

Drug Design, Testing, Manufacturing, & Marketing

I. Discovery & Creation

- A. Ancient sources
- B. Environmental
- C. Alteration
 - 1. isomer
- D. New chem cpd.
 - 1. molecular pharmacology
 - 2. Computer 3D
- E. Genetic manipulation
 - 1. recombinant DNA technology
 - 2. pharmacogenetics

II. Drug names

- A. Chemical name
- B. Generic drug name
- C. Trade name

III. Testing

- A. Background
- B. Animal studies
 - 1. half life
 - 2. median effective dose
 - 3. median toxicity dose
- C. Human trials = Clinical drug trials
 - a. Investigational New Drug
 - 1. Phase I
 - 2. Phase II
 - 3. Phase III
 - a. placebo
- D. New Drug Application

IV. Manufacturing

- A. bioavailability
 - 1. inert ingredients
- B. Packaging
 - 1. National Drug Code

V. Marketing

VI. Patents