



Drug Discovery of Biologics

45-MINUTE ONLINE COURSE | LEVEL 1

OVERVIEW

Drug Discovery of Biologics explains the steps involved in discovering new biologics, with a special focus on therapeutic antibodies. Learn the criteria used by researchers to for early target screening, select, validation, optimization, and determining when a drug target should be transitioned from discovery to development. Bonus content includes information on antibody diversity, affinity maturation, and key CMC challenges and how to overcome them.

Five Takeaways:

1. List the steps of discovery and lead optimization for biologics.
2. Explain target ID and selection considerations.
3. Explain how affinity maturation is tied to pharmaceutical liabilities.
4. Describe antibody diversity, IgG subtypes, and alternative formats.
5. Discuss the typical criteria for advancement of development candidates.

AGENDA

- **Overview** lists the steps of the drug discovery, development and commercialization process, including activities, costs and timing generally associated with each stage.
- **Early Selection, Target ID, & IgG Subtypes** compares and contrasts properties of both small and large molecule drugs. This section also reviews antibody production, selection, and humanization. It ends with target identification processes and antibody screening considerations.
- **Affinity Maturation & Pharmaceutical Liabilities** delves into the importance of affinity maturation and its key CMC liabilities. This section concludes with an explanation on how to overcome these CMC challenges.
- **Antibody Diversity & Alternative Formats** explains antibody therapeutic classes, includes immune checkpoint inhibitors, and explains why these medications are important.
- **Discovery To Development & Transition Criteria** lists the typical criteria for advancement of potential biologic development candidates.