

#### 4. CONCLUSION

This chapter has been written while pharmaceutical profiling of NCE is in its infancy and when there are still debates about the value of this strategy. Published materials on the process are relatively scarce and the proof-of-principle for pharmaceutical profiling is still being tested. However, the most current research reports on this subject include Kerns and Di (119) and Eddershaw et al. (120). Several generalizations may be made at this time. First, many of the procedures described here are not necessarily applicable across diverse molecular structures or therapeutic areas (e.g., permeability). Instead, these assays appear to function most reliably when homologous series of NCE are tested and compared. Many of the models mentioned here have been validated with small sets of existing medicines and the generalization of these results to new medicinal compounds arising from combinatorial synthesis may not be a valid procedure. Finally, all of these procedures require ongoing validation with the inclusion of a set of suitable reference compounds each time an experiment is conducted.

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