

Table 3 Hematology and blood leukocyte differentials in female B6C3F1/N mice exposed to gum guggul extract via oral gavage daily for 28 days

Parameter	Vehicle	Gum Guggul Extract (ug/kg/day)					CPS 50 mg/kg	Trend Analysis p-value
		31.25	62.5	125	250	500		
<i>Hematology</i>								
Erythrocytes (10 ⁶ /mm ³)	9.5 ± 0.1	9.4 ± 0.0	9.4 ± 0.1	9.2 ± 0.1	9.3 ± 0.0	9.5 ± 0.1	8.0 ± 0.1**	0.575
Reticulocytes (%)	3.41 ± 0.19	2.87 ± 0.09	3.22 ± 0.25	3.06 ± 0.18	2.86 ± 0.18	2.87 ± 0.16	0.62 ± 0.10**	0.149
Hemoglobin (g/dl)	15.8 ± 0.1	15.4 ± 0.1	15.7 ± 0.1	15.5 ± 0.1	15.4 ± 0.1	15.9 ± 0.1	13.7 ± 0.2**	0.806
Hematocrit (%)	47.9 ± 0.4	46.6 ± 0.1*	47.3 ± 0.3	46.4 ± 0.5*	47.0 ± 0.3	47.2 ± 0.5	40.5 ± 0.4**	0.892
MCV (fl)	50.2 ± 0.2	49.7 ± 0.1	50.5 ± 0.2	50.2 ± 0.2	50.5 ± 0.3	49.5 ± 0.2	50.6 ± 0.2	0.671
MCH (pg)	16.6 ± 0.1	16.4 ± 0.1	16.7 ± 0.1	16.8 ± 0.2	16.6 ± 0.1	16.7 ± 0.1	17.1 ± 0.1**	0.443
MCHC (g/dl)	33.0 ± 0.1	33.0 ± 0.1	33.1 ± 0.1	33.4 ± 0.4	32.8 ± 0.2	33.6 ± 0.2*	33.9 ± 0.2**	0.028
Platelets (10 ³ /mm ³)	555 ± 97	703 ± 116	770 ± 57	798 ± 73	934 ± 50*	774 ± 132	901 ± 95*	0.017
Leukocytes (10 ³ /mm ³)	7.5 ± 0.6	6.9 ± 0.9	5.1 ± 0.8	3.6 ± 0.5**	4.7 ± 0.8	8.1 ± 1.4	2.4 ± 0.7**	0.167
<i>Absolute leukocyte differentials (10³/mm³)</i>								
Lymphocytes	7409 ± 603	6728 ± 850	4972 ± 754	3506 ± 473**	4602 ± 0781	7964 ± 1324	2396 ± 659**	0.149
Neutrophils	108 ± 35	134 ± 51	185 ± 131	57 ± 24	67 ± 27	137 ± 47	29 ± 15	0.729
Eosinophils	20 ± 14	0 ± 0	3 ± 3	0 ± 0	6 ± 6	12 ± 12	0 ± 0	0.670
Monocytes	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	1.000
<i>Percent leukocyte differentials</i>								
% Lymphocytes	98 ± 1	98 ± 1	97 ± 1	8 ± 1	98 ± 0	98 ± 0	99 ± 0	0.934
% Neutrophils	2 ± 0	2 ± 1	2 ± 2	2 ± 1	1 ± 0	2 ± 0	1 ± 0	0.933
% Eosinophils	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0.681
% Monocytes	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	0 ± 0	1.000

Values represent the mean (±SE) from 8 animals/group; *p < 0.05; **p < 0.01.

GGE, Gugulipid® Lot # G51177/H, ~2.45% total guggulsterone content. MCV, mean corpuscular volume; MCH, mean corpuscular hemoglobin; MCHC, mean corpuscular hemoglobin concentration; CPS, cyclophosphamide.

Bolded entries indicate GGE-exposed groups that differ significantly from the vehicle controls or significant trends across GGE-exposed groups and vehicle controls.