

ANALYSIS OF EXPOSURE TO QT-PROLONGING DRUGS IN LUNG TRANSPLANT PATIENTS

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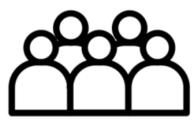
Background and objectives

- Drug-induced QT interval prolongation** is a relevant safety concern. **Lung transplant recipients** present polypharmacy and multiple predisposing factors, such as hypokalaemia, which may **increase the risk of QT prolongation**.
- To **evaluate the exposure to drugs with a risk of QT interval prolongation** in lung transplant patients and to identify **clinical factors associated** with increased susceptibility to this alteration.

Material and methods

- ✓ **Design:** Single-centre, retrospective, observational study conducted in a tertiary hospital.
- ✓ **Inclusion criteria:** Adults (>18 years) undergoing de novo lung transplantation (Oct 2023–Dec 2024). Re-transplantations were excluded.
- ✓ **Data analyzed:** Demographic and clinical data, treatment received and QT risk factors (female sex, age >65 years, insomnia, thyroid disorders, grapefruit intake, electrolyte disturbances, obesity).
- ✓ **Drug classification and statistical analysis:** QT-prolonging drugs were classified according to AZCERT [High risk (HR), possible risk (PR), conditional risk (CR)]. Data were analysed using descriptive statistics.

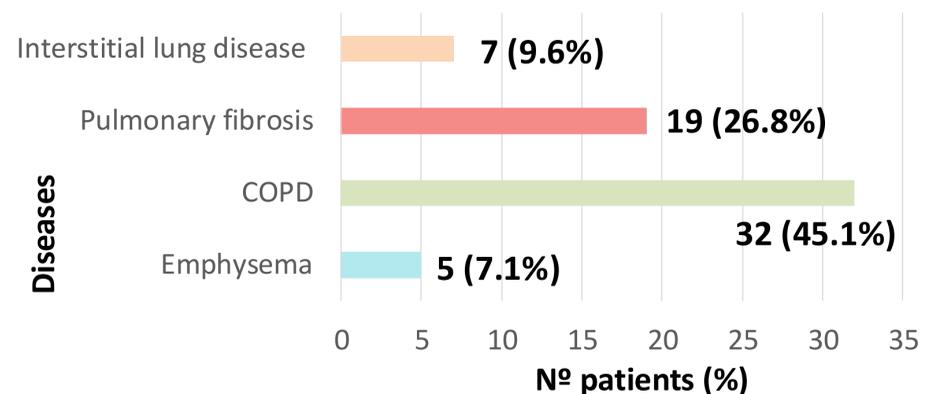
Results



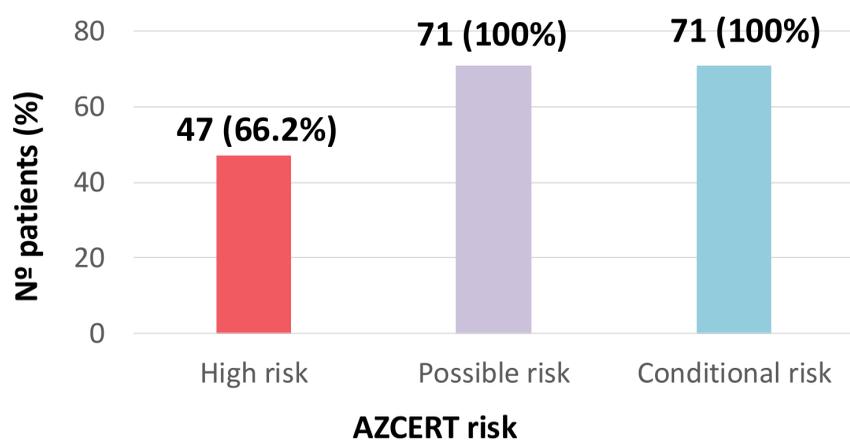
71 PATIENTS

- ✓ 33.86% female (n=24).
- ✓ Median age of 60.3 years (SD: 8.2 years).

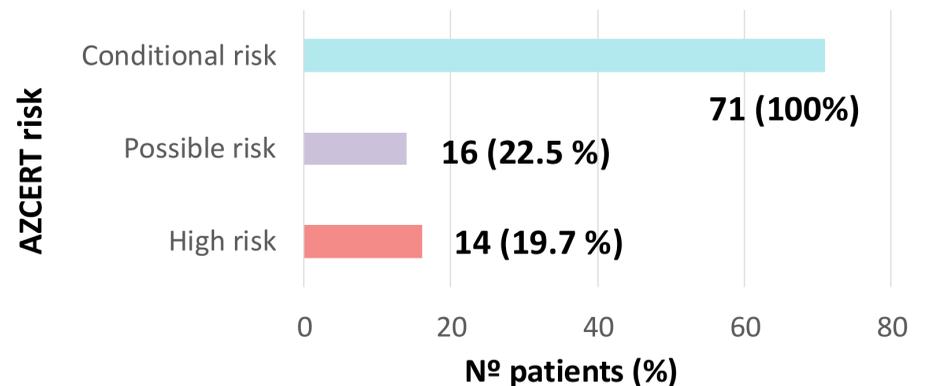
TRASPLANT INDICATIONS



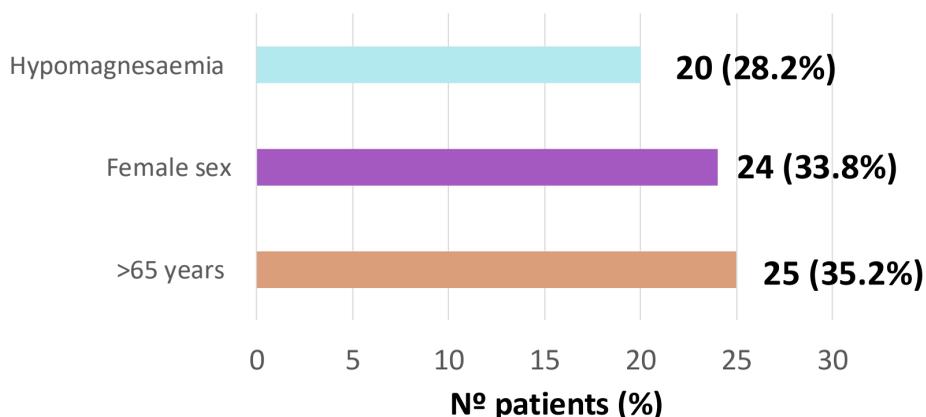
EXPOSURE TO DRUGS WITH A RISK OF QT PROLONGATION



POLYEXPOSURE ≥2 DRUGS



MOST PREVALENT RISK FACTORS



- ✓ HR drugs : azithromycin (30, 42.3%) and domperidone (22, 31.0%).
- ✓ PR drugs: tacrolimus (71, 100%).
- ✓ CR drugs, amphotericin B (70, 98.6%), pantoprazole (52, 73.2%) and furosemide (41, 57.7%).

Conclusion and relevance



Lung transplant patients showed **high exposure to QT-prolonging drugs**, with **frequent polyexposure and coexistence of risk factors** such as age >65 years, female sex and hypomagnesaemia. This combination increases the likelihood of severe arrhythmias and potentially fatal events.