

Table S1. Biochemical parameters on blood samples in surgically induced menopausal model in female Wistar rats

Table no.1 Serum alkaline phosphatase (U/L) level in oophorectomized rat females in an experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	76.234	10.864	51.72	74.732	82.188	86.48
Operated control	8	116.59	18.971	93.99	108.825	117.645	158.8
Control EG/PG	8	85.188	20.354	64.07	77.552	85.285	132.32
Control NN	8	120.628	43.87	72.83	92.073	131.27	212.42
NLC Evg 1	8	76.98	20.92	53.45	65.472	81.16	116.72
NLC Evg 2	8	108.269	28.187	76.45	90.602	116.79	156.19
NLC Evg 3	8	96.589	11.872	79.49	87.998	104.362	116.27
NLC Evg 4	8	106.539	39.131	69.92	88.068	105.872	198.19
NLC Evg 5	8	114.591	31.401	87.92	96.25	124.045	182.33
NLC Evg 6	8	137.601	34.633	76.19	125.805	153.485	181.73

ANOVA P<0.000321 ***

Table no.2 Level of calcium (mg/dL) in oophorectomised rat females in an experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	9.605	0.585	8.656	9.316	9.874	10.619
Operated control	8	9.749	1.01	8.331	9.118	10.244	11.112
Control EG/PG	8	10.157	0.901	8.567	9.812	10.671	11.409
Control NN	8	9.915	1.633	8.093	8.543	11.414	11.927
NLC Evg 1	8	9.396	0.987	8.406	8.719	9.612	11.511
NLC Evg 2	8	9.689	0.71	9.024	9.339	9.804	11.246
NLC Evg 3	8	10.257	1.735	8.291	8.946	11.751	12.95
NLC Evg 4	8	9.961	1.294	8.106	9.523	10.247	12.225
NLC Evg 5	8	10.993	2.382	8.096	9.132	12.016	15.328
NLC Evg 6	8	10.493	1.549	8.496	9.777	11.12	13.199

ANOVA P=0.502

Table no.3 Level of phosphathema (mg/dL) in females of oophorectomised rats in experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	6.381	0.862	5.27	5.808	6.935	7.64
Operated control	8	6.763	0.507	6.1	6.458	6.945	7.71
Control EG/PG	8	6.776	0.48	6.26	6.36	7.075	7.64
Control NN	8	6.424	1.046	4.48	5.8	7.41	7.44
NLC Evg 1	8	6.416	0.331	5.89	6.265	6.607	6.94

NLC Evec 2	8	6.829	1.125	4.99	6.447	7.528	8.12
NLC Evec 3	8	7.046	1.255	5.1	6.193	8.183	8.7
NLC Evec 4	8	7.889	1.734	6.82	7.115	7.795	12.07
NLC Evec 5	8	6.924	0.594	5.84	6.773	7.275	7.63
NLC Evec 6	8	7.12	1.461	5.72	6.225	8.075	9.9

ANOVA P=0.171

Table no. 4 Blood glucose level (mg/dL) in oophorectomized rats in experimental model of induced menopause

	N	Mean (mg/dL)	Std. Dev.	Min (mg/dL)	Item 25	Paragraph 75	Max (mg/dL)
Normal control	8	119.748	33.87	53.12	110.807	140.075	160.86
Operated control	8	136.589	39.779	73.48	114.18	159.395	192.64
Control EG/PG	8	158.333	38.256	103.87	139.765	180.642	226.95
Control NN	8	145.801	27.662	109.4	131.812	154.46	196.69
NLC Evec 1	8	89.246	10.827	65.7	88.758	92.968	102.63
NLC Evec 2	8	121.721	29.689	85	100.865	137.402	172.58
NLC Evec 3	8	132.974	42.205	78.92	102.745	152.882	210.12
NLC Evec 4	8	155.572	28.294	111.72	140.715	173.7	190.45
NLC Evec 5	8	149.512	39.229	100.49	122.687	162.72	222.76
NLC Evec 6	8	154.637	37.729	74.34	146.588	174.372	195.24

ANOVA P<0.00253 **

Table no. 5 Level of AST (U/L) activity in oophorectomized rat females in an experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	141.974	50.564	94.75	103.498	164.132	243.19
Operated control	8	155.122	34.074	108.96	130.62	167.047	217.23
Control EG/PG	8	143.345	18.514	118.49	136.237	149.468	170.66
Control NN	8	193.171	106.884	102.99	133.04	204.19	432.06
NLC Evec 1	8	160.655	21.949	135.2	144.065	181.01	191.4
NLC Evec 2	8	151.166	45.898	107.96	125.43	160.64	224.22
NLC Evec 3	8	374.861	489.758	101.8	118.465	343.335	1558
NLC Evec 4	8	186.839	63.478	127.56	130.865	240.45	275.04
NLC Evec 5	8	215.806	155.063	135.75	149.353	177.815	596.36
NLC Evec 6	8	173.108	40.871	110.67	154.165	200.658	231.24

ANOVA P=0.235

Table no. 6 ALT (U/L) activity level in oophorectomized rats in an experimental model of induced menopause

N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
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Normal control	8	53.043	8.226	41.06	45.853	58.485	61.99
Operated control	8	52.53	12.607	30.67	45.803	62.51	68.38
Control EG/PG	8	55.802	16.825	33.16	48.17	60.53	85.3
Control NN	8	69.026	34.223	38	47.02	92.572	135.1
NLC Eeveg 1	8	44.17	11.304	22.11	41.272	51.66	59.16
NLC Eeveg 2	8	48.992	10.642	36.2	44.578	49.752	71.58
NLC Eeveg 3	8	58.906	9.334	48.13	50.75	64.532	74.06
NLC Eeveg 4	8	49.905	6.687	39.91	45.172	52.612	61.78
NLC Eeveg 5	8	55.811	13.711	43.9	45.575	56.682	86.72
NLC Eeveg 6	8	59.305	7.421	47.65	56.772	63.828	69.38
ANOVA P=0.124							

Table no. 7 BD level in oophorectomy rat females in an experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	0.078	0.054	0.018	0.03	0.123	0.154
Operated control	8	0.046	0.023	0.012	0.027	0.061	0.07
Control EG/PG	8	0.044	0.021	0.02	0.029	0.062	0.078
Control NN	8	0.101	0.164	0.007	0.013	0.082	0.491
NLC Eeveg 1	8	0.055	0.032	0.019	0.028	0.073	0.111
NLC Eeveg 2	8	0.05	0.026	0.016	0.032	0.06	0.098
NLC Eeveg 3	8	0.036	0.022	0.007	0.024	0.044	0.077
NLC Eeveg 4	8	0.04	0.025	0.013	0.022	0.051	0.087
NLC Eeveg 5	8	0.035	0.019	0.012	0.023	0.044	0.064
NLC Eeveg 6	8	0.049	0.026	0.027	0.034	0.053	0.107
ANOVA P= 0.469							

Table no. 8 BT level in oophorectomy rat females in experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	0.311	0.154	0.103	0.216	0.456	0.514
Operated control	8	0.243	0.101	0.12	0.175	0.292	0.403
Control EG/PG	8	0.231	0.111	0.103	0.169	0.267	0.44
Control NN	8	0.161	0.09	0.029	0.118	0.188	0.334
NLC Eeveg 1	8	0.268	0.15	0.006	0.189	0.371	0.488
NLC Eeveg 2	8	0.245	0.172	0.129	0.139	0.255	0.6
NLC Eeveg 3	8	0.172	0.13	0.032	0.117	0.186	0.445
NLC Eeveg 4	8	0.178	0.084	0.084	0.094	0.24	0.286
NLC Eeveg 5	8	0.196	0.127	0.053	0.085	0.261	0.421
NLC Eeveg 6	8	0.155	0.082	0.045	0.108	0.194	0.281

ANOVA P= 0.21

Table no. 9 Total cholesterolemia level (mg/dL) in oophorectomized rats in an experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	66.5	14.233	41	62.5	75.25	83
Operated control	8	63	18.959	40	48.75	82	88
Control EG/PG	8	81.125	13.517	65	68	89	100
Control NN	8	72.125	16.444	43	60.5	82.75	93
NLC Evec 1	8	61.375	10.419	51	55.75	63	84
NLC Evec 2	8	66.775	12.163	49	62.15	69	92
NLC Evec 3	8	69.375	17.345	40	62	82.25	90
NLC Evec 4	8	75.625	16.248	54	68	79	103
NLC Evec 5	8	79.5	15.203	57	73.25	84.5	109
NLC Evec 6	8	68.5	14.081	45	59.25	75.25	91
ANOVA P= 0.145							

Table no. 10 Level of HDL-cholesterolemia (mg/dL) in females of oophorctomized rats in the experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	29.644	9.99	18.27	19.6	38.35	41.34
Operated control	8	17.747	9.159	7.67	10.587	21.18	31.9
Control EG/PG	8	24.005	11.044	5.5	17.765	33.608	37.76
Control NN	8	23.972	15.665	7.28	11.478	28.625	49.74
NLC Evec 1	8	21.364	7.083	13.72	17.598	22.6	36.84
NLC Evec 2	8	22.69	6.922	11.29	19.2	25.988	32.28
NLC Evec 3	8	17.869	8.574	9.16	12.758	19.535	36.15
NLC Evec 4	8	23.852	9.435	16.04	16.843	29.07	39.74
NLC Evec 5	8	26.62	13.914	14.5	16.753	32.3	54.93
NLC Evec 6	8	18.98	8.465	2.92	16.858	24.218	29.56
ANOVA P= 0.383							

Table no. 11 Triglyceremia level (mg/dL) in females of oophorectomized rats in an experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	96.028	53.029	52.8	59.025	97.005	214.75
Operated control	8	160.496	72.602	45.1	121.202	212.61	269.92
Control EG/PG	8	116.42	64.793	54.49	76.698	141.228	246.95

Control NN	8	128.622	81.681	64.6	93.935	128.93	321.51
NLC Evg 1	8	58.803	20.093	39.4	47.557	63.882	97.76
NLC Evg 2	8	86.464	45.476	38.07	49.558	110.798	156.4
NLC Evg 3	8	93.028	35.904	61.21	71.688	104.24	153.1
NLC Evg 4	8	103.18	52.479	41.65	61.888	139.515	184.54
NLC Evg 5	8	90.629	58.283	45.95	57.025	92.538	227.86
NLC Evg 6	8	102.884	27.784	61.75	87.447	118.285	148.69
ANOVA P= 0.0521							

Table no.12 Serum creatinine level in oophorectomized rat females in an experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	0.356	0.044	0.295	0.343	0.361	0.446
Operated control	8	0.31	0.078	0.164	0.282	0.34	0.427
Control EG/PG	8	0.348	0.074	0.252	0.28	0.389	0.453
Control NN	8	0.406	0.154	0.2	0.357	0.442	0.695
NLC Evg 1	8	0.355	0.062	0.248	0.344	0.387	0.425
NLC Evg 2	8	0.329	0.105	0.179	0.233	0.414	0.454
NLC Evg 3	8	0.397	0.074	0.282	0.367	0.409	0.545
NLC Evg 4	8	0.39	0.069	0.317	0.347	0.431	0.517
NLC Evg 5	8	0.416	0.042	0.351	0.388	0.44	0.479
NLC Evg 6	8	0.341	0.054	0.268	0.291	0.377	0.417
ANOVA P= 0.165							

Table no.13 Serum urea level (mg/dL) in oophorectomised rat females in an experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	40.201	10.457	25.43	31.208	46.028	56.53
Operated control	8	36.892	14.6	18.21	27.135	44.365	63.63
Control EG/PG	8	37.575	6.115	29.03	34.208	41.818	46.96
Control NN	8	39.842	11.996	22.5	29.96	47.87	53.38
NLC Evg 1	8	39.165	6.562	28.52	36.635	41.445	48.7
NLC Evg 2	8	38.054	5.342	29.6	35.847	39.158	48.07
NLC Evg 3	8	40.664	10.943	23.03	34.845	47.41	57
NLC Evg 4	8	40.325	10.584	18.99	38.017	48.04	51.11
NLC Evg 5	8	31.119	8.017	16.7	27.798	35.048	41.35
NLC Evg 6	8	41.77	6.434	34.54	37.818	42.91	54.91
ANOVA P= 0.619							

Table no. 14 The level of uricemia in females of the oophorectomized rat in the experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	1.321	0.436	0.589	0.99	1.58	1.912
Operated control	8	1.528	0.931	0.357	0.868	1.834	3.199
Control EG/PG	8	1.557	0.364	0.966	1.28	1.759	2.065
Control NN	8	1.544	0.774	0.816	1.114	1.669	3.149
NLC Evg 1	8	0.78	0.153	0.595	0.621	0.885	0.984
NLC Evg 2	8	1.526	0.539	0.766	1.233	1.797	2.327
NLC Evg 3	8	1.464	0.56	0.839	0.969	1.749	2.308
NLC Evg 4	8	1.45	0.511	0.721	1.105	1.804	2.213
NLC Evg 5	8	1.247	0.964	0.407	0.713	1.246	3.429
NLC Evg 6	8	1.247	0.513	0.417	0.87	1.621	1.879
ANOVA P= 0.326							

Table no.15 Level of serum acid phosphatase activity (U/L) in females of oophorectomized rats in an experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	13.781	5.269	7.64	9.695	17.782	21.91
Operated control	8	15.39	5.71	7.77	12.703	17.683	27.07
Control EG/PG	8	12.601	4.079	4.82	10.838	15.147	17.31
Control NN	8	16.852	5.951	8.6	12.725	21.362	25.61
NLC Evg 1	8	14.057	4.222	8.25	12.682	14.348	23.2
NLC Evg 2	8	16.204	3.787	12.82	14.395	16.372	24.99
NLC Evg 3	8	17.495	4.772	11.69	13.642	22.515	23.3
NLC Evg 4	8	18.701	4.476	14.52	16.14	19.625	28.56
NLC Evg 5	8	15.939	1.603	12.96	15.435	16.773	18.18
NLC Evg 6	8	20.918	5.097	15.62	17.735	22.587	31.25
ANOVA P = 0.0282							

Table no.16 Total serum protein level (g/L) in oophorectomised rat females in an experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	60.354	8.572	47.69	55.812	65.438	73.69
Operated control	8	48.015	3.51	43.74	46.11	49.472	54.57
Control EG/PG	8	60.136	12.931	43.64	49.603	69.878	79.07
Control NN	8	57.669	8.48	48.22	51.335	60.76	74.4
NLC Evg 1	8	47.021	3.936	40.38	45.46	48.062	54.36
NLC Evg 2	8	50.189	6.086	37.85	48.938	52.77	58.85
NLC Evg 3	8	56.656	5.452	46.83	54.467	60.172	64.99

Table no. 17 Serum progesterone level in oophorectomised female rats with ovarian suppression experimental model of induced menopause

Table no. 18 Serum estradiol level in oophorectomized rat females in experimental model of induced menopause

	N	Mean	Std. Dev.	Min	Item 25	Paragraph 75	Max
Normal control	8	31.95	19.822	13.84	24.115	29.99	74.96
Operated control	8	15.273	4.785	8.8	12.175	18.25	22.58
Control EG/PG	8	14.945	4.975	9.2	9.875	18.61	21.98
Control NN	8	16.375	10.589	9.1	10.465	15.445	41.65
NLC Eweg 1	8	16.033	4.324	9.6	13.6	19.127	21.23
NLC Eweg 2	8	15.107	3.989	9.7	12.825	16.78	21.16
NLC Eweg 3	8	13.066	3.551	9.1	9.75	14.895	18.37
NLC Eweg 4	8	11.918	4.157	9.1	9.6	12.807	21.37
NLC Eweg 5	8	10.82	1.315	9.5	9.825	12.14	12.72
NLC Eweg 6	8	15.499	5.077	9.8	9.875	20.112	21.31