Impact of Donor Age and Ischemic Time on Infections After Lung Transplantation: A Focus on Age-Dependent Ischemic Susceptibility

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Median lung transplant ischemic time is 5.5 hours and lung function begins to decline at age 40. How do these variables influence post-lung transplant respiratory infection risk?

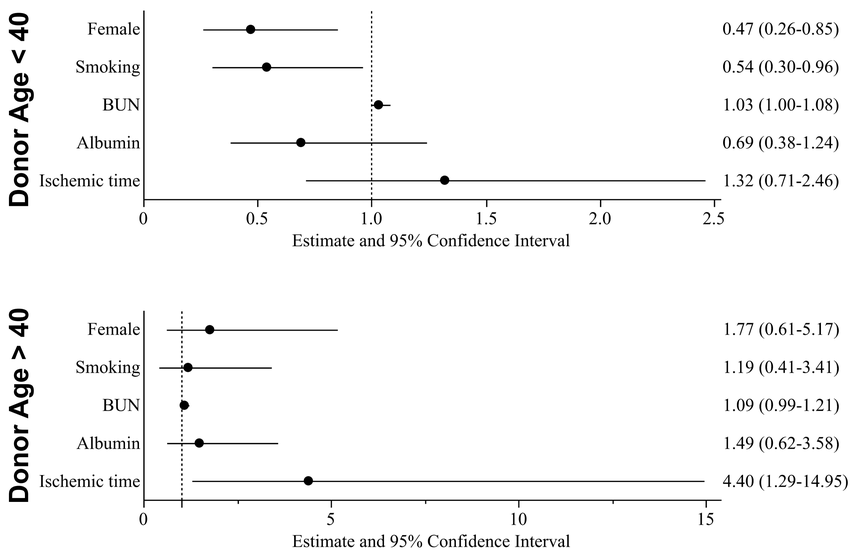
Introduction

Lung transplantation is an established **treatment** for patients with end-stage **pulmonary disease**

Infection is the **leading cause of death** between one month and a year after transplant

Prior studies have identified history **of multidrug-resistant infection**, exposure to **broad-spectrum antibiotics**, and **longer ischemic time** as **risk factors for infection** after lung transplant

In the age of **extended criteria donors** and **longer ischemic times**, what is the **differential impact** of **donor age** and **ischemic time** on **risk of infection**?

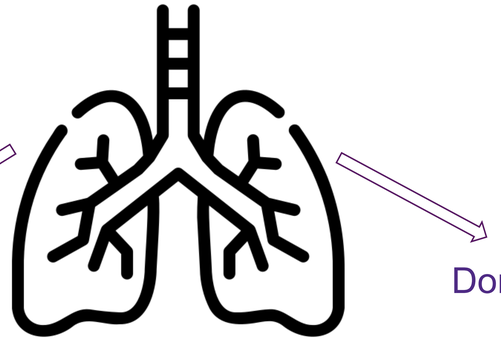


Discussion

Ischemic time > 5.5 **differentially impacts** infection risk in donors > 40 years. A **"one size fits all"** strategy in assessing post-transplant infection risk **may not be appropriate.**

Results

288 adult lung transplant recipients (2018 – 2023)



Donor age < 40 *(n=210)*

Donor age > 40 *(n=78)*

OR 1.32 (0.71-2.46) *p* = 0.38

Ischemic time > 5.5 hours and infection risk

OR 4.40 (1.29-14.95) *p* = 0.018