

**Abstract Type : Oral Presentation**  
**Abstract Submission No. : F-008087**

## **Outcome of donor recipient size mismatched lung transplantation**

**Bongsuk Park**<sup>1</sup>, Ha Eun Kim<sup>1</sup>, Young Ho Yang<sup>1</sup>, Moo Suk Park<sup>2</sup>, Ala Woo<sup>2</sup>, Eun Young Kim<sup>2</sup>, Jin Gu Lee<sup>1</sup>

<sup>1</sup>Department of Thoracic and Cardiovascular Surgery, Severance Hospital, Yonsei University, Republic of Korea

<sup>2</sup>Department of Pulmonology, Severance Hospital, Yonsei University, Republic of Korea

**Introduction:** donor/recipient size matching is a key requirement in lung transplantation (LT) to achieve proper organ allocation. There are several reports about the size mismatched lung transplantation, but their results were contradicted. In this study, we review the outcome of LT according to their D/R size match.

**Methods:** 446 patients who underwent LT between January 2010 and December 2022 were analyzed. Patients were divided into 3 groups according to donor/recipient size. 120%>D/R ratio was grouped as Over (n=108, 24.2%), 120%>D/R ratio80% was grouped as NL (n=314, 70.4%), 80%>D/R was grouped as Under (n=23, 5.2%). Their early and long-term outcome were analyzed.

**Results:** Incidence of grade 3 primary graft dysfunction (PGD) at 24hr and 48h were higher in bigger sized D/R ratio (42.6% in Over vs. 35.7% in NL vs. 13.0% in Under, p=0.02 at 24h, 36.1% vs. 25.2% vs. 13.0%, p=0.012 at 48h). PGD grade 3 at 72h also showed higher trend incidence in bigger D/R match (31.5% vs. 20.4% vs. 13.0%, p=0.069). Intensive care unit stay was shorter trend in smaller D/R (13.64±10.98 in Over vs. 11.40±9.59 in NL vs. 8.59±4.98 in Under, p=0.058). The 5year survival was not different among groups (51.7.% vs.51.9% vs. 54.8% in Over vs. NL vs. Under, p=0.929).

**Conclusion:** Even bigger D/R matched LT showed late recovery during early postoperative period, their long-term result was not different in terms of D/R size ratio.