

SUPPLEMENTAL DATA

**Figure Suppl. 1**

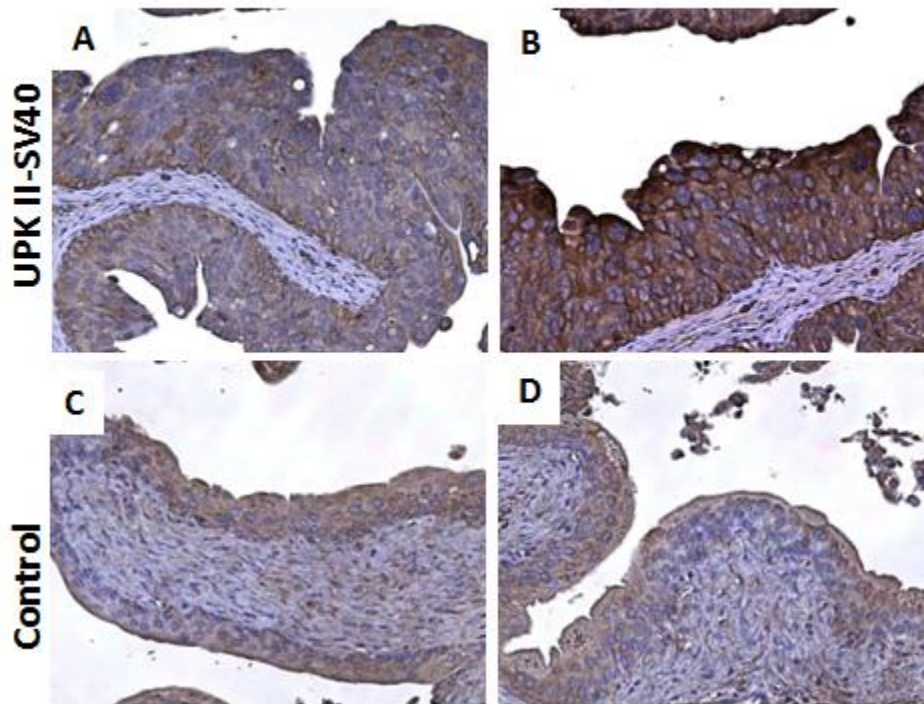


Figure Supplementary 1. Glut-1 expression in UPK II-SV40 bladder carcinoma *in situ*. A-D, immunohistochemistry for Glut-1, a glucose transporter whose expression is related to hypoxia, was performed in bladder tissues from UPK II-SV40 and control mice. Representative images are shown (200x original magnification), exhibiting an increased staining for Glut-1 in urothelial carcinoma *in situ* of UPK II-SV40 mice, with a pattern of staining almost exclusively located in the malignant epithelial cells.

**Figure Suppl. 2**

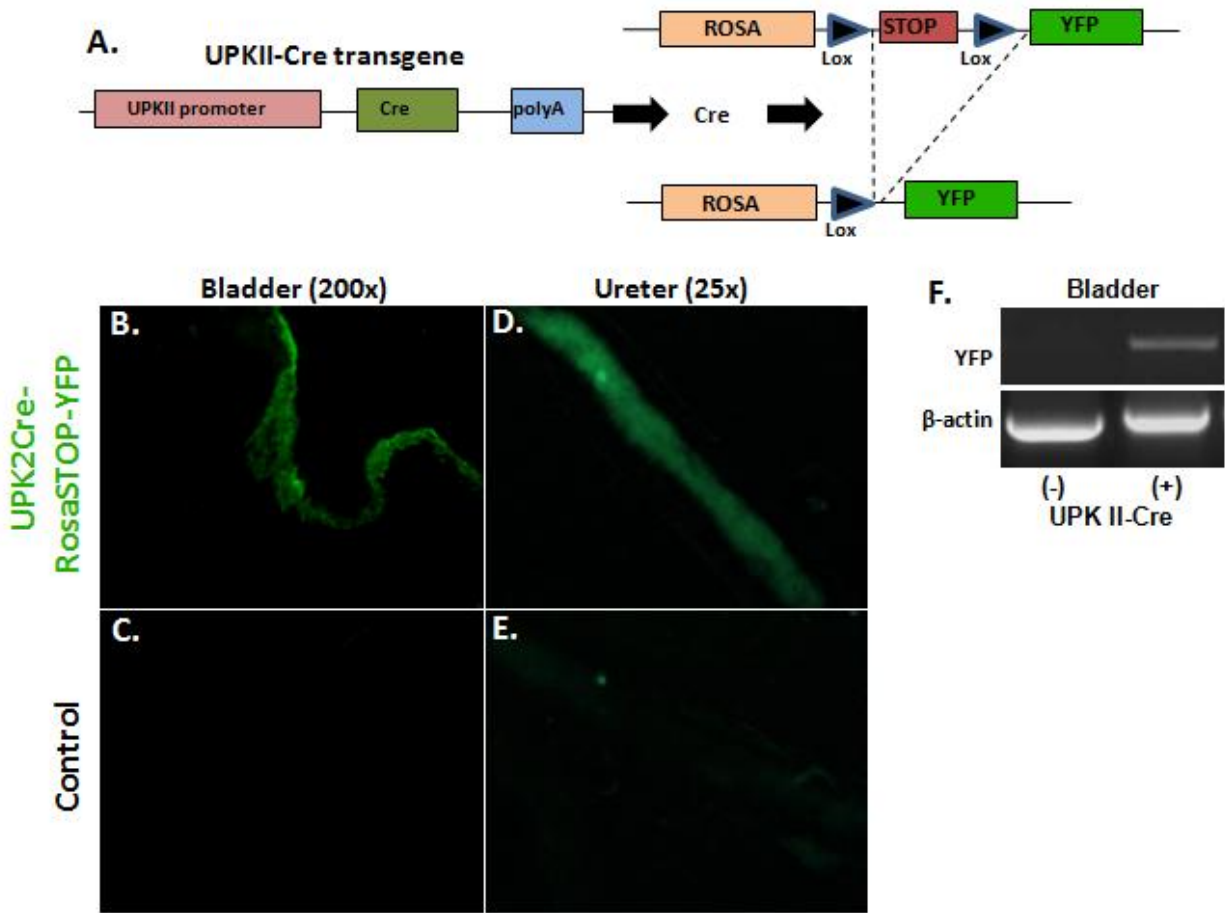


Figure Suppl. 2 . Reporter mouse UPK II-Cre;Rosa-STOP-YFP. A, DNA construct formed by the UPKII promoter and Cre-recombinase; the excision of the STOP cassette by Cre-recombinase generates urothelial-restricted expression of YFP. B-F, fluorescence was found only in bladder (B,C) and ureter (D,E) of UPKII-Cre;Rosa-STOP-YFP(+/+) reporter mice, but not in controls. F, PCR for recombinant UPKII-YFP was only positive in UPKII-Cre;Rosa-STOP-YFP(+/+) bladder.

**Supplementary table 1.** PCR primers used for cDNA synthesis and amplification of miRNA.

<b>miRNA</b>	<b>Sequence</b>	<b>Stem-loop primer</b>	<b>Forward primer (5'→3')</b>
RNU6B	CUGC GCAAGGAUGACACGCAA AU UCGUGAAGCGUCCAU AUUUUU	GTCGTATCCAGTGCAGGGTC CGAGGTATTCGCACTGGATA CGACAAAAATATGG	TGCGGCTGCGCAAGGATGA
miR-17	CAAAGUGCUUACAGUGCAGGUAG	GTCGTATCCAGTGCAGGGTC CGAGGTATTCGCACTGGATA CGACCTACCTGC	TGCGGCAAAGTGCTTACAGT
miR-18a	UAAGGUGCAUCUAGUGCAGAUAG	GTCGTATCCAGTGCAGGGTC CGAGGTATTCGCACTGGATA CGACCTATCTGC	TGCGGTAAGGTGCATCTAGT
miR-19a	UGUGCAA AU CUAUGCAA AACUGA	GTCGTATCCAGTGCAGGGTC CGAGGTATTCGCACTGGATA CGACTCAGTTTT	TGCGGTGTGCAAATCTATGC
miR-20a	UAAAGUGCUU AUAGUGCAGGUAG	GTCGTATCCAGTGCAGGGTC CGAGGTATTCGCACTGGATA CGACCTACCTGC	TGCGGTAAAGTGCTTATAGT
miR-92a	UAUUGCACUUGUCCCGGCCUG	GTCGTATCCAGTGCAGGGTC CGAGGTATTCGCACTGGATA CGACCAGGCCGG	TGCGGTATTGCACTTGTC
miR-21	UAGCUUAUCAGACUGAUGUUGA	GTCGTATCCAGTGCAGGGTC CGAGGTATTCGCACTGGATA CGACTCAACATC	TGCGGTAGCTTATCAGACT
miR-205	UCCUUCAU UCCACCGGAGUCUG	GTCGTATCCAGTGCAGGGTC CGAGGTATTCGCACTGGATA CGACCAGACTCC	TGCGGTCCTTCATTCCACC
miR-222	AGCUACAUCUGGCUACUGGGU	GTCGTATCCAGTGCAGGGTC CGAGGTATTCGCACTGGATA CGACACCCAGTA	TGCGGAGCTACATCTGGC
miR-129-5p	CUUUUUGCGGUCUGGGCUUGC	GTCGTATCCAGTGCAGGGTC CGAGGTATTCGCACTGGATA CGACGCAAGCCC	TGCGGCTTTTTGCGGTCT
miR-34a	UGGCAGUGUCU UAGCUGGUUGU	GTCGTATCCAGTGCAGGGTC CGAGGTATTCGCACTGGATA CGACACAACCAG	TGCGGTGGCAGTGTCTTAG
miR-145	GUCCAGUUU UCCCAGGAAUCCCU	GTCGTATCCAGTGCAGGGTCCG AGGTATTCGCACTGGATACGAC AGGGATTC	TGCGGTGAGATGAAGCACT
<b>Common reverse</b>	-----	-----	<b>Reverse primer (5'→3')</b> GTGCAGGGTCCGAGGT

Supplementary Table 2. Primers for rt RT-PCR

<b>Gene</b>	<b>Forward primer (5'→3')</b>	<b>Reverse primer (5'→3')</b>
VEGF-A	GGAGATCCTTCGAGGAGCACTT	GGCGATTTAGCAGCAGATATAAGAA
HIF-1 $\alpha$	CAGCTTCCTTCGGACACATAAG	CCACAGCAATGAAACCCTCCA
HIF-1 $\beta$	GAAATCTATCCCAGCATCAC	GACCACTATTCCTGAAATTCTC
TSP-1	ACTGACCGAGGAAGGGTCC	CCCGCTGTAGCTCTTGTTCA
Dicer	GGTCCTTTCTTTGGACTGCCA	GCGATGAACGTCTTCCCTGA
Drosha	CACTCCA ACTACAAGAGCCA	ATTGCTTCTTCAA ACTCCGT

Supplementary Table 3. Level of expression of angiogenic markers by gender in UPKII-SV40 mice.\*

	<b>Females*</b>	<b>Males*</b>	<b>P**</b>
<b>VEGF</b>	2.09	2.04	
<b>TSP-1</b>	0.60	0.47	0.59
<b>HIF1a</b>	1.17	0.74	0.12
<b>HIF-1b</b>	1.52	1.35	0.61
<b>miR-107</b>	--	--	--
<b>miR-18a</b>	7.86	4.08	0.47
<b>miR-19a</b>	5.54	3.18	0.36
<b>miR-20</b>	1.81	1.28	0.58
<b>miR-17</b>	3.01	1.93	0.41
<b>miR-92</b>	---	---	---
<b>miR-34</b>	1.10	0.73	0.315
<b>miR-21</b>	0.91	0.47	0.21
<b>miR-205</b>	0.57	0.38	0.25
<b>miR-222</b>	0.46	0.30	0.41
<b>miR-145</b>	0.21	0.21	0.95
<b>miR-200c</b>	1.05	0.77	0.49

\* Levels of expression are related to the reference control group (normalized to 1).

\*\* U-Mann Whitney test for comparison of means.