

# Look-Alike Medications in the Perioperative Setting: Scoping Review of Medication Incidents and Risk Reduction Interventions

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## BACKGROUND

Look-alike (LA) medications, where ampoules or vials of intravenous medications look similar, may increase the risk of medication errors in the perioperative setting.

## METHODS

Databases: CINAHL Complete, Embase, OVID Emcare, Pubmed, Scopus, Informit, Cochrane and Prospero Prospero.

## RESULTS

Total of 2,567 records identified to July 2022; only 18 publications met the inclusion criteria.



**Figure 1.** Labelling and packaging similarities of cisatracurium and midazolam ampoules.

## DISCUSSION

**Table 1.** Summary of the risk reduction strategies and interventions for LA medications in the perioperative setting.

Risk Reduction Strategies	Interventions
<b>Regulation</b>	Manufacturer labelling and packaging e.g., colour coding
<b>Procurement</b>	Risk assessment Communication and consultation Prefilled syringes
<b>Standardisation</b>	Standardising and Organising Medication Drawers Guidelines Adherence to Procedures Incident analysis
<b>Labelling</b>	Barcode medications for scanning Improved labelling via technology Label design Inhouse pharmacy labelling
<b>Environmental Team</b>	Limit medications in the workspace Communication Education Role definition Simulation exercises
<b>Storage</b>	Avoid LA Combinations Computerised Anaesthesia carts Optimise use of the Automated Dispensing Cabinets (ADC's) Label shelving Visually differentiate medications Segregate bulk stock
<b>Administration</b>	Double Checking Double Check with a read aloud Barcode scanning at the point of care Smart pumps



## CONCLUSION

- Risk reduction strategies and interventions have emerged that are not dependent on expensive, technology-based solutions
- There are opportunities for healthcare facilities to use multiple LA interventions to guide quality improvement. However further research with robust methodologies are required.

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