

# Results

## MANOVA

MANOVA

MANOVA: Pillai Test

Cases	df	Approx. F	Trace <sub>Pillai</sub>	Num df	Den df	p
(Intercept)	1	50770.365	1.000	2	35.000	2.526×10 <sup>-61</sup>
Ins_dose	2	19.420	1.038	4	72.000	7.113×10 <sup>-11</sup>
Gln_dose	2	17.612	0.989	4	72.000	4.042×10 <sup>-10</sup>
Ins_dose * Gln_dose	4	7.056	0.879	8	72.000	7.671×10 <sup>-7</sup>
Residuals	36					

MANOVA: Wilks Test

Cases	df	Approx. F	Wilks' Λ	Num df	Den df	p
(Intercept)	1	50770.365	3.446×10 <sup>-4</sup>	2	35.000	2.526×10 <sup>-61</sup>
Ins_dose	2	146.518	0.011	4	70.000	3.118×10 <sup>-33</sup>
Gln_dose	2	58.993	0.052	4	70.000	1.063×10 <sup>-21</sup>
Ins_dose * Gln_dose	4	15.509	0.130	8	70.000	7.308×10 <sup>-13</sup>
Residuals	36					

MANOVA: Hotelling-Lawley Test

Cases	df	Approx. F	Trace <sub>H-L</sub>	Num df	Den df	p
(Intercept)	1	50770.365	2901.164	2	35.000	2.526×10 <sup>-61</sup>
Ins_dose	2	701.324	82.509	4	68.000	1.796×10 <sup>-54</sup>
Gln_dose	2	147.169	17.314	4	68.000	1.031×10 <sup>-32</sup>
Ins_dose * Gln_dose	4	28.121	6.617	8	68.000	9.792×10 <sup>-19</sup>
Residuals	36					

Cases	df	Approx. F	Largest Root	Num df	Den df	p
(Intercept)	1	50770.365	2901.164	2	35.000	2.526×10 <sup>-61</sup>
Ins_dose	2	1484.211	82.456	2	36.000	2.593×10 <sup>-35</sup>
Gln_dose	2	310.826	17.268	2	36.000	1.948×10 <sup>-23</sup>
Ins_dose * Gln_dose	4	59.456	6.606	4	36.000	2.290×10 <sup>-15</sup>
Residuals	36					

# Bayesian ANOVA

## Model Comparison

Models	P(M)	P(M data)	BF <sub>M</sub>	BF <sub>10</sub>	error %
Null model	0.200	1.176×10 <sup>-30</sup>	4.703×10 <sup>-30</sup>	1.000	
Ins_dose + Gln_dose + Ins_dose * Gln_dose	0.200	1.000	2.176×10 <sup>+11</sup>	8.505×10 <sup>+29</sup>	1.611
Ins_dose + Gln_dose	0.200	1.839×10 <sup>-11</sup>	7.354×10 <sup>-11</sup>	1.564×10 <sup>+19</sup>	1.150
Ins_dose	0.200	1.537×10 <sup>-19</sup>	6.146×10 <sup>-19</sup>	1.307×10 <sup>+11</sup>	4.440×10 <sup>-6</sup>
Gln_dose	0.200	2.986×10 <sup>-30</sup>	1.194×10 <sup>-29</sup>	2.539	0.008

# ANOVA

ANOVA - BS

Cases	Sum of Squares	df	Mean Square	F	p
Ins_dose	4.912	2	2.456	1394.824	$7.822\times 10^{-35}$
Gln_dose	1.027	2	0.513	291.580	$5.768\times 10^{-23}$
Ins_dose * Gln_dose	0.376	4	0.094	53.355	$1.212\times 10^{-14}$
Residuals	0.063	36	0.002		

Note. Type III Sum of Squares

