Short Overview: **Pharmaceutical Industry COVID-19 Biostatistics Working Group**

BBS virtual Seminar on "Impact of COVID-19 on clinical trials"
May 6, 2020

Marcel Wolbers, Roche

This presentation is based on materials from the working group but has been adapted by the presenter. It should not be construed to represent the views of all working group members or their affiliated institutions and companies.

Working group members

Institution	Member
abbvie	Jyotirmoy Dey
	Stefan Englert
AMGEN	Thomas Liu
AstraZeneca	David Wright
BAYER	Olga Marchenko
	Bohdana Ratitch
Bristol Myers Squibb	Daniel Li
	Ming Zhou
Lilly	Wei Shen
GILEAD	Gerald Crans

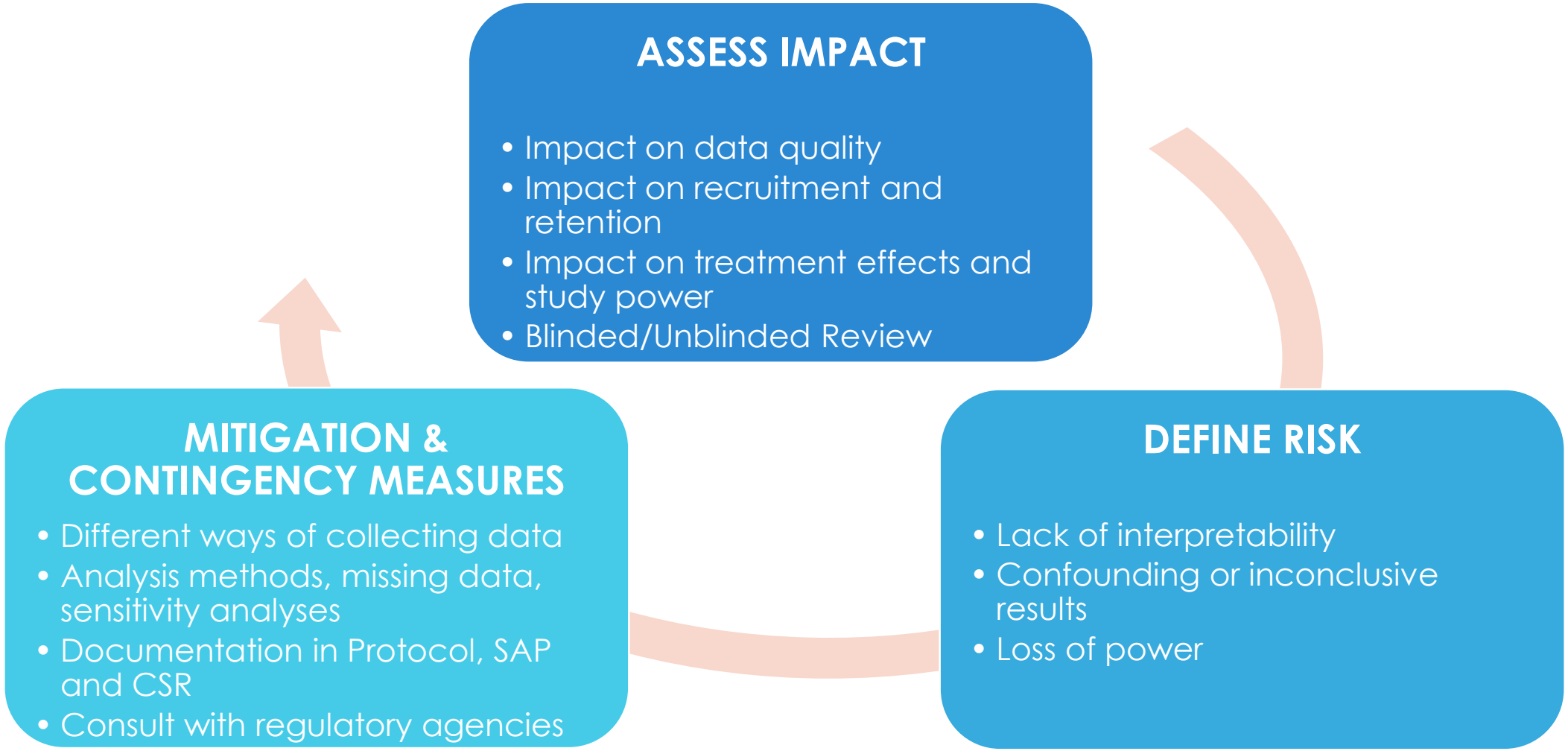
Institution	Member
gsk GlaxoSmithKline	Christine Fletcher
janssen	Norm Bohidar
Lundbeck	Ingrid Sofie Harbo
MERCK	Yue Shentu
Pfizer	R. Daniel Meyer
Roche Genentech A Member of the Roche Group	Xin Li
	Marcel Wolbers
SANOFI	Peng-Liang Zhao
	Hui Quan
Takeda	Michael Hale

Working group output

- **Manuscript**: ”Statistical issues and recommendations for clinical trials conducted during the COVID-19 pandemic”
  - Submitted to **SBR special edition on COVID-19** (with discussion)
  - Core sections:
    - Pandemic-related factors, impacts, and risk assessment
    - Implications and mitigations for estimands, missing data, and analysis
    - Study-level issues and mitigations

- **Slide deck**: ”Study and data integrity considerations for clinical trials impacted by COVID-19”
  - Presented as **DIA webinar** on **May 13, 5:00-6:15PM CET**
  - Free registration: http://engage.diaglobal.org/20220P5-COVID-19-Webinar.html
  - A small teaser of the material is presented on the next slides

Key steps to assess, define and understand the impact of COVID-19 on study and data integrity



Blinded/unblinded aggregate impact & risk assessment

- **Blinded review by sponsor**
  - Extent and pattern of intercurrent events and missing data
  - Enrollment change and shift in population
  - Reassessment of protocol assumptions
  - Probability of success for achieving pre-specified goals

- **Role of IDMC**
  - Carefully consider the need and feasibility of IDMC to lead/participate in the risk assessment
  - Amend the IDMC charter to document communication plan for outcomes of the unblinded risk assessment
  - **Exercise caution** in unblinded assessment to avoid biases

Does the COVID-19 pandemic change my trial?

- Answer depends on **impact&risk assessment** and **mitigation measures**
- **Research question** frequently unchanged
  - How would Drug A compare to Drug B **in the absence** of the acute, systematic disruptions to the healthcare systems due to the **COVID-19 pandemic**?
- **Estimand**: assess impact on all 5 attributes, in particular ICE
  - Different strategies may be appropriate for pandemic & non-pandemic ICE
- **Missing data & analysis**:
  - Missing data in many situations MCAR or MAR
  - Previously planned primary and sensitivity analyses need to be reviewed

Recommendations

- **Assess**: Diligently assess every impact of COVID-19 on the clinical trial conduct and interpretation
- **Act**: Fully understand the risks, have a fit-for-purpose mitigation plan and act correspondingly
- **Consult**: Engage early with Health Authorities and keep the communication channel open
- **Document**: If mitigation is required, clearly document the actions and the rationales