FACT SHEET

for health service organisations

National tall man lettering:

# Supplementary list of specialised medicines with suffix ‘mab’, ‘nib’ and ‘gib’

The Australian Commission on Safety and Quality in Health Care (the Commission) is an Australian Government agency that leads and coordinates national improvements in the safety and quality of health care based on the best available evidence. By working in partnership with patients, carers, clinicians, the Australian state and territory health systems, the private sector, managers and healthcare organisations, the Commission aims to ensure that the health system is better informed, supported and organised to deliver safe and high-quality care.

The Commission is responsible for the development and stewardship of the [National Tall Man Lettering List](https://www.safetyandquality.gov.au/our-work/medication-safety/safer-naming-labelling-and-packaging-medicines/national-tall-man-lettering-list) (the List).1 The List compiles look-alike sound-alike (LASA) medicine names (generic and brand name pairs) that have been predicted to pose the greatest risks to patient safety. The List shows LASA medicine names in pairs or groups.

## Tall man lettering

Tall man lettering is a typographic technique that uses selective capitalisation to help make similar looking medicine names more easily distinguishable.2,3,4 It uses a combination of lower- and upper-case letters to highlight differences. For example:

oBINUTUZumab and oFATUMumab

Research based on experimental psychology suggests that Tall man lettering purposely disrupts the reading of a medicine name, drawing attention to one or more differentiating syllables, and potentially preventing erroneous selection of a medicine with a similar name.

The Institute for Safe Medication Practices (ISMP), the International Medication Safety Network (IMSN), the World Health Organization (WHO) and many other organisations have recommended Tall man lettering as a strategy to minimise risk associated with LASA medicine name pairs.5,6,7,8,9

This fact sheet contains a supplementary list of specialised medicines to the *National Tall Man Lettering List* published in 2017. The medicine names have Tall man lettering applied to them consistent with the national convention and should be used in the form provided.

The supplementary list of specialised medicines contained within this fact sheet, has been produced by the Commission based on the changes to the Australian Register of Therapeutic Goods since 2017, in particular, the multitude of medicine names with the suffixes: ‘mab’; ‘nib’ and ‘gib’, and their potential for confusion.

Consideration was also given to changes to Tall man lettering lists published by other countries (United Kingdom,10 United States11 and Canada,5,12 along with reported adverse incidents or near misses from Australian hospital networks involving the following classes of immuno-modulating medicines:

* Monoclonal antibodies (MABs) (commonly ending in the suffix ‘mab’)
* Tyrosine kinase (factor) inhibitors (TKIs) (commonly ending in the suffix ‘nib’).

## Background

Medication errors are one of the most commonly reported clinical incidents in acute healthcare settings. While rates of serious harm are low, the prevalence of medication errors is a concern, particularly as many are preventable. Medication incidents related to LASA medicine names are one of the most common type of medication error.6,13,14

This supplementary list includes a prioritised selection of thirty one (31) LASA medicine name pairs and trios within the MABs (with the suffix ‘mab’) and TKIs (with the suffix ‘nib’) that have been predicted to pose the greatest risks to patient safety. The list also includes one (1) additional anti-cancer medicine with the ‘gib’ suffix: soNIDEGib.

## Guidance for use

This fact sheet has been developed to assist Health service organisations (HSOs) and clinicians involved in medication management, in particular, those involved in the prescribing, dispensing and administration of medicines.

Implementation of Tall man lettering should include educating clinicians about the risks associated with LASA medicine name groupings and the purpose of Tall man lettering.

The [National guidelines for on-screen display of information](https://www.safetyandquality.gov.au/publications-and-resources/resource-library/national-guidelines-screen-display-clinical-medicines-information) and guidance for implementation of [Electronic medication management systems](https://www.safetyandquality.gov.au/publications-and-resources/resource-library/electronic-medication-management-systems-guide-safe-implementation-third-edition) published by the Commission recommend using Tall man lettering.

The Commission supports the use of Tall man lettering as part of a multi-faceted approach to reduce the risk of selection errors by clinicians associated with LASA medicines names. For instance, the risk of selecting an incorrect medicine from a computerised drop down list when a doctor is prescribing, or a pharmacist is dispensing against a medication order.

The supplementary list of specialised medicines with the suffix ‘mab’, ‘nib’ and ‘gib’ should be considered for use by HSOs and clinicians in:

* Electronic medication management systems, including prescribing, dispensing and administration systems
* Printed labels used for inpatient dispensing, shelving in pharmacies, and ward medicines cupboards
* Drug libraries for smart pumps
* Automated medicines storage and distribution systems.

Figures 1 and 2 provide the details of the specialised medicine name pairs and trios with Tall man lettering applied.

HSOs and clinicians should continue to be alert to new medicines that are registered in Australia and changes to the labelling and packaging. In addition, some of the specialised medicines listed in this fact sheet may be discontinued following publication.

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| Figure 1: Medicine name pairs and trios with the suffix ‘mab’ | |
| beNRALizumab | beVACizumab  beZLOTOXumab |
| eCULizumab | eFALizumab  eMICizumab |
| oBINUTUZumab | oFATUMumab |
| oCRELizumab | oMALizumab |
| pANITUMumab | pERTUZumab |
| raMUCIRumab | raNIBIZumab |

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| Figure 2: Medicine name pairs and trios with the suffix ‘nib’ and ‘gib’ | |
| aFATinib | aXITinib |
| bARICITinib | biNIMEtinib |
| cABOZANtinib | cOBIMEtinib |
| daBRAFEnib | daSATinib |
| laPAtinib | leNVAtinib |
| pAZOPanib | pONATinib |
| soNIDEGib | soRAFENib  sUNITinib |
| tOFACitinib | tRAMEtinib |

## References

1. Australian Commission on Safety and Quality in Health Care. National Tall Man lettering list. Sydney, Australia: ACSQHC; 2016. Available from: <https://www.safetyandquality.gov.au/our-work/medication-safety/safer-naming-labelling-and-packaging-of-medicines/national-tall-man-lettering-list/>.
2. Filik R, Purdy K, Gale A, Gerrett D. Drug name confusion: evaluating the effectiveness of capital (“Tall Man”) letters using eye movement data. Social science & medicine. 2004;59(12):2597–601.
3. Filik R, Purdy K, Gale A, Gerrett D. Labeling of medicines and patient safety: evaluating methods of reducing drug name confusion. Human Factors. 2006;48(1):39–47.
4. Gabriele S. The role of typography in differentiating look-alike/sound-alike drug names. Healthc Q. 2006;9:88–95.
5. The Institute for Safe Medication Practices Canada. Principles for the Application of TALLman Lettering in Canada. 2015 [cited 2019 Nov 9].
6. DeHenau C, Becker MW, Bello NM, Liu S, Bix L. Tallman lettering as a strategy for differentiation in look-alike, sound-alike drug names: the role of familiarity in differentiating drug doppelgangers. Applied ergonomics. 2016;52:77–84.
7. Institute for Safe Medication Practices. ISMP Updates Its List Of Drug Names With Tall Man Letters. 2016 [cited 2019 Nov 9]. Available from: <https://www.ismp.org/newsletters/acutecare/showarticle.aspx?id=1140>.
8. Health Quality and Safety Commission New Zealand. Tall Man Lettering List Report. 2013 [cited 2019 Nov 9]. Available from: <https://www.hqsc.govt.nz/assets/Medication-Safety/Tall-Man-lettering/Tall-Man-report-Dec-2013.PDF>.
9. World Health Organization. Patient Safety Solutions: Look-Alike, Sound-Alike Medication Names 2007 [cited 2019 Nov 9]; 1(Solution 1). Available from: <http://www.who.int/patientsafety/solutions/patientsafety/PS-Solution1.pdf?ua=1>.
10. The National Pharmacy Association. Look-alike sound-alike (LASA) items. October 2018. <https://www.npa.co.uk/wp-content/uploads/2018/10/Look-alike-sound-alike-items.pdf>.
11. Institute for Safe Medication Practices. ISMP’s list of confused drug names. 2019 [cited 2019 Nov 9]. <https://www.ismp.org/sites/default/files/attachments/2017-11/confuseddrugnames%2802.2015%29.pdf>.
12. Application of TALLman lettering for drugs used in oncology. ISMP Can Saf Bull. 2010 [cited 2019 Nov 9];10(8):1–4. <https://www.ismp-canada.org/download/safetyBulletins/ISMPCSB2010-08-TALLmanforOncology.pdf>.
13. Lambert BL, Lin S-J, Chang K-Y, Gandhi SK. Similarity as a risk factor in drug-name confusion errors: the look-alike (orthographic) and sound-alike (phonetic) model. Medical care. 1999;37(12):1214–25.
14. Phatak HM, Cady PS, Heyneman CA, Culbertson VL. Retrospective detection of potential medication errors involving drugs with similar names. Journal of the American Pharmacists Association. 2005;45(5):616–24.

## Questions?

For more information, please visit: [safetyandquality.gov.au/our-work/medication-safety/safer-naming-labelling-and-packaging-medicines/national-tall-man-lettering-list](http://safetyandquality.gov.au/our-work/medication-safety/safer-naming-labelling-and-packaging-medicines/national-tall-man-lettering-list)

You can also contact the Comprehensive Care project team at: [mail@safetyandquality.gov.au](mailto:mail@safetyandquality.gov.au)

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