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## Review of Predicting *in vitro* drug sensitivity using Random Forests

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Abstract—This paper provides a review of Riddick et al. [1] and their work on predicting drug sensitivity using random forests. The purpose of this paper is to identify the main issues associated with drug sensitivity prediction, discuss the methods used by the authors, and to propose and alternative machine learning approach appropriate for the problem at hand. Finally, justification of the alternate method and future directions of investigation are proposed.

## I. Introduction References

[1] Gregory Riddick, Hua Song, Susie Ahn, Jennifer Walling, Diego Borges-Rivera, Wei Zhang, and Howard A Fine. Predicting in vitro drug sensitivity using random forests. *Bioinformatics*, 27(2):220–224, 2011.