### **STRATOS Steering group**

#### conference call - agenda

#### 2021-06-15 (Tuesday), 4.30 – 6.30 pm UK time

**Participants:** Willi Sauerbrei, Michal Abrahamowicz, Marianne Huebner, Ruth Keogh, Anne-Laure Boulesteix, Harbajan Chadha-Boreham, Georg Heinze, Victor Kipnis, Mitchell Gail, Ewout Steyerberg, James Carpenter, Saskia le Cessie

SG members not able to attend: Gary Collins, Jörg Rahnenführer, Els Goetghebeur

### Agenda:

**Changes in SG:** Steven Evans left the SG and TG5 to focus on other work, but stays as affiliate member. Thanks very much for all his work since the early days of STRATOS.

### 1. Website (5 minutes, short update)

1.1. At the BIRS meeting we decided that TG-specific websites with a common format need to be created. They will be linked to the STRATOS main website. Websites from TGs 3 and 7 are already linked. All TGs should have a website by 15 December. Freiburg website will be updated soon and include a members only part. What to include?

Google sites or other sites with similar format for the TGs. Multiple emails have been shared about this.

JC. Add minutes of SG to website. WS. Add the STRATOS Publication Policy

1.2. We will add a page for **STRATOS related papers**. Why is it on the STRATOS website? If a paper is to be considered, an explanation (about 2 – 4 sentences) will be needed. The explanation will be shown on the website. TG2 discussed that papers more specific to a TG could be listed under the TG on the website and more general under publications on the website. The publication panel could decide whether a paper can be added. Els suggested that one specific paper for each TG should be listed on the main website.

This item is a reminder from last SG.

1.3. Add layperson abstracts for all (longer) STRATOS papers. Some are available.

TGs are responsible for lay person abstracts. TG8 (short version) and TG7 (longer version) already have one.

#### After the meeting, not discussed!

Description of TGs on the website.

Most of the text and references were taken from the first STRATOS paper (Sauerbrei et al, 2014). Main issues have not changed much but TG papers should be added (will be done from Freiburg). A major change of the text is needed when we link TG websites.

### 2. Collaborations (10 min)

**ISCB** – we have a mini-symposium with two sessions of 90 minutes (program on website). Harbajan led the effort to write a proposal for a **Memorandum of Understanding** and it was submitted in December 2020. We received a revised version from (former) president Vana

This MOU establishes a formal connection between STRATOS and ISCB with no commitments for either party. There are unfortunately no arrangements about waiving conference fees, but general ISCB rules apply and negotiations could happen on a case-by-case basis.

**IBS** – short papers from all TGs and three panels (Simulation, Visualization, Glossary) have appeared in the Biometrical Bulletin. Then we started with updates (TG4 appeared, TG2 submitted, TG3 follows in August). **Which TG is interested to write the next article** (needed mid November)? We may also publish something about collaborative projects (e.g. SISAQOL, see below).

All BB articles can be found on the website. Every TG should think about writing the next article to be ready in November. An email will be sent to TG chairs to ask for volunteers.

**SISAQOL** - Setting International Standards in Analyzing Patient-Reported Outcomes and Quality of Life Endpoints Data. Led by the EORTC. For STRATOS Saskia le Cessie, Els Goetghebeur und Willi Sauerbrei joint a large grant application coordinated by members of the European Organisation for Research and Treatment of Cancer (EORTC). Project started in January. Email from Saskia to all members of SG and all TG and panel chairs on 31 July 2020, talk at ISCB 2021. Input from several (or all) TGs is needed. Soon we will have a **TC with interested members.** 

SISAQOL aims to derive guidelines for patient reported outcome studies. The program has several "work packages", STRATOS, single arm studies, and more. Review of the literature and of existing guidelines is a currently ongoing project.

*Issues related to the work of other TGs (measurement error, missing data, survival analysis, variable and function selection, perhaps all ) are relevant and will be contacted . This may be another option to write for the Biometric Bulletin.* 

### 3. Panels (10 min)

3.1. Visualization Panel (VP) is chaired by Mark Baillie (Novartis). See BiomBull article. Second chair and further members are needed.

A second chair would be very welcome.

3.2. Publication panel (PP). Updated document (version 9.0) sent on 18 December 2019 to all TG and panel chairs. For the members only part of the website. The document is fine for TG and panel papers, but the part about a STRATOS paper needs slight extensions.

The document may need small modifications for STRATOS papers.

3.3. Glossary panel (GP). Our glossary is based on the second edition of the "Dictionary for Clinical Trials" by Simon Day. About 700 terms were selected. Furthermore we have about 100 terms from NICE (National Institute for Health and Care Excellence, UK). Martin Boeker (Freiburg, expert in medical informatics) has imported these terms from the original text source into a database. For details see the Biometric Bulletin article. TG7 (Goetghebeur and Waernbaum) approached us about adding terms. A TC is planned (around end of June). Who is interested to join GP and help with the terms? Each TG will have many specific terms which need to be added. Therefore, each TG should be represented.

TG7 proposed glossary terms. Volunteers from other TGs are needed.

3.4. Simulation panel (SP). The panel is very active. See BiomBull article.

Biometric Bulletin article and a Level 1 paper in BMJ Open were published. A Level 2 paper related to reporting is in the works.

- 3.5. Knowledge translation panel (KT). Suzanne Cadarette and Catherine Quantin resigned, Rolf Groenwold and Maarten van Smeden are the new chairs. (E-Mail from Rolf on June 10<sup>th</sup>).
- 3.6. **Data set panel (DP).** Maarten van Smeden is a new co-chair and his collected repository is linked. It is important to provide better meta data about publicly available data sets.

# 4. Topic Groups (10 min)

TG9 will submit an overview paper soon. Then we have papers from all TGs. All groups are active and several collaborations among groups started. In the minutes of the last SG meeting we mentioned that reports will be needed for the newsletter (see point 9). Not all TGs sent reports. Please do it within 4 weeks.

# 5. Meetings (30 min)

### **2020**:

Invited sessions at **IBC (Seoul)** and **RSS (Bournemouth)**, **ISCB (invited session and mini-symposium)**. For all talks we have slides on the website. **Videos** exist from **ISCB presentations**. We will receive them for our website.

### 2021:

- 5.1. Invited session at the meeting of the German Region of IBS (March, virtual, Münster).
- 5.2. Mini-symposium at ISCB (22 July, Lyon).
- 5.3. Session at the meeting of the Society for Epidemiologic Research (virtual, San Diego) in June. Aris Perperoglou organized a session on 'multivariable model building' for the RSS meeting (Sept.). Georg Heinze and Mark Baillie organized a session at IBS-ROeS in

Salzburg. Furthermore, Heinze, Dunkler and Wallisch will give a tutorial about variable selection. Federico Ambrogi organized a session for **IBS-IR** (Sept).

SER most important epi conference in North America. Proposal was accepted. This will be a good opportunity to reach level 2 researchers. The methods sessions are typically well attended. Speakers who attend only this session have conference fee waivers. RSS meeting may possibly move online due to the rising COVID cases. IBS-ROeS will likely be in person. Panel chairs for KT, Simulation, Visualization will be presenting. For conference presentations TG chairs, panel chairs need to agree to it.

### 5.4. Virtual STRATOS meetings.

**Internally** (say between 9-18 Nov, 2 or 3 days. Day 1 overview from all nine TGs. (about 3 sessions of 90 minutes, say from 1 - 6.30 pm UK time). Day 2 (perhaps a bit shorter) panels, more specific talks (e.g. p-values, SISAQOL, ML vs Statistics, cooperations/advanced stages, further issues and tasks). Day 3 (following week. Short summary of day 1 and 2. Discussions and plans for the future.).

May have it on separate days (e.g. afternoon on one day on 3 consecutive weeks)

Public: Public meeting for two or three days around end January 2022

What type of researcher a public meeting should aim to attract?

- These would be half day meetings. Consecutive days may generate more momentum. But other preferences are to spread it across weeks.
- Zoom breakout rooms may allow collaborations within and between TGs. Ideas are to have lightning talks (highlights), TGs prepare a report beforehand to be available to all, so that the focus can be on collaborations that hasn't been presented in other conferences, for example.
- Presentations 15+5 minutes for each TG (9 talks), in 2 sessions on one day. Week 2 to discuss collaborations. Panel presentation (Simulation. Visualization and perhaps data set) scheduled on Day 1? Then we may have 11-12 presentations on the first day.
- TG reports should be available, which could be a recent Biometric Bulletin article.
- An additional idea is share TG introductory videos.
- *H C-B. A presentation on how to make videos.*
- MG. Hard to find people to take the lead on a paper. More active groups with current projects volunteer to present on work in progress and potentially elicit interest from other groups.
- Longer talks on 2<sup>nd</sup> day (VK). Possibly parallel session on 2<sup>nd</sup> day (GH).
- ES. Parallel may not be necessary as people have flexibility to join or not to join.

• Create schedule to see what fits (ExCom)

Intended dates for the internal meeting: November 2 and 9 (Tuesdays)

*Public meeting: Goal would be to update researchers outside STRATOS on guidance. Virtual meeting. Free.* 

RK. Seminar series instead of days.

VK. One webinar/week measurement error. One lecture and a period of questions and answers. Recording is available. <u>https://epi.grants.cancer.gov/events/measurement-error/</u>

Possibly next year.

*GH.* Webinars give us full control on registration and video distributions. This helps researchers to pick the topics they are interested in. Every week one topic group.

#### 2022:

Application for an invited session at IBC in Latvia (July) - further proposals ?

Invited session at the DAGStat in Hamburg (end March; organizers: Heiko Becher and WS)

Another **general in-person meeting of STRATOS?** Proposal - Lorentz Center in Leiden, The Netherlands.

No news and therefore no further discussion.

# 6. STATROS papers and involvement (15 min)

- 6.1. STRATOS paper on 'Methodological issues in medical research and patient care critical appraisal of statistical and machine learning techniques'. Discussions started in Banff. Led by Jörg Rahnenführer (TG9) and Matthias Schmid (TG2). Lara Lusa joined them. Talk from Jörg and Lara in the IBC application.
- 6.2. Scientists rise up against statistical significance (Amrhein et al, Nature 567, 305-307). Abrahamowicz, Kipnis and Carpenter lead a paper on this topic, several members expressed interest to join. Talks from Michal and Victor at ISCB.

Seventeen STRATOS members have expressed an interest about joining the project 6.2.

7. Level 1 material (15 min)

7.1. Review of Statistical Series in medical journals. Methodological issues related to TG2 Protocol paper appeared in PLOS ONE. Paper showing results will be submitted soon. Main result: many important gaps. Who is interested to join a group working on level 1 papers. Talk from Geraldine Rauch at ISCB.

GH. Some topics are discussed more often than others, thus there is a need to write more tutorials. WS. Many papers are more an introduction than a tutorial. Existing tutorials can be superficial, so more in-depth guidance is helpful.

- 7.2. Series of **short videos** (3-4 minutes). Led by Rolf Groenwold. See email 17 September 2020. TGs working on videos should contact Rolf.
- 7.3. Shiny apps. Georg Heinze, Daniela Dunkler and others from Vienna started with an app about non-linearity. At ISCB Christine Wallisch will speak about it. GH. Lots of examples. Mechanics about splines and fractional polynomials. WS. All TGs should consider whether shiny apps are appropriate for their topic. Please contact GH if you need more information.
- 7.4. Paper from the simulation panel appeared in BMJ Open (Boulesteix et al, 2020).
- 7.5. Paper to summarize most of the information about statistical issues in E+E reporting papers (Boxes about continuous variables, missing data, interactions etc). Comment on it and update the literature. It may become a joint paper with EQUATOR. Led by Willi. Several colleagues expressed interest.

# 8. Literature reviews (2 min)

Literature reviews are important. Some papers are published and several projects have been started. More needs to be done.

WS. It is important to know what is currently done. It was planned that each TG works on a literature review (see section 2.5 in our first paper).

# 9. Newsletter (3 min)

The first newsletter is from May 2018. There are several news to summarize. We would need a short report from each TG. Panels – papers in the BiomBull are more recent and reports may not be needed.

Ruth and Willi will work on an outline. Who else is interested. Some TGs need to send updated reports.

# 10. Membership (5 min)

We have the first **Early Career Adjunct Members** (very positive experience in TG2!). Encourage your younger co-workers.

Clinical affiliates – we need to become active.

Before the TC JC had sent an updated text. JC. Add more details about this term and what would be expected on the website and also think about a mechanism about a graceful exit, if it is not the way as expected. GH. It may depend on specific projects. Is the label "clinical affiliate" appropriate? AB. A clinician could work on projects but not be a STRATOS member. JC. Appropriate would be if someone collaborates not just with one or two papers, but contribute to STRATOS directions as well. MH. Affiliates may have important examples to contribute to the webinar series.

Label this as "Affiliate" or as "Member." The advantage would be have direct access on newest developments.

*General agreement to the new text from JC. HC-B may propose slight changes. Willi and Michal will invite up to 4 people.* 

### 11. AOB (15 min) - skipped

Every 6 month a meeting?

# **12.OTHER items**

The ExCom will discuss further about adding a TG for longitudinal data analysis.

Membership should be for a time period (eg 2 years) and renewal depends on what contributions they have made. JC and WS will write an official letter from the membership committee.

The STRATOS poster has not been used at conferences.