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Supplementary Material

Elevated blood urea nitrogen alters the transcriptome of equine embryos

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Table S1. List of differentially expressed genes in D14 equine embryos from urea and control groups

Gene name	Gene symbol	Orthologous gene species	Orthologous gene name	Orthologous gene symbol	FPKM Urea	FPKM Control	Log2(Fold change)	P-value	FDR-value
calcium binding protein 1	*CABP1*				2.3499	5.57175	1.24553	0.0001	0.0525636
prostate stem cell antigen	*PSCA*				2.94504	13.725	2.22045	0.00005	0.0304316
SRY-box transcription factor 9	*SOX9*				25.9369	36.1164	0.477646	0.0002	0.0889538
lactoperoxidase	*LPO*				2.16215	0.884357	-1.28977	0.00015	0.072275
carbohydrate sulfotransferase 1	*CHST1*				21.2582	6.74699	-1.65571	0.00005	0.0304316
apelin receptor	*APLNR*				3.14338	1.18366	-1.40906	0.00005	0.0304316
serpin family G member 1	*SERPING1*				16.3092	8.83528	-0.884338	0.00005	0.0304316
proline rich 35	*PRR35*				5.13904	10.3005	1.00315	0.00005	0.0304316
heart and neural crest derivatives expressed 1	*HAND1*				41.4476	27.4747	-0.593183	0.00005	0.0304316
sperm-associated acrosin inhibitor	*LOC102149479*				2.30311	11.0347	2.26039	0.00005	0.0304316
proprotein convertase subtilisin/kexin type 1	*PCSK1*				0.364527	1.98297	2.44356	0.00015	0.072275
galactose mutarotase	*GALM*				57.6161	37.6374	-0.614306	0.00005	0.0304316
fibulin 2	*FBLN2*				9.10164	6.06972	-0.584497	0.00005	0.0304316
G protein-coupled receptor 155	*GPR155*				12.7542	20.0676	0.653901	0.00005	0.0304316
glutathione S-transferase alpha 1	*GSTA1*				33.0872	70.9967	1.10148	0.00005	0.0304316
WAP four-disulfide core domain 2	*WFDC2*				8.55891	22.57	1.39891	0.00005	0.0304316
tripartite motif family like 2	*TRIML2*				18.4843	27.4481	0.570404	0.0002	0.0889538
vimentin	*VIM*				15.9812	8.25851	-0.952425	0.00005	0.0304316
LOC102150010	*LOC102150010*	*Bos taurus*	JPX transcript	*JPX*	4.1418	17.7008	2.09548	0.00005	0.0304316
myotubularin related protein 1	*MTMR1*				12.9479	18.3086	0.499804	0.0001	0.0525636
LOC111767475	*LOC111767475*	*Equus przewalskii*	G elongation factor, mitochondrial 1	*GFM1*	8.81659	14.2809	0.69579	0.00005	0.0304316
fibrinogen gamma chain	*FGG*				10.4312	19.4111	0.89598	0.00005	0.0304316
solute carrier family 13 member 4	*SLC13A4*				8.97096	6.07708	-0.561885	0.0001	0.0525636
neurofascin	*NFASC*				2.05577	0.806241	-1.3504	0.00005	0.0304316
unc-5 netrin receptor B	*UNC5B*				3.67667	1.94069	-0.921828	0.00005	0.0304316
keratin 4	*KRT4*				8.89241	21.5424	1.27653	0.00005	0.0304316

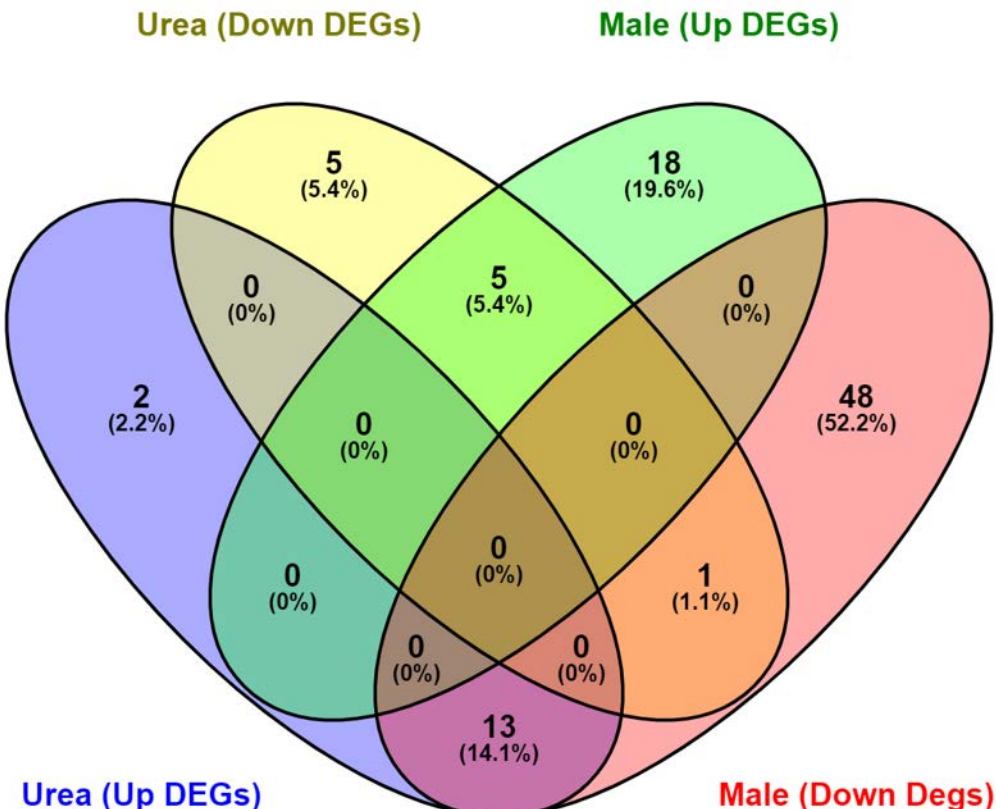
Urea (Down DEGs)
Male (Up DEGs)
5
(5.4%)
18
(19.6%)
0
(0%)
5
(5.4%)
0
(0%)
2
(2.2%)
0
(0%)
0
(0%)
48
(52.2%)
0
(0%)
0
(0%)
1
(1.1%)
0
(0%)
0
(0%)
13
(14.1%)
Urea (Up DEGs)
Male (Down Degs)

Figure S1.