

# Contents

Acknowledgments	vi
Foreword	vii
Preface	ix
Preface to the First Edition	xi
Introduction	xv
Differences Between Clinical and Statistical Significance	xvii
A Note to the Reader	xx
<b>Part I Guidelines for Reporting Statistics In Medicine</b>	<b>1</b>
1. Summarizing Data: <i>Reporting Numbers and Descriptive Statistics</i>	3
2. Comparing Probabilities of Events: <i>Reporting Measures of Risk</i>	19
3. Generalizing from a Sample to a Population: <i>Reporting Estimates and Confidence Intervals</i>	37
4. Comparing Groups with <i>P</i> Values: <i>Reporting Hypothesis Tests</i>	45
5. Adjusting for Several <i>P</i> Values: <i>The Multiple Testing Problem</i>	61
6. Testing for Relationships: <i>Reporting Association and Correlation Analyses</i>	73
7. Predicting Values from One or More Variables: <i>Reporting Regression Analyses</i>	85
8. Analyzing Groups with Multiple Variables: <i>Reporting Analysis of Variance (ANOVA)</i>	107
9. Assessing Time-to-Event as an Endpoint: <i>Reporting Survival Analyses</i>	115
10. Determining the Presence or Absence of Disease: <i>Reporting the Performance Characteristics of Diagnostic Tests</i>	125
11. Considering “Prior Probabilities”: <i>Reporting Bayesian Statistical Analyses</i>	149
12. Describing Patterns of Disease and Disability in Populations: <i>Reporting Epidemiological Measures</i>	159

<b>Part II</b>	<b>Guidelines for Reporting Research Designs and Activities</b>	175
13.	Testing Interventions in Experimental Studies: <i>Reporting Randomized Controlled Trials</i>	179
14.	Observing Prospectively, from Exposure to Outcome: <i>Reporting Cohort or Longitudinal Studies</i>	221
15.	Observing Retrospectively, from Outcome to Exposure: <i>Reporting Case-Control Studies</i>	229
16.	Observing Exposures and Outcomes Concurrently: <i>Reporting Surveys or Cross-Sectional Studies</i>	239
<b>Part III</b>	<b>Guidelines for Reporting Integrated Research Methods</b>	253
17.	Synthesizing the Results of Related Studies: <i>Reporting Systematic Reviews and Meta-Analyses</i>	255
18.	Weighing the Costs and Consequences of Treatment: <i>Reporting Economic Evaluations</i>	281
19.	Informing Treatment Choices: <i>Reporting Decision Analyses and Clinical Practice Guidelines</i>	305
<b>Part IV</b>	<b>Guidelines for Presenting Data and Statistics in Tables and Figures</b>	325
20.	Tabular Displays of Data and Statistics: <i>Reporting Values, Groups, and Comparisons in Tables</i>	327
21.	Visual Displays of Data and Statistics: <i>Reporting Values, Groups, and Comparisons in Figures</i>	349
<b>Part V</b>	<b>A Guide to Statistical Terms and Tests</b>	393
<b>Part VI</b>	<b>Appendices</b>	439
1.	Rules for Presenting Numbers in Text	441
2.	Mathematical Symbols and Notation	444
3.	Spellings of Statistical Terms and Tests	445
4.	Links to Other Sets of Reporting Guidelines	446
5.	Sources of Error, Confounding, and Bias in Biomedical Research	449
	<b>Bibliography</b>	459
	<b>Index</b>	475
	<b>About the Authors</b>	489