

## **SUPPLEMENTAL MATERIAL**

### **Urinary Mitochondrial DNA Copy Number Identifies Renal Mitochondrial Injury in Renovascular Hypertensive Patients Undergoing Renal Revascularization: A pilot Study**

Short title: Mitochondria in renovascular hypertension

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## SUPPLEMENTAL FIGURE LEGENDS

*Figure S1.* Plasma *COX3* and *ND1* levels were similar among the groups (A) and remained unchanged 3 months after percutaneous transluminal renal angioplasty (PTRA).

*Figure S2.* Plasma renin activity remained unchanged 3 months after PTRA.

*Figure S3.* Diastolic and mean arterial pressure similarly decreased in both PTRA-treated after 3 months.

*Figure S4.* A: Transmission electron microscopy (TEM) showing mitochondrial structural abnormalities in pigs with RVH. Representative renal immunofluorescent staining of the mitochondrial outer membrane marker pre-protein, translocases of the outer membrane (TOM)-20 (green) and its quantification, showing decreased mitochondrial density in RVH compared to normal pigs. B: Mitochondrial cytochrome-c oxidase (COX)-IV activity and ATP/ADP ratio were lower in RVH compared to normal pigs. † $P < 0.01$ .

*Figure S5.* Stenotic kidney oxidative stress (dihydroethidium, DHE staining), tubular injury (Periodic acid-Schiff, PAS staining), and tubulointerstitial fibrosis (trichrome staining) were higher in RVH compared to normal pigs. † $P < 0.01$ , ‡ $P < 0.001$ .

*Figure S6.* Urinary *COX3* and *ND1* copy number were higher in RVH compared to normal pigs (A) and correlated inversely with TOM-20 immunoreactivity (B), mitochondrial COX-IV activity

(C), and ATP generation (D). \* $P < 0.05$ .

*Figure S7.* Plasma COX3 and ND1 levels were similar between normal and RVH pigs.