

Supplementary information for the article:

Pilipović, I.; Stojić-Vukanić, Z.; Prijić, I.; Jasnić, N.; Đorđević, J.; Leposavić, G. β -Adrenoceptor Blockade Moderates Neuroinflammation in Male and Female EAE Rats and Abrogates Sexual Dimorphisms in the Major Neuroinflammatory Pathways by Being More Efficient in Males. *Cellular and Molecular Neurobiology* 2022. <https://doi.org/10.1007/s10571-022-01246-z>.



Oneway

Test of Homogeneity of Variances

Spinal cord noradrenaline

Levene Statistic	df1	df2	Sig.
2.050	5	30	.100

Explore

Group

Tests of Normality

Group		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Spinal cord noradrenaline	Female Control	.150	6	.200*	.966	6	.865
	Female 8th d.p.i.	.179	6	.200*	.926	6	.550
	Female 14th d.p.i.	.163	6	.200*	.984	6	.970
	Male Control	.182	6	.200*	.944	6	.692
	Male 8th d.p.i.	.174	6	.200*	.949	6	.733
	Male 14 d.p.i.	.168	6	.200*	.962	6	.833

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Oneway

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Beta1-adrenoceptor mRNA in CD11b+ cells	4.396	5	30	.004
Beta2-adrenoceptor mRNA in CD11b+ cells	4.722	5	30	.003

Explore

Group

Tests of Normality

Group		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Beta1-adrenoceptor mRNA in CD11b+ cells	Female Control	.168	6	.200*	.960	6	.821
	Female 10th d.p.i.	.164	6	.200*	.922	6	.522
	Female 14th d.p.i.	.184	6	.200*	.919	6	.499
	Male Control	.278	6	.161*	.878	6	.259
	Male 10th d.p.i.	.191	6	.200*	.976	6	.928
	Male 14th d.p.i.	.192	6	.200*	.931	6	.588
Beta2-adrenoceptor mRNA in CD11b+ cells	Female Control	.216	6	.200*	.956	6	.786
	Female 10th d.p.i.	.214	6	.200*	.847	6	.149
	Female 14th d.p.i.	.169	6	.200*	.980	6	.951
	Male Control	.215	6	.200*	.941	6	.665
	Male 10th d.p.i.	.167	6	.200*	.981	6	.957
	Male 14th d.p.i.	.203	6	.200*	.920	6	.503

a. Lilliefors Significance Correction

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Oneway

Test of Homogeneity of Variances

Body weight (g)

Levene Statistic	df1	df2	Sig.
3.083	3	44	.037

Explore

Group

Tests of Normality

Group		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Body weight (g)	Female, day of immunization	.203	12	.184	.927	12	.348
	Female, 10th day post immunization	.168	12	.200*	.920	12	.289
	Male, day of immunization	.161	12	.200*	.931	12	.393
	Male, 10th day post immunization	.251	12	.036	.873	12	.071

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Oneway

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Arg1 mRNA in CD11b+ cells	3.128	3	20	.049
iNOS mRNA in CD11b+ cells	7.464	3	20	.002
iNOS/Arg1 expression ratio	13.693	3	20	.000
CX3CL1 mRNA spinal cord tissue	.306	3	20	.821
CCL2 mRNA spinal cord tissue	5.165	3	20	.008
CCL19 mRNA spinal cord tissue	3.062	3	20	.052
CCL21 mRNA spinal cord tissue	2.217	3	20	.118
Nrf2 mRNA in CD11b+ cells	.546	3	20	.656
HO-1 mRNA in CD11b+ cells	4.069	3	20	.021
Stat3 mRNA in CD11b+ cells	.314	3	20	.815
Socs3 mRNA in CD11b+ cells	6.831	3	20	.002
Nox2 mRNA in CD11b+ cells	3.021	3	20	.054
IL-6 mRNA in CD11b+ cells	.542	3	20	.659

Explore

Group

Tests of Normality

	Group	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Arg1 mRNA in CD11b+ cells	Female Saline	.179	6	.200	.944	6	.694
	Female Prop	.255	6	.200*	.923	6	.531
	Male Saline	.119	6	.200*	.996	6	.999
	Male Prop	.252	6	.200*	.903	6	.393
iNOS mRNA in CD11b+ cells	Female Saline	.206	6	.200*	.919	6	.500
	Female Prop	.153	6	.200*	.951	6	.744
	Male Saline	.246	6	.200*	.877	6	.255
	Male Prop	.267	6	.200*	.852	6	.165
iNOS/Arg1 expression ratio	Female Saline	.293	6	.118	.804	6	.063
	Female Prop	.261	6	.200*	.868	6	.217
	Male Saline	.323	6	.049	.793	6	.051
	Male Prop	.274	6	.179	.818	6	.085
CX3CL1 mRNA spinal cord tissue	Female Saline	.194	6	.200*	.944	6	.691
	Female Prop	.218	6	.200*	.910	6	.438
	Male Saline	.181	6	.200*	.917	6	.487
	Male Prop	.187	6	.200*	.948	6	.721
CCL2 mRNA spinal cord tissue	Female Saline	.127	6	.200*	.992	6	.994
	Female Prop	.171	6	.200*	.946	6	.712
	Male Saline	.144	6	.200*	.970	6	.890
	Male Prop	.301	6	.094	.876	6	.251
CCL19 mRNA spinal cord tissue	Female Saline	.176	6	.200*	.973	6	.914
	Female Prop	.180	6	.200*	.971	6	.902
	Male Saline	.244	6	.200*	.957	6	.792
	Male Prop	.192	6	.200*	.917	6	.486
CCL21 mRNA spinal cord tissue	Female Saline	.224	6	.200*	.913	6	.456
	Female Prop	.168	6	.200*	.962	6	.838
	Male Saline	.232	6	.200*	.901	6	.381

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Tests of Normality

Group		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
CCL21 mRNA spinal cord tissue	Male Prop	.252	6	.200	.904	6	.398
Nrf2 mRNA in CD11b+ cells	Female Saline	.124	6	.200*	.978	6	.944
	Female Prop	.250	6	.200*	.889	6	.312
	Male Saline	.148	6	.200*	.977	6	.937
	Male Prop	.122	6	.200*	.982	6	.961
HO-1 mRNA in CD11b+ cells	Female Saline	.177	6	.200*	.943	6	.680
	Female Prop	.140	6	.200*	.985	6	.975
	Male Saline	.184	6	.200*	.938	6	.647
	Male Prop	.125	6	.200*	.993	6	.996
Stat3 mRNA in CD11b+ cells	Female Saline	.144	6	.200*	.964	6	.848
	Female Prop	.242	6	.200*	.883	6	.285
	Male Saline	.147	6	.200*	.973	6	.915
	Male Prop	.161	6	.200*	.940	6	.662
Socs3 mRNA in CD11b+ cells	Female Saline	.167	6	.200*	.950	6	.737
	Female Prop	.243	6	.200*	.917	6	.485
	Male Saline	.223	6	.200*	.926	6	.549
	Male Prop	.145	6	.200*	.962	6	.834
Nox2 mRNA in CD11b+ cells	Female Saline	.188	6	.200*	.931	6	.591
	Female Prop	.179	6	.200*	.957	6	.798
	Male Saline	.201	6	.200*	.967	6	.869
	Male Prop	.171	6	.200*	.965	6	.854
IL-6 mRNA in CD11b+ cells	Female Saline	.157	6	.200*	.948	6	.723
	Female Prop	.191	6	.200*	.906	6	.410
	Male Saline	.191	6	.200*	.973	6	.914
	Male Prop	.179	6	.200*	.918	6	.488

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Oneway

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
CD11b+CD45hi cell No	2.778	3	20	.068
CD11b+CD45int cell No	.879	3	20	.469
CD11b+CD45loint cell No	.666	3	20	.583
IL-1b+, % of CD11b+CD45hi cells	1.981	3	20	.149
IL-10+, % of CD11b+CD45hi cells	3.539	3	20	.033
IL-TGFb+, % of CD11b+CD45hi cells	.246	3	20	.863
IL-1b+, % of CD11b+CD45loint cells	7.919	3	20	.001
IL-10+, % of CD11b+CD45loint cells	4.341	3	20	.016
TGF-b+, % of CD11b+CD45loint cells	1.339	3	20	.290
Latex+, % of CD11b+CD45loint cells	1.169	3	20	.346
Dextran+, % of CD11b+CD45loint cells	1.000	3	20	.413
CD163+, % of CD11b+CD45loint cells	2.708	3	20	.073
CX3CR1+, % of CD11b+CD45loint cells	1.334	3	20	.292
CX3CR1 MFI on CX3CR1+CD11b+CD45loint cells	.650	3	20	.592

Explore

Group

Tests of Normality

Group		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
CD11b+CD45hi cell No	Female Saline	.153	6	.200*	.957	6	.799
	Female Prop	.237	6	.200*	.900	6	.373
	Male Saline	.172	6	.200*	.947	6	.717
	Male Prop	.161	6	.200*	.969	6	.883
CD11b+CD45int cell No	Female Saline	.153	6	.200*	.957	6	.799
	Female Prop	.237	6	.200*	.900	6	.373
	Male Saline	.172	6	.200*	.947	6	.717
	Male Prop	.161	6	.200*	.969	6	.883
CD11b+CD45loint cell No	Female Saline	.153	6	.200*	.957	6	.799
	Female Prop	.237	6	.200*	.900	6	.373
	Male Saline	.172	6	.200*	.947	6	.717
	Male Prop	.161	6	.200*	.969	6	.883
IL-1b+, % of CD11b+CD45hi cells	Female Saline	.135	6	.200*	.968	6	.880
	Female Prop	.202	6	.200*	.889	6	.311
	Male Saline	.186	6	.200*	.972	6	.907
	Male Prop	.149	6	.200*	.971	6	.901
IL-10+, % of CD11b+CD45hi cells	Female Saline	.190	6	.200*	.962	6	.837
	Female Prop	.185	6	.200*	.976	6	.933
	Male Saline	.171	6	.200*	.986	6	.976
	Male Prop	.139	6	.200*	.976	6	.931
IL-TGFb+, % of CD11b+CD45hi cells	Female Saline	.176	6	.200*	.973	6	.910
	Female Prop	.203	6	.200*	.933	6	.600
	Male Saline	.169	6	.200*	.940	6	.658
	Male Prop	.171	6	.200*	.957	6	.793
IL-1b+, % of CD11b+CD45loint cells	Female Saline	.175	6	.200*	.982	6	.960
	Female Prop	.242	6	.200*	.920	6	.502
	Male Saline	.213	6	.200*	.946	6	.708
	Male Prop	.261	6	.200*	.865	6	.207
IL-10+, % of CD11b+CD45loint cells	Female Saline	.190	6	.200*	.971	6	.896
	Female Prop	.160	6	.200*	.970	6	.895
	Male Saline	.175	6	.200*	.970	6	.895
	Male Prop	.213	6	.200*	.868	6	.218
TGF-b+, % of CD11b+CD45loint cells	Female Saline	.183	6	.200*	.945	6	.697
	Female Prop	.131	6	.200*	.991	6	.992
	Male Saline	.186	6	.200*	.982	6	.963
	Male Prop	.213	6	.200*	.956	6	.791
Latex+, % of CD11b+CD45loint cells	Female Saline	.180	6	.200*	.909	6	.427
	Female Prop	.167	6	.200*	.956	6	.785
	Male Saline	.233	6	.200*	.874	6	.242
	Male Prop	.148	6	.200*	.992	6	.993
Dextran+, % of CD11b+CD45loint cells	Female Saline	.197	6	.200*	.938	6	.645
	Female Prop	.168	6	.200*	.958	6	.806
	Male Saline	.200	6	.200*	.952	6	.753
	Male Prop	.191	6	.200*	.925	6	.542
CD163+, % of CD11b+CD45loint cells	Female Saline	.169	6	.200*	.973	6	.913
	Female Prop	.170	6	.200*	.958	6	.805
	Male Saline	.163	6	.200*	.978	6	.943
	Male Prop	.169	6	.200*	.965	6	.858
CX3CR1+, % of CD11b+CD45loint cells	Female Saline	.172	6	.200*	.963	6	.840
	Female Prop	.216	6	.200*	.925	6	.539
	Male Saline	.256	6	.200*	.871	6	.230
	Male Prop	.270	6	.197*	.900	6	.372
CX3CR1 MFI on CX3CR1+CD11b+CD45loint cells	Female Saline	.166	6	.200*	.967	6	.874
	Female Prop	.120	6	.200*	.993	6	.995
	Male Saline	.139	6	.200*	.995	6	.998
	Male Prop	.153	6	.200*	.963	6	.845

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Oneway

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Spinal cord cell No	.257	3	20	.855
CD4+ T-cell No	.946	3	20	.437
CD25+, % of CD4+Foxp3-cells	2.185	3	20	.121
IL-17+, % of TCRab+ cells	1.402	3	20	.271
IFN-g+GM-CSF+, % of IL-17+TCRab+ cells	1.102	3	20	.372
Foxp3+CD25+, % of CD4+ cells	3.484	3	20	.035
IL-17+ Teff/Treg cell ratio	.618	3	20	.611

Explore

Group

Tests of Normality

Group	Group	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Spinal cord cell No	Female Saline	.153	6	.200*	.957	6	.799
	Female Prop	.237	6	.200*	.900	6	.373
	Male Saline	.172	6	.200*	.947	6	.717
	Male Prop	.161	6	.200*	.969	6	.883
CD4+ T-cell No	Female Saline	.256	6	.200*	.860	6	.188
	Female Prop	.232	6	.200*	.888	6	.306
	Male Saline	.142	6	.200*	.981	6	.955
	Male Prop	.166	6	.200*	.965	6	.859
CD25+, % of CD4+Foxp3-cells	Female Saline	.184	6	.200*	.938	6	.642
	Female Prop	.211	6	.200*	.954	6	.770
	Male Saline	.206	6	.200*	.918	6	.489
	Male Prop	.202	6	.200*	.938	6	.646
IL-17+, % of TCRab+ cells	Female Saline	.166	6	.200*	.983	6	.965
	Female Prop	.193	6	.200*	.952	6	.754
	Male Saline	.151	6	.200*	.989	6	.987
	Male Prop	.183	6	.200*	.922	6	.519
IFN-g+GM-CSF+, % of IL-17+TCRab+ cells	Female Saline	.235	6	.200*	.946	6	.705
	Female Prop	.181	6	.200*	.968	6	.879
	Male Saline	.190	6	.200*	.953	6	.766
	Male Prop	.218	6	.200*	.926	6	.550
Foxp3+CD25+, % of CD4+ cells	Female Saline	.224	6	.200*	.955	6	.779
	Female Prop	.314	6	.065*	.868	6	.220
	Male Saline	.160	6	.200*	.965	6	.860
	Male Prop	.249	6	.200*	.878	6	.259
IL-17+ Teff/Treg cell ratio	Female Saline	.270	6	.195*	.825	6	.098
	Female Prop	.187	6	.200*	.929	6	.571
	Male Saline	.255	6	.200*	.931	6	.585
	Male Prop	.279	6	.157*	.919	6	.500

a. Lilliefors Significance Correction

*. This is a lower bound of the true significance.

Oneway

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
Daily mean clinical score 14th dpi	1.415	3	20	.268
Duration of the disease	.093	3	20	.963
Clinical severity index	3.359	3	20	.039
Maximum neurological score	2.000	3	20	.146

Explore

Group

Tests of Normality

Group		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Daily mean clinical score 14th dpi	Female Saline	.254	6	.200	.866	6	.212
	Female Prop	.492	6	.000	.496	6	.000
	Male Saline	.407	6	.002	.640	6	.001
	Male Prop	.392	6	.004	.701	6	.006
Duration of the disease	Female Saline	.202	6	.200	.853	6	.167
	Female Prop	.254	6	.200*	.866	6	.212
	Male Saline	.392	6	.004	.701	6	.006
	Male Prop	.392	6	.004	.701	6	.006
Clinical severity index	Female Saline	.277	6	.168	.773	6	.033
	Female Prop	.492	6	.000	.496	6	.000
	Male Saline	.172	6	.200*	.942	6	.675
	Male Prop	.401	6	.003	.702	6	.007
Maximum neurological score	Female Saline	.407	6	.002	.640	6	.001
	Female Prop	.492	6	.000	.496	6	.000
	Male Saline	.277	6	.168	.773	6	.033
	Male Prop	.407	6	.002	.640	6	.001

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