

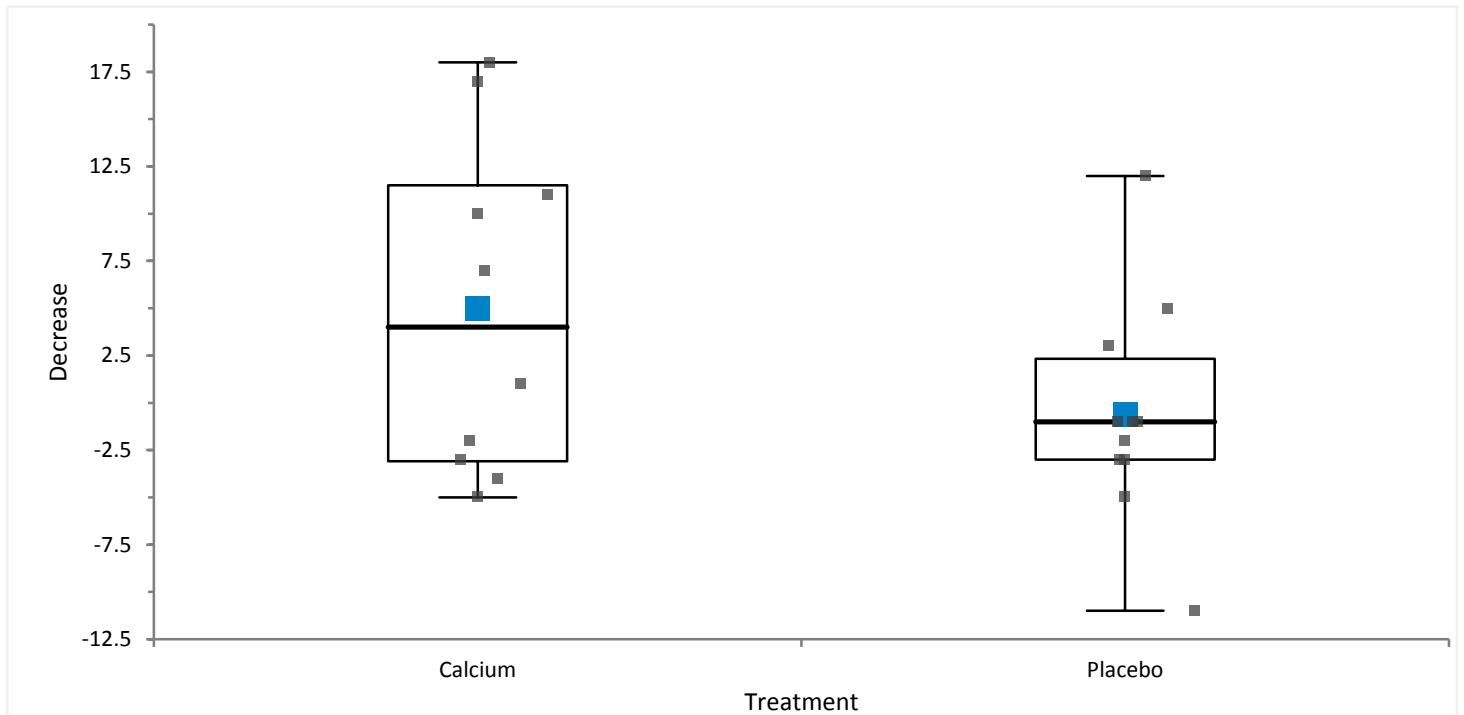
Compare Groups: Decrease by Treatment

Calcium and Blood pressure

<http://lib.stat.cmu.edu/DASL/Stories/CalciumandBloodPressure.html>

Last updated 2 February 2016 at 11:39 by Analyse-it Software, Ltd.

Descriptives



N | 21

Decrease by Treatment	Minimum	1st Quartile	Median	3rd Quartile	Maximum	Inter-quartile range
Calcium	-5	-3.1	4.0	11.5	18	14.6
Placebo	-11	-3.0	-1.0	2.3	12	5.3

Dispersion

Variance ratio | 0.45
95% CI | 0.11 to 1.70

$$\lambda = \sigma^2_{\text{Placebo}} / \sigma^2_{\text{Calcium}}$$

Fisher F test

Hypothesized ratio | 1
F statistic | 0.45
Numerator DF | 10
Denominator DF | 9
p-value | 0.2304¹

H0: $\lambda = 1$

The ratio of the variances of the populations is equal to 1.

H1: $\lambda \neq 1$

The ratio of the variances of the populations is not equal to 1.

¹ Do not reject the null hypothesis at the 5% significance level.

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Location

Mean difference	-5.6
95% CI	-12.4 to 1.1
SE	3.22

$$\mu_{\Delta} = \mu_{\text{Placebo}} - \mu_{\text{Calcium}}$$

Student t test

Hypothesized difference	3
t statistic	-2.68
DF	19
p-value	0.0148 ¹

$$H_0: \mu_{\Delta} = 3$$

The difference between the means of the populations is equal to 3.

$$H_1: \mu_{\Delta} \neq 3$$

The difference between the means of the populations is not equal to 3.

¹ Reject the null hypothesis in favour of the alternative hypothesis at the 5% significance level.