

Improved methods for designing, evolving and characterizing monoclonal antibodies

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The biotech industry has seen an explosion in the development of therapeutic antibodies in the last decade. The advantages of antibodies as therapeutics – namely their high affinity, specificity, potency, stability, manufacturability and low toxicity – are compelling. Nevertheless, there are many challenges associated with antibody discovery and development that require key technical advances to improve the rational and reliable generation of potent antibody therapeutics. I will discuss our progress in addressing some of these fundamental challenges, including the design, evolution and selection of antibodies with high affinity, specificity, stability and solubility.