

NEBULISED VORICONAZOLE IN LUNG TRANSPLANT RECIPIENTS: ANALYSIS OF USE, EFFICACY AND TOLERABILITY

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BACKGROUND

Fungal infection is a significant source of morbidity and mortality in lung transplant recipients (LTR). To avoid systemic toxicity, various nebulized antifungal agents are used after transplant to prevent or treat invasive fungal infections (IFI). Nebulised liposomal amphotericin B (n-LAB) has been widely used. However, some fungal agents with reduced amphotericin susceptibility, are emerging. Thus, new antifungal drugs are required.

OBJECTIVES

The purpose is to evaluate prescription profile, efficacy and tolerability of **nebulised voriconazole (n-V)** administered at a dose of **40mg twice daily** in LTR in a tertiary hospital.

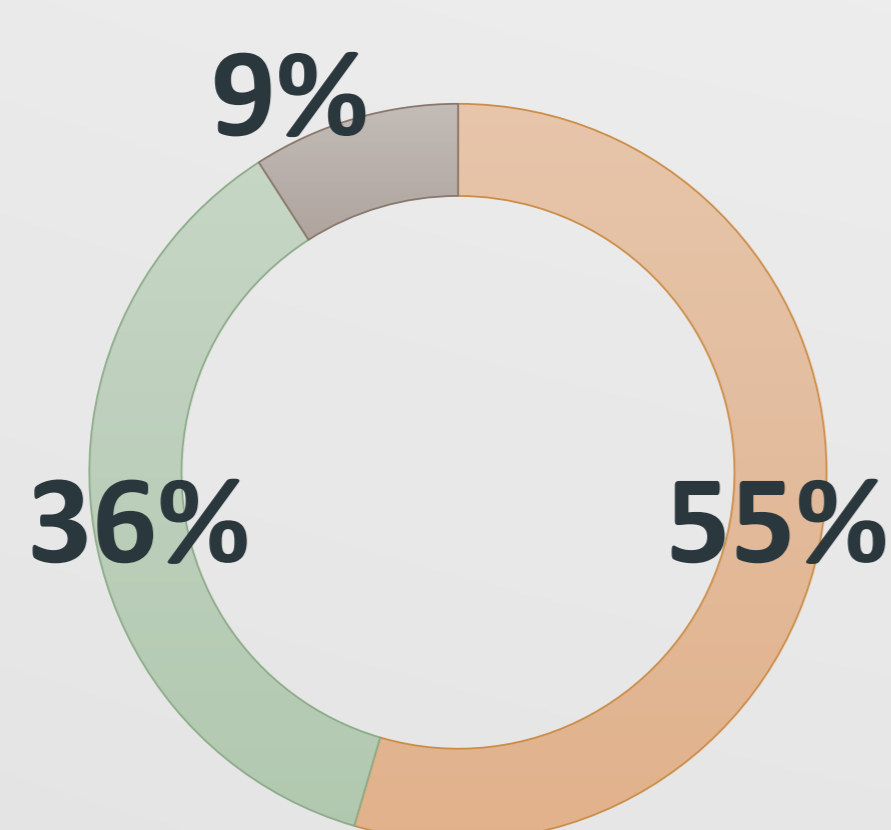
METHODS

Observational, retrospective study of patients who underwent lung transplant (LT) between January 2008 and September 2017 that received n-V. Effectiveness was performed in terms of fungal infection resolution or culture negativization.

RESULTS

Causes of transplantation

- Diffuse Parenchymal Lung Disease (DPLD)
- Cystic Fibrosis (CF)
- Chronic Obstructive Pulmonary Disease (COPD)

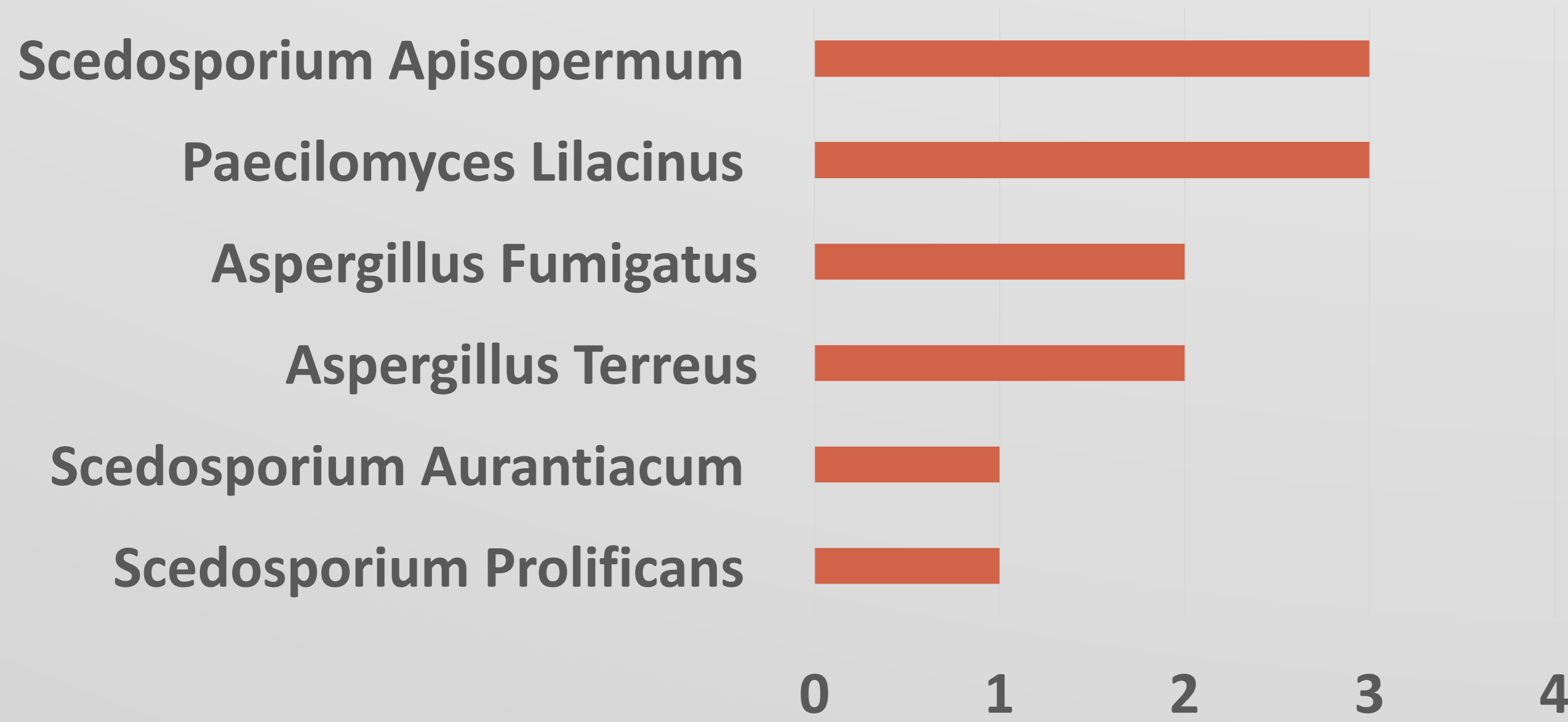


11 LTR received n-V

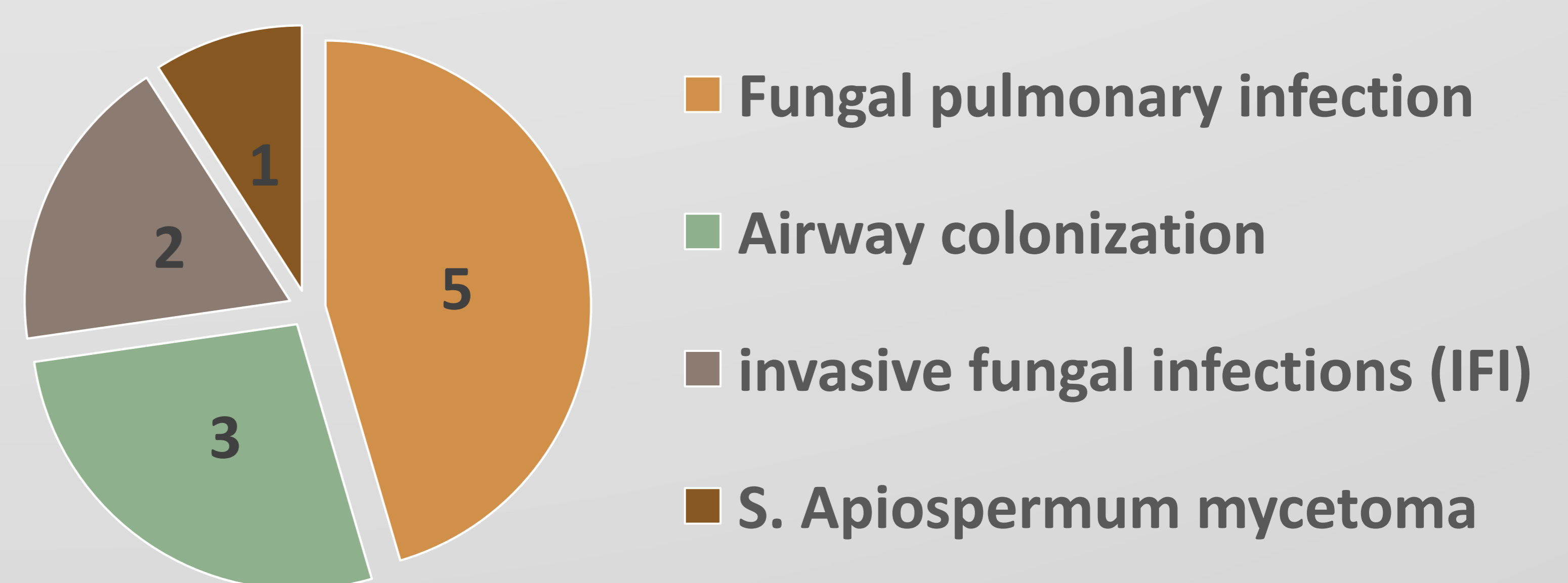
Average age: 40 (20-66)

10 patients (91%) previously received n-LAB as antifungal prophylaxis in post-transplant period

Fungal isolations



Fungal disease



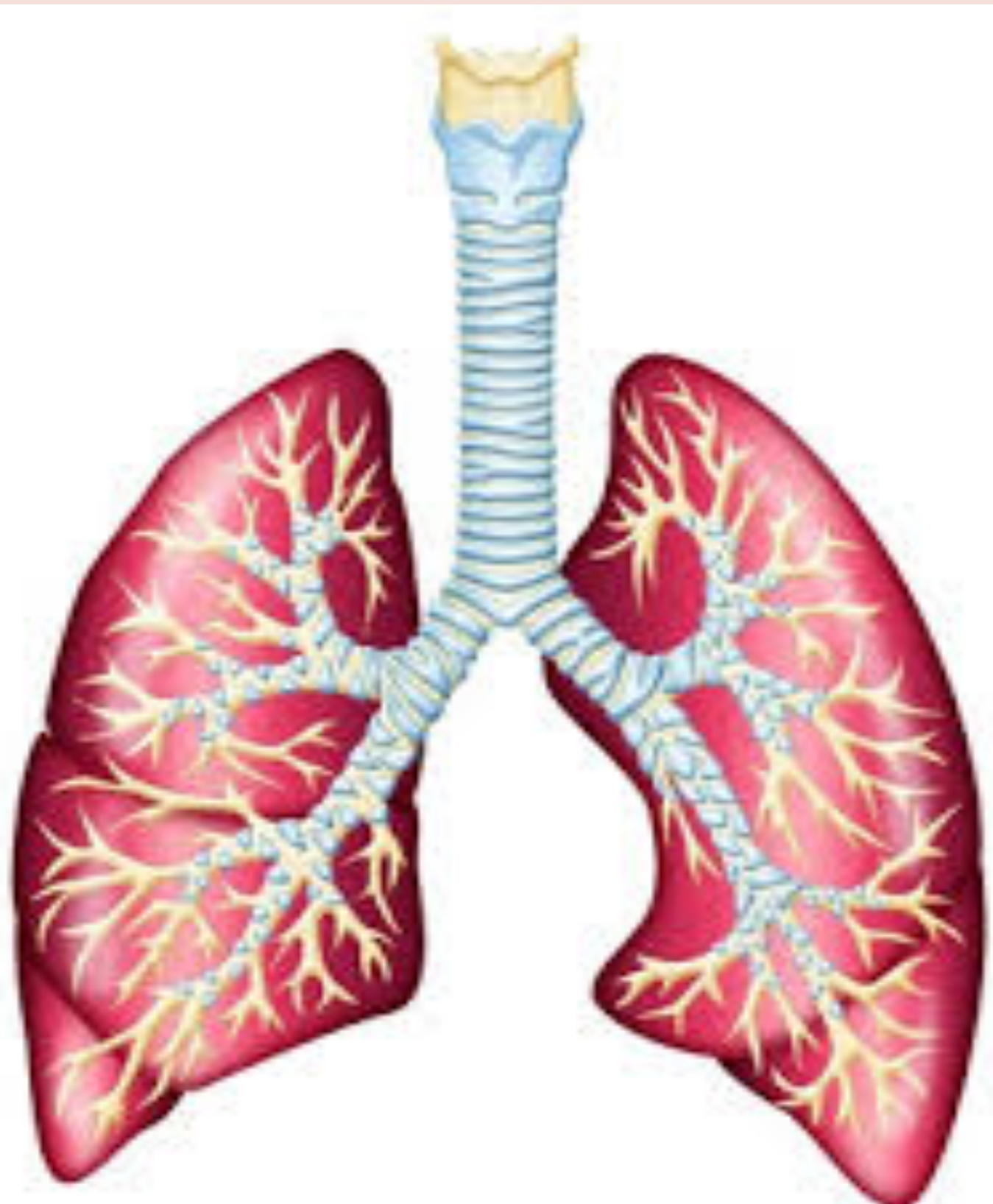
1 exitus related to S. Apiospermum and S. Prolificans IFI (9 months of n-V therapy duration)

Culture negativization took place in 82% of cases

Average treatment duration: 9,5 months (SD: 6,0)

No adverse effects were reported.

CONCLUSIONS



- n-V seems to be an effective alternative to prevent and treat fungal infections when n-LAB antifungal spectrum is not adequate to airway isolations. That occurs in most Scedosporium spp., Paecilomyces spp. and some Aspergillus spp.
- Its **tolerability is good** although n-V is not commercially available and it is prepared from intravenous vials.

Further studies will be required to accurately assess the use of n-V in clinical practice.