

# Course Project: Part 2

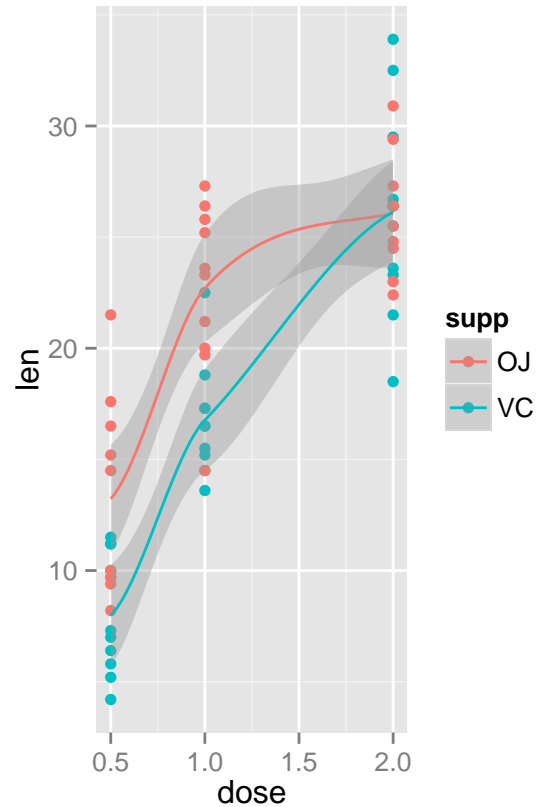
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Full code available here: [https://github.com/ldamewood/coursera-stat inference-008/blob/master/course\\_project\\_part2.Rmd](https://github.com/ldamewood/coursera-stat inference-008/blob/master/course_project_part2.Rmd)

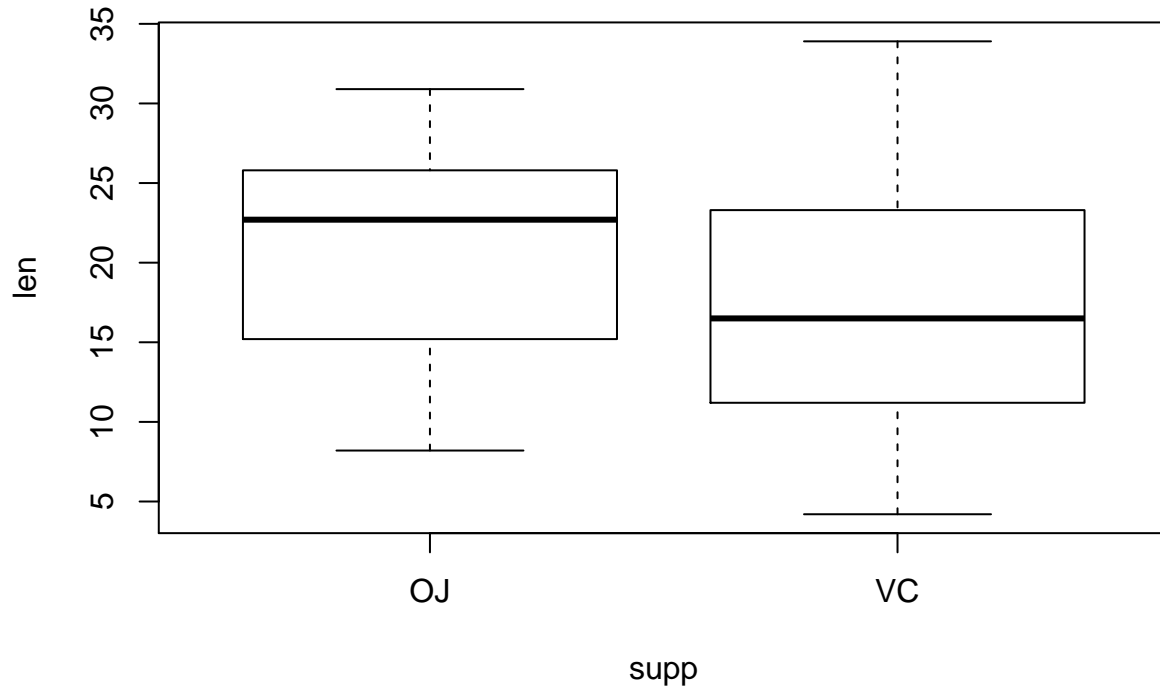
Summary of means and standard deviations of each supplement and dose combination.

	supp	dose	len.mean	len.sd
1	OJ	0.5	13.23	4.460
2	OJ	1.0	22.70	3.911
3	OJ	2.0	26.06	2.655
4	VC	0.5	7.98	2.747
5	VC	1.0	16.77	2.515
6	VC	2.0	26.14	4.798



Hypothesis: OJ corresponds to greater tooth growth than VC across all dosages. Assumptions: Subjects are not identical in the two groups.

## Tooth growth by suppliment across all dosages.



```
##
## Welch Two Sample t-test
##
## data: len by supp
## t = 1.915, df = 55.31, p-value = 0.03032
## alternative hypothesis: true difference in means is greater than 0
## 95 percent confidence interval:
##  0.4683      Inf
## sample estimates:
## mean in group OJ mean in group VC
##           20.66           16.96
```

CI is entirely greater than 0, which suggests OJ corresponds to greater tooth growth.