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# Model Selection for Clustering of Pharmacokinetic Responses

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**Highlights**

- We improve an Expectation-Maximisation method to stratify drug responses of patients. With this we aim to provide different drug doses for each stratum and so, maximise therapy efficacy while minimising its toxicity.
- Two novel model selection criteria, based on the Minimum Description Length and the Normalized Maximum Likelihood, were derived and developed for clustering pharmacokinetic (PK) responses.
- The method was evaluated over synthetic and real data and showed the ability to unveil the correct number of clusters underlying the mixture of PK curves.
- A cost-efficient parallel implementation in Java is publicly and freely available in a GitHub repository, along with a user manual and data used in the experiments.

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