



Article scientifique

Article

2019

Supplemental data

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Tubular NOX4 expression decreases in chronic kidney disease but does  
not modify fibrosis evolution

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This publication URL: <https://archive-ouverte.unige.ch/unige:122903>

Publication DOI: [10.1016/j.redox.2019.101234](https://doi.org/10.1016/j.redox.2019.101234)

**Supplementary Table 1:** Clinical characteristics of the enrolled patients for the study.

**Supplementary Table 2:** Plasma and urinary parameters analysis of Wt and Nox4<sup>KI</sup> mice at baseline, 3 days and 10 days of unilateral ureteral obstruction under standard diet.

**Supplementary Table 3:** List of primers used for quantitative Real time PCR analysis

Table 1: Clinical characteristics of the patients enrolled for the study

Renal disease	Number of patients	Sex (M/F)	Age in years Median (IQR)	eGFR (CKD- EPI ml/ min/ 1.73m2) Median (IQR)	% of fibrosis Median (IQR)
Normal kidney (nephrectomies)	5	4/1	70 (57.5-76.5)	92 (81-95)	<10
Diabetic nephropathy	14	11/3	57.5 (46-62)	33.5 (21.25-49.5)	40 (30-71.5)
IgA nephropathy	15	9/5	38 (25-63)	65 (42-86)	30 (18.7-52.5)
Vascular nephropathy	12	8/4	63.5 (55.25-68.75)	33 (16-50.25)	42.5 (30-63.75)

Table 2: Summary of metabolic parameters

**Baseline**

Plasma parameters	Wt mean	SD	Nox4 <sup>KI</sup> Mean	SD	p-value	n (Wt, Nox4 <sup>KI</sup> )
Na <sup>+</sup> (mmol/L)	155.40	6.08	155.60	5.09	ns	7,7
K <sup>+</sup> (mmol/L)	4.74	0.73	5.09	0.83	ns	7,7
Cl <sup>-</sup> (mmol/L)	118.70	2.87	118.60	3.55	ns	7,7
Ca <sup>2+</sup> (mmol/L)	2.16	0.08	2.17	0.05	ns	7,7
Enzymatic Creatinine (mg/dL)	0.13	0.02	0.18	0.02	***	7,7
Albumin (g/dL)	1.27	0.05	1.21	0.11	ns	7,7
Osmolality (mOsm/H <sub>2</sub> Okg)	342.90	10.75	345.70	5.09	ns	7,7

Urine parameters	Wt mean	SD	Nox4 <sup>KI</sup> Mean	SD	p-value	n (Wt, Nox4 <sup>KI</sup> )
UNa/Crt	23.00	5.35	29.29	8.22	ns	7,7
UK/Crt	75.20	19.91	84.76	7.52	ns	7,7
UCI/Crt	51.43	11.44	61.00	7.26	ns	7,7
UCa/Crt	0.19	0.04	0.19	0.06	ns	6,5
UCreatinine (mmol/L)	6.47	1.77	5.07	1.19	ns	7,7
Osmolality (mOsm/H <sub>2</sub> Okg)	3700.00	839.10	3339.00	969.10	ns	7,7
CCr (ml/min)	0.44	0.13	0.25	0.08	**	6,7

**3d UOU**

Plasma Parameters	Wt mean	SD	Nox4 <sup>KI</sup> Mean	SD	p-value	n (Wt, Nox4 <sup>KI</sup> )
Na <sup>+</sup> (mmol/L)	153.70	3.95	152.00	3.16	ns	7,7
K <sup>+</sup> (mmol/L)	4.43	0.40	4.47	0.59	ns	7,7
Cl <sup>-</sup> (mmol/L)	117.60	2.44	116.90	3.24	ns	7,7
Ca <sup>2+</sup> (mmol/L)	2.22	0.05	2.19	0.04	ns	7,7
Enzymatic Creatinine (mg/dL)	0.24	0.04	0.24	0.04	ns	7,7
Albumin (g/dL)	1.01	0.07	0.99	0.07	ns	7,7
Osmolality (mOsm/H <sub>2</sub> Okg)	344.40	4.12	345.10	5.37	ns	7,7

Urine parameters	Wt mean	SD	Nox4 <sup>KI</sup> Mean	SD	p-value	n (Wt, Nox4 <sup>KI</sup> )
UNa/Crt	28.43	3.41	29.29	4.92	ns	7,7
UK/Crt	69.79	4.20	74.19	3.12	*	7,7
UCI/Crt	48.43	2.94	51.29	4.42	ns	7,7
UCa/Crt	0.19	0.07	0.20	0.05	ns	6,4
UCreatinine (mmol/L)	4.80	0.92	3.67	1.15	ns	7,7
Osmolality (mOsm/H <sub>2</sub> Okg)	2659.00	544.10	2111.00	652.90	ns	7,7
CCr (ml/min)	0.19	0.06	0.23	0.07	ns	7,7

**10d UOU**

Plasma Parameters	Wt mean	SD	Nox4 <sup>KI</sup> Mean	SD	p-value	n (Wt, Nox4 <sup>KI</sup> )
Na <sup>+</sup> (mmol/L)	149.40	2.30	149.30	1.86	ns	5, 6
K <sup>+</sup> (mmol/L)	3.90	0.65	4.40	0.55	ns	5, 6
Cl <sup>-</sup> (mmol/L)	111.20	2.86	111.30	2.07	ns	5, 6
Ca <sup>2+</sup> (mmol/L)	2.29	0.03	2.25	0.02	ns	5, 6
Enzymatic Creatinine (mg/dL)	0.26	0.10	0.31	0.08	ns	4, 6
Albumin (g/dL)	1.13	0.05	1.17	0.08	ns	4, 7
Osmolality (mOsm/H <sub>2</sub> Okg)	342.30	8.66	342.70	9.60	ns	4, 7

Urine parameters	Wt mean	SD	Nox4 <sup>KI</sup> Mean	SD	p-value	n (Wt, Nox4 <sup>KI</sup> )
UNa/Crt	32.06	4.74	29.05	6.08	ns	8, 8
UK/Crt	80.76	4.44	78.05	8.99	ns	8, 8
UCI/Crt	57.43	4.81	53.22	6.52	ns	8, 8
UCa/Crt	0.30	0.13	0.30	0.17	ns	8, 6
UCreatinine (mmol/L)	4.27	0.94	4.52	1.90	ns	8, 8
Osmolality (mOsm/H <sub>2</sub> Okg)	2549.00	579.00	2591.00	1123.00	ns	8, 8
CCr (ml/min)	0.14	0.03	0.14	0.08	ns	4, 6

Table 3: List of primers

Gene	Forward	Reverse
<i>Bcl2</i>	AGTACCTGAACCGGCATCTG	CATGCTGGGGCCATATAGTT
<i>cMyc</i>	ACGACAAGAGGGCGGACACA	GCTGCGCTTCAGCTCGTT
<i>Ccl5</i>	TCTTGCAAGTCGTGTTTGT	GGGTCAGAATCAAGAAACCC
<i>Epo</i>	AACCCATCGTGACATTTTCT	CACCCTGCTGCTTTTACTCT
<i>Gsta</i>	GCTTGATGCCAGCCTTCTG	GGCTGCTGATTCTGCTCTTGA
<i>Hif1a</i>	CACCGATTGCGCATGGA	TTCGACGTTCAGAACTCATCTTTT
<i>Il1b</i>	GCAACTGTTCTGAACTCAAC	ATCTTTTGGGGTCCGTCAACT
<i>Il18</i>	GACTCTTGCGTCAACTTCAAG	CAGGCTGTCTTTTGTCAACGA
<i>Nox2</i>	ACTCCTTGGGTCAGCACTGG	GTTCTGTCCAGTTGTCTTCG
<i>Nox4</i>	CCTGCTCATTGGCTGTCCCTA	CGGCTACATGCACACCTGAGAA
<i>Nrf2</i>	CTACTCCCAGGTTGCCACACA	CGACTCATGGTCATCTACAAATGG
<i>Nqo1</i>	GCCCGCATGCAGATCCT	GGTCTCCTCCCAGACGGTTT
<i>Ren1</i>	CTCTCTGGGCACTCTTGTTC	GGGAGGTAAGATTGGTCAAGGA
<i>Rplp0</i>	AATCTCCAGAGGCACCATTTG	GTTCTCAGCATGTTCTCAGCAGTG
<i>TGFβ1</i>	CGGAGAGCCCTGGATACCA	GCCGCACACAGCAGTTCTT
<i>Vegf</i>	GGTGGACATCTTCCAGGAGT	TGATCTGCATGGTGATGTG