about 15 to 30 minutes.

Inspect the solution visually prior to use. Hympavzi is a clear and colourless to light yellow solution. Do not use if the medicinal product is cloudy, dark yellow, or contains flakes or particles.

Comprehensive instructions for the preparation and administration of the medicinal product are provided in the package leaflet and 'Instructions for Use'.

Hympavzi does not contain preservatives; therefore, unused portions should be discarded.

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

## **7. MARKETING AUTHORISATION HOLDER**

Pfizer Europe MA EEIG  
Boulevard de la Plaine 17  
1050 Bruxelles  
Belgium

## **8. MARKETING AUTHORISATION NUMBER(S)**

EU/1/24/1874/001  
EU/1/24/1874/002

## **9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION**

Date of first authorisation: 18 November 2024

## **10. DATE OF REVISION OF THE TEXT**

Detailed information on this medicinal product is available on the website of the European Medicines Agency <https://www.ema.europa.eu>.

## **ANNEX II**

- A. MANUFACTURER OF THE BIOLOGICAL ACTIVE  
SUBSTANCE AND MANUFACTURER RESPONSIBLE FOR  
BATCH RELEASE**
- B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY  
AND USE**
- C. OTHER CONDITIONS AND REQUIREMENTS OF THE  
MARKETING AUTHORISATION**
- D. CONDITIONS OR RESTRICTIONS WITH REGARD TO  
THE SAFE AND EFFECTIVE USE OF THE MEDICINAL  
PRODUCT**



**A. MANUFACTURER OF THE BIOLOGICAL ACTIVE SUBSTANCE AND  
MANUFACTURER RESPONSIBLE FOR BATCH RELEASE**

Name and address of the manufacturer of the biological active substance

Wyeth BioPharma  
Division of Wyeth Pharmaceuticals LLC  
One Burtt Road  
Andover, MA 01810  
USA

Name and address of the manufacturer responsible for batch release

Pfizer Manufacturing Belgium NV  
Rijksweg 12  
2870 Puurs-Sint-Amands  
Belgium

**B. CONDITIONS OR RESTRICTIONS REGARDING SUPPLY AND USE**

Medicinal product subject to restricted medical prescription (see Annex I: Summary of Product Characteristics, section 4.2).

**C. OTHER CONDITIONS AND REQUIREMENTS OF THE MARKETING  
AUTHORISATION**

- **Periodic safety update reports (PSURs)**

The requirements for submission of PSURs for this medicinal product are set out in the list of Union reference dates (EURD list) provided for under Article 107c(7) of Directive 2001/83/EC and any subsequent updates published on the European medicines web-portal.

The marketing authorisation holder (MAH) shall submit the first PSUR for this product within 6 months following authorisation.

**D. CONDITIONS OR RESTRICTIONS WITH REGARD TO THE SAFE AND  
EFFECTIVE USE OF THE MEDICINAL PRODUCT**

- **Risk management plan (RMP)**

The marketing authorisation holder (MAH) shall perform the required pharmacovigilance activities and interventions detailed in the agreed RMP presented in Module 1.8.2 of the marketing authorisation and any agreed subsequent updates of the RMP.

An updated RMP should be submitted:

- At the request of the European Medicines Agency;
- Whenever the risk management system is modified, especially as the result of new information being received that may lead to a significant change to the benefit/risk profile or as the result of an important (pharmacovigilance or risk minimisation) milestone being reached.

- **Obligation to conduct post-authorisation measures**

The MAH shall complete, within the stated timeframe, the below measures:

Description	Due date
A Post-Authorisation Safety Study to Evaluate the Safety of Marstacimab among Patients with Severe Haemophilia A or B using Real-World Data in Haemophilia Registers	

**ANNEX III**  
**LABELLING AND PACKAGE LEAFLET**

## **A. LABELLING**

**PARTICULARS TO APPEAR ON THE OUTER PACKAGING****CARTON****1. NAME OF THE MEDICINAL PRODUCT**

Hympavzi 150 mg solution for injection in pre-filled syringe  
marstacimab

**2. STATEMENT OF ACTIVE SUBSTANCE(S)**

One pre-filled syringe contains 150 mg marstacimab in 1 mL solution.

**3. LIST OF EXCIPIENTS**

Disodium edetate, L-Histidine, L-Histidine monohydrochloride, Polysorbate 80, Sucrose, Water for injections

**4. PHARMACEUTICAL FORM AND CONTENTS**

Solution for injection  
1 pre-filled syringe  
1 mL

**5. METHOD AND ROUTE(S) OF ADMINISTRATION**

For subcutaneous use.  
Do not shake.  
Read the package leaflet before use.

Lift here to open.

**6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN**

Keep out of the sight and reach of children.

**7. OTHER SPECIAL WARNING(S), IF NECESSARY****8. EXPIRY DATE**

EXP

**9. SPECIAL STORAGE CONDITIONS**

Store in a refrigerator.

Do not freeze.  
Store in the original carton in order to protect from light.

<b>10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE</b>
--

<b>11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER</b>
---

Pfizer Europe MA EEIG  
Boulevard de la Plaine 17  
1050 Bruxelles  
Belgium

<b>12. MARKETING AUTHORISATION NUMBER(S)</b>
--

EU/1/24/1874/001

<b>13. BATCH NUMBER</b>
-------------------------

Lot

<b>14. GENERAL CLASSIFICATION FOR SUPPLY</b>
--

<b>15. INSTRUCTIONS ON USE</b>
--------------------------------

<b>16. INFORMATION IN BRAILLE</b>
-----------------------------------

Hympavzi 150 mg

<b>17. UNIQUE IDENTIFIER – 2D BARCODE</b>
---

2D barcode carrying the unique identifier included.

<b>18. UNIQUE IDENTIFIER - HUMAN READABLE DATA</b>
--

PC  
SN  
NN

<b>MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS</b> <b>PRE-FILLED SYRINGE LABEL</b>
--

<b>1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION</b>
--

Hympavzi 150 mg solution for injection  
marstacimab  
SC

<b>2. METHOD OF ADMINISTRATION</b>
------------------------------------

<b>3. EXPIRY DATE</b>
-----------------------

EXP

<b>4. BATCH NUMBER</b>
------------------------

Lot

<b>5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT</b>
--

1 mL

<b>6. OTHER</b>
-----------------

Store in a refrigerator.

**PARTICULARS TO APPEAR ON THE OUTER PACKAGING****CARTON****1. NAME OF THE MEDICINAL PRODUCT**

Hympavzi 150 mg solution for injection in pre-filled pen  
marstacimab

**2. STATEMENT OF ACTIVE SUBSTANCE(S)**

One pre-filled pen contains 150 mg marstacimab in 1 mL solution.

**3. LIST OF EXCIPIENTS**

Disodium edetate, L-Histidine, L-Histidine monohydrochloride, Polysorbate 80, Sucrose, Water for injections

**4. PHARMACEUTICAL FORM AND CONTENTS**

Solution for injection

1 pre-filled pen

1 mL

**5. METHOD AND ROUTE(S) OF ADMINISTRATION**

For subcutaneous use.

Do not shake.

Read the package leaflet before use.

Lift here to open.

**6. SPECIAL WARNING THAT THE MEDICINAL PRODUCT MUST BE STORED OUT OF THE SIGHT AND REACH OF CHILDREN**

Keep out of the sight and reach of children.

**7. OTHER SPECIAL WARNING(S), IF NECESSARY****8. EXPIRY DATE**

EXP

**9. SPECIAL STORAGE CONDITIONS**

Store in a refrigerator.



Do not freeze.  
Store in the original carton in order to protect from light.

<b>10. SPECIAL PRECAUTIONS FOR DISPOSAL OF UNUSED MEDICINAL PRODUCTS OR WASTE MATERIALS DERIVED FROM SUCH MEDICINAL PRODUCTS, IF APPROPRIATE</b>
--

<b>11. NAME AND ADDRESS OF THE MARKETING AUTHORISATION HOLDER</b>
---

Pfizer Europe MA EEIG  
Boulevard de la Plaine 17  
1050 Bruxelles  
Belgium

<b>12. MARKETING AUTHORISATION NUMBER(S)</b>
--

EU/1/24/1874/002

<b>13. BATCH NUMBER</b>
-------------------------

Lot

<b>14. GENERAL CLASSIFICATION FOR SUPPLY</b>
--

<b>15. INSTRUCTIONS ON USE</b>
--------------------------------

<b>16. INFORMATION IN BRAILLE</b>
-----------------------------------

Hympavzi 150 mg

<b>17. UNIQUE IDENTIFIER – 2D BARCODE</b>
---

2D barcode carrying the unique identifier included.

<b>18. UNIQUE IDENTIFIER - HUMAN READABLE DATA</b>
--

PC  
SN  
NN

<b>MINIMUM PARTICULARS TO APPEAR ON SMALL IMMEDIATE PACKAGING UNITS</b> <b>PRE-FILLED PEN LABEL</b>
--

<b>1. NAME OF THE MEDICINAL PRODUCT AND ROUTE(S) OF ADMINISTRATION</b>
--

Hympavzi 150 mg solution for injection  
marstacimab  
Subcutaneous use

<b>2. METHOD OF ADMINISTRATION</b>
------------------------------------

<b>3. EXPIRY DATE</b>
-----------------------

EXP

<b>4. BATCH NUMBER</b>
------------------------

Lot

<b>5. CONTENTS BY WEIGHT, BY VOLUME OR BY UNIT</b>
--

1 mL

<b>6. OTHER</b>
-----------------

Store in a refrigerator.

## **B. PACKAGE LEAFLET**

## **Package leaflet: Information for the patient**

### **Hympavzi 150 mg solution for injection in pre-filled syringe** marstacimab

▼ This medicine is subject to additional monitoring. This will allow quick identification of new safety information. You can help by reporting any side effects you may get. See the end of section 4 for how to report side effects.

**Read all of this leaflet carefully before you start using this medicine because it contains important information for you.**

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you or the child in your care only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

#### **What is in this leaflet**

1. What Hympavzi is and what it is used for
2. What you need to know before you use Hympavzi
3. How to use Hympavzi
4. Possible side effects
5. How to store Hympavzi
6. Contents of the pack and other information

#### **1. What Hympavzi is and what it is used for**

Hympavzi contains the active substance marstacimab. Marstacimab is a monoclonal antibody, a type of protein designed to recognise and attach to a specific target in the body called tissue factor pathway inhibitor (TFPI).

Hympavzi is a medicine used to prevent or reduce bleeding in patients 12 years of age and older, weighing at least 35 kg, with:

- severe haemophilia A (congenital factor VIII deficiency, when the factor VIII blood level is less than 1%) who have not developed factor VIII inhibitors, or
- severe haemophilia B (congenital factor IX deficiency, when the factor IX blood level is less than 1%) who have not developed factor IX inhibitors.

Haemophilia A is an inherited bleeding disorder caused by a lack of factor VIII. Haemophilia B is an inherited bleeding disorder caused by lack of factor IX. Factor VIII and factor IX are proteins required for blood to clot and stop any bleeding. Some patients with haemophilia can develop factor VIII or factor IX inhibitors (antibodies in the blood that act against replacement factor VIII or factor IX medicines and prevent them from working properly).

The active substance in Hympavzi, marstacimab, recognises and attaches to TFPI, a protein that prevents blood from clotting too much. By attaching to TFPI, marstacimab decreases how well it works, which promotes the formation of thrombin (a protein that plays a crucial role in blood clotting when there is an injury or damage to the body). This helps to increase clotting and stop bleeding in patients with haemophilia.

## 2. What you need to know before you use Hympavzi

### Do not use Hympavzi

- if you are allergic to marstacimab or any of the other ingredients of this medicine (listed in section 6). If you are not sure if you are allergic, talk to your doctor, pharmacist or nurse before using Hympavzi.

### Warnings and precautions

Talk to your doctor before using Hympavzi.

**Before you start using Hympavzi, it is very important to talk to your doctor about using other factor VIII and factor IX products** (products that help blood clot but work in a different way from Hympavzi) while using Hympavzi. You may need to use other factor VIII or factor IX products to treat episodes of breakthrough bleeding while using Hympavzi. Carefully follow your healthcare provider's instructions regarding when and how to use these factor VIII or factor IX products while using Hympavzi.

### Blood clots (thromboembolic events)

Hympavzi increases how easily your blood clots. Similar medicines to Hympavzi have been known to cause blood clots in the blood vessels (so-called thromboembolic events). Blood clots may be life-threatening. Tell your doctor if you have a history of blood clots or if you have a condition which increases your risk of blood clots. This includes if you have:

- a history of coronary artery disease (heart disease caused by narrowing or blockage of blood vessels supplying the heart muscle)
- a history of ischaemic disease (reduced blood flow due to narrowed or blocked blood vessels)
- a history of blood clots in veins or arteries
- currently have serious infections
- currently have sepsis (blood poisoning)
- currently have trauma or crush injuries
- currently have cancer

**Stop using Hympavzi, and talk to a doctor immediately** if you notice any symptoms of a possible blood clot including the following side effects:

- |  |                         |
|--|-------------------------|
| • swelling or pain in arms or legs               | • feeling faint         |
| • redness or discolouration in your arms or legs | • headache              |
| • shortness of breath                            | • numbness in your face |
| • pain in chest or upper back                    | • eye pain or swelling  |
| • fast heart rate                                | • trouble seeing        |
| • coughing up blood                              |                         |

### Allergic reactions

Symptoms of allergic reaction have been seen in people using Hympavzi. Stop using Hympavzi and get medical help right away if you get any symptoms of a possible severe allergic reaction including the following:

- |  |                                      |
|--|--------------------------------------|
| • rash, hives, generalised itching             | • difficulty breathing or swallowing |
| • swelling of the face, lips, tongue or throat | • dizziness                          |

### Children below the age of 12 years

Hympavzi should not be used in children less than 1 year of age, and is not recommended for individuals below 12 years of age. The safety and benefits of this medicine are not yet known in this population.

### **Other medicines and Hympavzi**

Tell your doctor or pharmacist if you are using, have recently used or might use any other medicines.

### **Pregnancy, contraception and breast-feeding**

If you are able to get pregnant, you should use an effective method of contraception (birth control) during treatment with Hympavzi and for at least 1 month after the last injection.

If you are pregnant, think you may be pregnant or are planning to have a baby, ask your doctor for advice before using this medicine. Your doctor will consider the benefit of you using Hympavzi against the risk to your unborn baby.

If you are breast-feeding, ask your doctor for advice on whether to stop breast-feeding or stop using Hympavzi. Your doctor will consider the benefit of you using Hympavzi against the benefits for your nursing infant.

### **Driving and using machines**

Hympavzi has no or limited effect on the ability to drive or use machines.

### **Hympavzi contains polysorbate 80**

This medicine contains 0.2 mg of polysorbate 80 in each mL. Polysorbates may cause allergic reactions. Tell your doctor if you have any known allergies.

### **Hympavzi contains sodium**

This medicine contains less than 1 mmol sodium (23 mg) per 1 mL, that is to say essentially 'sodium-free'.

## **3. How to use Hympavzi**

Your treatment will be started under the supervision of a doctor qualified to care for patients with haemophilia. Always use this medicine exactly as your doctor has told you. Check with your doctor or pharmacist if you are not sure.

Your healthcare provider will provide instructions for stopping your current treatment when switching from factor- or non-factor-based medicines to Hympavzi. Contact your healthcare provider if you are not sure what to do.

If you are severely ill or need to undergo major surgery, tell your healthcare provider that you are using Hympavzi.

### **Keeping a record**

Each time you use Hympavzi, record the name and batch number of the medicine.

### **How Hympavzi is given**

- Hympavzi is given as an injection under the skin (subcutaneous injection). Do not inject it into a vein or muscle.
- For a more comfortable injection, Hympavzi may be allowed to warm at room temperature in the carton away from direct sunlight for about 15 to 30 minutes prior to use. Hympavzi should not be warmed in any other way. For example, do not warm in hot water or a microwave.

Before you use the syringe for the first time, your doctor, nurse or pharmacist will show you and/or your caregiver how to inject Hympavzi. **If you inject Hympavzi yourself or if your caregiver injects it, you or your caregiver must carefully read and follow the detailed instructions for use on the reverse side of this leaflet.**

### **Where to inject Hympavzi**

- Your doctor or nurse will show you and/or your caregiver which areas of the body should be injected with Hympavzi. The best place to give Hympavzi is the belly area (abdomen) or thigh. Injections to the upper arm should be given by a caregiver, doctor or nurse only.
- Change the site of injection on your body each time an injection is given.
- If more than one injection is required to deliver a complete dose, each injection should be given at a different injection site.
- If you are using other medicines that must be injected under the skin, these injections should be given at a different injection site.

### **How much Hympavzi to use**

Your treatment will start with a loading dose which will then be followed by a maintenance dose given every week:

- Loading dose (a higher starting dose to quickly build up levels in the body): The recommended dose is 300 mg.
- Maintenance dose: The recommended dose is 150 mg.

You should use this medicine once a week (any time of day) on the same day each week.

You should record which day of the week you use Hympavzi to help you remember to inject this medicine once a week.

Depending on how you respond to Hympavzi, your doctor may change your maintenance dose as needed, up to a maximum of 300 mg weekly.

### **Use in adolescents**

Hypavzi can be used in adolescents 12 years of age and older. An adolescent can self-inject the medicine provided the adolescent's doctor or nurse and the parent or caregiver agree and the patient is trained to do so.

### **If you use more Hympavzi than you should**

If you have used more Hympavzi than you are supposed to, tell your doctor immediately. You may be at risk of developing side effects such as blood clots and require medical attention. Always use Hympavzi exactly as your doctor has told you, and check with your doctor, pharmacist or nurse if you are not sure.

### **If you forget to use Hympavzi**

- If you forget your scheduled dose, inject the forgotten dose as soon as possible before the day of the next scheduled dose. Then continue to inject the medicine as scheduled. Do not inject a double dose to make up for a forgotten dose.
- If you forget two scheduled doses in a row (that is if it has been more than 13 days since your last injection), contact your doctor as soon as possible and ask what to do.
- If you are not sure what to do, ask your doctor, pharmacist or nurse.

### **If you stop using Hympavzi**

Do not stop using Hympavzi without talking to your doctor. If you stop using Hympavzi, you may no longer be protected against bleeding.

If you have any further questions on the use of this medicine, ask your doctor, pharmacist or nurse.

## **4. Possible side effects**

Like all medicines, this medicine can cause side effects, although not everybody gets them.

**Serious side effects**

Hympavzi may cause a rash (seen in up to 1 in 100 people), which may be severe. Contact your doctor immediately if you have a severe rash; some rashes may be serious. Do not use Hympavzi again until you have talked with your doctor about your rash.

Stop using Hympavzi and contact your doctor immediately if you notice any signs or symptoms of a possible blood clot. Please refer to section 2 “What you need to know before you use Hympavzi” for a list of possible symptoms of a blood clot (thromboembolic event).

**Other side effects**

Tell your doctor or nurse if you get any of these side effects.

**Very common** (may affect more than 1 in 10 people)

- a reaction in the area where the injection is given (including itching, swelling, redness, pain, bruising, hardening)

**Common** (may affect up to 1 in 10 people)

- headache
- high blood pressure
- itching (pruritus)

**Reporting of side effects**

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via [the national reporting system listed in Appendix V](#). By reporting side effects you can help provide more information on the safety of this medicine.

**5. How to store Hympavzi**

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the pre-filled syringe label and carton after EXP. The expiry date refers to the last day of that month.

Store in a refrigerator (2 °C - 8 °C). Do not freeze.

Keep the pre-filled syringe in the original carton in order to protect from light.

Hympavzi may be removed from the refrigerator and stored in its original carton for up to 7 days at room temperature (up to 30 °C). Do not return Hympavzi to the refrigerator after storing at room temperature. If Hympavzi has been at room temperature for more than 7 days, throw it away, even if it contains unused medicine.

Do not shake.

Remove Hympavzi from the refrigerator prior to use. For a more comfortable injection, Hympavzi may be allowed to warm at room temperature in the carton for about 15 to 30 minutes away from direct sunlight prior to use.

Before using the medicine, check the solution for particles or discolouration. Do not use if you notice that the medicine is cloudy, dark yellow, or contains flakes or particles.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.



## 6. Contents of the pack and other information

### What Hympavzi contains

- The active substance is marstacimab.
- The other ingredients are disodium edetate, L-histidine, L-histidine monohydrochloride, polysorbate 80 (E 433), sucrose, water for injections (see section 2 “Hympavzi contains polysorbate 80” and “Hympavzi contains sodium”).

### What Hympavzi looks like and contents of the pack

Hympavzi is a clear and colourless to light yellow solution for injection (injection) in a pre-filled syringe.

Each pack of Hympavzi contains 1 pre-filled syringe.

### Marketing Authorisation Holder

Pfizer Europe MA EEIG  
Boulevard de la Plaine 17  
1050 Bruxelles  
Belgium

### Manufacturer

Pfizer Manufacturing Belgium NV  
Rijksweg 12  
2870 Puurs-Sint-Amands  
Belgium

For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder:

**België/Belgique/Belgien**  
**Luxembourg/Luxemburg**  
Pfizer NV/SA  
Tél/Tel: +32 (0)2 554 62 11

**Lietuva**  
Pfizer Luxembourg SARL filialas Lietuvoje  
Tel: +370 5 251 4000

**България**  
Пфайзер Люксембург САРЛ, Клон България  
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**Česká republika**  
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**Ísland**

Icepharma hf.

Sími: +354 540 8000

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**Κύπρος**

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Τηλ: +357 22817690

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Pfizer Luxembourg SARL filiāle Latvijā

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**Sverige**

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**This leaflet was last revised in****Other sources of information**

Detailed information on this medicine is available on the European Medicines Agency web site:

<https://www.ema.europa.eu>.

## **INSTRUCTIONS FOR USE**

### ***Hympavzi 150 mg solution for injection in pre-filled syringe***

This 'Instructions for Use' contains information on how to inject Hympavzi.

Read this 'Instructions for Use' carefully before using Hympavzi pre-filled syringe and each time you get a refill prescription as there may be new information.

Your doctor, nurse or pharmacist should show you or your caregiver how to prepare and inject a dose of Hympavzi the right way before you use it for the first time.

**Do not inject yourself or someone else until you have been shown how to inject Hympavzi.**

### **Important Information**

- Each Hympavzi pre-filled syringe is a single-dose pre-filled syringe (called "syringe" in this 'Instructions for Use'). The Hympavzi pre-filled syringe contains 150 mg of Hympavzi for injection under the skin (subcutaneously).
- **Do not** inject Hympavzi into a vein or muscle.
- **Do not** shake Hympavzi.
- To help you remember when to inject Hympavzi, you can mark your calendar ahead of time. Call your doctor, nurse or pharmacist if you or your caregiver have any questions about the right way to inject Hympavzi.

### **How To Store Hympavzi**

- Store unused Hympavzi in the refrigerator between 2 °C to 8 °C. Do not freeze Hympavzi. Store Hympavzi in its original carton to protect from direct light.
- If necessary, Hympavzi may be stored in its original carton at room temperature up to 30 °C for up to 7 days. **Do not** use Hympavzi if it has been out of the refrigerator for longer than 7 days. Throw away (dispose of) any Hympavzi that has been kept at room temperature for longer than 7 days.
- **Do not** use past the expiry date printed on the Hympavzi pre-filled syringe.
- **Keep Hympavzi and all other medicines out of the reach of children.**

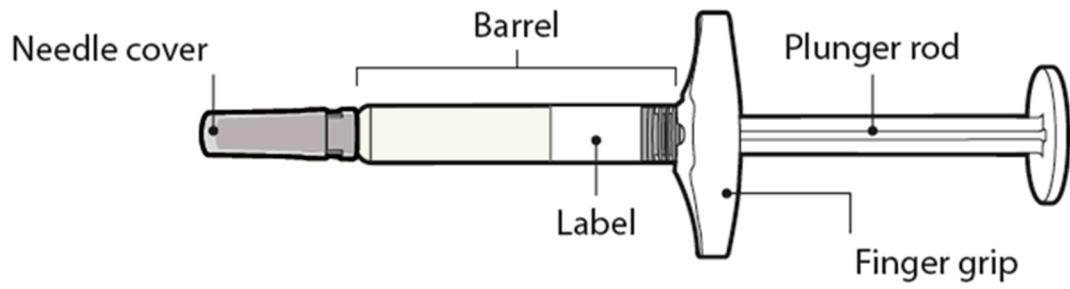
### **Supplies Needed For Hympavzi Injection**

**Gather the following supplies on a clean flat surface:**

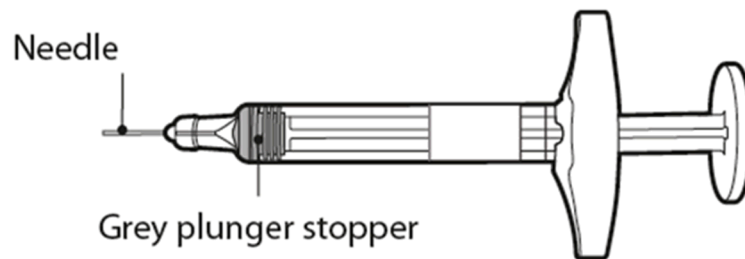
- 1 Hympavzi pre-filled syringe.
- 1 alcohol swab (not included).
- 1 cotton ball or gauze pad (not included).
- 1 sharps disposal container for syringe disposal (not included).

**Always hold Hympavzi pre-filled syringe by the barrel to prevent damage.**

***HYMPAVZI Pre-filled Syringe BEFORE use:***



***HYMPAVZI Pre-filled Syringe AFTER use:***



## Preparation Steps

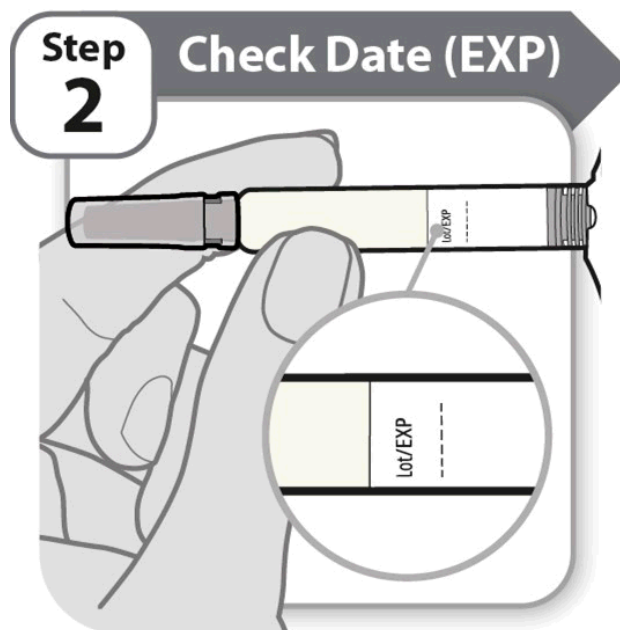
### Step 1 – Getting Ready

- **Remove** the syringe from its carton and keep out of direct sunlight.
- **Make sure** the name Hympavzi appears on the carton and syringe label.
- **Check the syringe** for any visible damage such as cracks or leaks.
- **Wash and dry** your hands.
- **Do not remove the needle cover until you are ready to inject.**
- **Throw away (dispose of)** the syringe if it is damaged, or if the syringe or the carton containing the syringe has been dropped.
- **Do not** use the syringe if:
  - it has been stored in direct light. Exposure to room light during dose preparation and injection is acceptable.
  - it has been frozen or thawed or it has been out of the refrigerator for more than 7 days.
- **Do not** shake the syringe. Shaking can damage Hympavzi.

**Note:** For a more comfortable injection, allow the syringe to warm up to room temperature in the carton for about 15 to 30 minutes away from direct sunlight.

**Do not** use any other methods to warm up the syringe, such as warming the syringe in a microwave or hot water.

## Step 2 – Check Date (EXP)



- **Check** the expiry date (EXP) printed on the syringe label.
- **Do not** use if the expiry date has passed.

### Step 3 – Check Medicine



- **Gently** tilt the syringe back and forth.
- **Look** carefully at the medicine in the syringe.
  - The medicine should be clear and colourless to light yellow.
  - **Do not** use the syringe if the medicine is cloudy, dark yellow, or contains flakes or particles.

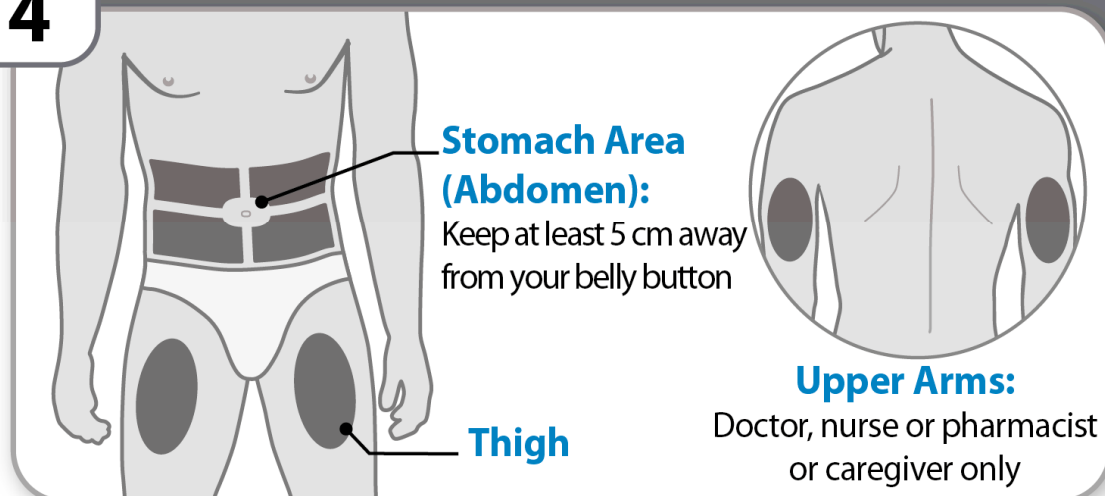
**Note:** It is normal to see air bubble(s).

**If you have any questions about the medicine, contact your doctor, nurse or pharmacist.**

## Step 4 – Choose and Clean Injection Site

### Step 4

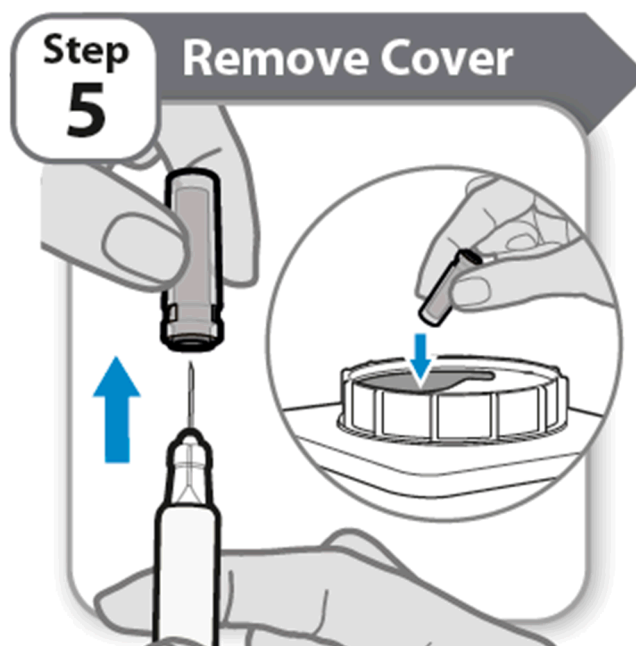
## Choose and Clean Injection Site



- **Choose** an injection site on your stomach area (abdomen) or thigh unless a different site has been suggested by your doctor, nurse or pharmacist. Hymravzi may also be injected into your upper arms by a doctor, nurse, pharmacist or caregiver only. Keep at least 5 cm away from your belly button.
- **Change** the injection site each time you give yourself an injection of Hymravzi. You may use the same area of your body, but be sure to choose a different injection site in that area.
- **Clean** the injection site with soap and water, or an alcohol swab if convenient.
- **Allow** the site to dry. **Do not** touch, fan or blow on the cleaned injection site.
- **Do not** inject Hymravzi into bony areas or areas on your skin that are bruised, red, sore (tender) or hard. Avoid injecting into areas with scars or stretch marks.
- **Do not** inject Hymravzi into a vein or muscle.
- **Do not** inject Hymravzi through your clothes.



## Step 5 – Remove Cover



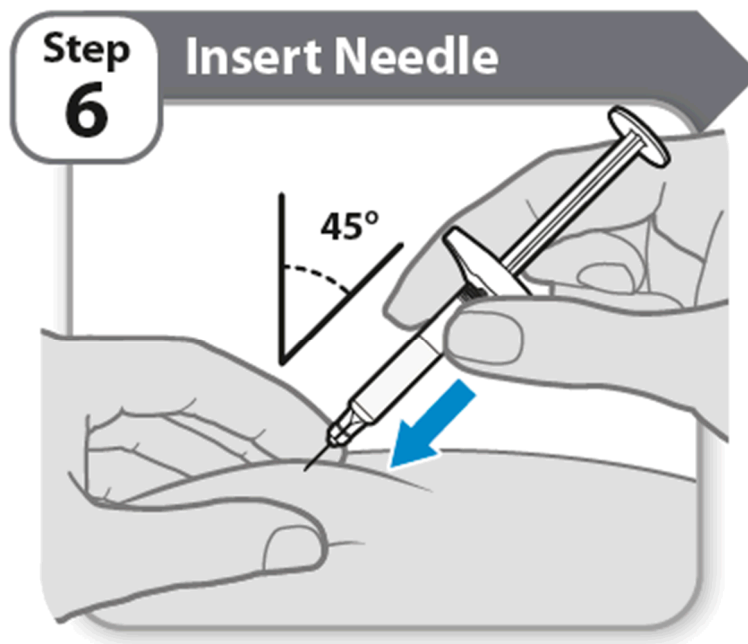
- **Hold** the syringe by the barrel.
- **Pull** the needle cover straight off carefully.
- **Put** the needle cover into a sharps disposal container right away. You will not need it again.
- **Do not** touch the needle or let it touch any surfaces.

**Note:** It is normal to see a few drops of medicine at the needle tip.

**Caution:** Handle the syringe with care to avoid an accidental needle injury.

## Injection Steps

### Step 6 – Insert Needle

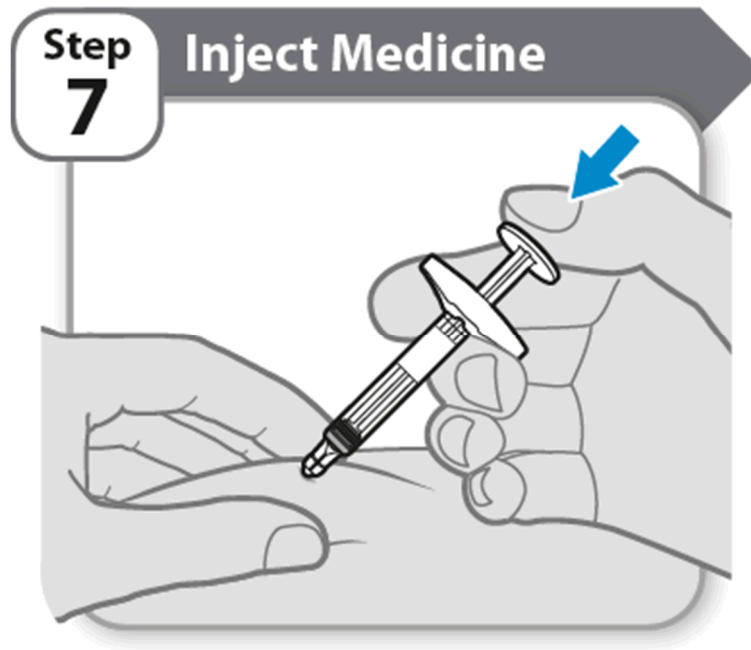


- **Pinch** your skin between your thumb and fingers to create a firm surface.
- **Insert** the needle to its full depth into your skin, at a 45° angle, as shown.

**Keep your skin pinched throughout the injection.**

**Caution:** If you change your mind where to inject after inserting the needle into your skin, you will need to throw away (dispose of) the syringe and get a new Hymravzi pre-filled syringe.

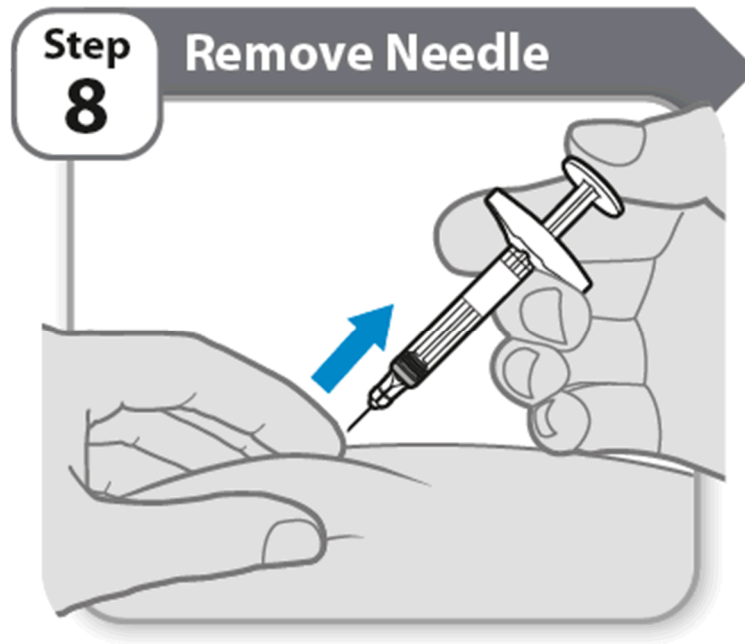
## Step 7 – Inject Medicine



- **Push** the plunger rod all the way down using slow and constant pressure, until the barrel is empty.

**Note:** It is recommended to count to 5 slowly after the plunger rod has been fully pushed down before removing the needle from your skin.

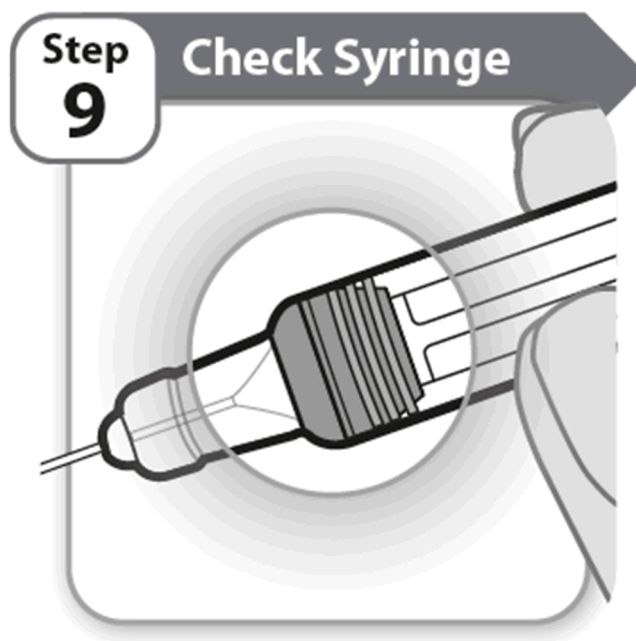
## Step 8 – Remove Needle



- **Pull** the needle out of your skin at the same angle at which it entered.

**Note:** If you see a small drop of medicine on your skin, wait a little longer before removing the needle when you give your next injection.

## Step 9 – Check Syringe



- **Check** the syringe to make sure the grey plunger stopper is in the position shown.

**If the grey plunger stopper is not in the position shown, this means you have not received a full dose. Call your doctor, nurse or pharmacist for help.**

**Never re-insert the needle.**

**Do not inject another dose.**

## Step 10 – After Care



- **Press** lightly on the injection site for a few seconds with a clean cotton ball or gauze pad if you see a drop of blood.
- **Do not** rub the area.

**Note:** If bleeding does not stop, please contact your doctor, nurse or pharmacist.

## Step 11 – Disposal



- **Put** the used syringe in a sharps disposal container as instructed by your doctor, nurse or pharmacist and in accordance with local health and safety laws.

**Never re-cap the needle.**

- **Do not** throw away (dispose of) syringes in the household waste.

## **Package leaflet: Information for the patient**

### **Hympavzi 150 mg solution for injection in pre-filled pen** marstacimab

▼ This medicine is subject to additional monitoring. This will allow quick identification of new safety information. You can help by reporting any side effects you may get. See the end of section 4 for how to report side effects.

#### **Read all of this leaflet carefully before you start using this medicine because it contains important information for you.**

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor, pharmacist or nurse.
- This medicine has been prescribed for you or the child in your care only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

#### **What is in this leaflet**

1. What Hympavzi is and what it is used for
2. What you need to know before you use Hympavzi
3. How to use Hympavzi
4. Possible side effects
5. How to store Hympavzi
6. Contents of the pack and other information

#### **1. What Hympavzi is and what it is used for**

Hympavzi contains the active substance marstacimab. Marstacimab is a monoclonal antibody, a type of protein designed to recognise and attach to a specific target in the body called tissue factor pathway inhibitor (TFPI).

Hympavzi is a medicine used to prevent or reduce bleeding in patients 12 years of age and older, weighing at least 35 kg, with:

- severe haemophilia A (congenital factor VIII deficiency, when the factor VIII blood level is less than 1%) who have not developed factor VIII inhibitors, or
- severe haemophilia B (congenital factor IX deficiency, when the factor IX blood level is less than 1%) who have not developed factor IX inhibitors.

Haemophilia A is an inherited bleeding disorder caused by a lack of factor VIII. Haemophilia B is an inherited bleeding disorder caused by lack of factor IX. Factor VIII and factor IX are proteins required for blood to clot and stop any bleeding. Some patients with haemophilia can develop factor VIII or factor IX inhibitors (antibodies in the blood that act against replacement factor VIII or factor IX medicines and prevent them from working properly).

The active substance in Hympavzi, marstacimab, recognises and attaches to TFPI, a protein that prevents blood from clotting too much. By attaching to TFPI, marstacimab decreases how well it works, which promotes the formation of thrombin (a protein that plays a crucial role in blood clotting when there is an injury or damage to the body). This helps to increase clotting and stop bleeding in patients with haemophilia.



## 2. What you need to know before you use Hympavzi

### Do not use Hympavzi

- if you are allergic to marstacimab or any of the other ingredients of this medicine (listed in section 6). If you are not sure if you are allergic, talk to your doctor, pharmacist or nurse before using Hympavzi.

### Warnings and precautions

Talk to your doctor before using Hympavzi.

**Before you start using Hympavzi, it is very important to talk to your doctor about using other factor VIII and factor IX products** (products that help blood clot but work in a different way from Hympavzi) while using Hympavzi. You may need to use other factor VIII or factor IX products to treat episodes of breakthrough bleeding while using Hympavzi. Carefully follow your healthcare provider's instructions regarding when and how to use these factor VIII or factor IX products while using Hympavzi.

### Blood clots (thromboembolic events)

Hympavzi increases how easily your blood clots. Similar medicines to Hympavzi have been known to cause blood clots in the blood vessels (so-called thromboembolic events). Blood clots may be life-threatening. Tell your doctor if you have a history of blood clots or if you have a condition which increases your risk of blood clots. This includes if you have:

- a history of coronary artery disease (heart disease caused by narrowing or blockage of blood vessels supplying the heart muscle)
- a history of ischaemic disease (reduced blood flow due to narrowed or blocked blood vessels)
- a history of blood clots in veins or arteries
- currently have serious infections
- currently have sepsis (blood poisoning)
- currently have trauma or crush injuries
- currently have cancer

**Stop using Hympavzi, and talk to a doctor immediately** if you notice any symptoms of a possible blood clot including the following side effects:

- |  |                         |
|--|-------------------------|
| • swelling or pain in arms or legs               | • feeling faint         |
| • redness or discolouration in your arms or legs | • headache              |
| • shortness of breath                            | • numbness in your face |
| • pain in chest or upper back                    | • eye pain or swelling  |
| • fast heart rate                                | • trouble seeing        |
| • coughing up blood                              |                         |

### Allergic reactions

Symptoms of allergic reaction have been seen in people using Hympavzi. Stop using Hympavzi and get medical help right away if you get any symptoms of a possible severe allergic reaction including the following:

- |  |                                      |
|--|--------------------------------------|
| • rash, hives, generalised itching             | • difficulty breathing or swallowing |
| • swelling of the face, lips, tongue or throat | • dizziness                          |

### Children below the age of 12 years

Hympavzi should not be used in children less than 1 year of age, and is not recommended for individuals below 12 years of age. The safety and benefits of this medicine are not yet known in this population.

### **Other medicines and Hympavzi**

Tell your doctor or pharmacist if you are using, have recently used or might use any other medicines.

### **Pregnancy, contraception and breast-feeding**

If you are able to get pregnant, you should use an effective method of contraception (birth control) during treatment with Hympavzi and for at least 1 month after the last injection.

If you are pregnant, think you may be pregnant or are planning to have a baby, ask your doctor for advice before using this medicine. Your doctor will consider the benefit of you using Hympavzi against the risk to your unborn baby.

If you are breast-feeding, ask your doctor for advice on whether to stop breast-feeding or stop using Hympavzi. Your doctor will consider the benefit of you using Hympavzi against the benefits for your nursing infant.

### **Driving and using machines**

Hympavzi has no or limited effect on the ability to drive or use machines.

### **Hympavzi contains polysorbate 80**

This medicine contains 0.2 mg of polysorbate 80 in each mL. Polysorbates may cause allergic reactions. Tell your doctor if you have any known allergies.

### **Hympavzi contains sodium**

This medicine contains less than 1 mmol sodium (23 mg) per 1 mL, that is to say essentially 'sodium-free'.

## **3. How to use Hympavzi**

Your treatment will be started under the supervision of a doctor qualified to care for patients with haemophilia. Always use this medicine exactly as your doctor has told you. Check with your doctor or pharmacist if you are not sure.

Your healthcare provider will provide instructions for stopping your current treatment when switching from factor- or non-factor-based medicines to Hympavzi. Contact your healthcare provider if you are not sure what to do.

If you are severely ill or need to undergo major surgery, tell your healthcare provider that you are using Hympavzi.

### **Keeping a record**

Each time you use Hympavzi, record the name and batch number of the medicine.

### **How Hympavzi is given**

- Hympavzi is given as an injection under the skin (subcutaneous injection). Do not inject it into a vein or muscle.
- For a more comfortable injection, Hympavzi may be allowed to warm at room temperature in the carton away from direct sunlight for about 15 to 30 minutes prior to use. Hympavzi should not be warmed in any other way. For example, do not warm in hot water or a microwave.

Before you use the pen for the first time, your doctor, nurse or pharmacist will show you and/or your caregiver how to inject Hympavzi. **If you inject Hympavzi yourself or if your caregiver injects it, you or your caregiver must carefully read and follow the detailed instructions for use on the reverse side of this leaflet.**

### **Where to inject Hympavzi**

- Your doctor or nurse will show you and/or your caregiver which areas of the body should be injected with Hympavzi. The best place to give Hympavzi is the belly area (abdomen) or thigh. Injections to the buttocks should be given by a caregiver, doctor or nurse only.
- Change the site of injection on your body each time an injection is given.
- If more than one injection is required to deliver a complete dose, each injection should be given at a different injection site.
- If you are using other medicines that must be injected under the skin, these injections should be given at a different injection site.

### **How much Hympavzi to use**

Your treatment will start with a loading dose which will then be followed by a maintenance dose given every week:

- Loading dose (a higher starting dose to quickly build up levels in the body): The recommended dose is 300 mg.
- Maintenance dose: The recommended dose is 150 mg.

You should use this medicine once a week (any time of day) on the same day each week.

You should record which day of the week you use Hympavzi to help you remember to inject this medicine once a week.

Depending on how you respond to Hympavzi, your doctor may change your maintenance dose as needed, up to a maximum of 300 mg weekly.

### **Use in adolescents**

Hypavzi can be used in adolescents 12 years of age and older. An adolescent can self-inject the medicine provided the adolescent's doctor or nurse and the parent or caregiver agree and the patient is trained to do so.

### **If you use more Hympavzi than you should**

If you have used more Hympavzi than you are supposed to, tell your doctor immediately. You may be at risk of developing side effects such as blood clots and require medical attention. Always use Hympavzi exactly as your doctor has told you, and check with your doctor, pharmacist or nurse if you are not sure.

### **If you forget to use Hympavzi**

- If you forget your scheduled dose, inject the forgotten dose as soon as possible before the day of the next scheduled dose. Then continue to inject the medicine as scheduled. Do not inject a double dose to make up for a forgotten dose.
- If you forget two scheduled doses in a row (that is if it has been more than 13 days since your last injection), contact your doctor as soon as possible and ask what to do.
- If you are not sure what to do, ask your doctor, pharmacist or nurse.

### **If you stop using Hympavzi**

Do not stop using Hympavzi without talking to your doctor. If you stop using Hympavzi, you may no longer be protected against bleeding.

If you have any further questions on the use of this medicine, ask your doctor, pharmacist or nurse.

## **4. Possible side effects**

Like all medicines, this medicine can cause side effects, although not everybody gets them.

**Serious side effects**

Hympavzi may cause a rash (seen in up to 1 in 100 people), which may be severe. Contact your doctor immediately if you have a severe rash; some rashes may be serious. Do not use Hympavzi again until you have talked with your doctor about your rash.

Stop using Hympavzi and contact your doctor immediately if you notice any signs or symptoms of a possible blood clot. Please refer to section 2 “What you need to know before you use Hympavzi” for a list of possible symptoms of a blood clot (thromboembolic event).

**Other side effects**

Tell your doctor or nurse if you get any of these side effects.

**Very common** (may affect more than 1 in 10 people)

- a reaction in the area where the injection is given (including itching, swelling, redness, pain, bruising, hardening)

**Common** (may affect up to 1 in 10 people)

- headache
- high blood pressure
- itching (pruritus)

**Reporting of side effects**

If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via [the national reporting system listed in Appendix V](#). By reporting side effects you can help provide more information on the safety of this medicine.

**5. How to store Hympavzi**

Keep this medicine out of the sight and reach of children.

Do not use this medicine after the expiry date which is stated on the pre-filled pen label and carton after EXP. The expiry date refers to the last day of that month.

Store in a refrigerator (2 °C - 8 °C). Do not freeze.

Keep the pre-filled pen in the original carton in order to protect from light.

Hympavzi may be removed from the refrigerator and stored in its original carton for up to 7 days at room temperature (up to 30 °C). Do not return Hympavzi to the refrigerator after storing at room temperature. If Hympavzi has been at room temperature for more than 7 days, throw it away, even if it contains unused medicine.

Do not shake.

Remove Hympavzi from the refrigerator prior to use. For a more comfortable injection, Hympavzi may be allowed to warm at room temperature in the carton for about 15 to 30 minutes away from direct sunlight prior to use.

Before using the medicine, check the solution for particles or discolouration. Do not use if you notice that the medicine is cloudy, dark yellow, or contains flakes or particles.

Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

## 6. Contents of the pack and other information

### What Hympavzi contains

- The active substance is marstacimab.
- The other ingredients are disodium edetate, L-histidine, L-histidine monohydrochloride, polysorbate 80 (E 433), sucrose, water for injections (see section 2 “Hympavzi contains polysorbate 80” and “Hympavzi contains sodium”).

### What Hympavzi looks like and contents of the pack

Hympavzi is a clear and colourless to light yellow solution for injection (injection) in a pre-filled pen. Each pack of Hympavzi contains 1 pre-filled pen.

### Marketing Authorisation Holder

Pfizer Europe MA EEIG  
Boulevard de la Plaine 17  
1050 Bruxelles  
Belgium

### Manufacturer

Pfizer Manufacturing Belgium NV  
Rijksweg 12  
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Belgium

For any information about this medicine, please contact the local representative of the Marketing Authorisation Holder:

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**Luxembourg/Luxemburg**  
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**Portugal**

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Pfizer, podružnica za svetovanje s področja  
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**Suomi/Finland**

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**This leaflet was last revised in**

**Other sources of information**

Detailed information on this medicine is available on the European Medicines Agency web site:  
<https://www.ema.europa.eu>.

## INSTRUCTIONS FOR USE

### *Hympavzi 150 mg solution for injection in pre-filled pen*

This 'Instructions for Use' contains information on how to inject Hympavzi.

Read this 'Instructions for Use' carefully before using Hympavzi pre-filled pen and each time you get a refill prescription as there may be new information.

Your doctor, nurse or pharmacist should show you or your caregiver how to prepare and inject a dose of Hympavzi the right way before you use it for the first time.

**Do not inject yourself or someone else until you have been shown how to inject Hympavzi.**

### **Important Information**

- Each Hympavzi pre-filled pen is a single-dose pre-filled pen (called "pen" in this 'Instructions for Use'). The Hympavzi pre-filled pen contains 150 mg of Hympavzi for injection under the skin (subcutaneously).
- **Do not** inject Hympavzi into a vein or muscle.
- **Do not** shake Hympavzi.
- To help you remember when to inject Hympavzi, you can mark your calendar ahead of time. Call your doctor, nurse or pharmacist if you or your caregiver have any questions about the right way to inject Hympavzi.

### **How To Store Hympavzi**

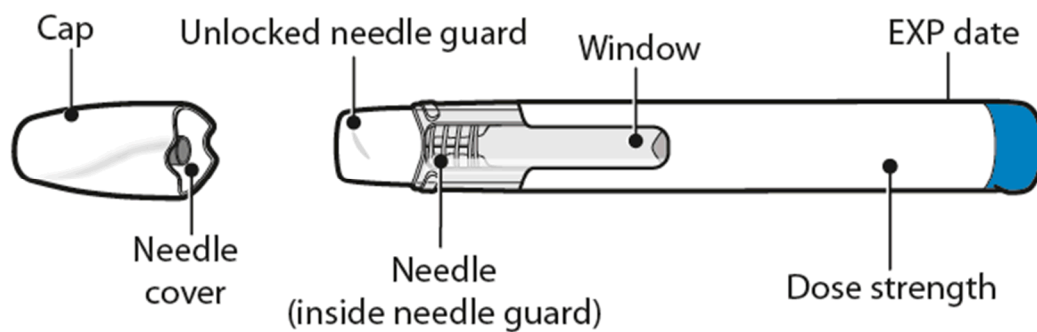
- Store unused Hympavzi in the refrigerator between 2 °C to 8 °C. Do not freeze Hympavzi. Store Hympavzi in its original carton to protect from direct light.
- If necessary, Hympavzi may be stored in its original carton at room temperature up to 30 °C for up to 7 days. **Do not** use Hympavzi if it has been out of the refrigerator for longer than 7 days. Throw away (dispose of) any Hympavzi that has been kept at room temperature for longer than 7 days.
- **Do not** use past the expiry date printed on the Hympavzi pre-filled pen.
- **Keep Hympavzi and all medicines out of the reach of children.**

### **Supplies Needed For Hympavzi Injection**

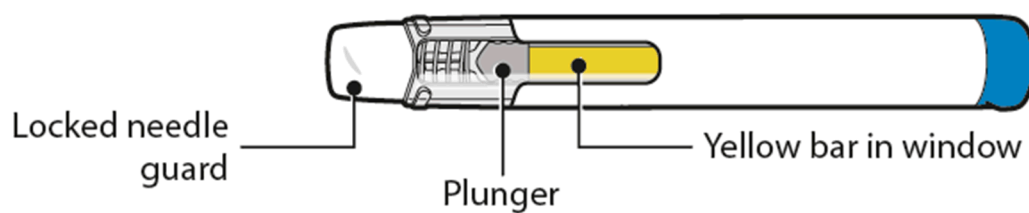
**Gather the following supplies on a clean flat surface:**

- 1 Hympavzi pre-filled pen.
- 1 alcohol swab (not included).
- 1 cotton ball or gauze pad (not included).
- 1 sharps disposal container for pen disposal (not included).

**HYMPAVZI Pre-filled Pen BEFORE use:**



**HYMPAVZI Pre-filled Pen AFTER use:**





## Preparation Steps

### Step 1 – Getting Ready

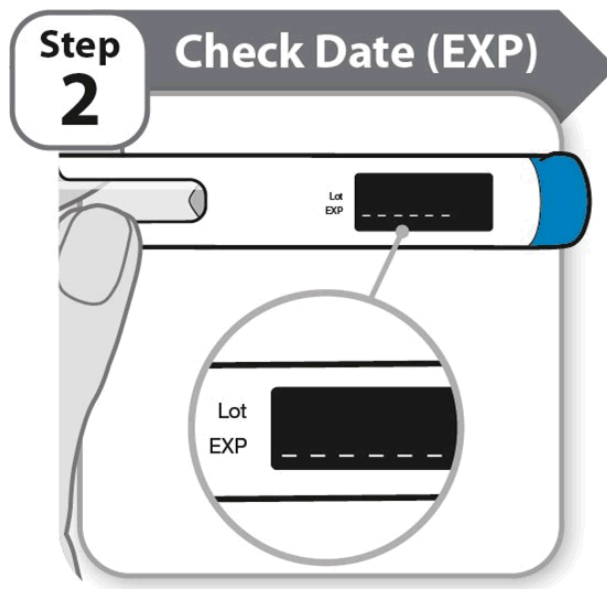
**Remove** the pen from its carton and keep out of direct sunlight.

- **Make sure** the name Hymravzi appears on the carton and pen label.
- **Check the pen** for any visible damage such as cracks or leaks.
- **Wash and dry** your hands.
- **Do not remove the cap until you are ready to inject.**
- **Throw away (dispose of)** the pen if it is damaged, or if the pen or the carton containing the pen has been dropped.
- **Do not** use the pen if:
  - it has been stored in direct light. Exposure to room light during dose preparation and injection is acceptable.
  - it has been frozen or thawed or it has been out of the refrigerator for more than 7 days.
- **Do not** shake the pen. Shaking can damage Hymravzi.

**Note:** For a more comfortable injection, allow the pen to warm up to room temperature in the carton for about 15 to 30 minutes away from direct sunlight.

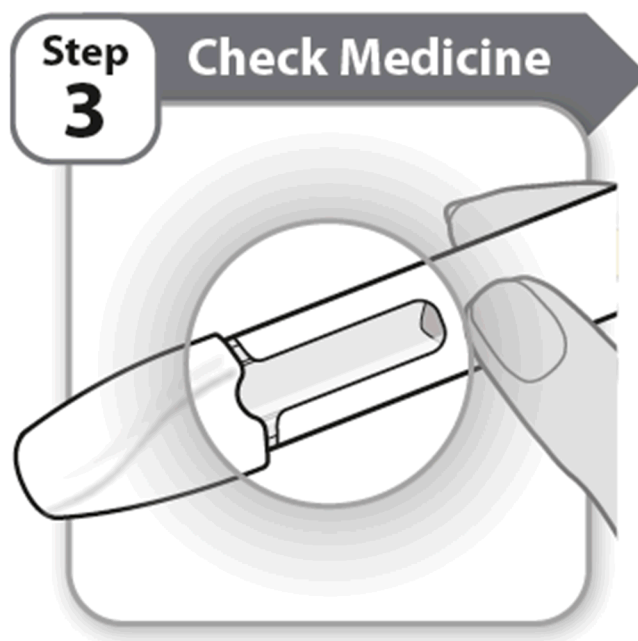
**Do not** use any other methods to warm up the pen, such as warming the pen in a microwave or hot water.

## Step 2 – Check Date (EXP)



- **Check** the expiry date (EXP) printed on the pen label.
- **Do not** use if the expiry date has passed.

### Step 3 – Check Medicine

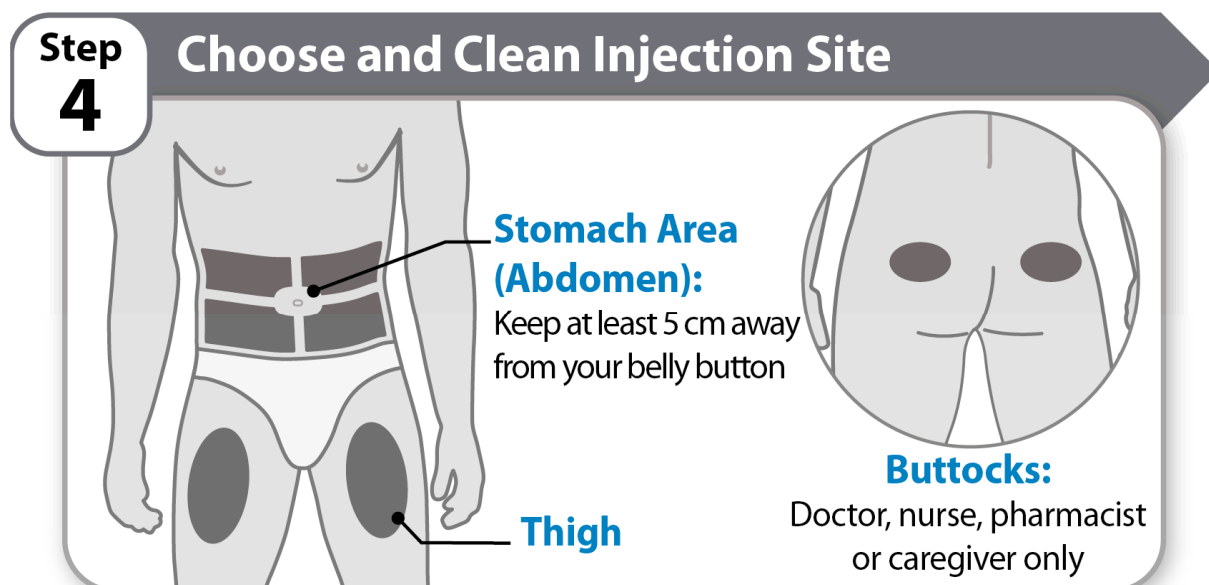


- **Look** carefully at the medicine through the window on the pen.
  - The medicine should be clear and colourless to light yellow.
  - **Do not** use the pen if the medicine is cloudy, dark yellow, or contains flakes or particles.

**Note:** It is normal to see air bubbles in the window.

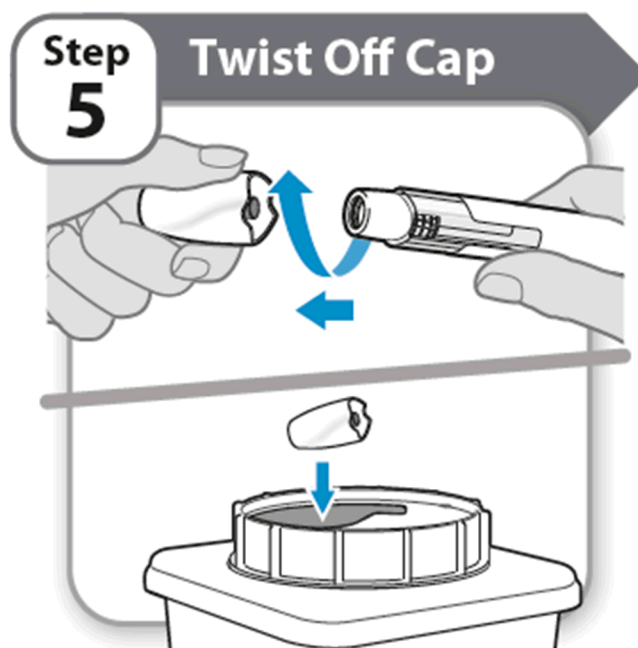
**If you have any questions about the medicine, contact your doctor, nurse or pharmacist.**

## Step 4 – Choose and Clean Injection Site



- **Choose** an injection site on your stomach area (abdomen) or thigh unless a different site has been suggested by your doctor, nurse or pharmacist. Hymravzi may also be injected into your buttocks by a doctor, nurse, pharmacist or caregiver only. Keep at least 5 cm away from your belly button.
- **Change** the injection site each time you give yourself an injection of Hymravzi. You may use the same area of your body, but be sure to choose a different injection site in that area.
- **Clean** the injection site with soap and water, or an alcohol swab if convenient.
- **Allow** the site to dry. **Do not** touch, fan or blow on the cleaned injection site.
- **Do not** inject Hymravzi into bony areas or areas on your skin that are bruised, red, sore (tender) or hard. Avoid injecting into areas with scars or stretch marks.
- **Do not** inject Hymravzi into a vein or muscle.
- **Do not** inject Hymravzi through your clothes.

### Step 5 – Twist off Cap



- **Twist and pull** off the cap.
- **Put** the cap into a sharps disposal container right away. You will not need it again.

**Note:**

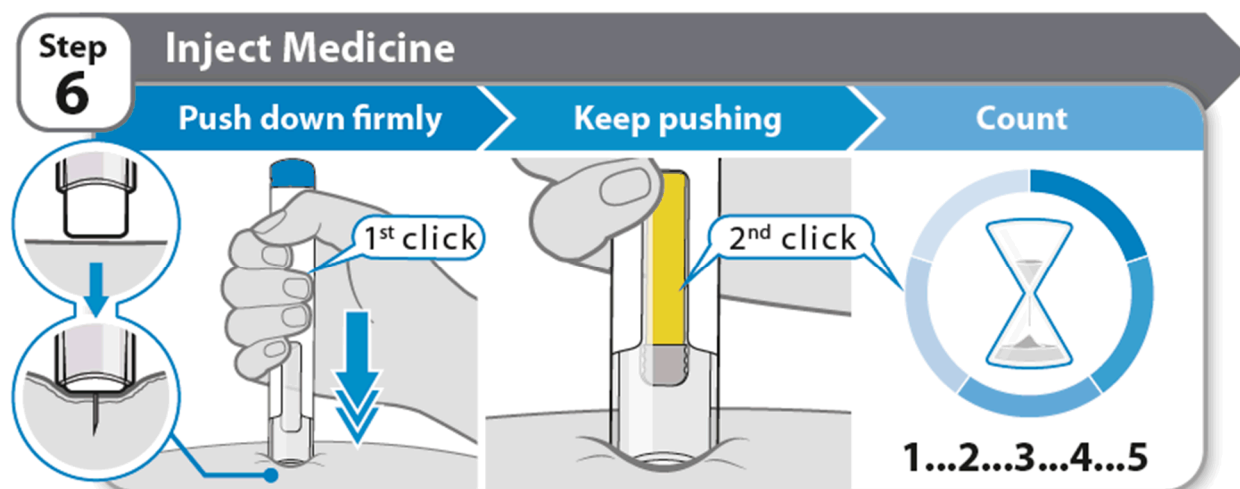
- It is normal to see a few drops of medicine at the needle tip.
- The needle cover will stay inside the cap after cap removal.

**Caution:** Handle the pen with care as it contains a needle.

**Do not** put, or press your hand over the needle guard. Doing so may result in a needle injury.

## Injection Steps

### Step 6 – Inject Medicine



- **Push** the pen **down firmly** against your skin at a 90° angle and **keep pushing** until the injection is complete (Step 7). You will hear the **1st click** when the injection starts.
- **Keep pushing** the pen firmly against your skin while the yellow bar moves across the window. You will hear a **2nd click** when the injection is **almost** complete.
- **Count slowly to 5** after you hear the **2nd click** to make sure you get a full dose.

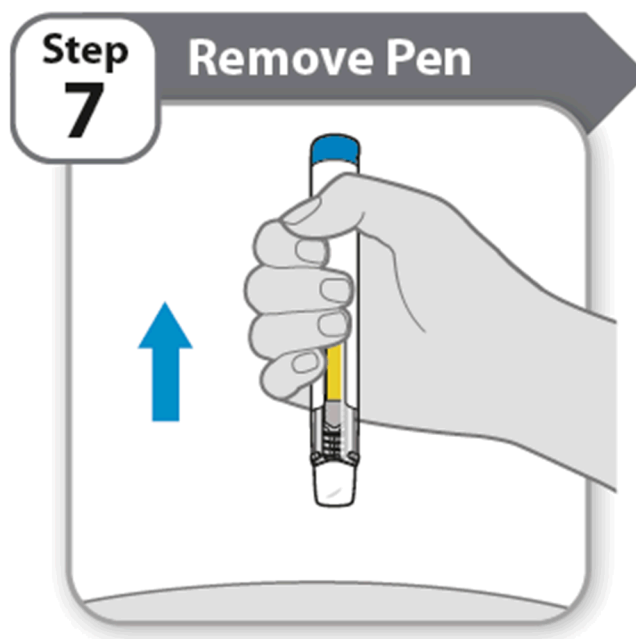
**Do not remove the pen from your skin until you have counted slowly to 5 after you hear the 2nd click and until the yellow marker completely fills the window.**

**Note:** The needle goes into your skin as you push the pen down. Your doctor, nurse or pharmacist may suggest gently pinching your skin while you inject.

**Note:** If you do not hear a click when pushing the pen against your skin, try pushing down harder. If you still cannot start the injection, get a new Hympavzi pre-filled pen.

**Caution:** If you change your mind where to inject after inserting the needle into your skin, you will need to throw away (dispose of) the pen and get a new Hympavzi pre-filled pen.

## Step 7 – Remove Pen

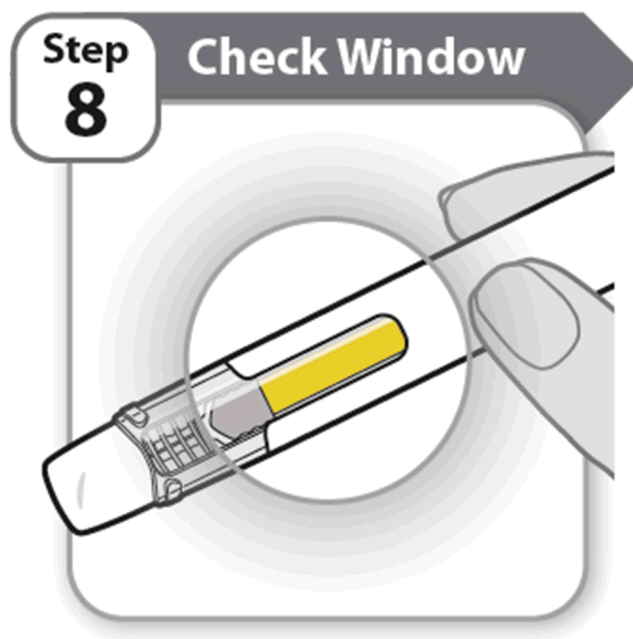


- **Remove** the pen from your skin.
  - If you see a small drop of medicine on your skin, wait a little longer before removing the pen when you give your next injection.

**Note:** After you remove the pen from your skin, the needle will be automatically covered and the needle guard locked in place.

**The pen cannot be reused.**

## Step 8 – Check Window



- **Check** the window to make sure all the medicine has been injected.

**If the yellow bar is not in the position shown, this means you have not received a full dose. Call your doctor, nurse or pharmacist for help.**

**Do not inject another dose.**



## Step 9 – After Care



- **Press** lightly on the injection site for a few seconds with a clean cotton ball or gauze pad if you see a drop of blood.
- **Do not** rub the area.

**Note:** If bleeding does not stop, please contact your doctor, nurse or pharmacist.

## Step 10 – Disposal



- **Put** the used pen in a sharps disposal container as instructed by your doctor, nurse or pharmacist and in accordance with local health and safety laws.
- **Do not** throw away (dispose of) pens in the household waste.