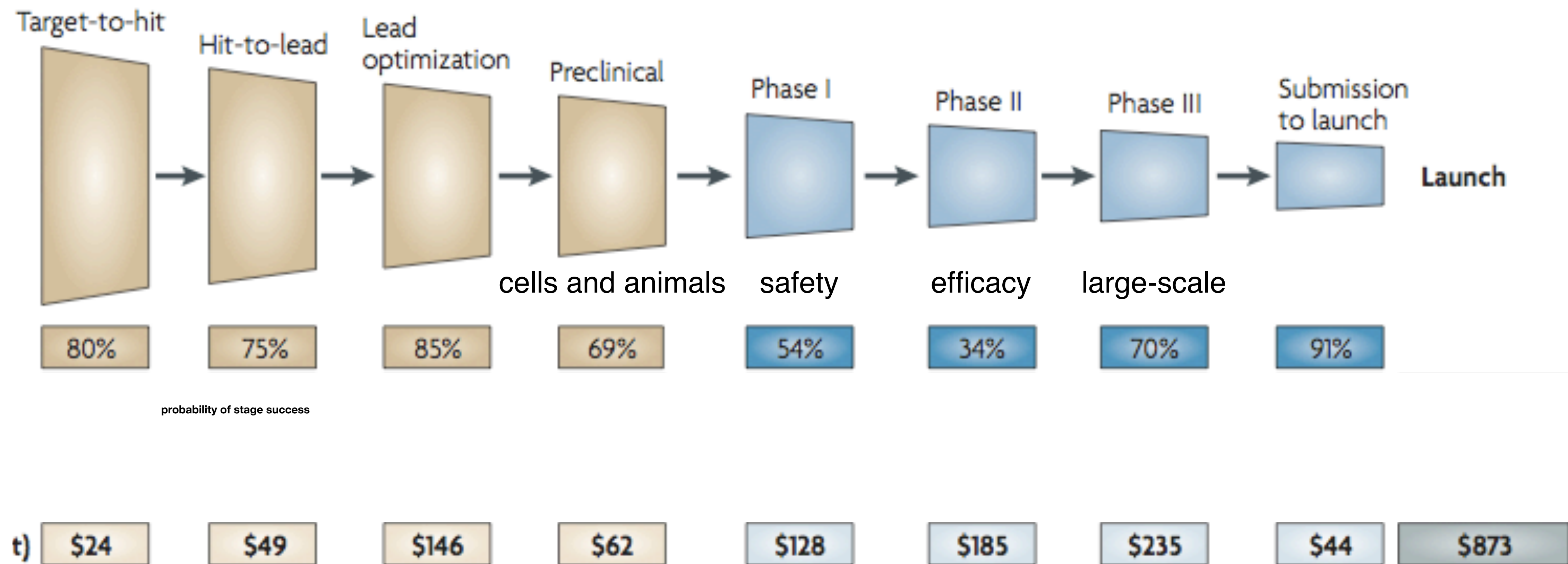


# Week 1 Module 1

## Principles of Structure-Based Drug Design

- This module will consist of a mini-lecture, an interactive structural visualization exercise, and a review
- At the end of this module, you should be able to, at least at a very basic level, answer the following questions:
  - Why is there interest in structure-based drug design?
  - What are the physiological functions of the biological macromolecules targeted by drugs?
  - What are biological macromolecules made of?
  - What does it mean for a biological macromolecule to be folded?
  - How do most drugs interact with their targets?

# Drug discovery is expensive and often fails



Chodera et al. Curr. Op. Struct. Bio. 2011, 21 (2), 150–160.  
for updated numbers see

Pammolli et al. bioRxiv 2019, 670471. <https://doi.org/10.1101/670471>.