

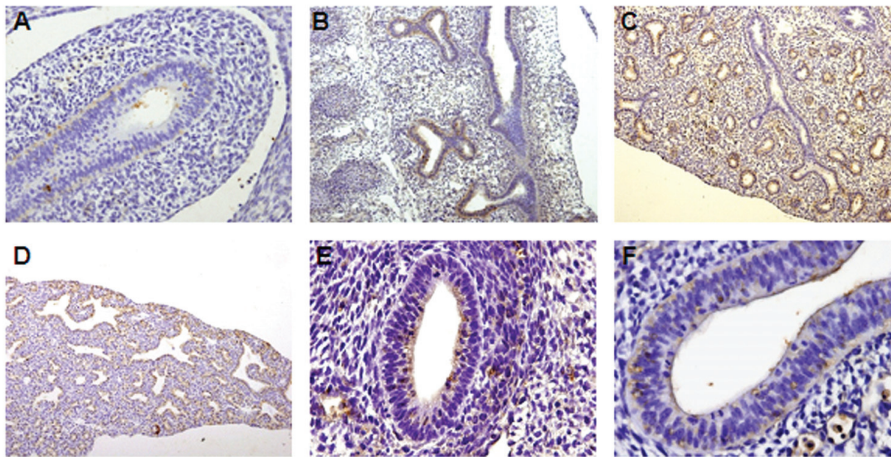
Supplemental Data

Local Fetal Lung Renin-Angiotensin System as a Target to Treat Congenital Diaphragmatic Hernia

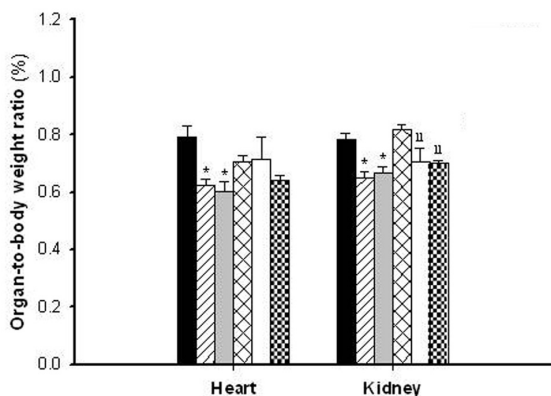
Cristina Nogueira-Silva,^{1,2,3} Emanuel Carvalho-Dias,^{1,2,4} Paulina Piairol,^{1,2} Susana Nunes,⁵ Maria J Baptista,^{1,2,6} Rute S Moura,^{1,2} and Jorge Correia-Pinto^{1,2,7}

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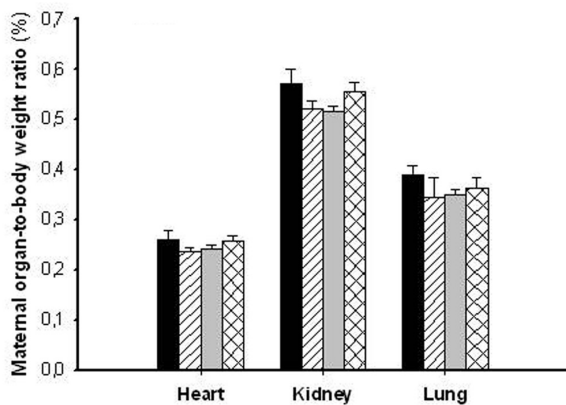
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Supplemental Figure 1. Protein expression pattern of renin-angiotensin system components during early stages of fetal lung development. (A-D) Renin expression at 13.5, 15.5, 17.5 and 19.5 d post-conception (dpc), respectively. Renin protein expression appears to be maximal in the branching buds. (E) ACE and (F) AT₂ receptor expression in epithelial cells at 13.5 dpc. Original magnification: x100 (B-D), x200 (A), x400 (E, F).



Supplemental Figure 2. Antenatal PD-123319 treatment effects on fetal heart and kidney. Heart-to-body weight and kidney-to-body weight ratios in control (C), nitrofen (N) and CDH groups treated with saline (■, C+S; ▨, N+S; ▩, CDH+S) or PD-123319 (▧, C+PD; □, N+PD; ▦, CDH+PD). The nitrofen treatment (nitrofen and CDH groups) induced decrease of heart and kidney-to-body weight ratios. Antenatal PD-123319 administration did not significantly change either heart or kidney growth. Results are expressed as %. $p < 0.05$: * vs. C+S, ** vs. C+PD.



Supplemental Figure 3. Heart, kidney and lung-to-body weight ratios in control and exposed to nitrofen pregnant rats, treated with (■, C+S; ▨, N+S) or PD-123319 (▩, C+PD; ▧, N+PD). PD-123319 treatment did not significantly change heart, kidney or lung-to-body weight ratios. Results are expressed as %.

Supplemental Table 1. Morphometric assessment of pulmonary arteries stained with Weigert's resorcin fuchsin solution.

	Arteries examined per animal (n)	ED (μm)	ID (μm)	MA (%)	AA (%)
C+S	71.33±11.62	49.86±1.65	44.43±1.63	23.71±0.62	16.04±0.41
CDH+S	62.2±12.99	35.01±1.51*	27.75±1.49*	43.67±1.27*	30.27±0.87*
CDH+PD	70.33±9.60	34.69±1.34*	29.96±1.33†	30.07±0.84†	29.14±0.79*

AA: adventitial area; C: control; CDH: congenital diaphragmatic hernia; ED: external diameter; ID: internal diameter; MA: medial area; PD: PD-123319; S: saline. Values represent the mean ± SEM of measurements. $p < 0.001$: *vs. C+S; †vs. CDH+S.