

Pharmacy Bulletin

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Chicken Pox Vaccine Is Now Available in Kedai Farmasi

Chicken pox is a contagious viral infection caused by Varicella-Zoster Virus (VZV). More than 90% of people get chicken pox during childhood unless they have been immunized. Once infected, patients will develop life-long immunity. After recovery, the virus remains dormant in spinal nerves and in 15 percent of the cases, it may be reactivated years later (typically in adults over 50 years old), causing Herpes Zoster (Shingles) which is commonly known as 'snake disease' among the Chinese.

Chickenpox causes a blister-like rash, itching, tiredness, and fever that can spread over the entire body causing between 250 and 500 itchy blisters. It can cause serious complications especially in babies, pregnant women and people with weakened immune systems. For example, immunocompromised people (who are contraindicated from getting the varicella vaccine) are at higher risk to develop visceral dissemination (VZV infection of internal organs) leading to pneumonia, hepatitis, encephalitis, and disseminated intravascular coagulopathy compared to immunocompetent people. Hence, it is inevitable that these population be protected by herd immunity which helps to slow or even stop the spread of disease.

Varicella vaccine is an **additional/optional vaccination** parents can choose to administer to their child from 12 months above. It was first introduced in Malaysia in 1997 as a single dose vaccine before the combination with other vaccines were made available in the market. There was a temporary shortage of supply nationwide in 2015-2016 but currently the supply has resumed. It is now available in PPUKM Kedai Farmasi NF (03-9145 5398).

Below are the 2 brands available in Malaysia as a single vaccine :

	Vari VAX	Vari LVIX
Manufacturer	AVAILABLE NOW Merck, Sharp & Dohme Sdn Bhd (MSD)	Glaxosmithkline Pharmaceutical Sdn Bhd (GSK)
Availability & Policy	In Kedai Farmasi NF. Price RM 107.20 per vial of 0.5mL 	Not available in PPUKM 
Dosage	Child 12month—12 years: 1 dose Child >12 years & Adult: 2 doses with 4-8 weeks interval	Child 12month—12 years: 1 dose Child >12 years & Adult: 2 doses with 6-10 weeks interval
Potency of varicella virus	> 1,350 PFU/0.5 mL	< 2,000 PFU/0.5 mL
Adminis-tration	Subcutaneous injection	
Precaution	<ul style="list-style-type: none"> ◆ Defer vaccination following for at least 5 months following blood/plasma transfusion or administration of immune globulin/varicella zoster immune globulin (VZIG). ◆ Following administration of VariVax, any immune globulin should not be given for 2 months after. ◆ Avoid salicylates for 6 weeks. ◆ Avoid pregnancy 3 month after vaccination. 	
Common Adverse Effect	<ul style="list-style-type: none"> ◆ Fever ◆ Pain ◆ Varicella like rash 	<ul style="list-style-type: none"> ◆ Rash ◆ Swelling at site of injection
Stability & storage	<ul style="list-style-type: none"> ◆ Store at 2-8 °C. ◆ Discard if reconstituted vaccine is not used within 30 min as it doesn't contain preservatives. 	<ul style="list-style-type: none"> ◆ Store at 2-8 °C. ◆ May be kept for up to 90 minutes at room temperature (25°C) and up to 8 hours in the refrigerator (2-8 °C)

References :

- 1) <https://www.cdc.gov/chickenpox/about/index.html>
- 2) <http://www.myhealth.gov.my/en/varicella-zoster-viral-infection/>
- 3) <http://infomed.com.my/vaccination-in-malaysia>
- 4) <http://www.mpaweb.org.my>

TEMPORARY SHORTAGE OF GLYCOPYRROLATE INJ IN PPUKM

Drug	Dosage	PROS	SIDE EFFECTS
SHORTAGE Glycopyrrolate Injection 200 mcg/mL (1mL); Syrup 0.1mg/mL (10mL) (Extemporaneous) Availability: Formulary Item Prescriber: All	Started at 0.02mg/kg per dose, two to three times daily; titrate once weekly to effectiveness and tolerability, not exceeding 3mg three times daily	Less central side effects as it does not cross blood brain barrier	Constipation, excessive oral dryness, urinary retention, blurred vision, hyperactivity, irritability
ALTERNATIVE Atropine 0.5% Eye drop Availability: Formulary Item Prescriber: All	1-2 drops sublingually 4-6 hourly if needed	Fast onset (onset of action 15-30 mins)	Crosses the blood-brain barrier, central side effects may be an issue, as well as cardiac effects such as tachycardia. *Should not be used in patients with cognitive impairment, dementia and hallucinations
Benzhexol Tablet 2mg Availability: Formulary Item Prescriber: All	Started at a low dose with a gradual stepwise increase over several weeks to promote tolerability	Useful in treating patients with cerebral palsy because of its additional beneficial effect on reducing dystonia	Constipation, excessive oral dryness, urinary retention, blurred vision, hyperactivity, irritability
Amitriptyline Tablet 25mg Availability: Formulary Item Prescriber: All	25-50 mg at bed-time	Suitable for patient with depression	Increases the risk of suicidal thinking and behavior (suicidality) in children and adolescents with major depressive disorder and other psychiatric disorders

Oral form	Onset	Duration
Glycopyrrolate	-	8-12 hr
Atropine	15-30 mins (1)	4 hr
Benzhexol	Within 1 hr, peak effects last 2-3 hr	6-12 hr
Amitriptyline	No data available	

References: 1) British National Formulary 70th Edition 2) Product monograph 3) MIMS Malaysia 3/2017

References :

ALTEPLASE (ACTILYSE®): ISSUE WITH RUBBER STOPPER DURING RECONSTITUTION

There has been a recent increase in complaints regarding **the rubber stopper being pushed** into the vial during reconstitution of Actilyse® Treatment Set 50mg/vial (Alteplase)



There has been an increased in number of **technical product complaints** from various countries regarding the above issue. However, Boehringer-Ingelheim (M) has not received any similar complaints from local hospitals to date. To prevent handling errors, the company emphasizes on strict compliance with the 'Instructions for use/handling' stated in the product package insert: **Use the transfer cannula provided for reconstitution, which is to be introduced vertically into the stopper and through the mark at its centre.** In addition, the company recommends to ensure sufficient replacement packs are available in case of unusable vial resulting from the issue, as this is a life saving drug.

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