Lignocaine with adrenaline 1:200,000 injections – Disruption to supply and risk of patient harm

Background
Aspen supplies the only Australian registered products of lignocaine 2% with adrenaline 1:200,000 in 20 mL injection and lignocaine 1% with adrenaline 1:200,000 in 20 mL injection. These products are temporarily out of stock due to a global manufacturing shortage. Aspen has advised that the delivery date for both products is mid-late April, however this is subject to change.

Both products are indicated for production of local or regional anaesthesia by infiltration; peripheral nerve block (e.g. intercostal block); major plexus block (e.g. brachial plexus block); epidural block and subarachnoid block.

Lignocaine 2% with adrenaline 1:200,000 in 20 mL injection
This product is commonly used for epidural top ups for caesarean sections. An alternative methylparaben preservative free product is available from Orpharma via the Therapeutic Goods Administration (TGA) Special Access Scheme (SAS).

Lignocaine 1% with adrenaline 1:200,000 in 20 mL injection
This product is commonly used when a larger volume of dilute local anaesthetic is required for procedures such as insertion of a permanent pacemaker, defibrillator or for inguinal hernia repair performed under local anaesthetic. There are alternatives of this product available via SAS, however they contain a methylparaben preservative. Access to preservative free alternatives is currently unavailable.

Products containing methylparaben preservative
Anaesthetic agents containing methylparaben preservative should not be used epidurally, intrathecally or by any route giving access to the cerebrospinal fluid, or via the intra- or retrobulbar route during eye surgery.

Other anaesthetic products are available without methylparaben preservatives and should be used wherever possible for the above mentioned routes. This includes combination products of ropivacaine and bupivacaine with adrenaline as well as single ropivacaine, bupivacaine and lignocaine agents.

Risk of dilution errors and patient harm
Lignocaine 1% in 20 mL injection and lignocaine 2% in 20 mL injection are available as single agents, however adrenaline 1:200,000 injection is not. Addition of diluted single agent adrenaline to lignocaine has the potential to cause patient harm due to dilution error.

Wherever possible, addition of diluted adrenaline to lignocaine should be avoided. If this is clinically required, dilution of adrenaline should be carried out with extreme caution.

Recommended actions by Local Health Districts/Networks
1. Distribute this notice to all relevant staff.
2. Implement strategies to locally manage the shortage of lignocaine 2% with adrenaline 1:200,000 in 20 mL injection and lignocaine 1% with adrenaline 1:200,000 in 20 mL injection through the Drug and Therapeutics/Medication Safety Committee. These measures should include:
   - Assess the current status of both products available in each facility, ensuring all locations of stock are identified.

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Recommended actions by Local Health Districts/Networks

- Conserve stock of both products for patients unable to receive alternative agents.
- Screen orders of unregistered SAS or S19A stock *upon receipt* for preservative content and approved routes for use.
- Use readily prepared alternative agents in preference to adding diluted adrenaline to lignocaine.
- Ensure robust medication safety strategies are in place to minimise the risk of patient harm if addition of diluted adrenaline to lignocaine is clinically required.

3. Ensure a system is in place to document actions taken.

4. Report any incidents associated with use of alternative local anaesthetic agents into the Incident Information Management System (IIMS).

5. Confirm receipt of this safety notice by emailing [CEC-MedicationSafety@health.nsw.gov.au](mailto:CEC-MedicationSafety@health.nsw.gov.au)