# Title:

# Sleep apnea is not associated with worse outcomes in kidney transplant recipients

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# **SUPPLEMENT TABLES**

**Table S1:** Predictors of rapid progression (>6 ml/min/1.73 m<sup>2</sup>/year) of graft function – multivariate analysis

| Model 1                  | Odds ratio | Confidence     | p-value |
|--------------------------|------------|----------------|---------|
|                          | (OR)       | interval of OR |         |
| AHI≥5/h (vs AHI<5/h as   | 0.67       | 0.25-1.85      | 0.44    |
| reference)*              |            |                |         |
| Model 2                  | Odds ratio | Confidence     | p-value |
|                          | (OR)       | interval of OR |         |
| AHI≥15/h (vs AHI<15/h as | 0.97       | 0.32-2.92      | 0.96    |
| reference)*              |            |                |         |
| Model 3                  | Odds ratio | Confidence     | p-value |
|                          | (OR)       | interval of OR |         |
| AHI≥30/h (vs AHI<30/h as | 0.47       | 0.09-2.35      | 0.36    |
| reference)*              |            |                |         |
| Model 4                  | Odds ratio | Confidence     | p-value |
|                          | (OR)       | interval of OR |         |
| AHI (+1/h increase)*     | 0.99       | 0.96-1.02      | 0.50    |
|                          |            |                |         |

<sup>\*</sup>Adjusted for age, presence of diabetes and serum albumin level

Table S2: Association between desaturation index and outcomes

|                           | eGFR changes       | Confidence interval | p-value |
|---------------------------|--------------------|---------------------|---------|
|                           | (ml/min/1.73       | of eGFR changes     |         |
|                           | m²/year)           | (ml/min/1.73        |         |
|                           |                    | m²/year)            |         |
| Patients with             | -1.04              | (-1.59) - (-0.48)   | 0.46    |
| Desaturation index        |                    |                     |         |
| <5/h                      |                    |                     |         |
| Patients with             | -1.30              | (-1.83) - (-0.76)   |         |
| <b>Desaturation index</b> |                    |                     |         |
| ≥5/h                      |                    |                     |         |
| Model*                    | Odds ratio (OR) of | Confidence interval | p-value |
|                           | rapid progression  | of OR               |         |
|                           | (>4 ml/min/1.73    |                     |         |
|                           | m²/year) of graft  |                     |         |
|                           | function           |                     |         |
| <b>Desaturation index</b> | 1.54               | 0.64-3.73           | 0.34    |
| ≥5/h (vs                  |                    |                     |         |
| Desaturation index        |                    |                     |         |
| <5/h as reference)        |                    |                     |         |
| Desaturation index        | 0.99               | 0.97-1.02           | 0.59    |
| (+1/hour)                 |                    |                     |         |

| Model**                      | Hazard ratio (HR)  | Confidence interval | p-value |
|------------------------------|--------------------|---------------------|---------|
|                              | of all-cause       | of HR               |         |
|                              | mortality          |                     |         |
| <b>Desaturation index</b>    | 1.61               | 0.73-3.56           | 0.24    |
| ≥5/h (vs                     |                    |                     |         |
| Desaturation index           |                    |                     |         |
| <5/h as reference)           |                    |                     |         |
| <b>Desaturation index</b>    | 1.01               | 0.98-1.03           | 0.57    |
| (+1/hour)                    |                    |                     |         |
| Model*                       | Odds ratio (OR) of | Confidence interval | p-value |
|                              | combined outcome   | of OR               |         |
| <b>Desaturation index</b>    | 1.02               | 0.42-2.46           | 0.97    |
| ≥5/h (vs                     |                    |                     |         |
| Desaturation index           |                    |                     |         |
| <5/h as reference)           |                    |                     |         |
| Desaturation index (+1/hour) | 0.99               | 0.97-1.02           | 0.56    |

<sup>\*:</sup> Model adjusted for age, serum albumin and presence of diabetes

<sup>\*\*:</sup> Unadjusted model

Table S3: Association between OSA and outcomes in females and males

|                     | eGFR changes       | Confidence interval | p-values                          |
|---------------------|--------------------|---------------------|-----------------------------------|
|                     | (ml/min/1.73       | of eGFR changes     |                                   |
|                     | m²/year)           | (ml/min/1.73        |                                   |
|                     |                    | m²/year)            |                                   |
|                     | Fer                | nales               | p for gender<br>interaction: 0.72 |
| AHI ≥15/h           | -0.23              | (-2.87) - (2.40)    | 0.51                              |
| AHI <15/h           | -1.24              | (-1.84) - (-0.63)   | -                                 |
|                     | M                  | ales                |                                   |
| AHI ≥15/h           | -0.95              | (-1.79) - (-0.11)   | 0.46                              |
| AHI <15/h           | -1.33              | (-1.94) - (-0.72)   | -                                 |
| Model*              | Odds ratio (OR) of | Confidence interval | p-values                          |
|                     | rapid progression  | of OR               |                                   |
|                     | (>4 ml/min/1.73    |                     |                                   |
|                     | m²/year) of graft  |                     |                                   |
|                     | function           |                     |                                   |
|                     | Female             |                     | p for gender                      |
|                     |                    |                     | interaction: 0.43                 |
| AHI ≥15/h (vs AHI   | 0.59               | 0.49-6.99           | 0.67                              |
| <15/h as reference) |                    |                     |                                   |
|                     | Male               |                     |                                   |
| AHI ≥15/h (vs AHI   | 0.79               | 0.23-2.70           | 0.71                              |
|                     |                    |                     |                                   |

| <15/h as reference) |                    |                     |                   |
|---------------------|--------------------|---------------------|-------------------|
| Model**             | Hazard ratio (HR)  | Confidence interval | p-values          |
|                     | of all-cause       | of HR               |                   |
|                     | mortality          |                     |                   |
|                     | Fer                | male                | p for gender      |
|                     |                    |                     | interaction: 0.36 |
| AHI ≥15/h (vs AHI   | 4.36               | 0.87-21.82          | 0.07              |
| <15/h as reference) |                    |                     |                   |
|                     | Male               |                     |                   |
| AHI ≥15/h (vs AHI   | 0.63               | 0.23-1.78           | 0.38              |
| <15/h as reference) |                    |                     |                   |
| Model*              | Odds ratio (OR) of | Confidence interval | p-value           |
|                     | combined outcome   | of OR               |                   |
|                     | Female             |                     | p for gender      |
|                     |                    |                     | interaction: 0.80 |
| AHI ≥15/h (vs AHI   | 4.44               | 0.38-51.96          | 0.24              |
| <15/h as reference) |                    |                     |                   |
|                     | Male               |                     |                   |
| AHI ≥15/h (vs AHI   | 0.52               | 0.15-1.77           | 0.29              |
| <15/h as reference) |                    |                     |                   |

<sup>\*:</sup> Model adjusted for age, serum albumin and presence of diabetes

\*\*: Unadjusted model

### **SUPPLEMENT FIGURE**

Figure S1: Flow chart of the patient selection

