Mini–Symposium on
STRATOS initiative - more on guidance for analysis of observational studies

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Synopsis

The validity and practical utility of observational medical research depends critically on good study design, appropriate statistical analysis methods, accurate interpretation of results, and consideration of sources of potential bias in the data. Statistical methodology has seen substantial development in recent times. Unfortunately, there is a lack of guidance on vital practical issues which discourages many applied researchers from using more sophisticated and possibly more appropriate methods when analyzing observational studies, and many recent methodological developments are ignored in practice. Consequently, design and analysis of observational studies often exhibit serious weaknesses.

These observations led to the initiation of the international initiative for STRengthening Analytical Thinking for Observational Studies (STRATOS), a large collaboration of experts in many different areas of biostatistical research. The overarching objective of STRATOS is to provide accessible and accurate guidance in the design and analysis of observational studies. The guidance is intended for applied statisticians and other data analysts with varying levels of statistical education, experience and interests (Sauerbrei et al, Statistics in Medicine 2014, 5413-5432). The initiative involves more than 100 members from 18 countries (http://www.stratos-initiative.org/), who work in nine topic groups and eleven cross-cutting panels. Panels aim to co-ordinate the initiative, to share best research practices and to disseminate research tools and results from the work of the topic groups.

During the conference there will be an invited session with presentations from topic groups TG2, TG3, TG7 and TG9. In the mini-symposium we will have further talks from other top groups and panels.

The symposium will be particularly suitable for researchers and students wanting an overview of key methods and main issues in some topics.