



# PHARMACY *Bulletin*

vol. 1 2025



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# Apixaban

2.5mg Film Coated Tablet  
5mg Film Coated Tablet

by Abdul Qaiyum bin Abdul Razak



## INTRODUCTION (1, 2)

Apixaban is an oral, direct, **highly selective** and **reversible active site inhibitor** of free and clot-bound **factor Xa** (FXa) that prevents prothrombin activation, reducing thrombin formation and clotting.

Prescribing category: **A\*** (JKUT Perubatan)

## INDICATION & DOSE (1, 2, 3)

### Deep Vein Thrombosis, Pulmonary embolism

- **Treatment:** 10mg BD for 7 days followed by 5mg BD
- **Prophylaxis of recurrent case:** 2.5mg BD following completion of  $\geq 6$  months of anticoagulant treatment

### Prevention of venous thromboembolic events (VTE) after a hip or knee replacement surgery

- 2.5mg BD, starting 12 – 24 hours after surgery
- Duration of treatment: 10-14 days (knee replacement); 32-38 days (hip replacement)

### Prevention of stroke and systemic embolism in patients with non-valvular atrial fibrillation

- 5mg BD in patient with  $\geq 1$  risk factor e.g prior stroke or TIA, age  $\geq 75$  years, hypertension, diabetes mellitus, symptomatic heart failure (NYHA Class  $\geq$  II)
- Dose reduction to 2.5mg BD in patient with at least 2 of the following characteristics: age  $\geq 80$  years, body weight  $\leq 60$ kg, or serum creatinine  $\geq 1.5$ mg/dL (133 micromole/L)
- For long term

## ADMINISTRATION (2)

May be taken with or without food. May crush and immediately administer orally or via feeding tubes.

## ADVERSE EFFECTS (2)

Most commonly reported adverse reactions are **haemorrhage**, **contusion**, **epistaxis** and **haematoma**.

## CONTRAINDICATIONS (2, 3)

- **Hypersensitivity** to active substance or any excipients.
- Clinically significant **active bleeding**.
- Hepatic disease associated with **coagulopathy** and clinically relevant **bleeding risk**.
- Conditions that considered to be a **significant risk for major bleeding**.
- **Concomitant treatment** with other **anticoagulants** such as unfractionated Heparin (UFH), LMWH, Fondaparinux, Warfarin, Dabigatran or Rivaroxaban except under specific circumstances of switching oral anticoagulant therapy, when UFH is given to maintain an open central venous or arterial catheter or when UFH is given during catheter ablation for atrial fibrillation.
- **Pregnancy** and **breastfeeding**.

## SPECIAL POPULATION (2, 4, 5)



### Renal Impairment

**Not recommended** in patient with **end stage renal disease** (ESRD) (CrCl <15 mL/min) or on **dialysis**.



### Hepatic Impairment

**Not recommended** in patient with **severe hepatic impairment**.  
Use with caution in patient with mild to moderate hepatic impairment.



### Pregnancy

Animal studies do not indicate direct or indirect harmful effects with respect to reproductive toxicity.  
Should be **avoided during pregnancy** as lack of sufficient human studies.



### Breastfeeding

Data from animals indicates Edoxaban is secreted into **breast milk**.  
**Not recommended during breastfeeding**, and discontinuation of breastfeeding should be considered if treatment is necessary.

## DRUG INTERACTION (2)

- P-gp inhibitors: Ketoconazole, Itraconazole, Dronedarone, Erythromycin
- P-gp inducers: Rifampicin, Phenytoin, Carbamazepine, St. John's Wort
- Anticoagulants, antiplatelets, NSAIDs
- Selective serotonin reuptake inhibitors (SSRIs)
- Serotonin-norepinephrine reuptake inhibitors (SNRIs)

## OVERDOSE (2, 3, 6)

Overdose may lead to haemorrhage. A **specific antidote** to Apixaban is **not available in Malaysia**. In the event of haemorrhagic complications, drug must be discontinued and the source of bleeding investigated. The initiation of appropriate treatment such as surgical haemostasis or the transfusion of fresh frozen plasma should be considered.

Administration of **activated charcoal** may be useful in the management of Apixaban overdose or accidental ingestion. For situations when reversal of anticoagulation is needed due to life-threatening or uncontrolled bleeding, administration of **prothrombin complex concentrates (PCCs)** or **recombinant factor VIIa** may also be considered.

## STORAGE (2)

Store below 30°C.

## REFERENCES

1. Pharmaceutical Services Programme. (2025). *Formulari Ubat KKM (FUKKM)*. Retrieved from <https://pharmacy.moh.gov.my/ms/apps/fukkm>
2. Quest3+ Product Search. (2025). *Apixaban*. Retrieved from [https://quest3plus.bpfk.gov.my/front-end/attachment/111300/pharma/544770/V\\_90537\\_20240425\\_172349\\_D3.pdf](https://quest3plus.bpfk.gov.my/front-end/attachment/111300/pharma/544770/V_90537_20240425_172349_D3.pdf)
3. Pharmaceutical Services Programme, Ministry of Health Malaysia. (2023). *Anticoagulant Quick Guide 1st ed.* Retrieved from [https://pharmacy.moh.gov.my/sites/default/files/document-upload/anticoagulant-quick-guide-1st-edition\\_0.pdf](https://pharmacy.moh.gov.my/sites/default/files/document-upload/anticoagulant-quick-guide-1st-edition_0.pdf)
4. Beyer-Westendorf, J., Tittl, L., Bistervels, I., Middeldorp, S., Schaefer, C., Paulus, W., Thomas, W., ... Bornhauser, M. (2020). Safety of direct oral anticoagulant exposure during pregnancy: a retrospective cohort study. *The Lancet. Haematology*, 7(12), e884–e891. [https://doi.org/10.1016/S2352-3026\(20\)30327-6](https://doi.org/10.1016/S2352-3026(20)30327-6)
5. Daei, M., Khalili, H., & Heidari, Z. (2021). Direct oral anticoagulant safety during breastfeeding: a narrative review. *European Journal of Clinical Pharmacology*, 77(10), 1465–1471. <https://doi.org/10.1007/s00228-021-03154-5>
6. Tomaselli, G. F., Mahaffey, K. W., Cuker, A. C., Dobest, P. P., Doherty, J. U., Eikelboom, J. W., Florido, R., ... Wiggins, B. S. (2020). 2020 ACC expert consensus decision pathway on management of bleeding in patients on oral anticoagulants: A report of the american college of cardiology solution set oversight committee. *Journal of the American College of Cardiology*, 76(5), 594–622. <https://doi.org/10.1016/j.jacc.2020.04.053>



# TLD

## Dolutegravir 50mg Lamivudine 300mg Tenofovir Disoproxil Fumarate 300mg

by Muhammad Zaheruddin Hilmi bin Zuraki

### INDICATION & DOSE (1, 2)

**Human Immunodeficiency Virus** type 1 in adult and adolescent aged 12 years and above, weighing 40kg and above: **One tablet once daily**

### PRESCRIBER CATEGORY (1)

A/KK (JKUT Perubatan)

### DOSAGE FORM (2)

**Film-coated tablet** in **orange** colour, modified capsule shaped, biconvex film coated tablet debossed with 'H' on one side and 'D17' on the other side

### MISSED DOSE MANAGEMENT (2)

**<12 hours before next dose**

- Take it as soon as possible

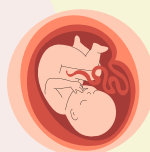
**Within 12 hours before next dose**

- Skip the dose, take the next dose at usual time

### STORAGE (2)

Store below 30°C and protect from light and moisture

### SPECIAL POPULATION (2)



#### Pregnancy

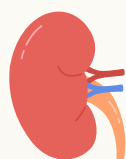
**FDA category C:** There are no adequate and well controlled trials in pregnant women. Should be used in pregnancy only if the benefit outweighs the risks



#### Breastfeeding mother

HIV-1-infected mothers are advised **not breastfeeding their infants** to prevent postnatal HIV-1 transmission.

Lamivudine and Tenofovir are excreted in breast milk. Dolutegravir is excreted in rat milk, but lacking human data



**Not recommended** in patient with **renal impairment** (CrCL<50mL/min)

### ADVERSE EVENTS (2, 3)

#### Tenofovir Disoproxil Fumarate

- Headache, diarrhea, nausea, vomiting, flatulence
- Renal insufficiency, Fanconi syndrome
- Renal tubular damage
- Osteomalacia
- Reduced bone mineral density

#### Lamivudine

- Minimal toxicity

#### Dolutegravir

- Insomnia, headache (common)
- Nausea, diarrhea (common)
- Vivid dreams
- Hepatotoxicity
- Rash
- Hyperglycemia
- Increase in serum creatinine
- Hypersensitivity syndrome (<1%)

## CONTRAINDICATION (2)

**Hypersensitivity reaction** to Dolutegravir, Lamivudine, or Tenofovir disoproxil fumarate.

## MECHANISM OF ACTION (2)

**Dolutegravir:** HIV integrase inhibitor by binding to the integrase active site and blocking the strand transfer step of retroviral DNA integration which is essential for the HIV replication cycle.

**Lamivudine:** A synthetic nucleoside analogue where it will be phosphorylated intracellularly and inhibit HIV-1 reverse transcriptase via DNA chain termination.

**Tenofovir Disoproxil Fumarate:** Requires initial diester hydrolysis and subsequent phosphorylations to form tenofovir diphosphate, an obligate chain terminator. Tenofovir diphosphate inhibits the activity of HIV-1 reverse transcriptase by competing with the natural substrate and, after incorporation into DNA, by DNA chain termination

## DRUG INTERACTION (2, 3)

Always check for drug interaction when there is a doubt



Interacting Drug	Effect	Recommendation
Metformin	↑ Metformin	Metformin initiation: <b>Initiate</b> Metformin at <b>lower dose</b> and titrate up to <b>maximum 1g per day</b> .  Dolutegravir initiation: Monitor for <b>increased risk of lactic acidosis</b> especially in patients with moderate renal impairment.
Medications containing Polyvalent Cations <i>Antacids, Multivitamin, Nutritional supplements</i>	↓ Dolutegravir	Calcium or iron supplements decrease Dolutegravir if taken together on an empty stomach. Magnesium or Aluminum containing antacids decrease Dolutegravir regardless of food intake and should be taken minimum 2 hours before or 6 hours after.  General advice: To take TLD <b>2 hours BEFORE</b> or <b>6 hours AFTER</b> taking these medications.
Anticonvulsant <i>Carbamazepine, Phenobarbital, Phenytoin</i>	↓ Dolutegravir	<b>Avoid co-administration if possible.</b> Drugs without interaction with Dolutegravir that can be used: Sodium Valproate, Lamotrigine, Levetiracetam and Topiramate. Double dose of Dolutegravir if no alternative.
Rifampicin	↓ Dolutegravir	<b>Discuss with ID physician</b> for double dosing of Dolutegravir or wait till completed TB treatment prior TLD initiation

## REFERENCES

1. Pharmaceutical Services Programme. (2025). *Formulari Ubat KKM (FUKKM)*. Retrieved from <https://pharmacy.moh.gov.my/ms/apps/fukkm>
2. Quest3+ Product Search. (2025). *TELDY*. Retrieved from [https://quest3plus.bpfk.gov.my/front-end/attachment/111300/pharma/544770/V\\_90537\\_20240425\\_172349\\_D3.pdf](https://quest3plus.bpfk.gov.my/front-end/attachment/111300/pharma/544770/V_90537_20240425_172349_D3.pdf)
3. Ministry of Health Malaysia. (2022). *Malaysian Consensus Guidelines on Antiretroviral Therapy 2022*. Retrieved from [https://www.researchgate.net/publication/364689111\\_Malaysian\\_Consensus\\_Guideines\\_on\\_Antiretrviral\\_Therapy\\_2022](https://www.researchgate.net/publication/364689111_Malaysian_Consensus_Guideines_on_Antiretrviral_Therapy_2022)

## HUMAN METAPNEUMOVIRUS (hMPV)

by Mumtaz bin Suyuti

### INTRODUCTION

(1, 2, 3, 4)

Human metapneumovirus (hMPV) is a **respiratory virus** causing mild to severe infections like pneumonia and bronchiolitis, especially in young children, older adults, and those with compromised immunity. It spreads through **airborne transmission** and contaminated surfaces. With no licensed vaccine, preventive measures such as hand washing, mask-wearing, and staying home when ill reduce transmission risks. Recently, countries like Malaysia have reported notable cases, such as 327 cases in 2024, underscoring the need for vigilance.

### STATISTICS & PREVELANCE

(3)



In 2024, Malaysia saw a **45% increase in hMPV cases**, with 327 reported compared to 225 in 2023. The Health Ministry advised vigilance, noting that hMPV typically presents with cold-like symptoms but can lead to bronchitis or pneumonia in severe cases. To combat this, the ministry emphasized maintaining good hygiene practices such as frequent handwashing, mask-wearing, and covering coughs and sneezes. They also cautioned those traveling to risky areas to take extra precautions. The ministry noted that respiratory infections often rise at the beginning and end of the year, aligning with patterns observed in countries like China.

### CLINICAL MANIFESTATION

(1, 4)

hMPV is a common cause of **respiratory infections**, typically resulting in mild symptoms but capable of causing severe illness in certain populations. hMPV may cause sickness that includes:



Cough



Fever



Sore throat



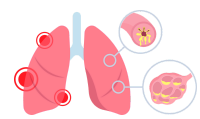
Runny nose



Headache



Body ache



Pneumonia

### TRANSMISSION

(1, 4)

hMPV primarily spreads through mechanisms similar to other respiratory viruses. According to the CDC, the virus is most likely transmitted from an infected person to others through

- **Respiratory Secretions:** Droplets and aerosols produced during coughing and sneezing are a primary mode of transmission.
- **Close Personal Contact:** Direct contact, such as touching or shaking hands with an infected person, can spread the virus.
- **Contaminated Surfaces:** Touching objects or surfaces contaminated with the virus and then touching the mouth, nose, or eyes can lead to infection.

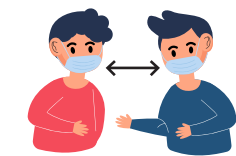
The CDC also notes that hMPV circulates in distinct annual seasons, typically beginning in the winter and lasting through the spring in the U.S. This seasonality is confirmed by surveillance data from the National Respiratory and Enteric Virus Surveillance System (NREVSS).

## PREVENTION

(1, 2, 4)



- 1 Handwashing:** Wash hands often with soap and water for at least 20 seconds, especially after coughing or sneezing, before preparing food, and after using the restroom.



- 2 Avoid Close Contact:** Limit close contact with individuals who are sick, particularly those with respiratory symptoms.



- 3 Surface Cleaning:** Regularly clean and disinfect frequently touched surfaces and objects, such as doorknobs, light switches, toys, and countertops, using a household disinfectant.

- 4 Stay informed:** Monitor developments regarding respiratory tract infections domestically and abroad.



## DIAGNOSTIC TESTING

(1, 4, 6)

Diagnostic testing that are available to confirm the infection of hMPV by amplification technique of specific DNA sequences including:



Polymerase Chain Reaction (PCR)



Nucleic Acid Amplification Tests (NAAT)

## WHY PREVENTION MATTERS



(1, 2, 5, 7)

- Impact:** hMPV causes significant respiratory illness in vulnerable populations like children, older adults, and those with weakened immunity.
- Prevention:** Preventive measures can reduce the spread of hMPV.
- Treatment:** No specific antiviral treatment or vaccine exists; prevention and supportive care are key strategies.



## TREATMENT

(1, 2, 4)

Currently, there is **no specific antiviral medication or vaccine licensed** for its treatment. Typically, the management including:

- ✔ **Symptomatic relief** - use over the counter medication to relieve pain, fever and cough



- ✔ **Rest & hydration**- Getting plenty of rest and staying hydrated to recover from the infection



- ✔ **Medical supervision**- individuals at higher risks should consult their healthcare provider even if symptoms seem mild



**Hospitalization** - In severe cases where hospitalization is required (e.g., pneumonia or significant respiratory distress), medical interventions may include:



- Oxygen Therapy** - Providing supplemental oxygen to help improve breathing



- Monitoring & Supportive Care** - Close monitoring of vital signs and providing supportive care as needed



## REFERENCES

- World Health Organization. (2025, January 10). Human metapneumovirus (HMPV) infection. Retrieved from <https://www.who.int/news-room/questions-and-answers/item/human-metapneumovirus>
- World Health Organization. (2025, January 16). WHO advisory on trends of acute respiratory infection, including human metapneumovirus. Retrieved from <https://www.who.int/westernpacific/about/how-we-work/pacific-support/news/detail/16-01-2025-who-advisory-on-trends-of-acute-respiratory-infection-including-human-metapneumovirus>
- Yasmine, R. (2025, February 10). Malaysia recorded 327 HMPV cases in 2024, health ministry urges public to remain vigilant. *The Straits Times*. Retrieved from <https://www.straitstimes.com/asia/se-asia/malaysia-recorded-327-hmpv-cases-in-2024-health-ministry-urges-public-to-remain-vigilant>
- Centers for Disease Control and Prevention. (2024, April 11). About human metapneumovirus. Retrieved from <https://www.cdc.gov/human-metapneumovirus/about/index.html>
- Wang, X., Li, Y., Deloria-Knoll, M., Madhi, S. A., Cohen, C., Ali, A., ... Respiratory Virus Global Epidemiology Network (2021). Global burden of acute lower respiratory infection associated with human metapneumovirus in children under 5 years in 2018: a systematic review and modelling study. *The Lancet. Global health*, 9(1), e33–e43. [https://doi.org/10.1016/S2214-109X\(20\)30393-4](https://doi.org/10.1016/S2214-109X(20)30393-4)
- Costa-Filho, R. C., Saddy, F., Costa, J. L. F., Tavares, L. R., & Castro Faria Neto, H. C. (2025). The silent threat of human metapneumovirus: Clinical challenges and diagnostic insights from a severe pneumonia case. *Microorganisms*, 13(1), 73. <https://doi.org/10.3390/microorganisms13010073>
- Nadiger, M., Sendi, P., Martinez, P. A., & Totapally, B. R. (2023). Epidemiology and clinical features of human metapneumovirus and respiratory syncytial viral infections in children. *The Pediatric Infectious Disease Journal*, 42(11), 960–964. <https://doi.org/10.1097/INF.0000000000004055>

# NEONATAL VARICELLA

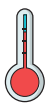
by Siti Nur Afza Atirah binti Zahari

Neonatal varicella is an **airborne** disease caused by the **Varicella-Zoster virus (VZV)** transmitted through respiratory droplets or contact with skin lesions. (1)

Neonatal varicella occurs when maternal infection arises within 7 days before or 7 days after delivery or through postnatal exposure to VZV. (2)

**17-30%**<sup>(2)</sup>  
of newborns develop neonatal varicella within 5-10 days of life

## CLINICAL MANIFESTATIONS

<sup>(3)</sup>

Fever may develop within the first few days after birth.



The lesions begin as macules that rapidly progresses to papules followed by characteristic vesicles and the formation of crusts.



It usually appears first on the head and spreads to other parts of the body.

**Due to the absence of maternal protective antibodies, mortality rate can reach up to 20%**<sup>(2)</sup>



### Care At Home

On sending home, parents are advised to **look out for new vesicles** or baby being **unwell** for 28 days after exposure. If so, to bring the infant to the nearest hospital as soon as possible.

## RISK FACTORS

<sup>(2, 3)</sup>

### Maternal VZV infection timing:

- High-risk period: A mother who develops VZV symptoms 5 days before to 2 days after delivery.



### Seronegative mother:

- Mother with lack immunity to VZV.

### Premature birth

- Premature infants are at high risk due to nosocomial transmission within healthcare settings.
- More susceptible due to incomplete transfer of maternal antibodies and their immature immune systems.



## MANAGEMENT

<sup>(2)</sup>

### Prophylaxis

**Infants born to mothers who develop varicella between 7 days before or 7 days after delivery.**

#### Newborn:

- Administer Varicella Zoster immunoglobulin (VZIG) as soon as possible after delivery or within 96 hours of initial exposure.

#### If VZIG not available:

- IV Immunoglobulin 400mg/kg AND
- IV Acyclovir 15mg/kg/dose over 1 hour every 8 hours (total 45mg/kg/day) for 5 days.

### Infants With Vesicles

#### Newborn:

- Administer Acyclovir for 7-10 days.

# VARICELLA ZOSTER IMMUNOGLOBULIN (VZIG) <sup>(4)</sup>

**Brand:** Varitect CP

✓ Available at HTPN

**Composition:** Varicella Zoster Immunoglobulin 25 IU/mL



## DOSING

- **PREVENTION OF CHICKEN POX**  
**1mL (25IU) per kg** body weight. In repeated exposure, (e.g. household contact): Higher doses are preferable. For post-exposure prophylaxis, Varitect CP should be administered as soon as possible and **not later than 96 hour after exposure**.
- **TREATMENT OF ZOSTER INFECTIONS**  
**1 to 2mL (25 to 50IU) per kg** body weight, with additional applications depending on the course of clinical manifestations.

## STORAGE

- Store in refrigerator (2°C to 8°C).
- Keep the vial in the outer carton in order to protect from light.
- Do not freeze.

## ADMINISTRATION

Varitect CP should be infused **intravenously** at an initial rate of **0.1mL/kg/hr for 10 minutes**. If well tolerated, the rate of administration may gradually be increased to a maximum of 1mL/kg/hr for the remainder of the infusion.

## ADVERSE EFFECTS

- Mild headache
- Nausea
- Hypersensitivity
- Skin itching, rash
- Low blood pressure
- Chills, fever

## CONTRAINDICATION

- History of anaphylaxis or severe systemic (hypersensitivity) reactions to human immune globulins.
- Immunoglobulin A deficiency with antibodies against Immunoglobulin A.

## RECOMMENDATIONS FOR BREASTFEEDING <sup>(2, 5)</sup>



**If the mother presents with Varicella up to 5 days before or 2 days after delivery:**

- Mother should be isolated during the contagious phase of lesions up to the crust phase.
- Breastmilk can be expressed and given to the infant. It remains unclear whether the virus can be found in human milk and whether it could infect the infant.
- The infant should be observed up to the 21st day of life.

**If the mother present with Varicella more than 5 days before delivery or after 3rd day of postpartum:**

- Antibodies are transferred to the infant transplacentally or via breastmilk.
- Current recommendations generally advise to continue breastfeeding the infant provided that precautions such as handwashing, wearing of a mask and covering of lesion are properly taken.

## REFERENCES

1. Malaysian Society of Infectious Diseases & Chemotherapy. (n.d.). *Adult Immunisation Guidelines - Varicella*. Retrieved February 21, 2025, from <https://adultimmunisation.msdc.my/varicella/>
2. Ministry of Health Malaysia. (2019). Paediatric protocols for Malaysian hospitals (4th ed.). Malaysian Paediatric Association. Retrieved from <https://mpaeds.my/paediatric-protocols-for-malaysian-hospitals-4th-edition-2019/>
3. Blumental, S., & Lepage, P. (2019). Management of varicella in neonates and infants. *BMJ Paediatrics Open*, 3(1), e000433. <https://doi.org/10.1136/bmjpo-2019-000433>
4. Biotech Pharma GmbH (Germany). (2019). Human Varicella-zoster immunoglobulin 25IU/ml for infusion (Varitect CP): Product information leaflet.
5. Lamounier, J. A., Moulin, Z. S., & Xavier, C. C. (2004). Recommendations for breastfeeding during maternal infections. *Jornal de Pediatria*, 80(5 Suppl), S181-S188. <https://doi.org/10.2223/1252>

# Ashwagandha

by Fariza Norbaya binti Nordin



Indian ginseng, also known as Ashwagandha or winter cherry (*Withania somnifera*), is a popular medicinal herb. Its root is the main part used in traditional remedies. The name “Ashwagandha” comes from the Sanskrit words “ashwa”, which means horse, symbolizing that the root gives one ability close to those of a horse after eating the root. “Gandha” means fragrance, which alludes to the distinct scent of the plant's fresh root. (1)

## Anti-Inflammatory

Studies highlight Ashwagandha’s remarkable ability to modulate mitochondrial activity and reduce inflammation by blocking inflammatory markers like cytokines (IL-6 and TNF- $\alpha$ ), nitric oxide, and reactive oxygen species. (1)

It may be used in different forms, either alone or combined with other treatments, to help manage various health conditions. For arthritis, especially degenerative cases, the recommended dose is 6 grams of powder or extract in tablet form, or 500–1000 mg in capsules, taken for 8 to 12 weeks. (3)

## Anxiolytic and Anti-Stress Effects

Ashwagandha is believed to help reduce stress by balancing the hormone levels, particularly regulating the hypothalamic-pituitary-adrenal (HPA) axis that controls the body’s response to stress. (1) A study found that in healthy people with mild to moderate symptoms, Ashwagandha root extract with 2.5% withanolides can successfully reduce cortisol and increase serotonin, hence improving stress and anxiety. (4)

## Sleep Disorder

Taking Ashwagandha extract for six weeks had significantly improved sleep quality in healthy individuals, with no reported side effects from the treatment. (5)

## Products in Market (2)



Vitamode Ashwagandha  
300mg Capsule  
(MAL16040038TC)



LAC Ashwagandha Root  
250mg Capsule  
(MAL22046130TC)



VitaHealth Charge-Up  
Ashwagandha Plus Capsule  
(MAL22086121TC)



## Contraindication (1)

- Hyperthyroidism
- Planning for or in pregnancy
- Men with hormone-sensitive prostate cancer
- Patients on any sedative or anxiety medication
- Patients on any hypoglycemic, hypotensive or immunosuppressive drugs (raw material may be a CYP3A4 inducer or a CYP2B6 inhibitor)
- Individuals with autoimmune disease
- Hypersensitivity reactions to plants in Solanaceae family

1. Mikulska, P., Malinowska, M., Ignacyk, M., Szustowski, P., Nowak, J., Pesta, K., ... Cielecka-Piontek, J. (2023). Ashwagandha (*Withania somnifera*)-Current research on the health-promoting activities: A narrative review. *Pharmaceutics*, 15(4), 1057. <https://doi.org/10.3390/pharmaceutics15041057>

2. National Pharmaceutical Regulatory Agency. (2025). *QUEST 3+ Product Search*. <https://quest3plus.bpfk.gov.my/pmo2/>

3. Kanjilal, S., Gupta, A. K., Patnaik, R. S., & Dey, A. (2021). Analysis of clinical trial registry of India for evidence of anti-arthritis properties of *Withania somnifera* (ashwagandha). *Alternative Therapies in Health and Medicine*, 27(6), 58–66.

4. Majeed, M., Nagabhushanam, K., & Mundkur, L. (2023). A standardized ashwagandha root extract alleviates stress, anxiety, and improves quality of life in healthy adults by modulating stress hormones: Results from a randomized, double-blind, placebo-controlled study. *Medicine*, 102(41), e35521. <https://doi.org/10.1097/MD.00000000000035521>

5. Deshpande, A., Irani, N., Balkrishnan, R., & Benny, I. R. (2020). A randomized, double blind, placebo controlled study to evaluate the effects of ashwagandha (*Withania somnifera*) extract on sleep quality in healthy adults. *Sleep Medicine*, 72, 28–36. <https://doi.org/10.1016/j.sleep.2020.03.012>

# EVENT HIGHLIGHTS

7 OCTOBER 2024  
- 13 FEBRUARY 2025

Pharmacy Department  
Transition

4 & 8 OCTOBER  
2024

World Pharmacists  
Day

16 NOVEMBER  
2024

World Diabetes  
Day

4 & 5 JANUARY  
2025

Team Building &  
Appreciation Dinner



# FROM HOSPITAL KAJANG TO PHARMACY DEPARTMENT TRANSITION

## HOSPITAL TENGGU PERMAISURI NORASHIKIN AND OPENING OF WOMEN & CHILDREN COMPLEX

### OVERVIEW

The Pharmacy Department has successfully completed the full transition of services from Hospital Kajang to the newly established Women & Children Complex (WCC) and re-branded as Hospital Tengku Permaisuri Norashikin (HTPN). This transition marks a significant milestone in enhancing pharmaceutical care and support for maternal and pediatric services in Selangor.

The transition process, which began in October 2024, was carried out in carefully planned phases to ensure patient's safety, operational continuity and minimal disruption to daily services. This achievement was made possible through the collaborative efforts of pharmacy staff, hospital administrators and IT support.

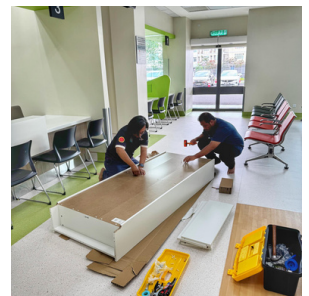
### TIMELINE OF THE TRANSITION

#### Phase

01

#### 7 OCTOBER 2024

Preparation of expanding pharmacy services to WCC building started



## Phase 02

**18 NOVEMBER 2024**

Operation of

- Outpatient Pharmacy
- Logistics Pharmacy
- Pharmacy Resource Information Centre
- Manufacturing Pharmacy & Prepacking Services

## Phase 03

**16 DECEMBER 2024**

Operation of

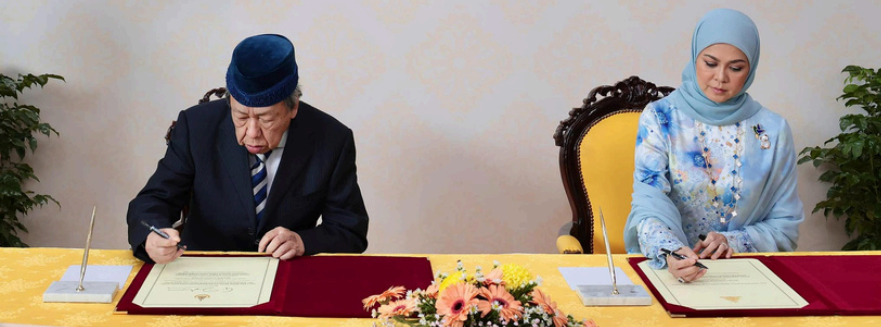
- Inpatient Pharmacy
- Emergency Pharmacy
- Clinical Pharmacy
- Therapeutic Drug Monitoring Services
- Total Parenteral Compounding (TPN)

## Opening & Rebranding Ceremony

**13 FEBRUARY 2025**

Opening ceremony of WCC and rebranding of Hospital Kajang to HTPN with the presence of His grace, Sultan Selangor Sultan Sharafuddin Idris Shah, along with Her grace, Tengku Permaisuri Selangor Tengku Permaisuri Norashikin

DULI YANG MAHA MULIA SULTAN SELANGOR  
TELAH BERKENAN MERASMIKAN  
PUSAT RAWATAN WANITA DAN KANAK-KANAK SERTA  
PENJENAMAAN SEMULA HOSPITAL KAJANG  
KEPADA  
HOSPITAL TENGGU PERMAISURI NORASHIKIN  
13 FEBRUARI 2025M (KHAMIS) BERSAMAAN 14 SYA'ABAN 1446H



## IMPACT AND SIGNIFICANCE

The successful transition symbolizes a step forward in advancing pharmaceutical care in a modern and patient-centered environment. With improved infrastructure, optimized workflows and closer proximity to specialized care units, the pharmacy services at Women & Children Complex, Hospital Tengku Permaisuri Norashikin are now better equipped to serve the unique needs of women and children.

This relocation also provided an opportunity to upgrade storage capabilities, improve medication safety processes and streamline clinical collaboration between pharmacists and other healthcare teams.

*Together, we have not just changed locations -  
we have elevated the standards of care*



# World Pharmacists Day



PHARMACISTS:  
MEETING GLOBAL HEALTH NEEDS

by Ungku Nor'Afiqah binti Ungku Azmi

World Pharmacists Day, celebrated on September 25, honors pharmacists' essential role in global health. Established by FIP in 2009, it highlights their contributions to medication safety, patient care, and public health, with each year focusing on a new theme to encourage collaboration in healthcare.

The Pharmacy Department of Hospital Tengku Permaisuri Norashikin had organized a two-days event for celebrating World Pharmacists Day in 2024.

On October 4, 2024, the PharmRace event was held around the hospital, benefiting both the public and pharmacists. The race had 5 checkpoints, each focusing on different pharmaceutical topics.



On October 8, 2024, the World Pharmacist Day Ceremony took place at Dataran Gemilang, with staff and the public attending. The event started with a speech from the Head of Pharmacy and the Hospital Deputy Director 1 (Medical)'s inauguration, followed by two informative talks.



On World Pharmacists Day, we hope to inspire greater recognition of pharmacists' critical role in healthcare. May this day encourage continued collaboration, innovation, and dedication in improving patient care, medication safety, and global health. Let's work together to create a healthier future for all.

Thank you, pharmacists, for your dedication and care. Your impact on healthcare is truly appreciated.

Happy World Pharmacists Day!



# WORLD Day DIABETES



16 NOVEMBER 2024

by Nor Fazrihan Akma binti Mustafa

On November 16, 2024, Hospital Tengku Permaisuri Norashikin's Department of Endocrinology, Pharmacy and Dietetics hosted World Diabetes Day 2024 at Stadium Kajang. The event aimed to raise awareness about diabetes, its prevention, and management, while also providing education and resources to the community, especially for those affected by the condition.

## 8:00am: Aerobic Exercise

The event began with a group exercise session led by the Hospital Tengku Permaisuri Norashikin Aerobic Team. Open to the public, the activity attracted many citizens, not just hospital staff, to participate in the exercise.



## 9:00am – 9:45am: WDD Talk Series

After the event's inauguration by YB Syahredzan Johan (Member of Parliament for Bangi), a series of diabetic talks included "Kenali Diabetes", "Kenali Ubat Diabetes" and "Makanan Diabetes" were presented by the representative from Medical, Pharmacy, and Dietetic Departments, respectively.

## 9:45am – 10:30am: Diabetes & Well-being Forum

A forum titled "Diabetes and Well-being" was held, led by the Endocrine Unit. The Psychiatric Department, Dietetic Department, and Hospital Tengku Permaisuri Norashikin counselors also participated. Public had the opportunity to ask healthcare professionals questions related to diabetes.





## 10:30am: "Healthy Diet" Cooking Contest

A cooking contest was held, where participants had to prepare a healthy meal suitable for diabetic individuals. The contest was open to the public, and the dishes were judged by evaluators from the Dietetic Unit.

## Booth and Exhibition

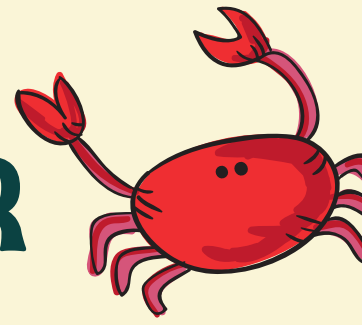
In addition, health triage and a health exhibition were held from 8:30am to 12:30pm. Many community members participated, taking the opportunity to ask pharmacists about any health-related concerns.





# TEAM BUILDING & APPRECIATION DINNER

*Together We are Stronger*



by Mohd Syabil Haiman Bin Mohd Fauzi

4 & 5 January 2025  
Avillion Admiral Cove, Port Dickson

The Pharmacy Department of Hospital Tengku Permaisuri Norashikin recently organized a vibrant event that combined team-building activities, a karaoke competition, and an appreciation dinner themed around Hawaiian culture. This event aimed to foster camaraderie among staff while celebrating their contributions and achievements.



## Event Highlights

### Team Building Activities

The day began with various team-building exercises designed to enhance collaboration and communication among the 45 staff participated in these programmes. These activities encouraged teamwork and helped participants develop stronger interpersonal relationships.





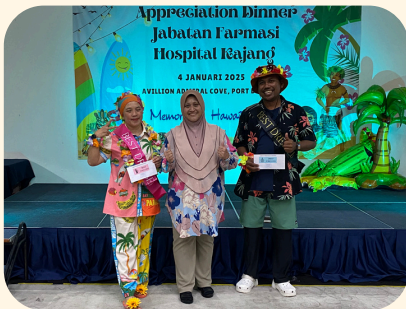
## Karaoke Competition

Following the team-building sessions, a lively karaoke competition took the center stage. Participants showcased their singing talents, adding a fun and entertaining element to the event. This segment not only provided enjoyment but also allowed staff to express their creativity and bond over shared experiences.



## Appreciation Dinner

The evening culminated in an appreciation dinner adorned with a Hawaiian theme. Attendees enjoyed a festive atmosphere complete with tropical decorations, Hawaiian cuisine, and entertainment. This dinner served as a platform to recognize the hard work and dedication of the pharmacy staff, reinforcing their importance within the hospital's operations.



Overall, the event was a successful blend of professional development and social interaction, leaving participants feeling valued and motivated for future endeavors within Pharmacy Department Hospital Tengku Permaisuri Norashikin.



# Appreciation

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