

## Making Priors a Priority

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Matt gave this presentation at the [ACS](#) Spring meeting 2011 in Anaheim.

### Abstract

When we build a predictive model of a drug property we rigorously assess its predictive accuracy, but we are rarely able to address the most important question, “How useful will the model be in making a decision in a practical context?” To answer this requires an understanding of the prior probability distribution and hence prevalence of negative outcomes due to the property. We will illustrate the importance of the prior to assess the utility of a model to select or eliminate compounds for further investigation. A better understanding of the prior probabilities of adverse events due to key factors will improve our ability to make good decisions in drug discovery, finding higher quality molecules more efficiently. As the data necessary to estimate these priors does not include proprietary compound structures, this presents an opportunity for collaboration to improve the basis for good decision-making for all.

These are the slides that Matt presented.

A copy of Matt's slides is available as a [PDF](#) file.