

Minimising the risk of Look-Alike Sound-Alike medication errors in community pharmacy



THE CHALLENGE

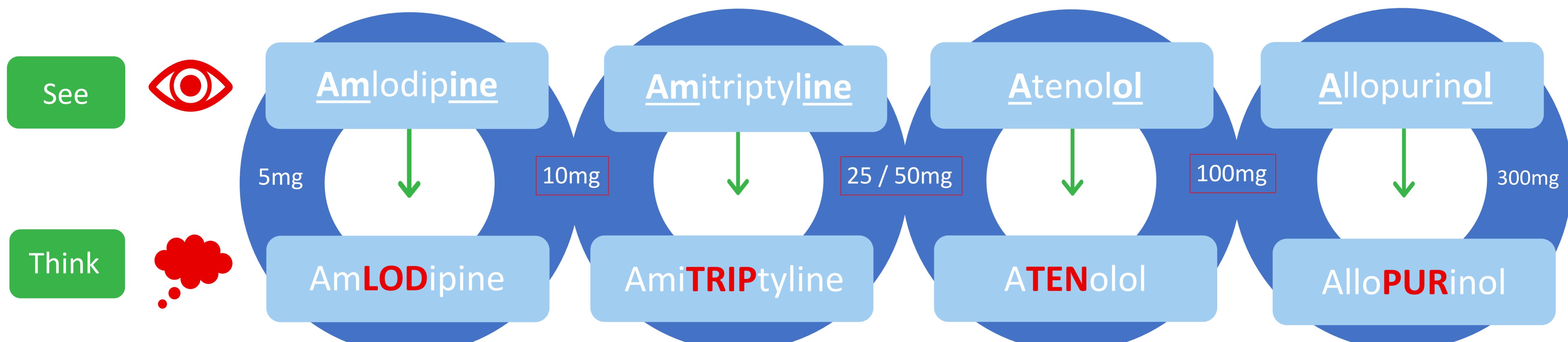
In England alone, **1.1 billion** prescriptions were dispensed in the community in 2017. Of these, over **70 million** prescriptions were for the medicines deemed to be the top ten highest risk Look-Alike Sound-Alike (LASA) combinations i.e. medicines which have **similar looking and/or sounding names**:

amlodipine and amitriptyline
allopurinol and atenolol
azathioprine and azithromycin
carbamazepine and carbimazole
prednisolone and propranolol

These medicines are deemed to be the **highest risk LASA** combinations due to the **likelihood of their occurrence** and the **magnitude of harm** that could be caused should they be mistakenly selected for one another.



It deosn't mtaer in waht oredr the
ltteers in a wrod are. Tihs is bcuseae the
huamn mnid deos not raed ervey lteter
by istlef, but the wrod as a wlohe.



RISK MINIMISATION ACTIVITY

LASA errors often feature in the 'Share and Learn' discussions at Community Pharmacy Patient Safety Group meetings. MSOs and pharmacy teams across the country have explored and shared numerous different risk minimisation measures to reduce the likelihood of LASA errors occurring, including **physical separation**, **visual warnings**, **robots** and revisiting **checking** procedures. Some pharmacy teams move one of the LASA pair into a 'high risk' medicines area in the dispensary, others move one of the LASA pair down to 'Z'. However, as is well known by all MSOs, every patient safety incident is caused by a combination of contributory factors, including human factors, and therefore a combination of risk minimisation measures is usually necessary.

Community pharmacy MSOs have indicated that it is often the checking procedure itself which can allow LASA errors to occur. Too often the prescription is checked against the applied dispensing label, rather than the pack itself. Small changes such as different sized baskets, better label placement and members of the dispensing team placing medicine packs with the **label side facing down in the basket** when handing these to pharmacists for final checks, are all thought to help mitigate against this.

WHAT NOW & WHAT NEXT

NHS England introduced **quality criteria** relating to LASA errors in the 2018/19 extension of the community pharmacy Quality Payments Scheme.

Many community pharmacy MSOs are using **dashboards** and internal reporting systems to track how different risk minimisation techniques are working and to see whether the current **increased focus** on the five **highest risk LASA** combinations has an impact on error rates.



It is difficult to determine which risk minimisation measures have the most significant impact and there appears to be a lack of good research in this area. The Community Pharmacy Patient Safety Group believe **further research**, for instance by the **Behavioural Insights Team**, could be very beneficial.

Dispensary design and organisation undoubtedly has an impact on safety. Given how much pharmacy practice (and dispensing volume) has evolved over the last ten years, the Community Pharmacy Patient Safety Group would like to see NHS Improvement revisiting its predecessor's 2007 guidance 'Design for patient safety'.

Packaging changes can also have an impact, though it is clear that introducing different colours is not a sustainable solution to the wider LASA challenge.

ATENC

Quetiapine vs Quinine

Atenolol belongs to a group of drugs called beta-blockers. They affect the heart and circulation. An Atenolol is used to treat angina (chest pain) and hypertension. Lowering high blood pressure helps to prevent stroke and heart attacks.

Most doses start at 25mg to 50mg once daily. Maximum licensed daily dose is 100mg. Side effects include: dizziness, lowered blood pressure (hypotension), cold hands and feet, leg pain and fatigue.

Take extra care when selecting look-alike sound-alike names, especially when selecting for patients with dementia.

If atenolol is supplied in error to a patient, cause loss of consciousness, with increased heart rate and blood pressure, in elderly patients.

Information originally published by Boots UK, 2016

LASA information resources for discussion at team safety huddles, available at pharmacysafety.org



Automation, technology and **barcode scanning** can all play a part in minimising risk and are measures that many MSOs are exploring within their organisations, though introducing anything which disrupts workflow comes with its own risks too.

There is no 'silver bullet', but combining efforts, focusing on the highest risks and sharing learning will all help to minimise likelihood of harm to patients.