

Table 2S

Comparison of BUN concentrations, urinary RPA-1 concentrations, and kidney histopathological severity in individual F344 rat following dietary exposure to melamine and cyanuric acid

Concentration of melamine and cyanuric acid in diet (ppm)	0		120		180		240	
	Males	Females	Males	Females	Males	Females	Males	Females
Sex								
Rat ID	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 6, 7, 8	1, 2, 3, 4, 5, 6, 7, 8
Dilatation, Renal Tubule ^b	0 ^a , 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	3, 3, 1, 2, 0, 0, 1, 2	0, 2, 2, 0, 0, 0, 0, 0	4, 4, 4, 4, 4, 4, 4, 4	3, 4, 3, 4, 4, 4, 4, 4
Fibrosis ^b	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 2, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 2, 4, 3, 4	0, 0, 0, 0, 2, 2, 3, 3
Regeneration, renal tubule ^b	1, 1, 1, 0, 1, 1, 1, 1	0, 1, 1, 1, 0, 0, 0, 0	1, 0, 1, 1, 1, 1, 1, 2	1, 1, 0, 1, 0, 0, 0, 1	4, 4, 2, 3, 1, 1, 2, 3	2, 3, 3, 1, 2, 2, 1, 1	4, 4, 4, 4, 4, 4, 4, 4	3, 4, 3, 4, 4, 4, 4, 4
Necrosis, Renal Tubule, Epithelium ^b	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 1, 0, 0, 0, 0, 1, 0	0, 0, 0, 0, 0, 0, 0, 0	2, 2, 2, 2, 2, 3, 2, 3	1, 2, 2, 2, 2, 2, 2, 2
Infiltration cellular, lymphocyte	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	1, 0, 0, 1, 1, 0, 0, 0	1, 0, 0, 0, 0, 1, 0, 0	2, 0, 0, 0, 0, 2, 0, 2	0, 0, 0, 0, 0, 1, 2, 2
Hyperplasia, Pelvis, Transitional Epithelium ^b	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 2, 0, 0	0, 0, 0, 0, 0, 0, 0, 0	0, 0, 0, 0, 0, 0, 0, 3	0, 0, 2, 0, 0, 0, 0, 0	3, 2, 2, 3, 1, 1, 0, 1	1, 3, 2, 1, 1, 2, 2, 3
Blood BUN (mg/dl) ^b	13, 17, 23, 17, 17, 17, 16, 17	17, 19, 15, 13, 17, 18, 15, 17	13, 13, 13, 12, 17, 17, 13, 16	11, 14, 16, 13, 21, 16, 15, 17	16, 18, 16, 15, 12, 16, 12, 14	11, 10, 10, 13, 16, 12, 17, 15	55, 92, 49, 51, 92, 176, 137, 110	42, 48, 21, 92, 61, 52, 84, 49
Urinary RPA-1 (µg/mg Cr) ^c	1.9, 1.5, 1.9, 1.6, 2.5, 2.2, 1.7, 2.5	1.4, 1.3, 1.4, 1.7, 1.3, 1.4, 1.3, 2.1	2.5, 3.3, 7.5, 7.3, 2.5, 2.2, 4.6, 2.4	1.1, 1.2, 1.9, 3.1, 1.0, 1.3, 1.2, 1.4	20.1, 16.4, 8.9, 110, 8.1, 19, 9.9, 22.1	6.1, 23.2, 7.1, 3.0, 4.1, 10.3, 3.4, 5.8	7.8, 7.6, 9.9, 13.1, 18.5, 6.6, 14.2, 2.6	16.2, 5.8, 50.4, 17.3, 12.4, 10.6, 7.4, 3.9

^aKidney lesion severity qualified as: 0 = not observed, 1 = minimal, 2 = mild, 3 = moderate, 4 = marked.

^bKidney histopathological changes and blood BUN levels were examined at the end of study.

^cUrinary RPA-1 levels were analyzed for day 28 for control and low dose groups (120 ppm and 180 ppm). At the highest dose group (240 ppm), the levels of RPA-1 were analyzed for day 14.