



*Statistics: Making an Impact*  
July 27 - August 1, 2019  
Colorado Convention Center

# JSM 2019 Abstract Submission

[Return to main conference page](#)

[Preview of Abstract](#)

**Your abstract has not been submitted yet.**

Please review all of your entries before submitting, and note that any abstract text over the 1200 character limit has been truncated.

Clicking "[Submit Abstract](#)" will submit the Abstract into the JSM Abstract database. .

## Abstract Information

[Edit Abstract](#)

**Abstract Type:**

[Contributed](#)

**Sub Type:**

[Speed](#)

**Sponsor:**

[Biometrics Section](#)

**Title:**

[Meta-analysis of binary outcomes combining individual patient data and aggregate data](#)

**Abstract:**

Often both aggregate or meta-analysis (MA) studies and Individual Patient Data (IPD) studies are available for specific treatments. Combining these two sources of data could improve the overall meta-analytic estimates of treatment effects. We propose a method to combine treatment effects across trials where the response can be binary or continuous. For some studies with MA data, the associated IPD maybe available, albeit at some extra effort or cost to the analyst. We consider the case when treatment effects are random and evaluate the wisdom of choosing MA when IPD is available by studying the relative efficiency of analyzing all IPD studies versus combining various percentages of MA and IPD studies. For many different models design constraints under which the MA estimators are the IPD estimators, and hence fully efficient, are known. For such models we advocate a selection procedure that chooses MA studies over IPD studies in a manner that force least departure from design constraints and hence ensures a fully efficient combined MA and IPD estimator.

**Key words:**

meta-analysis, treatment-control difference, random effect, efficiency, Individual patient data, design

**Audio-visual:**

Audio-Visual Guidelines: Each technical session room will be equipped with a complimentary PC-compatible laptop, LCD projector, screen, and lectern with microphone. Additional equipment must be ordered and paid for by the presenter. All rooms will be connected to the JSM speaker management system with access to upload in advance and onsite. For the poster part of Speed sessions, each presenter will be provided with a 42" display screen and a laptop.

## Existing Authors

[Edit Authors](#)
**Options****Name**

Agarwala, Neha (agneha1@umbc.edu) - University of Maryland - Baltimore County ( Presenting )

Roy, Anindya (anindya@umbc.edu) - University of Maryland - Baltimore County

**To provide the best cohesive program possible, all session participants need to commit to their involvement by registering for JSM. The registration fee is nonrefundable.**

---

This will submit the abstract and make entries into the database. Please review all of your entries before submitting.

Submit Abstract



### American Statistical Association

732 North Washington Street  
Alexandria, VA 22314  
(703) 684-1221  
[meetings@amstat.org](mailto:meetings@amstat.org)

Copyright © American Statistical Association

[Meetings, Receptions, and Other JSM Event Submissions](#)  
[Press/Media](#) | [Privacy Policy](#) | [Conduct Policy](#) | [Previous JSMs](#)