Comparability and reproducibility of biomedical data

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June 20, 2012

Abstract

1 Introduction

2 Reproducibility of assay and primary data

2.1 Overview of data generation process and its impact on C&R

2.2 Metrics to quantify C&R

2.3 Correcting for experimental bias

2.4 Standards and data sharing

3 Reproducibility of assay results and derived data

In addition to the experimental protocal, data analysis contributes siginificantly to the reproducibility or non-reproducibility of an experiment or publication. As of today, many published studies involving data analysis remain totally un-reproducible due to the lack of sharing of computer code or scripts that can be used to reproduce the analysis.

3.1 Tools for reproducible analyses

3.2 Standards and code sharing

3.3 Authoring tools

4 Conclusion