

STRATOS mini-symposium at CEN 2023, September 7 2023

## **Ten years of the STRengthening Analytical Thinking for Observational Studies (STRATOS) initiative – progress and looking to the future**

Coordinators:

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Description:

The STRATOS (STRengthening Analytical Thinking for Observational Studies) initiative is a large collaboration of experts in many different areas of biostatistical research. The objective is to provide accessible and evidence-based guidance for key topics in the design and analysis of observational studies. Guidance is intended for applied statisticians and other data analysts with varying levels of statistical training and experience (<https://stratos-initiative.org/de>). The STRATOS initiative was launched at a half-day Mini-Symposium at ISCB 2013. We will present some of the progress and plans for the future.

Program:

### **Session 1 (14.35-16.05)**

**14.35-15.25**

***Experience and progress with developing guidance for the analysis of key topics in observational research***

**Sauerbrei W**, Abrahamowicz M, Le Cessie S, Huebner M, Keogh R, Carpenter J for the STRATOS initiative

**15.25-15.45**

***Initial data analysis is a necessary step in the research workflow***

**Huebner M**, Schmidt CO, Lusa L for TG3

**15.45-16.05**

***Level 1 guidance on conducting and reporting sensitivity analyses for missing data***

**Lee K**, Mainzer R, **Carpenter J** for TG1

## **Session 2 (16.20-17.20)**

**16.20-16.40**

***Statistical analysis of high-dimensional biomedical data: A gentle introduction to analytical goals, common approaches and challenges***

Rahmenfuehrer J, Ambrogi F, De Bin R, McShane L for TG9

**16.40-17.00**

***Ongoing research towards state-of-the-art in variable and functional form selection for statistical models***

Heinze G, Perperoglou A, Sauerbrei W for TG2

**17.00-17.20**

***Data-Driven Simulations to Assess the Impact of Data Imperfections in Real-World Time-to-Event Analyses***

Abrahamowicz M, Beauchamp M-E, Boulesteix A-L, Morris TP, Sauerbrei W, Kaufman JS for the STRATOS Simulation Panel

## **Session 3 (17.30-18.00)**

***Methodological research needs to improve – getting involved to increase future contributions of the STRATOS initiative***

Sauerbrei W, Abrahamowicz M, Le Cessie S, Huebner M, Keogh R, Carpenter J for the STRATOS initiative