



## Latest advice for medicines users

The monthly newsletter from the Medicines and Healthcare products Regulatory Agency and its independent advisor the Commission on Human Medicines

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The Medicines and Healthcare products Regulatory Agency (MHRA) is the government agency responsible for ensuring that medicines and medical devices work and are acceptably safe.

The Commission on Human Medicines gives independent advice to ministers about the safety, quality, and efficacy of medicines. The Commission is supported in its work by Expert Advisory Groups that cover various therapeutic areas of medicine.



NICE has accredited the process used by the MHRA to produce Drug Safety Update guidance. More information on accreditation can be viewed on the [NICE website](https://www.nice.org.uk/accreditation).

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First, we inform healthcare professionals of the risk of underdosing with calcium gluconate, used to stabilise the myocardium and prevent cardiac arrest in patients experiencing severe hyperkalaemia. See page 2 for more information.

Second, we remind healthcare professionals of the existing contraindication of systemic (oral and injectable) NSAIDs such as ibuprofen, naproxen, and diclofenac in the last trimester of pregnancy (after 28 weeks of pregnancy). Following a new review, we advise that prolonged use of systemic NSAIDs from week 20 of pregnancy onwards may be associated with an increased risk of oligohydramnios and fetal renal dysfunction and some cases of constriction of the ductus arteriosus. See article on page 5 for new advice for healthcare professionals and advice that can be provided to patients.

Third, we inform healthcare professionals that the MHRA has launched new safety advice on the steps to take during anaphylaxis. This new guidance includes an easy step-by-step guide on what to do in an emergency and provides updated advice on body positioning. We also share new resources to raise awareness of anaphylaxis and guide patients on the best use of adrenaline auto-injectors (AAIs).

We also provide a summary of recent letters and notifications sent to healthcare professionals about medicines and medical devices. If you have been forwarded this issue of Drug Safety Update, [subscribe directly via our website](#).

## Calcium chloride, calcium gluconate: potential risk of underdosing with calcium gluconate in severe hyperkalaemia

Calcium salts (either calcium chloride or calcium gluconate) are used to stabilise the myocardium and prevent cardiac arrest in patients experiencing severe hyperkalaemia. However, the two salts are not equivalent in terms of calcium dose. Ensure the correct dose is administered to avoid underdosing of calcium. If treated sub-optimally, hyperkalaemia can be fatal.

### Advice for healthcare professionals:

- calcium salts (either calcium chloride or calcium gluconate) are used to stabilise the myocardium and prevent cardiac arrest – these two products are not dose-equivalent
- be alert to the risk of inadvertent underdosing if calcium gluconate is used instead of calcium chloride and verify the calcium salt details before administration: 30ml of calcium gluconate 10% provides 6.8mmol of calcium (equivalent to 10ml of calcium chloride 10%)
- administration must be by slow intravenous injection of the whole dose over 10 minutes (see advice on dosing below)
- repeat doses may be required as the effect of calcium is temporary, lasting 30 to 60 minutes
- we have issued a [National Patient Safety Alert](#) to ask providers to review local guidance, including electronic mobile applications, quick reference guides and supporting materials for clinicians
- report suspected adverse reactions associated with calcium gluconate on a [Yellow Card](#)
- report medication errors or near misses via local risk management systems and medication errors resulting in patient harm on a [Yellow Card](#)

### Calcium salts and treatment of severe hyperkalaemia

Treatment of severe hyperkalaemia (plasma concentration  $\geq 6.5$  mmol/l) is a medical emergency and treatment must not be delayed. Calcium gluconate is used to stabilise the myocardium and prevent arrhythmias and cardiac arrest.

Calcium salts have previously been used off-label for the treatment of myocardial excitability in severe hyperkalaemia, but the MHRA recently authorised the use of calcium gluconate in acute severe hyperkalaemia and in cardiac resuscitation due to severe hyperkalaemia. Calcium gluconate therapy should be started only in cases of documented severe hyperkalaemia. It should not be routinely administered during cardiac arrest.

Updated [Clinical Practice Guidelines in the Treatment of Acute Hyperkalaemia in Adults](#) were published in 2020.<sup>1</sup> Calcium salts do not reduce the serum potassium but

are given to protect the heart. The guideline recommends use of either calcium chloride or calcium gluconate. However, the salts are not equivalent in terms of calcium dose. To achieve the recommended calcium dose of 6.8 mmol, 30ml of calcium gluconate 10% or 10ml calcium chloride 10% must be used. Both calcium gluconate and calcium chloride preparations are available in 10ml vials at 10% (w/v) concentration, therefore 3 vials of calcium gluconate are required to reach the appropriate dose but only 1 vial of calcium chloride. The method of administration should be by slow intravenous injection, which may need to be repeated.

ECG changes may provide evidence of potassium toxicity but are not always present initially. ECG monitoring is advised for potassium levels above 6.0 mmol/L. Calcium gluconate should show an effect on ECG abnormalities within 3 minutes of administration and its action is expected to last for 30 to 60 minutes. A 30ml bolus dose of calcium gluconate 10% should be given by intravenous injection over 10 minutes. The effect of calcium salts is temporary so consider a repeat dose if ECG abnormalities remain within 5 to 10 minutes after the initial dose is complete.

Calcium salts do not lower potassium levels. The risk of arrhythmias and cardiac arrest increases in proportion to severity of hyperkalaemia. Measures to lower potassium levels and to address underlying causes of hyperkalaemia must be taken immediately.

### **Review of underdosing of calcium gluconate**

The MHRA has reviewed available UK data related to inappropriate use of calcium gluconate and identified isolated cases where medication errors have occurred, including one death, where 10ml of calcium gluconate was used during cardiopulmonary resuscitation (Yellow Card [literature report](#)<sup>2</sup>). Reports from the National Reporting Learning System received since the guideline was updated<sup>3</sup> indicate that 6 incidents showed incorrect calcium gluconate administration and monitoring in the context of severe hyperkalaemia and cardiac arrest (5 fatal, 1 unknown outcome). The safety concerns in these incidents related to calcium gluconate underdosing; lack of repeat dosing where indicated; lack of potassium-lowering treatment and lack of or inappropriate ECG monitoring.

Following a review by the MHRA and advice from the [Commission on Human Medicines](#), the product information for these medicines will be updated to more clearly define the safe and effective administration of calcium gluconate for severe hyperkalaemia and to warn of the potential for underdosing.

The MHRA recently authorised use of calcium gluconate for the treatment of myocardial excitability in severe hyperkalaemia, which was previously off-label. Healthcare professionals are reminded that calcium gluconate is not usually recommended for the treatment of cardiac arrest except for where there is concomitant severe hyperkalaemia.<sup>4</sup> Bolus injection is recommended in these circumstances.

We have also issued a [National Patient Safety Alert](#) following consultation with NHS England and bodies in Scotland, Wales, and Northern Ireland, as well as the UK Kidney Association.

### **Report suspected reactions on a Yellow Card**

Please continue to report suspected adverse drug reactions to the [Yellow Card scheme](#). Healthcare professionals, patients, and caregivers are asked to submit reports using the Yellow Card scheme electronically using:

- the [Yellow Card website](#)
- the Yellow Card app; download from the [Apple App Store](#) or [Google Play Store](#)
- some clinical IT systems for healthcare professionals (EMIS, SystmOne, Vision, MiDatabank, and Ulysses)

When reporting please provide as much information as possible, including information about batch numbers, medical history, any concomitant medication, onset timing, treatment dates, and product brand name.

### **References**

1. Alfonzo and others. [Clinical practice guidelines. Treatment of acute hyperkalaemia in adults, June 2020. The Renal Association](#), pages 73-76 (viewed on 01 November 2022).
2. Vallis-Booth E, Moore S. [Fatal overdose of Taxus baccata plant matter treated in a rural district general hospital](#). BMJ Case Rep 2022;15: e243896.
3. Data from 01 August 2020 to 31 August 2022.
4. Deakin C and others. [Resuscitation Council UK. 2021 Resuscitation Guidelines. Special Circumstances Guidelines. Treatment of hyperkalaemia](#) (viewed on 01 November 2022).

*Article citation: Drug Safety Update volume 16, issue 11: June 2023: 1.*

## **Non-steroidal anti-inflammatory drugs (NSAIDs): potential risks following prolonged use after 20 weeks of pregnancy**

We want to remind healthcare professionals that use of systemic (oral and injectable) NSAIDs such as ibuprofen, naproxen, and diclofenac is contraindicated in the last trimester of pregnancy (after 28 weeks of pregnancy). A review of data from a 2022 study has identified that prolonged use of NSAIDs from week 20 of pregnancy onwards may be associated with an increased risk of oligohydramnios (low levels of amniotic fluid surrounding the baby) and fetal renal dysfunction. Some cases of constriction of the ductus arteriosus (narrowing of a connecting blood vessel in the baby's heart) have also been identified at this early stage.

If, following consultation between the patient and a healthcare professional, use of a systemic NSAID after week 20 of pregnancy is considered necessary, it should be prescribed for the lowest dose for the shortest time and additional neonatal monitoring considered if used for longer than several days. This is in addition to giving advice to discontinue use of any NSAID in the last trimester of pregnancy.

### **Advice for healthcare professionals:**

- we remind healthcare professionals that systemic (oral and injectable) NSAIDs are contraindicated during the last trimester (after 28 weeks) of pregnancy due to the risk of premature closure of the ductus arteriosus and renal dysfunction in the fetus and due to prolongation of maternal bleeding time and inhibition of uterine contractions during labour
- a review of data from [a 2022 study](#) has identified that prolonged use of NSAIDs from week 20 of pregnancy onwards may be associated with an increased risk of:
  - oligohydramnios resulting from fetal renal dysfunction; this may occur shortly after initiation, although it is usually reversible upon discontinuation.
  - cases of constriction of the ductus arteriosus, most of which resolved after treatment cessation
- avoid prescribing systemic NSAIDs from week 20 of pregnancy unless clinically required and prescribe the lowest dose for the shortest time in these circumstances
- antenatal monitoring for oligohydramnios should be considered if the mother has been exposed to NSAIDs for several days after week 20 of pregnancy; the NSAID should be discontinued if oligohydramnios is found or if the NSAID is no longer considered to be clinically necessary
- please advise patients who are pregnant to avoid use of NSAIDs available without prescription from week 20 of pregnancy onwards unless advised by their healthcare professional
- continue to follow clinical guidelines about taking and recording current and recent medicines, including over-the-counter medicines, at each antenatal appointment (for example, see [NICE guideline on antenatal care \[NG201\]](#))

- report suspected adverse reactions to NSAIDs to the [Yellow Card scheme](#)

## **Advice for healthcare professionals to provide to patients:**

### **New information for patients about NSAIDs in pregnancy**

- NSAID (non-steroidal anti-inflammatory) medicines such as ibuprofen, naproxen, and diclofenac are well established medicines for short-term pain relief, but all NSAIDs have recognised side effects and these are listed in the Patient Information Leaflet
- this advice is for oral NSAIDs (taken by mouth) and NSAIDs administered by injection
- if you are pregnant and are worried about taking a NSAID, please discuss this with a healthcare professional who will be able to advise further on your treatment plan
- NSAID should not be taken during the third (last) trimester of pregnancy (after 28 weeks of pregnancy) as they can in some cases cause labour to be delayed or last longer than expected. It can also have potential effects on the unborn baby's kidneys and heart
- while it is already well known that NSAIDs should not be taken during the third trimester of pregnancy, new information has identified that there may be potential risks to the baby following prolonged use of a NSAID after week 20 of pregnancy
- this new evidence has shown that prolonged use of NSAIDs after week 20 of pregnancy may increase the risk of problems with the unborn baby's kidneys and heart – however, these effects are usually reversible when the NSAID is stopped
- NSAIDs should be avoided from week 20 of pregnancy onwards unless absolutely necessary and advised by your healthcare professional
- if you and your doctor decide you should take a NSAID during pregnancy, then this should be at the lowest dose for the shortest period
- if you are treated with an NSAID during later pregnancy for more than a few days, your doctor may recommend additional monitoring such as ultrasound scans to check on your baby's health
- it is vitally important that you seek medical advice if pain persists for longer than 3 days or if you have repeated pain during pregnancy

### **General advice about pain relief during pregnancy**

- some patients may need short-term pain relief during pregnancy, such as for headache, toothache, muscle or joint pain and will need to take a medicine to help relieve their pain
- if you are unsure whether your pain relief medicine is an anti-inflammatory (NSAID), please speak to your doctor, midwife, or pharmacist

- some non-prescription pain relief medicines may contain more than one active drug, therefore it is important to read the box or the leaflet provided with the medicine to see if it contains an NSAID like ibuprofen
- if you have concerns about pain or inflammation or are not certain which medicines to take while you are pregnant, talk to your midwife or a healthcare professional
- the use of any non-prescription medicine for the management of pain during pregnancy should be for the shortest possible time at the lowest possible dose
- if pain persists for longer than 3 days, or if you have repeated pain during pregnancy, then you should seek advice from your doctor or another healthcare professional

## Background

NSAIDs block the synthesis and release of prostaglandin to relieve pain and inflammation. NSAIDs include ibuprofen, naproxen, and diclofenac, which are sold under many different brand names. The advice in this article applies to oral NSAIDs and NSAIDs administered by injection (available on prescription).

NSAIDs are contraindicated in the third trimester of pregnancy. This means they should not be used from week 28 of pregnancy. This is due to the increased risks of constriction of the ductus arteriosus and renal dysfunction, which are greater in the last trimester. NSAIDs may also increase bleeding time owing to their anti-platelet-aggregating effect on platelets and may inhibit uterine contractions, resulting in delayed or prolonged labour.

## New review of safety data

A [recent European review](#) considered further evidence on the risks of NSAIDs in pregnancy. The review recommended that additional warnings should be added to the product information highlighting the risks of oligohydramnios (reduced volume of amniotic fluid surrounding baby) and constriction of the ductus arteriosus (a blood vessel in the baby's heart) if NSAIDs are used for more than a few days after week 20 of pregnancy. Oligohydramnios and constriction of the ductus arteriosus are potentially serious as they can cause restriction of fetal growth and heart dysfunction.

Evidence was identified from an [observational cohort study](#)<sup>1</sup> of data between 2008 and 2017 reporting that oligohydramnios, likely caused by fetal renal dysfunction, was associated with use of NSAIDs from week 20 of pregnancy. From a total of 1092 pregnancies exposed to NSAIDs during the second and/or third trimester, 41 (3.8%) cases of oligohydramnios were observed. This compares to 29 (2.5%) from a total of 1154 pregnancies exposed to NSAIDs in the first trimester.

In the same study, a small number of reports of premature closure of the ductus arteriosus was observed in pregnancies following exposure to NSAIDs during the

second or third trimester. There were no reports relating to exposure during the first trimester. The study also looked at the effects of metamizole exposure in pregnancy, a different pain relief medicine not available in the UK.

### **MHRA review and independent advice**

The findings of this study were considered by the Paediatric Medicines and Medicines in Women's Health Expert Advisory Groups of the [Commission on Human Medicines](#) (CHM), and by the CHM, which agreed with the recommendations of the European review.

The CHM considered that the risk of constriction of the ductus arteriosus with prolonged exposure was serious and that this supported the updated warnings in the product information, although it noted there was limited evidence for the risk with short-term (less than a few days) exposure to NSAIDs during the late second trimester. If NSAID treatment is considered by a doctor to be necessary, then antenatal monitoring for oligohydramnios and constriction of the ductus arteriosus should be undertaken from week 20 onwards.

The product information for NSAIDs has been amended to include the risk of oligohydramnios and premature closure of the ductus arteriosus in the second trimester of pregnancy. It now includes advice to avoid use from week 20 of pregnancy onwards unless considered necessary by a doctor.

### **Advice about pain relief in pregnancy**

It is recognised that some patients may need short-term pain relief during pregnancy, such as for headache, toothache, muscle or joint pain. Before using any pain relief medicine available without prescription during pregnancy, patients should be advised to read the Patient Information Leaflet and only use the medication for the shortest possible time at the lowest possible dose and lowest possible frequency.

If pain persists beyond 3 days, then patients should seek advice from their doctor or healthcare professional. Patients should be made aware that some pain relief medicines, available without prescription, may contain multiple active ingredients, like ibuprofen and paracetamol, codeine and paracetamol, or codeine and ibuprofen. Therefore, they should check the Patient Information Leaflet supplied with the medicine for further information and speak to a healthcare professional if they have questions.

### **Medicines not included in this advice**

The review did not examine topical NSAIDs (gels and creams containing NSAIDs). Healthcare professionals should follow the contraindications and warnings in the product information in relation to pregnancy. Patients who are using gel or creams containing NSAIDs during pregnancy should be advised to read the Patient Information Leaflet for advice.



The latest review did not include consideration of COX-2 inhibitor pain relief medicines (Coxib) medicines. However, it should be noted that all Coxibs are contraindicated in the third trimester of pregnancy, and some are contraindicated throughout all of pregnancy. Coxibs inhibit prostaglandin synthesis, similarly to other NSAIDs, and have been associated with oligohydramnios, uterine inertia and premature closure of the ductus arteriosus. Healthcare professionals should follow the contraindications and warnings in the product information for the COX-2 inhibitor drugs in relation to pregnancy.

### **Report suspected adverse drug reactions**

Please continue to report any suspected adverse drug reactions via the Yellow Card Scheme. Healthcare professionals, patients, and caregivers are asked to submit reports using the Yellow Card scheme electronically using:

- the [Yellow Card website](#)
- the Yellow Card app; download from the [Apple App Store](#) or [Google Play Store](#)
- some clinical IT systems for healthcare professionals (EMIS, SystemOne, Vision, MiDatabank, and Ulysses)

When reporting suspected adverse drug reactions, please provide as much information as possible, including information about medical history, any concomitant medication, onset timing, and treatment dates. When reporting for a biological medicine or vaccine, please ensure that you provide the brand name (or product licence number and manufacturer), and the specific batch number.

1 Dathe K and others, [Fetal adverse effects following NSAID or metamizole exposure in the 2nd or 3rd trimester](#). BMC Pregnancy and Childbirth 2022; issue 22, article number 666.

*Article citation: Drug Safety Update volume 16, issue 11: June 2023: 2.*

# Adrenaline auto-injectors (AAIs): new guidance and resources for safe use

## Resources for the safe use of adrenaline auto-injectors (AAIs)

On 19 June 2023, the MHRA, with the support of allergy awareness advocates, has launched a [safety campaign to raise awareness of anaphylaxis and provide advice on the use of adrenaline auto-injectors \(AAIs\)](#). The launch coincides with the World Allergy Week, an annual initiative led by the [World Allergy Organization](#).

A toolkit of resources is now available for health and social care professionals to support the safe and effective use of AAIs. The resources are freely available for download from the MHRA's guidance page on [Adrenaline Auto-Injectors \(AAIs\)](#) and include:

- [Infographic about the correct use of your AAI](#) – see [Welsh version](#)
- [Video about the correct use of your AAI](#) – see [Welsh version](#)

### Advice for healthcare professionals:

- use the materials to inform patients and caregivers what to do if they suspect anaphylaxis and how to use adrenaline auto-injectors (AAIs)
- prescribers should prescribe 2 AAIs to make sure patients always have a backup
- talk to your colleagues about the safe use of AAIs and the signs of anaphylaxis using the mnemonic A, B, C for Airway, Breathing and Circulation.
- report any suspected defective AAIs to the [Yellow Card](#) scheme. Keep defective AAIs for investigation. Your report improves the safety of medicines and medical devices.

### Advice for healthcare professionals to provide to patients and carers:

- adrenaline auto-injectors (AAIs) should be used without delay if anaphylaxis is suspected, even if in doubt about the severity of the event
- signs may include swelling in the throat or tongue, wheezing or breathing difficulty, dizziness, tiredness and confusion
- immediately dial 999 to summon emergency medical help after administering adrenaline; say anaphylaxis (“ana-fill-axis”)
- if you are not already lying down, lie down flat and raise your legs (if you're pregnant, lie on your left side); this will assist blood flow to the heart and vital organs
- stay lying down even if you feel better
- if you struggle to breathe, you can gently sit up - don't change position suddenly; you should then lie down again as soon as you can
- do not stand up even if someone encourages you to
- use your second AAI if you haven't improved after 5 minutes
- you should always carry 2 AAIs at all times; check the expiry dates and see a pharmacist if you need a replacement
- report any suspected defective AAIs to the [Yellow Card scheme](#). Keep defective AAIs for investigation. Your report improves the safety of medicines and medical devices

## **About adrenaline auto-injectors (AAIs)**

Adrenaline auto-injectors (AAIs) (product names EpiPen or Jext) deliver adrenaline by means of an auto-injector device for the emergency treatment of anaphylaxis, a life-threatening severe allergic reaction.

In October 2019 the Commission on Human Medicines (CHM) endorsed the formation of an Adrenaline Auto-injector Expert Working Group (AAI EWG) to examine a range of issues to support the effective and safe use of AAIs for the emergency treatment of anaphylaxis.

One of the agreed actions for the group was to develop a communication campaign so that patients, healthcare professionals and the wider public can be better equipped to understand the importance of AAIs as potentially life-saving healthcare products.

View the full Public Assessment Report: [Recommendations to support the effective and safe use of adrenaline auto-injectors.](#)

AAIs are intended for self-administration by the patient or for administration by the patient's carer. AAIs should always be carried by the patient considered to be at risk of anaphylaxis. An AAI should be administered early, at the first signs of anaphylaxis, in line with clear evidence that this improves patient outcome. This requires the patient and carer to be confident in recognising the early signs of anaphylaxis and in distinguishing a severe, life-threatening allergic reaction from one that is less severe and does not require adrenaline. Making this distinction can be challenging, given the wide range of signs and symptoms of anaphylaxis. If there is doubt about the severity of an episode, adrenaline should be administered without delay as the risks of delay outweigh the potential risks from unnecessary administration of adrenaline.

## **Report adverse drug reactions on a Yellow Card**

Please continue to report any suspected adverse drug reactions to the Yellow Card scheme. Healthcare professionals, patients, and caregivers are asked to submit reports using the Yellow Card scheme electronically using:

- the [Yellow Card website](#)
- the Yellow Card app; download from the [Apple App Store](#) or [Google Play Store](#)
- some clinical IT systems for healthcare professionals (EMIS, SystemOne, Vision, MiDatabank, and Ulysses)

When reporting suspected adverse drug reactions, please provide as much information as possible, including information about medical history, any concomitant medication, onset timing, and treatment dates. When reporting for a biological medicine or vaccine, please ensure that you provide the brand name (or product licence number and manufacturer), and the specific batch number.

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# Letters and medicine recalls sent to healthcare professionals in May 2023

## Letters

In May 2023, the following letters were sent or provided to relevant healthcare professionals:

- [OctaplasLG infusion 200ml bags \(Blood Group A and AB\) \(Human plasma proteins 57.5mg per ml\): Interim Supply of Belgium and Czech Republic Stock to Mitigate Supply Disruption](#)
- [Clexane \(enoxaparin sodium\) device – Important information regarding differences between PREVENTIS and ERIS needle guard safety systems](#)
- [GlucaGen HypoKit \(Human Glucagon\) 1mg/ml: supply shortage in the UK](#)
- [Fluticasone Propionate \(Flixonase\) Nasule 400 micrograms \(1 mg/ml\) Nasal Drops Suspension: Permanent Discontinuation Notification](#)
- [Levothyroxine and risk of biotin interference on clinical lab tests](#)

## Medicine Recalls and Notifications

In May 2023, recalls and notifications for medicines were issued on:

[Class 3 Medicines Recall: Hikma Farmacêutica Portugal S.A., Gemcitabine 1g/26.3ml & 2g/52.6ml Solution For Infusion Vial, EL\(23\)A/16](#). Issued 10 May 2023. Hikma Farmacêutica Portugal S.A has informed the MHRA of a potential issue impacting the batches listed in this notification. Due to a limited number of complaints received regarding loose caps, Hikma Farmacêutica Portugal S.A is recalling the batches as a precautionary measure from pharmacies and wholesalers. Stop supplying the above batches immediately. Quarantine all remaining stock and return it to your supplier using your supplier's approved process.

[Class 4 Medicines Defect Information: Novartis Pharmaceuticals, Simulect 10mg & 20mg powder and solvent for Solution for injection or infusion, EL \(23\)A/17](#). Issued 16 May 2023. Novartis Pharmaceuticals has informed the MHRA that the solvent (water for injections in ampoules) co-packed with the impacted batches of Simulect powder for injection may contain glass fragments approximately 20 – 800 µm in size. Therefore, the included solvent should not be used, but replaced with an alternative water for injection. The quality of the Simulect vials themselves is not affected and due to supply considerations, the impacted batches are not being recalled.

[Class 4 Medicines Defect Information: Orifarm UK Ltd, Buccolam 10mg Oromucosal solution, EL \(23\)A/18](#). Issued 22 May 2023. Orifarm UK Ltd has informed the MHRA that the Patient Information Leaflet (PIL) in one batch of Buccolam 10mg Oromucosal solution has missing information regarding having to break the seal on the inner container before use. All other sections of the PIL are unaffected. The information in step 1 of the PIL should include text indicating to break the seal at one end. Healthcare professionals are advised to inform patients of the error in the PIL. The Marketing Authorisation Holder can supply copies of the correct PIL on request, so that any affected packs remaining in the dispensary can be supplemented with the correct information. Future copies of the PIL will reflect the correct information.

[Class 4 Medicines Defect Information: Drugsrus Limited / Dawa Limited, Metronidazole 200 mg/5 ml Oral Suspension, EL \(23\)A/19](#). Issued 23 May 2023. Drugsrus Limited has informed the MHRA that a small number of bottles of Metronidazole 200 mg/5 ml Oral Suspension 100ml are leaking. The probable cause of this defect relates to the possibility of a slight defect in the cap or bottle threads. Only the batches listed in this notification are affected. Due to the very low number of complaints received and the high visibility of the defect usually prior to dispensing, the product is not currently being recalled. Healthcare professionals are advised to check any incoming bottles from the batches listed. Do not dispense any bottles that are leaking. Quarantine any affected bottles immediately. Contact Drugsrus Limited for replacement and further advice. Patients who have a bottle of Metronidazole 200 mg/5 ml Oral Suspension 100ml that is leaking should contact their pharmacy team to arrange a replacement.

### **National Patient Safety Alert on removal of Philips Health Systems V60 and V60 Plus ventilators from service**

On 18 May 2023, we issued a [National Patient Safety Alert to instruct that all Philips V60 and V60 Plus ventilators should be permanently removed from use in the UK healthcare system](#) by no later than 30 September 2023. This is due to electrical issues with the devices that may, in rare instances, cause them to shut down unexpectedly.

If there is a risk of severe patient harm due to a lack of alternative ventilators, providers may continue to use affected ventilators until 30 September 2023, but only with appropriate [risk mitigation measures in place – see Risk assessment and additional patient monitoring requirements if temporary use of affected devices cannot be avoided](#). However, all V60 range ventilators must be removed from service with replacement devices in use by 30 September 2023.

We are working closely with the Department of Health and Social Care, who will be able to provide information on arrangements to supply replacement ventilators to any hospitals where staff feel they are needed, to ensure capacity is maintained.

## **Recall of Emerade 500 micrograms and Emerade 300 micrograms auto-injectors, due to the potential for device failure**

On 9 May 2023 we issued a [National Patient Safety Alert](#) with detailed instructions to support the recall from patients of all unexpired Emerade 500 micrograms and Emerade 300 micrograms adrenaline auto-injectors (also referred to as pens). This is due to an issue identified during testing where some auto-injectors failed to deliver the product or activated prematurely after they had been dropped.

It is unclear what impact this has on auto-injectors in clinical use, however as a precautionary measure and owing to the inability to identify this issue before the auto-injectors are used, all Emerade auto-injectors are being recalled in the UK.

General Practitioners (GPs) and Pharmacy Teams are asked to send the linked letter [Advice for patients who have been prescribed Emerade auto-injectors](#) to all patients and carers who have been prescribed Emerade auto-injectors. For further information on safe and effective use of adrenaline auto-injectors please refer to the MHRA's [Adrenaline Auto-Injectors \(AAls\) safety campaign](#).

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