Readme.doc: Read me file for CI\_of\_Interaction\_Index.zip

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## Objective:

Describe the softwares provided by the above authors in the manuscript "Confidence Interval of Interaction Index for Assessing Multiple Drug Interaction" (submitted).

- **1.** *Simulation1\_3\_drugs.ssc:* Simulation for three-drug combinations described as Scenario 1 in Section 4 in the above mentioned manuscript.
- 2. CI\_II.ssc:
  - (1) *CI.known.effect:* Estimate interaction index and its confidence interval based on delta method at each observed combination dose level, which is described in Section 2.
  - (2) *CI.delta:* Estimate the curve of interaction indices versus effects and its pointwise confidence bound based on delta method for combination doses at a fixed ray, which is described in Section 3.
  - (3) *CI.simulation*: Estimate the curve of interaction indices versus effects and its pointwise confidence bound based on Monte Carlo simulations proposed by Belen'kii and Schinazi (1994).
  - (4) *median.effect plots:* Median effect plots for each of the two drugs.
- 3. *Simulation2\_fixed\_ratio.ssc:* Simulations for assessing drug interactions for combination doses at a fixed ray by using different methods. The required functions can be found in the file *CI\_II.ssc*.
- 4. *Case\_studies\_CI\_II.ssc:* Two case studies presented in Section 4 in the above mentioned manuscript. The required functions can be found in the file *CI\_II.ssc.*