

## Herpes Zoster Non-Live Recombinant Vaccine Biological Page

Section 7:	Biological Product Information			Standard #: 07.215	
Created by:	Provincial Immunization Program Standards and Quality				
Approved by:	Provincial Immunization Program Standards and Quality				
Approval Date:	September	<sup>.</sup> 1, 2021	Revised:	January 29, 2024	

	SHINGRIX®		
Manufacturer	GlaxoSmithKline Inc.		
Biological Classification	Non-live recombinant, AS01 <sub>B</sub> adjuvanted		
Indications for Provincially Funded Vaccine	<ul> <li>Solid Organ Transplant recipients 18 years of age and older (pre and post solid organ transplant).         <ul> <li>See <u>Adult SOT</u> for additional information.</li> </ul> </li> <li>Autologous Hematopoietic Stem Cell Transplant (HSCT) recipients 18 years of age and older (post HSCT).         <ul> <li>See <u>Adult HSCT</u> for additional information.</li> </ul> </li> </ul>		
Serology	See Adult SOT for additional information regarding serology recommendations.		
Schedule	<ul> <li>Primary Series:</li> <li>Dose 1: Day 0</li> <li>Dose 2: Two to six months later</li> <li>Notes:</li> <li>Persons with active HZ should not be immunized with HZ vaccine. Vaccine may be considered at least one year after an episode of HZ disease.</li> <li>SHINGRIX® is recommended for those who have received live varicella vaccine prior to SOT transplant. SHINGRIX® vaccine can be administered 8 weeks after live varicella vaccine.</li> <li>SHINGRIX® is recommended for those who have received Zostavax® prior to solid organ transplant. An interval of one year is recommended between live attenuated Herpes Zoster (Zostavax®) and SHINGRIX®.</li> </ul>		
Preferred Use	N/A		
Dose	0.5 mL		
Route	Intramuscular Injection		
Contraindications/ Precautions	<ul> <li>Contraindications:</li> <li>Known severe hypersensitivity to any component of the vaccine.</li> <li>Anaphylaxis to a previous dose of the vaccine.</li> <li>Precautions: <ul> <li>SHINGRIX® is not indicated for prevention of primary varicella infection or for the treatment of herpes zoster (HZ) or postherpetic neuralgia (PHN).</li> <li>There are limited data available on the use of SHINGRIX® in immunocompromised adults 50 years of age or older.</li> <li>Fever and shivering were more frequently reported when Pneumococcal Vaccine, 23-valent Polysaccharide (PPV23) vaccine was co-administered with Shingrix.</li> </ul> </li> </ul>		
Possible Reactions	<ul> <li>Common:</li> <li>Pain, redness, itching and swelling at the injection site</li> <li>Fever, chills</li> <li>Fatigue, malaise</li> <li>Headache, myalgia</li> <li>Nausea, vomiting, diarrhea, abdominal pain</li> </ul>		

	SHINGRIX®			
	<ul> <li>Rare:</li> <li>Allergic reactions</li> <li>Anaphylaxis</li> <li>As with any immunization, unexpected or unusual side effects can occur. Refer to product monograph for more detailed information.</li> </ul>			
Pregnancy	There are no data on the use of SHINGRIX® in pregnant women, therefore use with caution.			
Lactation	There are no data on the use of SHINGRIX® in breastfeeding women, therefore use with caution.			
Composition	<ul> <li>After reconstitution, one dose (0.5mL) contains:</li> <li>50 mcg Varicella Zoster Virus (VZV) glycoprotein E (gE)</li> <li>50 mcg Quillaja saponaria Molina fraction 21 (QS-21)</li> <li>50 mcg 3-O-desacyl-4'-monophosphoryl lipid A (MPL)</li> </ul>			
	<ul> <li>Additional excipients - powder (gE):</li> <li>dipotassium phosphate</li> <li>polysorbate 80</li> <li>sodium dihydrogen phosphate dihydrate</li> <li>sucrose</li> </ul>			
	<ul> <li>Additional excipients - suspension (AS01<sub>B</sub> adjuvant system)</li> <li>cholesterol</li> <li>dioleoyl phosphatidylcholine</li> <li>disodium phosphate anhydrous</li> <li>potassium dihydrogen phosphate</li> <li>sodium chloride</li> <li>water for injection</li> </ul>			
Blood/Blood Products	Contains no human blood/blood products			
Bovine/Porcine Products	Contains no bovine or porcine products			
Latex	There is no latex in the vaccine or vaccine packaging			
Interchangeability	SHINGRIX® is the only non-live licensed vaccine for the prevention of HZ (shingles) in Canada.			
Administration with Other Products	<ul> <li>SHINGRIX® may be administered concomitantly with, or at any time before or after, other inactivated vaccines or live vaccines protecting against a different disease.</li> <li>The vaccines should be administered at different injection sites.</li> </ul>			
Appearance	<ul> <li>The reconstituted vaccine is an opalescent, colourless to pale brownish liquid.</li> <li>The lyophilized powder is white.</li> </ul>			
Storage	<ul> <li>Store both lyophilized vial and adjuvant solution at +2°C to +8°C.</li> <li>Protect from light.</li> </ul>			
Preparation	<ul> <li>Shingrix® must be reconstituted prior to administration.</li> <li>Withdraw the entire contents of the vial containing the adjuvant suspension into a sterile syringe.</li> <li>Add the entire contents of the syringe into the vial containing the lyophilized powder.</li> <li>Shake gently until the lyophilized powder is completely dissolved.</li> </ul>			
Vaccine Code	Var-SI			
Antigen Code	VZ			

	SHINGRIX®		
	<ul> <li>Individuals 18 years of age and older who are or will be at increased risk of Herpes Zoster due to immunodeficiency or immunosuppression caused by known disease or therapy.</li> </ul>		
Program Notes:			
2017 October 13: Licensed for use in Canada.			
<ul> <li>2021 September 1: Implemented for solid organ transplant recipients 18 years of age and older.</li> </ul>			

- 2023 March 1: Updated to include reports of fever and shivering when co-administered with Pneumococcal 23valent Polysaccharide (PPV23) Vaccine.
- 2024 January 29: Expanded indications for provincially funded vaccine to include autologous HSCT recipients 18 years of age and older.

## **Related Resources:**

• Herpes Zoster (Shingles) Vaccine – Shingrix (VAR-SI) Information Sheet

## **References:**

- 1. Alberta Health, Health System Accountability and Performance Division, Alberta Immunization Policy (2024 January 29). Herpes Zoster Non-Live Recombinant Vaccine (Shingrix®).
- 2. Expert opinion of Alberta HSCT physicians. (November 2023).
- 3. Expert opinion of Alberta Infectious Disease and Solid Organ Transplant physicians (November 2019).
- 4. Ask the Experts: Zoster (Shingles) Vaccines (immunize.org) Feb 28, 2023
- 5. GlaxoSmithKline (2022, November 15). SHINGRIX®: Herpes Zoster vaccine (non-live recombinant, AS01<sub>B</sub> adjuvanted). *Product Monograph*. <u>https://ca.gsk.com/media/6259/shingrix-pm-en.pdf</u>
- 6. National Advisory Committee on Immunization. (2018). Updated Recommendations on the Use of Herpes Zoster Vaccines. <u>https://www.canada.ca/en/services/health/publications/healthy-living/updated-recommendations-use-herpes-zoster-vaccines.html#a6</u>
- 7. National Advisory Committee on Immunization. Canadian Immunization Guide (Evergreen ed.). Ottawa, On: Public Health Agency of Canada. <u>https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-8-herpes-zoster-(shingles)-vaccine.html#a9</u>