

Look Alike Sound Alike (LASA) Medications

This supplement focuses on some of the interventions that can be made to reduce the risk associated with LASAs, highlighting two commonly reported LASA errors, Amlodipine/Amitriptyline and Quetiapine/Quinine.

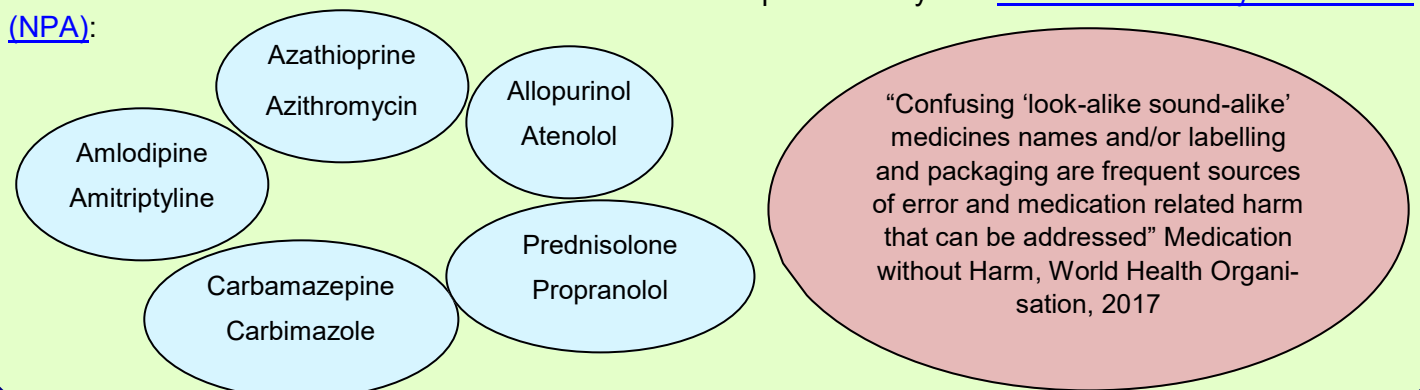
What are LASAs?

A LASA is any medication that can be confused with another medication because they either **Look-Alike** or **Sound -Alike**.

What's the incidence of LASA errors?

LASA dispensing errors are one of the most common medication errors. Around half of the errors reported to the Pharmacy and Medicines Management team, which resulted in a patient getting the wrong drug, involve LASA errors. Serious adverse incidents, including those with fatal outcomes, have occurred when the wrong drug has been dispensed due to a LASA error.

Particular care should be taken when prescribing or dispensing LASA medicines. Extra vigilance is required to ensure that the intended medication is supplied. Some of the highest risk LASA medication combinations are detailed below but a more extensive list has been produced by the [National Pharmacy Association \(NPA\)](#):



It doesn't matter in what order the letters in a word are. This is because the human mind does not read every letter by itself, but the word as a whole.



Why does a LASA error occur?

When we read, we scan rapidly and afterwards the mind makes sense of what is seen. This can give bias to what we expect to see as opposed to what is really there. Having drug names with similar groups of letters can often lead to confusion. This makes LASA errors difficult to detect, even by a second checker.

The following factors contribute to these types of errors:

- Similar packaging
- Similar sounding medication available in the same strengths
- Alphabetical storage may mean that LASAs are often stored side-by-side

Most commonly LASA errors are as a result of a picking error. They can also occur during labelling when selecting from drop-down menus or during the checking procedure if the prescription is checked against the label and the actual pack is not checked.

Reducing LASA errors

Dispensary Layout

Physical separation of LASA medications and the use of visual warnings is recommended.

Tall man lettering is the practice of using upper case letters for part of a medication name to help differentiate between names that look or sound similar in order to prevent errors. This type of lettering aims to emphasise the dissimilarities in the medication names.

Visual warnings

- Use shelf edge alert labels
- Display posters
- Add Patient Medication Record (PMR) prompts
- Use Tall man lettering



Dispensing procedures

- Ensure that robust dispensing and checking Standard Operating Procedures (SOPs) are in place and adhered to.
- Take extra care when dispensing Monitored Dosage Systems (MDS).
- Where possible, build a double check by different members of staff into the dispensing process.
- If a double check is not possible the pharmacist should take a 'mental break' between assembly of the prescription and completion of the final check.
- Always ensure empty medication boxes are left for the pharmacist to check against.
- Ensure appropriate label placement on medication packs. Dispensing labels shouldn't cover essential information, like the proprietary and/or non-proprietary name and strength.
- When completing the final accuracy check always check the product dispensed against the prescription form and against the label.

Other Factors to Reduce LASA Risks

Working environment

- Reduce distractions
- Appropriate working patterns for staff
- Adequate breaks and time off

Technology

- Use of barcoding
- Use of robots

Education and training

- Adequate training for dispensing staff, particularly when dispensing into MDS
- Raising LASAs awareness with dispensary staff
- Highlighting the many resources available

Review Errors

- Review all errors as a team, to help minimise the risk of recurrence
- Consider adding a LASA (Y/N) tick box to incident logs or as a keyword in electronic records

Recently Reported Errors

AmLODipine – AmiTRIPTYline

Over a recent six month period in Northern Ireland three errors involving Amlodipine and Amitriptyline were reported anonymously to the Pharmacy and Medicines Management team. This was also the most commonly reported LASA medication error in England in Q4 2021—[click here for full report](#)

In one report the patient was prescribed Amlodipine 10mg tablets but Amitriptyline 10mg tablets were dispensed. The incident was only discovered when the patient went to reorder the prescription. It is unclear how many tablets were taken and it was reported that the patient experienced tiredness and diarrhoea.

In both of the other reports, the patients were prescribed Amitriptyline 10mg tablets but dispensed Amlodipine 10mg tablets. In one case the pharmacist spotted the dispensing error before the medication was handed out to the patient. In the other case the error was again, only discovered when the patient tried to reorder the prescription. The patient had taken forty-two of the Amlodipine 10mg tablets. The patient was reported as feeling unwell, had lost weight and had decreased energy levels.

QueTIAPine - QuINine

The effects are likely to be serious if a patient takes a 200mg or 300mg dose of Quetiapine in error:

- Stroke-like symptoms
- Drowsiness
- Seizures

There have been two recent dispensing incidents in Community Pharmacy in which patients were prescribed Quinine but Quetiapine was dispensed in error:

Case 1

- The medication had been dispensed into a MDS.
- The patient had several admissions to hospital with symptoms of confusion and slurred speech.
- The MDS had been labelled with a Quinine label although it contained quetiapine.
- The error went unnoticed, as the MDS was not checked during the hospital admission.
- The error was only discovered when the patient's relative asked the community pharmacist to review the patient's night time medication in the MDS.

Case 2

- The correct label was printed for Quinine but a box of Quetiapine was dispensed.
- The patient had been taking Quetiapine for at least a week and phoned the ambulance as a result of noticing slurred speech.
- The paramedics identified the error as they noticed the Quinine label attached to a Quetiapine box.
- The patient was kept in hospital overnight for observation.

QueTIAPine vs QuINine – minimising the risk

- Use the **patient's age** to think about the **person behind every prescription**.
- **Quetiapine** is used for bipolar disorder and schizophrenia, often first diagnosed in young adulthood.
- The **initial dose of quetiapine is low**, so query a dose of 200mg or 300mg for a new patient.
- **Quinine** is used for night time leg cramps, usually a problem associated with older people. It is taken at a dose of one 200mg or 300mg tablet at night.

Note: There is minimal evidence for Quinine for the treatment of leg cramps and it is currently included in the Limited Evidence List. Patients who are prescribed Quinine should be encouraged to have their medication reviewed by their GP practice.

Reporting incidents and near misses

It is imperative that all adverse incidents and near misses, whether associated with a LASA or not, are reported appropriately.

Adverse incidents occur on a regular basis with respect to the prescribing, dispensing and administration of medications. It is important to recognise that reporting and investigating an incident is not about apportioning blame but is an opportunity to review practice and share learning with the aim of preventing recurrence of a similar incident in the future.

The reporting of adverse incidents and near misses, for the purpose of sharing learning, is an important way to improve patient safety.

Anonymous reporting

Community pharmacists can report incidents and near misses anonymously to the Pharmacy and Medicines Management team. At present this is via the link <http://www.medicinesgovernance.hscni.net/> .

Adverse Incident Report

The Pharmacy and Medicines Management team may also be officially informed about an incident by the patient, a pharmacy, a GP practice or via the trust involved. The pharmacy may be asked to complete an Adverse Incident Form and answer queries relating to the incident. Once again the purpose of this is to review practice and share learning to help avoid a recurrence.

Incidents involving a CD

If the incident involves a Controlled Drug, the Accountable Officer (Dr Lisa Byers) and Pharmacy Inspectorate [Medicines Regulatory Group](#), Department of Health NI, must be notified as soon as possible without compromising the steps needed to ensure patient safety. Please use the email addresses below:

ControlledDrugsAccountableOfficer@health-ni.gov.uk

MRG_inspectors@health-ni.gov.uk

Further information

A project in the Lloyds Pharmacy Group successfully reduced Amlodipine - Amitriptyline errors by 77% after implementing a patient safety programme. This project was presented at the Community Pharmacy Patient Safety Group Virtual Conference 2021 and is also available to watch on their website at the link below. The website also contains a range of useful resources such as posters:

[Look-Alike Sound-Alike medicines – Community Pharmacy Patient Safety Group \(pharmacysafety.org\)](#)

Medicines Management Team contact details

This newsletter has been produced for community pharmacists and pharmacy staff by the Regional Pharmacy and Medicines Management Team. Previous editions of newsletters can be found at: <https://niformulary.hscni.net/prescribing-newsletters/>

If you have any queries or require further information on the contents of this newsletter, please contact one of the Pharmacy Advisors in your local SPPG office:

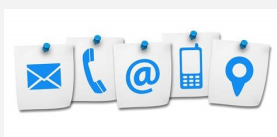
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