

Direct Health Care Professional Communication

شركة أدوية الحكمة
المكتب العلمي

Ketamine (Tekam®), Midazolam (Hikma Midazolam®) and Isoflurane (Floran®): safety communication regarding repeated or lengthy use of general anesthetic and sedation drugs during surgeries or procedures in children younger than 3 years or in pregnant women during their third trimester

Dear Healthcare professional,

Hikma Pharmaceuticals would like to inform you of the following

Summary:

- It was found that repeated or lengthy use of general anesthetic and sedation drugs during surgeries or procedures in children younger than 3 years or in pregnant women during their third trimester may affect the development of children's brains.
- As a risk minimization measure; kindly note that we are in the process of updating these products labels and we will continue to monitor the use of these drugs in children and pregnant women.

This information is being sent in agreement with the Saudi Food & Drug Authority.

Saudi Food and Drug Authority will continue to monitor safety information associated with the use of those products as it does for all medicinal products on the Saudi market, to identify and assess potential harms, and the SFDA will keep Healthcare providers updated.

Further information on the safety concern and the recommendations:

Published studies in pregnant animals and young animals have shown the use of general anesthetic and sedation drugs for more than 3 hours caused widespread loss of nerve cells in the brain. Studies in young animals suggest these changes result in long-term effects on the animals' behavior or learning³⁻²². Studies have also been conducted in children, some of which support findings from previous animal studies, particularly after repeated or prolonged exposure to these drugs early in life²³⁻⁴⁵. All the studies in children had limitations, and it is unclear whether any negative effects seen in children's learning or behavior were due to the drugs or to other factors, such as the underlying medical condition that led to the need for the surgery or procedure.

Consistent with animal studies, recent human studies suggest that a single, relatively short exposure to general anesthetic and sedation drugs in infants or toddlers is unlikely to have negative effects on behavior or learning.

Anesthetic and sedation drugs are necessary for infants, children, and pregnant women who require surgery or other painful and stressful procedures, especially when they face life-threatening conditions requiring surgery that should not be delayed. In addition, untreated pain can be harmful to children and their developing nervous systems.

Currently, Tekam® (Ketamine), Hikma Midazolam® (Midazolam) and Floran® (Isoflurane) are registered in Saudi Arabia and fall under this safety communication. We are in the process of updating these products labels and we will continue to monitor the use of these drugs in children and pregnant women.

We kindly ask you to balance the benefits of appropriate anesthesia in young children and pregnant women against the potential risks, especially for procedures that may last longer than 3 hours or if multiple procedures are required in children under 3 years.

Further information:

Tekam® is indicated:

- As the sole anesthetic agent for diagnostic and surgical procedures that do not require skeletal muscle relaxation.
- For short procedures; but it can be used, with additional doses, for longer procedures.
- For the induction of anesthesia prior to the administration of other general anesthetic agents.
- To supplement low-potency agents such as nitrous oxide.

Hikma Midazolam® is a short-acting sleep-inducing drug that is indicated:

In adults

- Conscious sedation before and during diagnostic or therapeutic procedures with or without local anaesthesia
- Anaesthesia
 - Premedication before induction of anaesthesia
 - Induction of anaesthesia
 - As a sedative component in combined anaesthesia
- Sedation in intensive care units

In children

- Conscious sedation before and during diagnostic or therapeutic procedures with or without local anaesthesia
- Anaesthesia
 - Premedication before induction of anaesthesia
- Sedation in intensive care units

Isoflurane is indicated as a general anaesthetic for use in patients of all ages.

Call for reporting:

Healthcare professionals are encouraged to report any adverse reactions related to mentioned medications to the National Pharmacovigilance and Drug Safety Centre (NPC).

The National Pharmacovigilance and Drug Safety Centre (NPC)

Fax: +966-11-205-7662

Toll free phone: 8002490000

E-mail: npc.drug@sfd.gov.sa

Website: <https://ade.sfd.gov.sa/>

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Annexes

Literature references:

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2. Safety communication published by the US-FDA. Published on 14-Dec-2016. Available at: <http://www.fda.gov/drugs/drugsafety/ucm532356.htm>
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