

FIGURE 1.5 Lipitor® (Atorvastatin), Prozac® (Fluoxetine), and Singular® (Montelukast) are some of the most successful drugs in the history of the drug industry. Each has produced multibillion dollar franchises, providing their owners with ample resources for the pursuit of additional novel therapeutic entities.

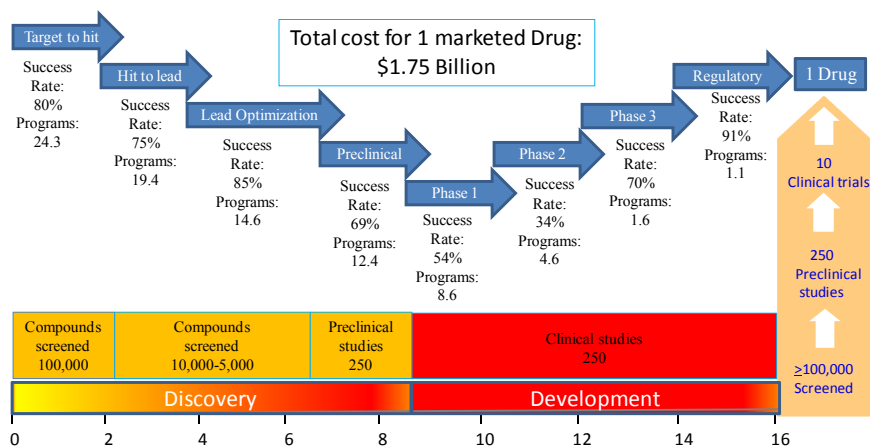


FIGURE 1.6 An analysis of the various stages of the drug discovery and development process provides an indication of the success rate of each stage of the process. Based on these estimates, only 1 out of every 24 early stage programs (Target to hit stage) will produce a marketed therapy. The cost to develop a single new drug must also account for the costs associated with all of the programs that are unsuccessful. The total cost is estimated to be \$1.75billion.

single new drug costs over \$1.75billion to discover and develop.³⁷ As a measure of comparison, the same amount of money could be used to buy 17 Boeing 737 jet aircrafts (based on 2012 prices on Boeing’s Web site), purchase approximately 7000 homes (assuming \$250,000 per home), 70,000