

Essentials of Patient Oriented Research (EPOR)

Statistical Methods in Clinical Research

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Thursdays, March 27 – June 5, 2025

5:15 - 6:30 p.m.

Text: Practical Statistics for Medical Research. Douglas G. Altman
(Chapman & Hall)

Software: STATA, version 18 (available for Windows and Mac)
Stata/BE is sufficient (\$160 annual licenses)

From STATA Corp: www.stata.com/order/

Note: you are free to use other statistical software, but STATA will be used and taught in the course. One week prior to the first topic lecture, an optional STATA mini-boot camp will be offered, which will cover the basics of using STATA.

Statistical Methods in Clinical Research

Week	Date	Lecture Topic
-1	3/27/2025	Stata Mini-Boot Camp (Optional)
1	4/3/2025	Introduction/Data Summarization Chapters 1-3, Appendix A
2	4/10/2025	Designing Research Chapter 5
3	4/17/2025	Preparing to Analyze Data Chapter 7
4	4/24/2025	Principals of Statistical Analysis Chapter 8
5	5/1/2025	Comparing Groups – Continuous Data Chapter 9
6	5/8/2025	Repeated measurements Section 12.3, Section 14.6
7	5/15/2025	Comparing Groups – Categorical Data Chapter 10
8	5/22/2025	Sample-size and Power Calculation Section 15.3
9	5/29/2025	Relation Between Two Continuous Variables Chapter 11
10	6/5/2025	Survival Analysis Chapter 13

Exercises will be assigned at the end of each class and solutions discussed the following week.