

PRODUCT MONOGRAPH  
INCLUDING PATIENT MEDICATION INFORMATION

**VAXZEVRIA™**  
**COVID-19 Vaccine (ChAdOx1-S [recombinant]),**

**VAXZEVRIA (manufactured by AstraZeneca) and COVISHIELD (manufactured by Serum Institute of India) are ChAdOx1-S recombinant vaccines developed by AstraZeneca and the University of Oxford. Health Canada has reviewed the manufacturing information for these vaccines and found them to be comparable.**

**Solution for Intramuscular Injection**

Multiple Dose Vial  
(8 dose and 10 dose vial presentations)

Active Immunizing Agent

HEALTH CANADA HAS AUTHORIZED THE SALE OF THIS COVID-19 Vaccine UNDER AN INTERIM ORDER

VAXZEVRIA is indicated for:

Active immunization of individuals 18 years of age and older for the prevention of coronavirus disease 2019 (COVID-19).

The use of VAXZEVRIA is permitted under an interim authorization delivered in accordance with section 5 of the COVID-19 Interim order (IO)\*. Patients should be advised of the nature of the authorization. The interim authorization is associated with Terms and Conditions that need to be met by the Market Authorization Holder to ascertain the continued quality, safety and efficacy of the product. For further information on authorization under this pathway, please refer to Health Canada's IO Respecting the Importation, Sale and Advertising of Drugs for Use in Relation to COVID-19.

\* <https://www.canada.ca/en/health-canada/services/drugs-health-products/covid19-industry/drugs-vaccines-treatments/interim-order-import-sale-advertising-drugs.html#a2.8>

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## RECENT MAJOR LABEL CHANGES

CONTRAINDICATIONS (2)	04-2021
CONTRAINDICATIONS (2)	06-2021
SERIOUS WARNINGS AND PRECAUTIONS (3)	04-2021
DOSAGE AND ADMINISTRATION (4.4)	03-2021
WARNINGS AND PRECAUTIONS (7)	03-2021
WARNINGS AND PRECAUTIONS (7)	04-2021
WARNINGS AND PRECAUTIONS (7)	06-2021
WARNINGS AND PRECAUTIONS (7)	07-2021

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## **PART I: HEALTH PROFESSIONAL INFORMATION**

### **1 INDICATIONS**

VAXZEVRIA (COVID-19 Vaccine (ChAdOx1-S [recombinant])) is indicated for active immunization of individuals 18 years of age and older for the prevention of coronavirus disease 2019 (COVID-19).

#### **1.1 Pediatrics**

The safety and efficacy of VAXZEVRIA in children under 18 years of age have not yet been established. No data are available.

#### **1.2 Geriatrics**

Currently, there is limited information from clinical trials on the efficacy of VAXZEVRIA in individuals  $\geq 65$  years of age. No dose adjustment is required.

### **2 CONTRAINDICATIONS**

VAXZEVRIA is contraindicated in individuals who are hypersensitive to the active substance or to any ingredient in the formulation. For a complete listing, see **DOSAGE FORMS, STRENGTHS, COMPOSITION AND PACKAGING** section.

VAXZEVRIA is contraindicated in individuals who have experienced major venous and/or arterial thrombosis with thrombocytopenia following vaccination with VAXZEVRIA /COVISHIELD.

VAXZEVRIA is contraindicated in individuals who have previously experienced episodes of capillary leak syndrome.

### **3 SERIOUS WARNINGS AND PRECAUTIONS**

A combination of thrombosis and thrombocytopenia, in some cases accompanied by bleeding, has been observed very rarely following vaccination with VAXZEVRIA (see **WARNINGS AND PRECAUTIONS, Hematologic** section).

### **4 DOSAGE AND ADMINISTRATION**

#### **4.1 Dosing Considerations**

VAXZEVRIA is a solution for intramuscular injection that should be administered by a trained healthcare worker.

#### **4.2 Recommended Dose and Dosage Adjustment**

The VAXZEVRIA vaccination course consists of two separate doses of 0.5 mL each. The second dose should be administered between 4 and 12 weeks after the first dose.

Individuals should complete the vaccination course with either VAXZEVRIA or COVISHIELD (see WARNINGS AND PRECAUTIONS).

There are no data available on the interchangeability of VAXZEVRIA with other non ChAdOx1-S (recombinant) COVID-19 vaccines.

### 4.3 Reconstitution

VAXZEVRIA **must not** be reconstituted, mixed with other medicinal products, or diluted.

### 4.4 Administration

VAXZEVRIA is a colourless to slightly brown, clear to slightly opaque solution. The vaccine should be inspected visually for particulate matter and discolouration prior to administration. Discard the vial if the solution is discoloured or visible particles are observed.

Each vaccine dose of 0.5 mL is withdrawn into a syringe for injection to be administered intramuscularly, preferably in the deltoid muscle. Use a separate sterile needle and syringe for each individual.

Each vial contains at least the number of doses stated. It is normal for liquid to remain in the vial after withdrawing the final dose. When low dead volume syringes and/or needles are used, the amount remaining in the vial may be sufficient for an additional dose. Care should be taken to ensure a full 0.5 mL dose is administered. Where a full 0.5 mL dose cannot be extracted, the remaining volume should be discarded. Do not pool excess vaccine from multiple vials.

The vaccine does not contain any preservative. After first opening, use the vial within:

- 6 hours when stored at room temperature (up to 30°C), or
- 48 hours when stored in a refrigerator (2 to 8°C).

The vial can be re-refrigerated, but the cumulative storage time at room temperature must not exceed 6 hours, and the total cumulative storage time must not exceed 48 hours. After this time, the vial must be discarded.

## 5 OVERDOSAGE

In the case of a suspected vaccine overdose, monitoring of vital functions and symptomatic treatment are recommended. Contact your regional poison control centre.

## 6 DOSAGE FORMS, STRENGTHS, COMPOSITION AND PACKAGING

Table – Dosage Forms, Strengths, Composition and Packaging

Route of Administration	Dosage Form / Strength/Composition	Non-medicinal Ingredients
Intramuscular injection	Solution  Multidose vial (8 dose and 10 dose vial presentations)	<ul style="list-style-type: none"><li>• Disodium edetate dihydrate (EDTA)</li><li>• Ethanol</li><li>• L-Histidine</li><li>• L-Histidine hydrochloride monohydrate</li><li>• Magnesium chloride hexahydrate</li><li>• Polysorbate 80</li><li>• Sodium chloride</li><li>• Sucrose</li><li>• Water for injection</li></ul>

VAXZEVRIA is a clear to slightly opaque, colourless to slightly brown, sterile, particle free, preservative-free, solution for intramuscular injection.

One dose (0.5 ml) of VAXZEVRIA contains:

COVID-19 Vaccine (ChAdOx1-S\* recombinant)                      5 x 10<sup>10</sup> viral particles (not less than 2.5 x 10<sup>8</sup> infectious units)

\*Recombinant, replication-deficient chimpanzee adenovirus vector encoding the unmodified SARS-CoV-2 Spike (S) glycoprotein (GP) produced in genetically modified human embryonic kidney (HEK) 293 cells by recombinant DNA technology.

VAXZEVRIA is packaged in (not all pack sizes may be available):

- 5 mL of solution in a 10-dose vial (clear type I glass) with stopper (elastomeric with aluminium overseal).
- 4 mL of solution in a 8-dose vial (clear type I glass) with stopper (elastomeric with aluminium overseal).

To help ensure the traceability of vaccines for patient immunization record-keeping as well as safety monitoring, health professionals should record the time and date of administration, quantity of administered dose (if applicable), anatomical site and route of administration, brand name and generic name of the vaccine, the product lot number and expiry date.

## 7 WARNINGS AND PRECAUTIONS

As with any vaccine, vaccination with VAXZEVRIA may not protect all vaccine recipients.

Individuals may not be optimally protected until after receiving the second dose of the vaccine.

### General

#### Hypersensitivity and anaphylaxis

Hypersensitivity reactions including anaphylaxis and angioedema have occurred following administration of VAXZEVRIA.

Appropriate medical treatment and supervision should always be readily available in case of an anaphylactic event following the administration of the vaccine.

Vaccine recipients should be kept under observation for at least 15 minutes after immunization.

A second dose of the vaccine should not be given to those who have experienced a hypersensitivity reaction to the first dose of VAXZEVRIA /COVISHIELD.

#### Concurrent illness

Vaccination should be postponed in individuals suffering from an acute severe febrile illness or acute infection. However, the presence of a minor infection and/or low-grade fever should not delay vaccination.

#### Interchangeability

There are no safety, immunogenicity or efficacy data to support interchangeability of VAXZEVRIA with other non-ChAdOx1-S (recombinant) COVID-19 vaccines.

### Driving and Operating Machinery

VAXZEVRIA has no or negligible influence on the ability to drive and use machines. However, some of the adverse reactions mentioned under **ADVERSE REACTIONS** may temporarily affect the ability to drive or use machines.

### Hematologic

#### Thrombosis and thrombocytopenia

A combination of thrombosis and thrombocytopenia including thrombosis with thrombocytopenia syndrome (TTS), in some cases accompanied by bleeding, has been observed very rarely following vaccination with VAXZEVRIA during post-authorization use. This includes severe cases in unusual sites such as cerebral venous sinus thrombosis (CVST) and splanchnic vein thrombosis, as well as arterial thrombosis, concomitant with thrombocytopenia. The majority of these cases occurred within the first 3 weeks following vaccination. Some cases had a fatal outcome.

Whilst specific risk factors for thrombosis in combination with thrombocytopenia have not been identified, cases have occurred in patients with a previous history of

thrombosis, as well as in patients with autoimmune disorders, including idiopathic thrombocytopenic purpura. The benefits and risks of vaccination should be considered in these patients.

Healthcare professionals should be alert to the signs and symptoms of thrombosis and thrombocytopenia. Vaccinated individuals should be instructed to seek immediate medical attention if they develop symptoms such as shortness of breath, chest pain, leg swelling or pain, or persistent abdominal pain following vaccination. Additionally, anyone with neurological symptoms after vaccination including sudden onset of severe headaches, persistent or worsening headaches, blurred vision, confusion or seizures, or who experiences unusual skin bruising or petechiae beyond the site of vaccination after a few days, should seek prompt medical attention.

Individuals who have experienced a previous CVST with thrombocytopenia or heparin-induced thrombocytopenia (HIT) should only receive the VAXZEVRIA /COVISHIELD if the potential benefits outweigh the potential risks. Patients who have experienced major venous or arterial thrombosis with thrombocytopenia following vaccination with VAXZEVRIA /COVISHIELD should not receive a second dose of VAXZEVRIA /COVISHIELD.

Since medical management of a post-vaccine thrombosis with thrombocytopenia may be different than medical management of other thromboses, if patients present with thrombosis with thrombocytopenia, healthcare professionals should consult with current guidance and hematologic specialists to diagnose and treat this post-vaccine event.

Individuals diagnosed with thrombocytopenia following vaccination with the VAXZEVRIA /COVISHIELD should be evaluated for signs of thrombosis, and similarly individuals who present with thrombosis following vaccination should be evaluated for thrombocytopenia.

#### Risk of bleeding with intramuscular administration

As with other intramuscular injections, VAXZEVRIA should be given with caution to individuals with thrombocytopenia, any coagulation disorder or to persons on anticoagulation therapy, because bleeding or bruising may occur following an intramuscular administration in these individuals.

#### Capillary leak syndrome

Cases of capillary leak syndrome (CLS) have been observed very rarely following vaccination with VAXZEVRIA during post-authorization use. Some of the reported cases had a history of CLS. Some cases had a fatal outcome. CLS is a rare disease characterized by acute episodes of limb edema, hypotension, hemoconcentration and hypoalbuminemia. Patients with an acute episode of CLS following vaccination require prompt medical attention and treatment. Intensive supportive therapy is usually warranted. Individuals with a known history of CLS should not be vaccinated with this vaccine.

#### **Immune**

## Immunocompromised individuals

Immunocompromised persons, including individuals receiving immunosuppressant therapy, may have a diminished immune response to the vaccine.

## **Neurologic**

### Neurological events

Very rare events of demyelinating disorders, such as Guillain-Barré Syndrome (GBS), have been reported following vaccination with VAXZEVRIA /COVISHIELD during post-authorization use. Healthcare professionals should be alert to GBS signs and symptoms to ensure correct diagnosis, in order to initiate adequate supportive care and treatment, and to rule out other causes.

## **Syncope**

Syncope (fainting) can occur following, or even before, any vaccination as a psychogenic response to the needle injection. Procedures should be in place to prevent injury from syncopal reactions.

## **Fertility**

It is unknown whether VAXZEVRIA may impact fertility in humans. No data are available in humans.

## **7.1 Special Populations**

### **7.1.1 Pregnant Women**

The safety and efficacy of VAXZEVRIA in pregnant women have not yet been established.

Use of VAXZEVRIA in pregnant women should be based on an assessment of whether the benefits of vaccination outweigh the potential risks.

There is a pregnancy exposure registry that monitors pregnancy outcomes in women exposed to VAXZEVRIA during pregnancy. Women who are vaccinated with VAXZEVRIA during pregnancy are encouraged to enroll in the registry by visiting <https://c-viper.pregistry.com> or calling 1-800-616-3791.

### **7.1.2 Breast-feeding**

It is unknown if VAXZEVRIA is excreted in human milk. A risk to the newborns/ infants cannot be excluded. The developmental and health benefits of breast feeding should be considered along with the mother's clinical need for immunization against COVID-19.

### **7.1.3 Pediatrics**

The safety and efficacy of VAXZEVRIA in children and adolescents (under 18 years of age) have not yet been established. No data are available.

#### 7.1.4 Geriatrics

Currently, there is limited information from clinical trials on the efficacy of VAXZEVRIA in individuals  $\geq 65$  years of age (see ADVERSE REACTIONS and CLINICAL TRIALS section). No dose adjustment is required.

### 8 ADVERSE REACTIONS

#### 8.1 Adverse Reaction Overview

The overall safety of VAXZEVRIA is based on an interim analysis of pooled data from four ongoing clinical trials conducted in the United Kingdom (COV001 and COV002), Brazil (COV003), and South Africa (COV005). At the time of analysis, 23,745 participants  $\geq 18$  years of age had been randomised and received either one or two doses of VAXZEVRIA (n=12,021) or a control treatment (n=11,724). Two doses of VAXZEVRIA were received by 7,598 participants ages 18 to 64 and by 668 participants ages 65 and above. The median follow-up after second dose for these age groups were 63.0 days and 30.0 days, respectively.

Control treatments consisted of a licensed meningococcal vaccine (MenACWY), a saline placebo, or a combination of the two. Of the total number of control doses administered in the studies, 77.7% were MenACWY and 22.3% were saline placebo.

Demographic characteristics were generally similar among participants who received VAXZEVRIA and those who received control. Overall, among the participants who received VAXZEVRIA, 90.3% were aged 18 to 64 years and 9.7% were 65 years of age or older. The majority of recipients were White (75.5%), 10.1% were Black and 3.5% were Asian; 55.8% were female and 44.2% male.

Following vaccination, recipients may experience multiple adverse reactions occurring at the same time (for example, myalgia/arthralgia, headache, chills, pyrexia and malaise).

When compared with the first dose, adverse reactions reported after the second dose were generally milder and reported less frequently.

Adverse reactions were generally milder and reported less frequently in older adults ( $\geq 65$  years old).

Data is presented here for the reactogenicity subset that consists of subjects enrolled in studies COV001, COV002 and COV003 who received the standard dose for their first dose of vaccine, and who were given diary cards to record solicited adverse reactions. Data from subjects in Study COV005 were excluded from this subset due to differences in data collection. In this analysis set, 1,736 subjects (402 aged  $\geq 65$  years) received VAXZEVRIA and 1,596 (324 aged  $\geq 65$  years) received the control.

In the reactogenicity subset, the most frequently reported adverse reactions in subjects 18 years of age and older (percentage of subjects) were injection site tenderness (75.3%), injection site pain (54.2%), fatigue (62.3%), headache (57.5%), myalgia (48.6%), malaise (44.2%), pyrexia (33.6%), chills (31.9%), arthralgia (27.0%), and nausea (21.9%).

## 8.2 Clinical Trial Adverse Reactions

Clinical trials are conducted under very specific conditions. The adverse reaction rates observed in the clinical trials; therefore, may not reflect the rates observed in practice and should not be compared to the rates in the clinical trials of another drug. Adverse reaction information from clinical trials may be useful in identifying and approximating rates of adverse drug reactions in real-world use.

Solicited adverse reaction data were collected from Day 1 to Day 7 and reported by participants in a symptom diary card after each dose and on electronic case report forms. Reported solicited local and systemic adverse reactions are presented in Tables 1 to 4.

**Table 1 – Solicited Local Adverse Events Within 7 Days After First and Second Injection by Grade-Participants 18-64 Years of Age (Dose 1 SD for Safety Analysis Set, Including Studies COV001, COV002, and COV003 Only)**

Solicited Local AEs	Dose 1		Dose 2	
	Vaccine Group n(%) N= 1323	Control Group <sup>a</sup> n(%) N= 1260	Vaccine Group n(%) N= 567	Control Group <sup>a</sup> n(%) N=484
<b>Pain</b>				
Any Grade	798 (60.3)	468 (37.1)	195 (34.4)	158 (32.6)
Grade 3 or 4 <sup>b</sup>	9 (0.7)	2 (0.2)	0	1 (0.2)
<b>Tenderness</b>				
Any Grade	1041 (78.7)	1041 (78.7)	338 (59.6)	251 (51.9)
Grade 3 or 4 <sup>b</sup>	8 (0.6)	3 (0.2)	0	2 (0.4)
<b>Redness</b>				
Any Grade	35 (2.6)	23 (1.8)	6 (1.1)	4 (0.8)
>10 cm or Necrosis or ED	2 (0.2)	2 (0.2)	0	1 (0.2)
<b>Warmth</b>				
Any Grade	230 (17.4)	178 (14.1)	62 (10.9)	56 (11.6)
Grade 3 or 4 <sup>b</sup>	0	0	0	0
<b>Itch</b>				
Any Grade	86 (6.5)	55 (4.4)	24 (4.2)	13 (2.7)
Grade 3 or 4 <sup>b</sup>	0	0	0	0
<b>Swelling</b>				
Any Grade	38 (2.9)	29 (2.3)	5 (0.9)	5 (1.0)
>10 cm or PDA or Necrosis	2 (0.2)	0	0	0
<b>Induration</b>				
Any Grade	40 (3.0)	28 (2.2)	4 (0.7)	11 (2.3)
>10 cm or Necrosis or ED	2 (0.2)	0	0	0

<sup>a</sup> In Studies COV001 and COV002, MenACWY was administered as control for both Dose 1 and Dose 2. In Study COV003, MenACWY was administered as placebo for Dose 1, with a saline placebo for Dose 2.

<sup>b</sup> Grade 3: Unable to perform normal daily activity (COV001, COV002) or marked limitation in routine activities, some assistance usually required; medical intervention/therapy required (COV003). Grade 4: Emergency department or hospital admission required (COV001, COV002) or potentially Life-threatening: requires assessment in emergency department or hospitalization (COV003).

Note: Subjects in some study groups were recommended to take prophylactic acetaminophen 1 g every 6 hours for the first 24 hours after vaccination.

ED = exfoliative dermatitis; PDA = prevent daily activity

**Table 2 – Solicited Local Adverse Events Within 7 Days After First and Second Injection by Grade-Participants ≥65 Years of Age (Dose 1 SD for Safety Analysis Set, Including Studies COV001, COV002, and COV003 Only)**

Solicited Local AEs	Dose 1		Dose 2	
	Vaccine Group n(%) N=399	Control <sup>a</sup> n(%) N=318	Vaccine Group n(%) N=256	Control <sup>a</sup> n(%) N=223
<b>Pain</b>				
Any Grade	91 (22.8)	44 (13.8)	26 (10.2)	11 (4.9)
Grade 3 or 4 <sup>b</sup>	0	0	0	0
<b>Tenderness</b>				
Any Grade	202 (50.6)	94 (29.6)	82 (32.0)	41 (18.4)
Grade 3 or 4 <sup>b</sup>	0	0	0	0
<b>Redness</b>				
Any Grade	9 (2.3)	3 (0.9)	1 (0.4)	0
>10 cm or Necrosis or ED	0	0	0	0
<b>Warmth</b>				
Any Grade	42 (10.5)	21 (6.6)	9 (3.5)	8 (3.6)
Grade 3 or 4 <sup>b</sup>	0	0	0	0
<b>Itch</b>				
Any Grade	14 (3.5)	15 (4.7)	6 (2.3)	4 (1.8)
Grade 3 or 4 <sup>b</sup>	0	0	0	0
<b>Swelling</b>				
Any Grade	8 (2.0)	1 (0.3)	2 (0.8)	1 (0.4)
>10 cm or PDA or Necrosis	0	0	0	0
<b>Induration</b>				
Any Grade	5 (1.3)	0	1 (0.4)	0
>10 cm or Necrosis or ED	0	0	0	0

<sup>a</sup> In Studies COV001 and COV002, MenACWY was administered as control for both Dose 1 and Dose 2. In Study COV003, MenACWY was administered as placebo for Dose 1, with a saline placebo for Dose 2.

<sup>b</sup> Grade 3: Unable to perform normal daily activity (COV001, COV002) or marked limitation in routine activities, some assistance usually required; medical intervention/therapy required (COV003). Grade 4: Emergency department or hospital admission required (COV001, COV002) or potentially Life-threatening: requires assessment in emergency department or hospitalization (COV003).

Note: Subjects in some study groups were recommended to take prophylactic acetaminophen 1 g every 6 hours for the first 24 hours after vaccination.

ED = exfoliative dermatitis; PDA = prevent daily activity

**Table 3 – Solicited Systemic Adverse Events Within 7 Days After First and Second Injection by Grade-Participants 18-64 Years of Age (Dose 1 SD for Safety Analysis Set, Including Studies COV001, COV002, and COV003 Only)**

Solicited Systemic AEs	Dose 1		Dose 2	
	Vaccine Group n(%) N= 1323	Control Group <sup>a</sup> n(%) N= 1260	Vaccine Group n(%) N=573	Control Group <sup>a</sup> n(%) N=486
<b>Fever</b>				
Any Grade	152 (11.6)	5 (0.4)	4 (0.7)	3 (0.6)
Grade 3 or 4 <sup>b</sup>	11 (0.8)	0	1 (0.2)	1 (0.2)
<b>Feverishness</b>				
Any Grade	509 (38.5)	124 (9.9)	68 (12.0)	33 (6.8)
Grade 3 or 4 <sup>c</sup>	59 (4.5)	1 (0.1)	2 (0.4)	1 (0.2)
<b>Chills</b>				
Any Grade	492 (37.2)	96 (7.6)	37 (6.5)	26 (5.4)
Grade 3 or 4 <sup>c</sup>	58 (4.4)	0	1 (0.2)	0
<b>Joint pains</b>				
Any Grade	371 (28.0)	113 (9.0)	66 (11.6)	32 (6.6)
Grade 3 or 4 <sup>c</sup>	14 (1.1)	3 (0.2)	0	0
<b>Muscle pains</b>				
Any Grade	692 (52.3)	300 (23.8)	145 (25.6)	74 (15.3)
Grade 3 or 4 <sup>c</sup>	30 (2.3)	1 (0.1)	0	0
<b>Fatigue</b>				
Any Grade	854 (64.6)	582 (46.2)	244 (43.0)	163 (33.7)
Grade 3 or 4 <sup>c</sup>	53 (4.0)	7 (0.6)	6 (1.1)	3 (0.6)
<b>Headache</b>				
Any Grade	809 (61.1)	533 (42.3)	217 (38.3)	143 (29.5)
Grade 3 or 4 <sup>c</sup>	38 (2.9)	6 (0.5)	2 (0.4)	1 (0.2)
<b>Malaise</b>				
Any Grade	634 (47.9)	233 (18.5)	122 (21.5)	65 (13.4)
Grade 3 or 4 <sup>c</sup>	59 (4.5)	3 (0.2)	5 (0.9)	2 (0.4)
<b>Nausea</b>				
Any Grade	316 (23.9)	152 (12.1)	55 (9.7)	49 (10.1)
Grade 3 or 4 <sup>c</sup>	12 (0.9)	1 (0.1)	3 (0.5)	1 (0.2)
<b>Vomiting</b>				
Any Grade	23 (1.7)	10 (0.8)	5 (0.9)	2 (0.4)
Grade 3 or 4 <sup>c</sup>	4 (0.3)	1 (0.1)	2 (0.4)	0

<sup>a</sup> In Studies COV001 and COV002, MenACWY was administered as control for both Dose 1 and Dose 2. In Study COV003, MenACWY was administered as placebo for Dose 1, with a saline placebo for Dose 2

<sup>b</sup>  $\geq 39.0^{\circ}\text{C}$

<sup>c</sup> Grade 3: Unable to perform normal daily activity (COV001, COV002) or marked limitation in routine activities, some assistance usually required; medical intervention/therapy required (COV003). Grade 4: Emergency department or hospital admission required (COV001, COV002) or potentially life-threatening: requires assessment in emergency department or hospitalization (COV003).

Note: Subjects in some study groups were recommended to take prophylactic acetaminophen 1 g every 6 hours for the first 24 hours after vaccination.

**Table 4 – Solicited Systemic Adverse Events Within 7 Days After First and Second Injection by Grade-Participants ≥65 Years of Age (Dose 1 SD for Safety Analysis Set, Including Studies COV001, COV002, and COV003 Only)**

Solicited Local AEs	Dose 1		Dose 2	
	Vaccine Group n(%) N=399	Control <sup>a</sup> n(%) N=318	Vaccine Group n(%) N=265	Control <sup>a</sup> n(%) N=227
<b>Fever</b>				
Any Grade	4 (1.0)	1 (0.3)	0	0
Grade 3 or 4 <sup>b</sup>	0	0	0	0
<b>Feverishness</b>				
Any Grade	37 (9.3)	14 (4.4)	11 (4.3)	7 (3.1)
Grade 3 or 4 <sup>c</sup>	0	0	0	0
<b>Chills</b>				
Any Grade	43 (10.8)	12 (3.8)	5 (2.0)	6 (2.7)
Grade 3 or 4 <sup>c</sup>	0	0	1 (0.4)	0
<b>Joint pains</b>				
Any Grade	52 (13.0)	24 (7.5)	19 (7.4)	15 (6.7)
Grade 3 or 4 <sup>c</sup>	0	0	0	0
<b>Muscle pains</b>				
Any Grade	90 (22.6)	36 (11.3)	35 (13.7)	19 (8.5)
Grade 3 or 4 <sup>c</sup>	0	0	0	0
<b>Fatigue</b>				
Any Grade	163 (40.9)	87 (27.4)	69 (27.0)	47 (21.1)
Grade 3 or 4 <sup>c</sup>	0	2 (0.6)	1 (0.4)	0
<b>Headache</b>				
Any Grade	127 (31.8)	77 (24.2)	51 (19.9)	32 (14.3)
Grade 3 or 4 <sup>c</sup>	0	0	1 (0.4)	0
<b>Malaise</b>				
Any Grade	69 (17.3)	32 (10.1)	25 (9.8)	15 (6.7)
Grade 3 or 4 <sup>c</sup>	1 (0.3)	1 (0.3)	2 (0.8)	1 (0.4)
<b>Nausea</b>				
Any Grade	32 (8.0)	22 (6.9)	14 (5.5)	7 (3.1)
Grade 3 or 4 <sup>c</sup>	0	0	0	0
<b>Vomiting</b>				
Any Grade	1 (0.3)	2 (0.6)	0	1 (0.4)
Grade 3 or 4 <sup>c</sup>	0	0	0	1 (0.4)

<sup>a</sup> In Studies COV001 and COV002, MenACWY was administered as control for both Dose 1 and Dose 2. In Study COV003, MenACWY was administered as placebo for Dose 1, with a saline placebo for Dose 2

<sup>b</sup> ≥39.0°C

<sup>c</sup> Grade 3: Unable to perform normal daily activity (COV001, COV002) or marked limitation in routine activities, some assistance usually required; medical intervention/therapy required (COV003). Grade 4: Emergency department or hospital admission required (COV001, COV002) or potentially life-threatening: requires assessment in emergency department or hospitalization (COV003).

Note: Subjects in some study groups were recommended to take prophylactic acetaminophen 1 g every 6 hours for the first 24 hours after vaccination.

### Unsolicited Adverse Events

In the pooled analysis of subjects aged  $\geq 18$  who received any dose of vaccine (VAXZEVRIA = 12,021 of whom 1169 were aged  $\geq 65$  years and control = 11,724 of whom 940 were aged  $\geq 65$  years), unsolicited adverse events occurring within 28 days after each vaccination were reported by 37.8% of participants who received VAXZEVRIA and 27.9% of participants who received the control. Most of these events occurred within 7 days after receipt of any dose of the vaccine, with 9.4% of participants in the VAXZEVRIA group and 9.0% of participants in the control group reporting adverse events between 7 and 28 days after any dose. The adverse events occurring in  $\geq 2\%$  participants were predominantly reactogenicity events (vaccination site pain, headache, fever, myalgia, fatigue, chills, asthenia, malaise, nausea etc).

Other unsolicited events where there was an imbalance of AEs between VAXZEVRIA and control group and that occurred at rates  $>0.1\%$  in the vaccine group included: hyperhidrosis (0.3% in the vaccine and 0.1% in the control group) and decreased appetite (0.2% in the vaccine and 0.1% in the control group).

Lymphadenopathy, pruritis and rash are recognized uncommon AEs for the MenACWY comparator vaccine. Lymphadenopathy occurred at a rate of 0.3 % in both groups. Pruritis and rash occurred at rates of 0.2% each in both the VAXZEVRIA and control groups.

Unsolicited AEs affecting the nervous system occurred in 11.7 % of participants in the VAXZEVRIA group and 7.8% of participants in the control group. Most of these events were due to reactogenicity, were self-limited and occurred in the first 7 days following vaccination. The events that occurred at higher rates in the VAXZEVRIA group than the control group included headache (9.3% vs 6.1% respectively), dizziness (0.6 % vs 0.5 %) and somnolence (0.3% vs 0.2%). Facial paralysis occurred in 3 subjects in the VAXZEVRIA group and 3 subjects in the control group, all of whom had received meningococcal vaccine.

No deaths related to the vaccine were reported in the pooled safety analysis.

### Serious Adverse Events

Seventy-nine (0.7%) of subjects in the VAXZEVRIA group and 89 (0.8%) of subjects in the control group experienced a serious adverse event between the first vaccination and the interim analysis. The median duration of follow-up from the first dose was 105 days in the VAXZEVRIA group and 104 days in the control group.

Two serious adverse events were possibly related to the VAXZEVRIA: one case of pyrexia (40.5°C) occurring 2 days after dose 1, and one case of transverse myelitis occurring 14 days after dose 2. Two possibly related SAEs occurred in the control group: a case of autoimmune haemolytic anemia occurring 9 days after a single dose of the MenACWY vaccine and one case of myelitis occurring 54 days after a single dose of MenACWY.

### **8.3 Post-Market Adverse Reactions**

The following adverse reactions have been spontaneously reported during worldwide post-authorization use of VAXZEVRIA. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to product exposure. They are included because: a) they represent reactions that are known to occur following immunizations generally; or b) they are potentially serious; or c) on the basis of their frequency of reporting.

Blood and lymphatic system disorders: Thrombocytopenia.

Immune system disorders: Anaphylactic reaction.

Nervous system disorders: Guillain-Barré Syndrome.

Skin and subcutaneous tissue disorders: Angioedema.

Vascular disorders: A combination of thrombosis and thrombocytopenia including thrombosis with thrombocytopenia syndrome (TTS), in some cases accompanied by bleeding, has been observed very rarely following vaccination with VAXZEVRIA. This includes severe cases in unusual sites such as cerebral venous sinus thrombosis and splanchnic vein thrombosis, as well as arterial thrombosis, concomitant with thrombocytopenia. See **WARNINGS AND PRECAUTIONS**.

In addition, cases of capillary leak syndrome (CLS) have been observed following vaccination with VAXZEVRIA. See **WARNINGS AND PRECAUTIONS**.

## **9 DRUG INTERACTIONS**

No interaction studies have been performed.

Do not mix VAXZEVRIA with other vaccines/products in the same syringe.

## **10 CLINICAL PHARMACOLOGY**

### **10.1 Mechanism of Action**

VAXZEVRIA is a monovalent vaccine composed of a single recombinant, replication-deficient chimpanzee adenovirus (ChAdOx1) vector encoding the S glycoprotein of

SARS-CoV-2. The SARS-CoV-2 S immunogen in the vaccine is expressed in the trimeric pre-fusion conformation; the coding sequence has not been modified in order to stabilise the expressed S-protein in the pre-fusion conformation. Following administration, the S glycoprotein of SARS-CoV-2 is expressed locally stimulating neutralising antibody and cellular immune responses, which may contribute to protection against COVID-19.

## **11 STORAGE, STABILITY AND DISPOSAL**

### Unopened multidose vial

Store in a refrigerator (2 to 8°C).

Do not freeze.

Store in outer carton in order to protect from light.

Use the product before the expiration date on the vial label.

### Opened multidose vial

For storage conditions after first opening of the medicinal product, see below.

After first opening, chemical and physical in-use stability has been demonstrated from the time of vial puncture to administration for no more than:

- 6 hours at room temperature, up to 30°C, or
- 48 hours in a refrigerator (2 to 8°C).

The vial can be re-refrigerated, but the cumulative storage time at room temperature must not exceed 6 hours, and the total cumulative storage time must not exceed 48 hours.

## **12 SPECIAL HANDLING INSTRUCTIONS**

### Disposal

VAXZEVRIA contains genetically modified organisms (GMOs). Any unused vaccine or waste material should be disposed of in accordance with local requirements. Spills should be disinfected with an appropriate antiviral disinfectant.

## PART II: SCIENTIFIC INFORMATION

### 13 PHARMACEUTICAL INFORMATION

#### Drug Substance

Proper name: COVID-19 Vaccine (ChAdOx1-S [recombinant])

#### Product Characteristics:

VAXZEVRIA is a clear to slightly opaque, colourless to slightly brown, sterile, particle free, pH 6.6, preservative-free, solution for intramuscular injection.

One dose (0.5 ml) of VAXZEVRIA contains:

COVID-19 Vaccine (ChAdOx1-S\* recombinant) 5 x 10<sup>10</sup> viral particles

\*Recombinant, replication-deficient chimpanzee adenovirus vector encoding the unmodified SARS-CoV-2 Spike (S) glycoprotein (GP) produced in genetically modified human embryonic kidney (HEK) 293 cells by recombinant DNA technology.

### 14 CLINICAL TRIALS

#### 14.1 Trial Design and Study Demographics

##### *Interim analysis of pooled data from COV001, COV002, COV003, and COV005*

VAXZEVRIA has been evaluated based on an interim analysis of pooled data from four on-going randomised, blinded, controlled trials: a Phase I/II Study in healthy adults 18 to 55 years of age in the UK (COV001; NCT04324606), a Phase II/III Study in adults ≥18 years of age in the UK (COV002; NCT04400838), a Phase III Study in adults ≥18 years of age in Brazil (COV003; ISRCTN89951424), and a Phase I/II study in adults aged 18 to 65 years of age in South Africa (COV005; NCT04444674). The studies excluded participants with a history of anaphylaxis or angioedema; participants with severe and/or uncontrolled cardiovascular, gastrointestinal, liver, renal, endocrine/metabolic disease, or neurological illnesses; pregnant or breastfeeding women; participants with known history of SARS-CoV-2 infection as well as those with severe immunosuppression.

The primary efficacy endpoint was virologically-confirmed symptomatic cases of COVID-19\* confirmed by a clinical adjudication committee.

*\*PCR confirmed SARS-CoV-2 and at least one of the following symptoms: objective fever (defined as ≥37.8 °C), cough, shortness of breath, anosmia, or ageusia.*

Based on the pre-defined criteria for the interim efficacy analysis (data cut-off November 4, 2020), COV002 and COV003 exceeded the threshold of ≥5 adjudication committee confirmed COVID-19 cases per study and therefore contributed to the efficacy analysis; COV001 and COV005 did not exceed such threshold and were excluded from this interim analysis. In the pooled analysis for efficacy (COV002 and COV003), participants ≥18 years of age that received two doses of VAXZEVRIA or

control (meningococcal vaccine or saline placebo) were included. The planned dose was  $5 \times 10^{10}$  viral particles (vp) per dose administered via IM injection. The population used for the interim analysis of the primary efficacy endpoint included participants who received two doses of the VAXZEVRIA or control and did not have evidence of prior infection with SARS-CoV-2 through 15 days after the second dose. Study COV002 contributed a total of 7548 participants (3744 receiving the VAXZEVRIA, 3804 receiving two doses of a meningococcal vaccine control) and Study COV003 contributed a total of 4088 participants (2063 receiving the VAXZEVRIA, 2025 receiving meningococcal vaccine followed by saline placebo control) to this analysis.

Participants are planned to be followed for up to 12 months, for assessments of safety and efficacy against COVID-19 disease.

**Table 5 – Demographic Characteristics – Subjects Without Evidence of Infection Prior to 15 Days After Dose 2 – Evaluable Efficacy Population (COV002 and COV003)**

Characteristic	Study COV002 (United Kingdom)		Study COV003 (Brazil)	
	VAXZEVRIA (N=3744)	Meningococcal Vaccine (N=3804)	VAXZEVRIA (N=2063)	Meningococcal Vaccine/ Placebo (N=2025)
<b>Sex</b>				
Female	2264 (60.5)	2365 (62.2)	1261 (61.1)	1156 (57.1)
Male	1480 (39.5)	1438 (37.8)	802 (38.9)	869 (42.9)
<b>Age (years)</b>				
Mean (SD)	43.0 (13.1)	43.2 (13.0)	38.9 (11.5)	38.6 (11.2)
Median	42	42	37	36
Min, max	18, 86	18, 88	19, 84	18, 77
<b>Age group</b>				
18 to 64 years	3467 (92.6)	3525 (92.7)	1999 (96.9)	1985 (98.0)
≥65 years	277 (7.4)	279 (7.3)	64 (3.1)	40 (2.0)
<b>Race</b>				
White	3450 (92.1)	3534 (92.9)	1357 (65.8)	1366 (67.5)
Asian	213 (5.7)	197 (5.2)	54 (2.6)	53 (2.6)
Black	23 (0.6)	16 (0.4)	230 (11.1)	210 (10.4)
Other	22 (0.6)	19 (0.5)	260 (12.6)	260 (12.8)
Mixed	34 (0.9)	37 (1.0)	159 (7.7)	133 (6.6)
Not reported	2 (0.1)	1 (<0.1)	3 (0.1)	3 (0.1)
<b>Comorbidity at baseline<sup>a</sup></b>				
Yes	1311 (35.0)	1398 (36.8)	759 (36.8)	735 (36.3)
No	2432 (65.0)	2401 (63.1)	1301 (63.1)	1282 (63.3)
Missing	1 (<0.1)	5 (0.1)	3 (0.1)	8 (0.4)

<sup>a</sup> Number (%) of subjects who have 1 or more of the following comorbidities at baseline that increase the risk of severe COVID-19 disease: BMI  $\geq 30$  kg/m<sup>2</sup>, cardiovascular disorder, respiratory disease, or diabetes.

## 14.2 Study Results

The interim analysis of the primary efficacy endpoint (data cut-off November 4, 2020) included 11,636 participants 18 years of age and older (5,807 in the VAXZEVRIA group and 5,829 in the control group). At the time of the interim analysis, participants had been followed for symptomatic COVID-19 disease for a median of 63 days (range: 16-94 days) after the second dose, corresponding to exposure of 921 person-years in the VAXZEVRIA and 925 person-years in the control group.

Participants randomised to VAXZEVRIA received either two standard doses [SD] ( $5 \times 10^{10}$  vp per dose) (SD/SD) or, due to a difference in concentration determination between two analytical methods, one low dose [LD] ( $2.2 \times 10^{10}$  vp) followed by one SD ( $5 \times 10^{10}$  vp) (LD/SD).

The interval between dose 1 and dose 2 ranged from 3 to 26 weeks for these data. In these 11,636 seronegative participants, 86 (0.7%) had a dose interval of less than 4 weeks, 8,786 (75.5%) had a dose interval of 4-12 weeks and 2,764 (23.8%) had a dose interval of more than 12 weeks.

A total of 131 participants had SARS-CoV-2 virologically confirmed COVID-19 occurring  $\geq 15$  days post second dose. There were 30 confirmed COVID-19 cases identified in the VAXZEVRIA group and 101 in the control group, respectively, for the primary interim efficacy analysis. Compared to control, efficacy of VAXZEVRIA in participants with first COVID-19 occurrence from 15 days after Dose 2 was 70.42% (two-sided 95.84% confidence interval of 58.84% to 80.63%,  $p < 0.001$ ). There were no cases of COVID-19 hospitalisation (WHO severity score  $\geq 4$ ) in the participants that received VAXZEVRIA as compared to 5 cases in control participants.

The vaccine efficacy was based on pre-specified analysis; however the results should be interpreted with caution given that it excludes 51% of randomized and vaccinated subjects, the majority of which had only received a single dose. In addition, a significant difference was observed in vaccine efficacy between the LD/SD cohort and the SD/SD cohort. The findings may also be confounded by the variability in dosing interval.

In participants who received two standard doses of the vaccine (SD/SD) or the corresponding control (4,440 in the VAXZEVRIA group and 4,455 in the control group), a total of 98 participants had SARS-CoV-2 virologically confirmed COVID-19 occurring  $\geq 15$  days post second dose (27 cases in the VAXZEVRIA group and 71 cases in the

control group). In this population, vaccine efficacy from 15 days post second dose was 62.10% (two-sided 95% confidence interval of 39.96% to 76.08%).

Evidence shows protection starts from approximately 3 weeks after first dose of vaccine and persists up to 12 weeks. A second dose should be given at a 4-to-12-week interval after the first dose, with evidence that efficacy increases with longer dosing intervals.

Based on an updated analysis (data cut-off December 7, 2020), vaccine efficacy was 59.5% (two-sided 95% confidence interval of 45.8% to 69.7%) in participants who received two standard doses with the second dose administered 4 to 12 weeks after the first dose. Regarding COVID-19 hospitalisation (WHO severity score  $\geq 4$ ) in these data, there were 0 (0.0%; N=5,258) cases of COVID-19 hospitalisation in participants who received two doses of VAXZEVRIA ( $\geq 15$  days post dose 2) as compared to 8 (0.2%; N=5,210) for control, including one severe case (WHO severity score  $\geq 6$ ), reported for control and 0 severe cases reported for VAXZEVRIA.

At the time of interim analysis, there were limited number of COVID-19 cases in participants  $\geq 65$  years old.

## **15 MICROBIOLOGY**

No microbiological information is required for this drug product.

## **16 NON-CLINICAL TOXICOLOGY**

### **General Toxicology**

In a repeat-dose toxicity study in mice, Intramuscular (IM) administration of VAXZEVRIA was well tolerated.

IM administration of VAXZEVRIA at a dose of  $3.7 \times 10^{10}$  vp/animal once every 3 weeks for 6 weeks (total of 3 doses) resulted in transient inflammation at the site of injection and underlying fascia and connective tissue, slightly increased body temperature, increased spleen weights, mildly decreased monocyte counts, and minimal to mild clinical chemistry changes indicative of an active phase response.

Non-adverse, mixed and/or mononuclear cell inflammation was observed in the subcutaneous tissues and skeletal muscle of the administration sites and adjacent sciatic nerve consistent with the anticipated findings after IM injection of vaccines. There were no findings in the administration sites or sciatic nerves at the end of a 4-week recovery period, indicating complete recovery of the VAXZEVRIA-related inflammation.

Full recovery from all findings was observed following the 4 week recovery period. These changes are consistent with an expected immunostimulatory response following intramuscular administration of a vaccine.

## **Carcinogenicity**

VAXZEVRIA has not been evaluated for carcinogenicity in animals, as carcinogenicity studies were not considered relevant to this vaccine.

## **Genotoxicity**

VAXZEVRIA has not been evaluated for genotoxicity, as genotoxicity studies were not considered relevant to this vaccine.

## **Reproductive and Developmental Toxicology**

In a pre- and post-natal development toxicity study in mice, VAXZEVRIA was well tolerated. In this study, F0 female mice were administered two doses of  $3.71 \times 10^{10}$  vp/animal of VAXZEVRIA by IM injection 13 days prior to mating and on gestational day (GD) 6 or on GD 6 and GD 15. IM administration of VAXZEVRIA elicited detectable anti-SARS-CoV-2 S-glycoprotein maternal antibodies in dams that were detected in foetuses and pups, indicating placental and lactational transfer, respectively. There were no VAXZEVRIA-related adverse effects on female fertility, fetal or pup survival, or pup physical development. There were also no VAXZEVRIA-related fetal external, visceral, or skeletal findings or abnormal gross pathology findings in pups prior to or post weaning or in dams.

A biodistribution study conducted in mice did not show measurable distribution of VAXZEVRIA to the gonads (testes, ovaries) following a single IM injection at a dose of  $3.7 \times 10^{10}$  vp/animal.

## **PATIENT MEDICATION INFORMATION**

### **READ THIS FOR SAFE AND EFFECTIVE USE OF YOUR MEDICINE**

#### **VAXZEVRIA™**

#### **COVID-19 Vaccine (ChAdOx1-S [recombinant]), Solution for Intramuscular Injection**

VAXZEVRIA (manufactured by AstraZeneca) and COVISHIELD (manufactured by Serum Institute of India) are ChAdOx1-S recombinant vaccines developed by AstraZeneca and the University of Oxford. Health Canada has reviewed the manufacturing information for these vaccines and found them to be comparable.

Health Canada has authorized the sale of this COVID-19 vaccine under an Interim Order. This leaflet is a summary and will not tell you everything about this vaccine. Talk to your healthcare professional about your medical condition and treatment and ask if there is any new information about VAXZEVRIA.

#### **What is VAXZEVRIA used for?**

VAXZEVRIA is a vaccine used to prevent the coronavirus disease 2019 (COVID-19) caused by the SARS-CoV-2 virus. It can be given to adults 18 years of age and older.

#### **How does VAXZEVRIA work?**

COVID-19 is caused by a virus called coronavirus (SARS-CoV-2).

VAXZEVRIA stimulates the body's natural defences (immune system), by causing the body to produce its own protection (antibodies) against the SARS-CoV-2 virus that causes the COVID-19 infection. You cannot get COVID-19 from this vaccine.

The vaccine is given by injection with a needle, usually in the upper arm, and will require two doses given between 4 and 12 weeks apart. Individuals may not be optimally protected until after receiving the second dose of the vaccine. As with any vaccine, VAXZEVRIA may not fully protect all those who receive it. It is not yet known how long people who receive the vaccine will be protected.

Even after you have had both doses of the vaccine, continue to follow the recommendations of local public health officials to prevent spread of COVID-19.

#### **What are the ingredients in VAXZEVRIA?**

Medicinal ingredients: ChAdOx1-S [recombinant]

Non-medicinal ingredients:

- Ethanol,
- Disodium edetate dihydrate (EDTA),
- L-Histidine,  
L-Histidine hydrochloride monohydrate,
- Magnesium chloride hexahydrate,
- Polysorbate 80,
- Sodium chloride,
- Sucrose,
- Water for injection

### **VAXZEVRIA comes in the following dosage forms:**

Clear to opalescent, colourless to slightly brown, particle-free, preservative-free, solution for injection. It is provided in a multiple dose vial of 10 or 8 doses, one dose is 0.5 mL.

### **You should not receive VAXZEVRIA if you:**

- Had a severe allergic reaction to any of the medicinal ingredients or any of the other ingredients in this vaccine (see ***What are the ingredients in VAXZEVRIA***). If you are not sure, talk to your healthcare professional;
- Have had an allergic reaction to a previous dose of VAXZEVRIA /COVISHIELD;
- Have had a major blood clot occurring at the same time as having low levels of platelets (thrombocytopenia) after receiving any VAXZEVRIA /COVISHIELD;
- Have previously experienced episodes of capillary leak syndrome (see ***What are possible side effects from using VAXZEVRIA***);
- Have any symptoms that could be due to COVID-19. Talk with your healthcare professional about your symptoms and getting a COVID-19 test. Your healthcare professional will advise you when you are able to receive the vaccine.

### **To help avoid side effects and ensure proper use, talk to your healthcare professional before you take VAXZEVRIA. Talk about any health conditions or problems you may have, including if you:**

- Have any allergies or previous problems following administration of VAXZEVRIA /COVISHIELD Vaccine such as an allergic reaction or breathing problems, or major venous or arterial thrombosis with thrombocytopenia;
- Have ever had a blood clot or low blood platelets (thrombocytopenia) in the past or if you have an autoimmune disorder (illness where the body's immune system attacks its own cells) including idiopathic thrombocytopenic purpura (ITP);
- Have had a history of venous sinus thrombosis in the brain (CVST) with low platelets (thrombocytopenia) or a history of heparin-induced thrombocytopenia (HIT);
- Have previously experienced episodes of capillary leak syndrome (see ***What are possible side effects from using VAXZEVRIA***);
- Have had a severe allergic reaction after any other vaccine injection;
- Have a weakened immune system due to a medical condition (immunodeficiency) or are on a medicine that affects your immune system (such as high-dose corticosteroids, immunosuppressants or cancer medicines);
- Currently have a severe infection with a high temperature (over 38°C);
- Have a problem with bleeding or bruising, or if you are taking a blood thinning medicine (anticoagulant);
- Are pregnant, think you may be pregnant or plan to become pregnant;
- Are breastfeeding or plan to breastfeed.

**If you are not sure if any of the above applies to you, talk to your healthcare professional before you are given the vaccine.**

### **Neurological events**

Guillain-Barré syndrome (GBS) is a neurological disorder where inflammation of peripheral nerves causes rapid muscle weakness and can sometimes lead to paralysis. This has been

reported very rarely after vaccination with VAXZEVRIA /COVISHIELD. Seek immediate medical attention if you develop weakness and paralysis in the extremities that can progress to the chest and face.

### **Driving and using machines**

VAXZEVRIA has no known effect on the ability to drive and use machines. However, side effects listed in ***What are possible side effects from using VAXZEVRIA*** may impact your ability to drive and use machines. If you feel unwell, do not drive or use machines.

### **Tell your healthcare professional about all the medicines you take, including any drugs, vitamins, minerals, natural supplements or alternative medicines.**

Tell your healthcare professional if you are taking, have recently taken or might take, any other medicines or vaccines.

### **How VAXZEVRIA is given:**

- A healthcare provider will inject the vaccine into a muscle (intramuscular injection), usually in your upper arm.
- During and after each injection of the vaccine, your doctor, pharmacist or nurse will watch over you for around 15 minutes to monitor for signs of an allergic reaction.

### **Usual dose:**

You will receive 2 injections. You will be told when you need to return for your second injection of VAXZEVRIA.

The second injection can be given between 4 and 12 weeks after the first injection.

It is very important that you return for the second injection, or the vaccine may not work as well.

Individuals should complete the vaccination course with either VAXZEVRIA or COVISHIELD.

### **Overdose:**

In the event of suspected overdose with VAXZEVRIA, contact your regional poison control centre.

### **Missed Dose:**

If you forget to go back to your healthcare professional at the scheduled time for your next dose, ask your healthcare professional for advice. It is important that you return for your second injection of VAXZEVRIA.

### **What are possible side effects from using VAXZEVRIA?**

Like all medicines, VAXZEVRIA can cause side effects, although not everybody gets them. Most side effects are mild to moderate in nature and resolve within a few days. Fewer side effects were reported after the second dose.

Severe allergic reaction (anaphylaxis), severe swelling of the lips, mouth, throat (which may cause difficulty in swallowing or breathing) have been reported following VAXZEVRIA. Should you develop any serious symptoms or symptoms that could be an allergic reaction, seek medical attention right away. Symptoms of an allergic reaction include:

- hives (bumps on the skin that are often very itchy)
- feeling faint or light-headed
- changes in your heartbeat
- swelling of your face, lips, tongue or throat
- difficulty breathing, shortness of breath or wheezing

A combination of major blood clots and low level of platelets, in some cases together with bleeding, has been observed very rarely following vaccination with VAXZEVRIA in post-authorization use. The majority of the cases occurred within the first 3 weeks following vaccination and some cases had a fatal outcome. Very rare cases of low blood platelets (thrombocytopenia) have also been reported. Seek medical attention right away if any of the following symptoms occur within the first month following vaccination:

- new severe headaches, worsening or persistent headaches, blurred vision, confusion or seizures
- shortness of breath, chest pain, leg swelling, leg pain or persistent abdominal pain
- unusual skin bruising or pinpoint round spots beyond the site of vaccination

After vaccination, you may have more than one side effect at the same time (for example, muscle/joint aches, headaches, chills and generally feeling unwell). If any of your symptoms are persistent, please seek advice from your healthcare professional.

Very rare cases of capillary leak syndrome (CLS) have been reported following vaccination with VAXZEVRIA. Some affected patients had a previous diagnosis of CLS. CLS is a serious, potentially fatal condition causing fluid leakage from small blood vessels (capillaries) resulting in rapid swelling of the arms and legs, sudden weight gain and feeling faint (low blood pressure). Seek medical attention right away if you develop these symptoms in the days following vaccination.

Side effects that have been reported with VAXZEVRIA were as follows:

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

- tenderness, pain, warmth, or itching where the injection is given
- generally feeling unwell
- feeling tired (fatigue)
- chills or feeling feverish
- headache
- feeling sick (nausea)
- joint pain or muscle ache

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

- swelling or redness where the injection is given
- fever
- being sick (vomiting) or diarrhea
- pain in legs or arms
- flu-like symptoms, such as high temperature, sore throat, runny nose, cough and chills

**Uncommon** (may affect up to 1 in 100 people)

- sleepiness or feeling dizzy
- decreased appetite
- abdominal pain

- enlarged lymph nodes
- excessive sweating, itchy skin, rash or hives

These are not all the possible side effects you may have when taking VAXZEVRIA. If you experience any side effects not listed here, tell your healthcare professional.

If you experience a severe allergic reaction, call 9-1-1, or go to the nearest hospital.

### **Reporting Suspected Side Effects for Vaccines**

**For the general public:** Should you experience a side effect following immunization, please report it to your healthcare professional.

Should you require information related to the management of the side effect, please contact your healthcare professional. The Public Health Agency of Canada, Health Canada and AstraZeneca Canada Inc. cannot provide medical advice.

**For healthcare professionals:** If a patient experiences a side effect following immunization, please complete the Adverse Events Following Immunization (AEFI) Form appropriate for your province/territory (<https://www.canada.ca/en/public-health/services/immunization/reporting-adverse-events-following-immunization/form.html>) and send it to your local Health Unit.

### **Storage:**

Your healthcare professional is responsible for storing this vaccine and disposing of any unused product correctly.

Keep out of reach and sight of children.

### **If you want more information about VAXZEVRIA:**

- Talk to your healthcare professional
- Find the full product monograph that is prepared for healthcare professionals and includes this Patient Medication Information by visiting the Health Canada website: (<https://www.canada.ca/en/health-canada/services/drugs-health-products/drug-products/drug-product-database.html>); the manufacturer's website [www.astrazeneca.ca](http://www.astrazeneca.ca), or [www.azcovid-19.com](http://www.azcovid-19.com), or by calling 1-800-668-6000.

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