**Supplemental figure legends**

**Supplementa Fig. 1:** Baseline pulmonary angiography in the right anterior oblique position and balloon sizing the MPA and RVOT of patient 1.

**Supplementa Fig. 2:** Baseline pulmonary angiography in the left anterior oblique position and balloon sizing the MPA and RVOT of patient 1.

**Supplementa Fig. 3:** Baseline pulmonary angiography and balloon sizing the MPA and RVOT of patient 2.

**Supplementa Fig. 4:** Surgical incision and the main pulmonary artery suture plication of patient 1.