

FROM PRESCRIPTION TO PERSONALISATION OF LINEZOLID

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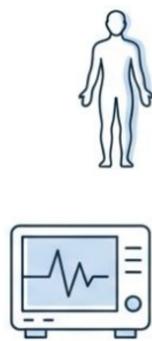
BACKGROUND AND IMPORTANCE

Linezolid is an antibiotic indicated for severe infections, but its high pharmacokinetic variability may compromise both efficacy and safety. Therapeutic drug monitoring (TDM) can optimise dosing and reduce the risk of adverse effects.

AIM AND OBJECTIVES

To analyse the use of linezolid in hospitalised patients and assess the proportion of prescriptions meeting criteria for TDM, based on the expert consensus statement on *Expert consensus statement on therapeutic drug monitoring and individualization of linezolid* (doi: 10.3389/fpubh.2022.967311).

MATERIAL AND METHODS



- TDM**
- Sex
 - Paediatrics (<12 years)
 - Elderly (>75 years)
 - Obesity (BMI >30 kg/m²)
 - Critical illness
 - Renal impairment (eGFR <60 mL/min)
 - Hepatic impairment (AST/ALT >5×ULN)



Drug interactions:

- Clarithromycin
- Proton pump inhibitors
- Amiodarone
- Amlodipine
- Calcium channel blockers
- Rifampicin
- Phenobarbital
- Levothyroxine

RESULTS

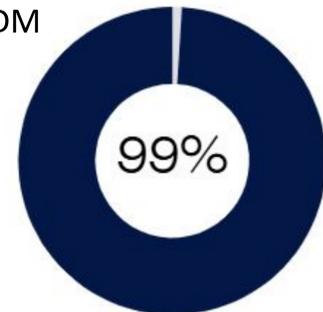


236 patients
(266 prescriptions)



Excluded ≤ 2 days
prescription

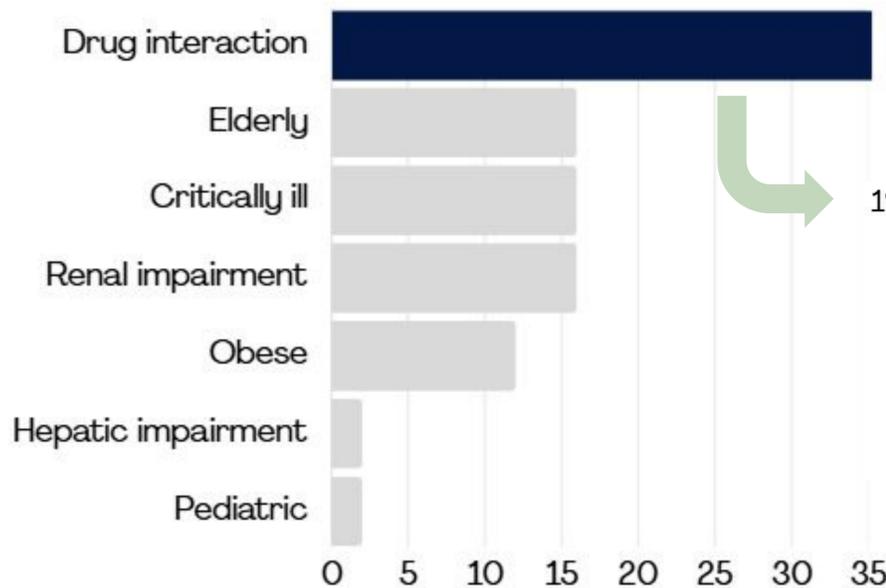
TDM



♂ 70%
Median age: 73

💉 83%

💊 17%



1% Rifampicine (reduce linezolid levels)



Interaction low risk

CONCLUSION AND RELEVANCE

Nearly all linezolid prescriptions met at least one criterion for TDM, with around 60% involving factors that significantly affect pharmacokinetics. These findings support the need for implementing standardised TDM protocols to ensure safe and effective use of linezolid in clinical practice.

