

## **Upregulation of miR145 and miR126 in EVs from renal cells undergoing EMT and urine of diabetic nephropathy patients.**

Veronica Dimuccio<sup>1</sup>, Linda Bellucci<sup>2</sup>, Marianna Genta<sup>1</sup>, Cristina Grange<sup>3</sup>, Maria Felice Brizzi<sup>3</sup>, Maddalena Gili<sup>1</sup>, Sara Gallo<sup>1</sup>, Maria Laura Centomo<sup>1</sup>, Federica Collino<sup>2,4</sup> # and Benedetta Bussolati<sup>1#\*</sup>.

### SUPPLEMENTARY MATERIAL

Supplementary Table S1

Supplementary Table S2

Supplementary Figure S1

**Supplementary Table S1.** Oligonucleotide primers sequences for miRNA detection.

miR21	F- TAGCTTATCAGACTGATGTTGA
miR24	F- TGGCTAGTTCAGCAGGAA
miR221	F- AGCTACATTGTCTGCTGGGTTTC
miR296	F-GGGTTGGGTGGAGGCTCT
miR320c	F- AAAAGCTGGGTGGAGGGT

**Supplementary Table S2.** Evaluation by qRT-PCR of a panel of uEV miRNAs linked to in renal cell damage in the urine of DN patients divided in normoalbuminuric (NALb; n=8), microalbuminuric (MiAlb; n=5), and macroalbuminuric (MaAlb; n=11) and expressed as Relative Quantification (RQ). RNU6B was used as normalizer. ns= non-significant in respect to NALb.

Patient Group	miR21 (RQ)	miR24 (RQ)	miR221 (RQ)	miR296 (RQ)	miR320c (RQ)
NALb	1±0.17	1±0.23	1±0.24	1±0.55	1±1.09
MiAlb	0.80±0.23 (ns)	3.11±8.24 (ns)	2.14±4.41 (ns)	1.20±0.00 (ns)	0.81±0.62 (ns)
MaAlb	0.40±0.19 (ns)	1.15±0.58 (ns)	1.15±0.99 (ns)	0.92±4.64 (ns)	1.94±2.68 (ns)

**Supplementary Figure S1. (A)** Relative quantification of miR145 and miR126 in podocytes (PODO-Cells) treated with TGF- $\beta$  for 24 hours in the millifluidic coculture dynamic system. Untreated podocytes were used as control (CTL). n=3 independent experiments) (\*  $p<0.05$  vs CTL). **(B).** Measure of miR126 and miR145 levels in glomerular endothelial cells (GEC-Cells) untreated (CTL) or treated with TGF- $\beta$  for 24 hours. (n=3 independent experiments).

