

MADRAGBulletin

For healthcare professionals only

Volume 57 | Issue 06/2025



The MADRAC Bulletin is a bi-monthly publication that provides a selection of local safety signals and articles discussing local individual case safety reports (ICSRs) meant to raise awareness among healthcare professionals.

The MADRAC Bulletin also features pharmacovigilance-related activities conducted by the National Pharmaceutical Regulatory Agency (NPRA) and contains a list of directives based on safety issues advised by the Malaysian Adverse Drug Reactions Advisory Committee (MADRAC) and endorsed by the Drug Control Authority (DCA) as well as safety alerts that have been published on the NPRA website.

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DISCLAIMER

The MADRAC Bulletin is published by the National Pharmaceutical Regulatory Agency (NPRA), Ministry of Health (MOH), Malaysia. This publication is meant to provide updates on medication safety issues to healthcare professionals, and not as a substitute for clinical judgement. While reasonable care has been taken to verify the accuracy of the information at the time of publication, the NPRA shall not be held liable for any loss whatsoever arising from the use or reliance on this publication. The opinions expressed in all articles are the authors' own and do not necessarily reflect the view of NPRA.

We would like to thank the Director General of Health, Malaysia for his permission to publish the signal/case report articles.



Highlights

10th Anniversary of #MedSafetyWeek Campaign

#MedSafetyWeek is an annual global campaign spearheaded by the World Health Organisation (WHO) Uppsala Monitoring Centre in Sweden, aimed at enhancing awareness on the safe use of medicines and the importance of reporting side effects. The campaign ran from 3 to 9 November 2025, involving around 130 organisations from almost 120 countries.

This year marked Malaysia's fifth consecutive year of participation in the #MedSafetyWeek campaign as well as the 10th anniversary of this global initiative. The theme this year: "We can all help make medicines safer" carried a simple yet meaningful message: everyone, be it pharmacists, doctors, other healthcare professionals, the pharmaceutical industry, or consumers, shares the responsibility of ensuring the safety of medicines.

In 2025, the #MedSafetyWeek Malaysia task force was expanded to include pharmacists from each state across Malaysia, in addition to the existing members from the National Pharmaceutical Regulatory Agency (NPRA) and Headquarters of Pharmacy Practice & Development Division. Collaboration with the private healthcare sector was also increased, through the Pharmaceutical Association of Malaysia (PhAMA) and Malaysian Pharmacists Society (MPS).

The impact of these collaborations was immediately evident! This year, the #MedSafetyWeek social media posts were shared by health facilities and individuals all across Malaysia — from Johor to Perlis, as well as in Sarawak — with various activities being carried out, including health awareness campaigns, talk shows, radio interviews, and live quizzes held nationwide.

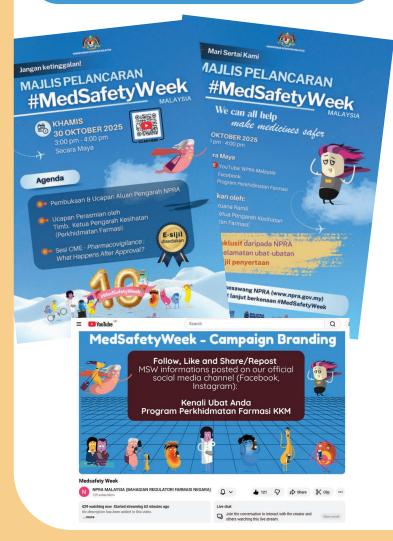
We will let the photos speak for themselves...



Highlights

Soft launch of #MedSafetyWeek 2025

The soft launch event of #MedSafetyWeek 2025 was successfully held via live streaming through the National Pharmaceutical Regulatory Agency (NPRA) YouTube Channel and the Pharmaceutical Services Programme Facebook page on 30 October 2025, attracting over 2,000 participants from various backgrounds including doctors, dentists, pharmacists, pharmaceutical industry, professional fields, and consumers. The ceremony commenced with an opening speech by Pn. Wan Noraimi Wan Ibrahim, Director of NPRA, followed by an address and officiation by Dr. Azuana Ramli, Deputy Director General of Health (Pharmaceutical Services), Ministry of Health. The event concluded with a Continuing Medical Education (CME) session titled "Pharmacovigilance: What Happens After Approval" by Pn. Nurul Aimi Mohd. Reduzan, a pharmacovigilance officer from NPRA. The launch aimed to raise public pharmacovigilance and #MedSafetyWeek campaign.



Press Release & Media Coverage



Public urged to report side-effects of medicines

PUTRAJAYA: The Health Minis has called on the public al healthcare workers to play active role in reporting the effects of medicines, as part the annual #MedSafetyWe 2025 campaign aimed at ensuri the continued safety of medicin in Malavsis

in Malaysia. Held from Nov 3, the campaig Agency and forms part of a global initiative by the World Health Organisation.

The ministry said the theme 'We can all help make medicines safer' underscores that medicine safety is a shared responsibility of all partles, including healthcare professionals, pharmaceutical redicine safety is crucial to soure that products available in e market are both safe and fective.

"All reports of side effects sceived will be analysed to etect potential new safety risks uch as previously unidentified de effects, or to determine oppropriate risk mitigation measures," said the r Health workers reports through the Pharmacy Informatic via email at fv@r Consumers ma suspected side consulting healthca or submitting the Co Effect Reporting For

Radio Interviews



Exhibitions and Health Carnival

Collaboration: NPRA, PhAMA, Hospital Selayang & Malaysian Paediatric Association



Perlis



Penang



Sarawak



Johor



Malacca



Children's Activities

Colouring contest



Spot the candy vs medicine



Social Media Postings







Videos, Posters & Others









Online Webinars

YOU'RE IMMIED TO





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#MedSafety Week Malaysia

Experiencing a side effect?
Report it to:
www.npra.gov.my

#MedSafetyWeek

Info on Wheels by Jabatan Penerangan Malaysia



#MedSafetyWeek

3-9 November 2025



Articles Based on Case Reports

This section discusses local individual case safety reports of suspected adverse events recorded in the Malaysian Pharmacovigilance Database (QUEST). The case reports presented in this section are intended to serve as a reminder of potential adverse events that healthcare providers should be aware of in day-to-day clinical practice, take account of, and report to the NPRA if any relevant events occur. Information contained in these articles is not comprehensive but rather represents a selection of clinically relevant items that warrants dissemination.

Report of Suicidal Behaviour with Efavirenz Use

By Syifa' Izzati Mohd Zainul Arifien

Case Report 1¹

A 16-year-old male adolescent, with no known prior psychiatric history, was diagnosed with retroviral disease. Antiretroviral therapy (ART) was initiated with efavirenz 400 mg once daily and a fixed-dose combination of tenofovir and emtricitabine once daily.

Five days after initiating ART, the patient developed neuropsychiatric symptoms, including spaciness, poor concentration and school refusal. He subsequently developed **suicidal ideation**, with multiple reported attempts; attempting to hang himself at home and trying to jump from both his residential flat and school building. The patient also reported persistent negative emotions, low mood, and excessive thinking since starting treatment. Following a clinical review, efavirenz was discontinued and substituted with dolutegravir. Olanzapine 2.5 mg once daily was also prescribed for three days.

During a follow-up phone call, his family member reported a significant improvement after switching to dolutegravir, noting that the patient no longer expressed suicidal thoughts or tendencies and rarely experienced low mood. However, no formal psychiatric evaluation was conducted, due to the family's reluctance to attend regular follow-ups. Given the presence of concomitant medications, the adverse events were assessed as *possibly* related to efavirenz.



Al-generated image

Discussion

Efavirenz is a non-nucleoside reverse transcriptase inhibitor (NNRTI) that suppresses replication of Human Immunodeficiency Virus type 1 (HIV-1).² currently nine efavirenz-containing products marketed in Malaysia, available either as monotherapy or in fixed-dose combinations.3 In Malaysia, it is indicated for the treatment of HIV-1 infection in adults and paediatric patients and is a preferred option for first-line ART regimens in treatment-naive patients.^{2,5} Efavirenz is typically used in combination with nucleoside/nucleotide reverse transcriptase inhibitors (NRTIs).4,5 Like other ARTs, although efavirenz does not cure HIV infection, it plays a critical role in reducing viral load, morbidity and mortality, thereby improving quality of life and life expectancy among people living with HIV.

The risk of serious psychiatric adverse events, including severe depression, suicidal ideation and nonfatal suicide attempts has been documented in local package inserts of products containing efavirenz.² Although a causal relationship with efavirenz has not been established, there have been occasional reports of death by suicide, delusions and psychosis-like behaviour. Commonly, experience nervous system symptoms such as anxiety, hallucinations, impaired concentration, insomnia, and abnormal dreams. In some cases, serious neurologic adverse events such as ataxia and encephalopathy (characterised by psychomotor slowing, psychosis, or delirium) may late-onset neurotoxicity. pathophysiology remains unclear, but it is believed that the high penetration of efavirenz into the central nervous system (CNS) contribute to these effects.^{2,6} Cerebrospinal fluid (CSF) concentrations of efavirenz are approximately three times higher than expected based on its unbound plasma fraction.



The neuropsychiatric effects are likely driven by multiple mechanisms, involving direct effects on serotonin receptors, disruption of mitochondrial energy production, neurotoxicity from its primary metabolite, and neuroinflammatory processes.^{6,7} Several factors may increase the risk of neuropsychiatric adverse events associated with efavirenz. The strongest predictor of suicidal behaviour is a pre-existing psychiatric disorder.^{2,5,6,8,9} Other contributing factors include substance abuse, heavy alcohol use and conditions that elevate plasma drug concentrations, such as taking efavirenz with food, chronic liver disease and the concomitant use of medications with CNS effects. Genetic polymorphisms in the CYP2B6 gene can also result in elevated plasma concentrations or prolonged drug half-life, which subsequently increase the risk of CNS toxicity.^{2,6} The onset of neuropsychiatric adverse events associated with efavirenz varies depending on the type and severity of the symptom.^{2,9} Common symptoms, such as anxiety and hallucinations typically begin within 1 to 3 days after treatment initiation and generally resolve or become tolerable after the first 2 to 4 weeks. However, severe late-onset neurotoxicity may occur months to years after starting efavirenz therapy. Serious psychiatric events such as suicidal behaviour may also present with delayed onset, with one study reporting a median onset of 10.2 months after initiation.8

To date, the NPRA has received 1,301 local adverse drug reaction (ADR) reports involving 2,381 adverse events suspected to be related to efavirenz.1 The most commonly reported adverse events include dizziness (282), maculopapular rash (268), and rash (236). There were six (6) local reports of suicidal ideation, two (2) reports of suicide attempt, and one (1) report of suicidal behaviour, including the case discussed above. As of July 2025, the World Health Organization (WHO) global ADR database has recorded 141 reports of suicidal ideation, 138 reports of suicide attempt, and three (3) reports of suicidal behaviour suspected to be associated with efavirenz. 10* Suicidal behaviour among people living with HIV is multifactorial and may be influenced by psychosocial factors such as HIV-related stigma, discrimination, substance abuse, and lack of social support.¹¹ Healthcare professionals are advised to remain vigilant for neuropsychiatric symptoms in patients receiving efavirenz, particularly those with a history of mental illness, and provide early psychological support and intervention when necessary to reduce the risk of suicide and optimise treatment outcomes.

*DISCLAIMER

VigiBase is the WHO global database of reported potential adverse effects of medicinal products, developed and maintained by Uppsala Monitoring Centre (UMC). This information comes from a variety of sources, and the likelihood that the suspected adverse effect is drug-related is not the same in all cases. This information does not represent the opinion of the UMC or the WHO.

Advice for Healthcare Professionals

- Assess patients for a history of psychiatric illness before initiating efavirenz and avoid its use in those with current, past or severe psychiatric illness, as they are at a higher risk of developing serious adverse effects such as depression and suicidal ideation.
- Monitor patients closely for neuropsychiatric symptoms, particularly during the initial weeks of efavirenz therapy and in those with known risk factors such as mental illness, substance abuse or liver impairment.
- Counsel patients and caregivers to promptly report any concerning behavioural or psychological changes.
- Advise patients to take efavirenz on an empty stomach, preferably at bedtime, to minimise potential adverse effects.
- Consider switching to an alternative antiretroviral agent (e.g., dolutegravir) if persistent, severe, or late-onset neuropsychiatric symptoms occur.
- **Report** any adverse drug reactions suspected to be related to the use of efavirenz to the NPRA.

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What's New

List of Safety Alerts and Directives Related to Drug Safety Issues

NPRA reviews and presents drug safety issues at meetings of the Malaysian Adverse Drug Reactions Advisory Committee (MADRAC) to determine the appropriate risk minimisation measures. Regulatory actions are proposed to the Drug Control Authority (DCA), resulting in DCA directives issued to ensure local package inserts and consumer medication information leaflets (RiMUP) for all products containing the affected active ingredients are updated with the required safety information. The table below shows the safety alerts and DCA directives that were recently issued, which are available on the NPRA website.

	Active Ingredients	Safety Alerts		Directive Ref. No. [Date]
		Title	Date	Directive Rei. No. [Date]
1	Doxycycline	Fixed Drug Eruption (FDE)	13-Oct-2025	NPRA.600-1/9/13 (65) Jld.1 [18 Aug 2025]
2	Amiodarone	Risk of Primary Graft Dysfunction after Heart Transplantation	14-Nov-2025	NPRA.600-1/9/13 (69) Jld.1 [7 Oct 2025]
3	Sulfamethoxazole, Trimethoprim (Cotrimoxazole)	Risk of Circulatory Shock	14-Nov-2025	-
4	Selective Serotonin Reuptake Inhibitors (SSRIs) and Serotonin-Norepinephrine Reuptake Inhibitors (SNRIs)	Risk of Persistent Sexual Dysfunction	14-Nov-2025	NPRA.600-1/9/13 (70) Jld.1 [7 Oct 2025]
5	Cyclin-Dependent Kinase Inhibitors (CDKIs)	Interaction with Statins Leading to Potential Risk of Rhabdomyolysis	17-Nov-2025	-

How to report adverse events?

NPRA encourages all healthcare professionals to report all suspected adverse drug reactions (ADR) to medicines, including pharmaceutical products, over-the-counter medicines, traditional medicines, and health supplements, as well as adverse events following immunisation (AEFI) with vaccines.

To report ADR/AEFI:

- 1. Visit www.npra.gov.my
- 2. Report ADR as Healthcare Professional by

Downloading the **ADR manual form** and submit the completed form via email or post:



fv@npra.gov.my



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NPRA Safety Information Mailing List

To join the mailing list:



 a) scan the QR code to complete the subscription form available on the NPRA website, or



b) send an email with your details to fv@npra.gov.my

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