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Cover Story

The keynote review in this issue of *Drug Discovery Today*, by Giulio Vistoli, Alessandro Pedretti and Bernard Testa, discusses how the concept of drug-likeness helps in the optimization of pharmaceutical and pharmacokinetic properties of drug candidates. The article reviews current approaches and discusses their shortcomings. The authors demonstrate that one of the major drawbacks of these approaches is the static nature of the structural and physical descriptors used when trying to model the highly flexible and kinetic nature of small organic drug molecules.

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