

## Unit 7 – STATA for Analysis of 1, 2, and 3+ Samples Homework

**Due: Monday November 16, 2020**

### Dataset: [sepsis.Rdata](#)

Right click to download from course website.

### Description of [sepsis.Rdata](#)

This data set contains 455 observations. Data are from a study conducted by Bernard et al (1997). This was a randomized clinical trial to assess the effect of intravenous ibuprofen on mortality in patients with sepsis. Study investigators used a specific measure of mortality risk called the APACHE score; higher scores indicate greater risk.

### Variables used in this assignment

Variable	Variable Label	Type	Codes
race	Race	numeric, discrete	0 = White 1 = Black 2 = Other
temp0	Baseline temperature	numeric, farenheight	-
temp1	Temperature at 2 hours	numeric, farenheight	-
apache	Baseline Apache Score	numeric	
treat	Treatment	Numeric, discrete	0 = Placebo 1 = Ibuprofen

- \_\_\_\_ 1. Consider treated patients whose race is recorded as “other”. For this subset of the data, test whether the baseline temperature (**temp0**) is significantly different from their temperature after 2 hours (**temp1**). Provide a 1 sentence interpretation of your output.
  
- \_\_\_\_ 2. Consider, still, ONLY the treated patients whose race is recorded as “other”. For this subset of the data, obtain a 90% confidence interval for the true change in temperature between baseline and 2 hours. Provide a 1 sentence statement and interpretation of your confidence interval.
  
- \_\_\_\_ 3. Test whether the baseline APACHE score (**apache**) is different between treated and untreated patients. The treatment variable is **treat**. Provide a 1 sentence interpretation of your output.

- \_\_\_\_ 4. Exercise 3, continued – Obtain a 95% confidence interval for the true difference in APACHE scores between treated and untreated patients. Provide a 1 sentence statement and interpretation of your confidence interval.