Supplementary Table 2S. Baseline characteristics and clinical outcomes in infants stratified by FiO<sub>2</sub> before surfactant.

|                              | „Low” FiO<sub>2</sub> (≤0.30) | „High” FiO<sub>2</sub> (>0.60) | P     |
|------------------------------|-------------------------------|-------------------------------|-------|
| **Baseline characteristics** |                               |                               |       |
| Gestational age (weeks)      | 29.6 ±2.6                     | 29.6 ±3.4                     | ns    |
| Birth weight (g)             | 1288 ±435                     | 1384 ±743                     | ns    |
| Male sex                     | 40 (56%)                      | 21 (54%)                      | ns    |
| 5 min Apgar                  |                               |                               |       |
| Cesarean section             | 65 (91%)                      | 35 (90%)                      | ns    |
| Antenatal steroids           | 59 (83%)                      | 28 (72%)                      | ns    |
| Maximum FiO<sub>2</sub> in the Delivery room | 0.3 (0.3 – 0.3) | 0.4 (0.3 – 0.8) | <0.001 |
| Time from birth to SF        | 2.17 (0.75 – 5.00)            | 1.52 (0.64 – 3.17)            | ns    |
| **Clinical outcomes**        |                               |                               |       |
| MV < 72 h of life            | 14 (20%)                      | 18 (46%)                      | 0.007 |
| Duration of MV (days)        | 3.0 ±8.2                      | 6.8 ±12.5                     | 0.006 |
| Duration of non-invasive ventilation (days) | 7 (4 – 21)               | 7 (3 – 26)                     | ns    |
| BPD                          | 18 (25%)                      | 16 (41%)                      | ns    |
| BPD moderate or severe       | 9 (13%)                       | 7 (18%)                       | ns    |
| IVH                          | 22 (31%)                      | 6 (15%)                       | ns    |
| IVH grade 3 or 4             | 6 (8%)                        | 0 (0%)                        | 0.087 |
| In-hospital mortality        | 4 (6%)                        | 5 (13%)                       | ns    |

If not otherwise indicated, data are the mean ± SD or median (IQR). BPD = bronchopulmonary dysplasia, IVH = intraventricular hemorrhage.