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Integrating NGS with CRISPR for Drug Discovery

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Abstract

synergy in the feld of drug discovery, of ering unprecedented opportunities for accelerating the development of novel therapeutics. NGS provides comprehensive genomic data, enabling the identification of disease-associated

 $fail\ or\ succeed\ in\ speci\ c\ contexts. \quad is\ can\ lead\ to\ more\ informed\ drug\ development\ strategies\ and\ reduce\ the\ risk\ of\ late-stage\ failures.$

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By streamlining the identi cation and validation of drug targets, and by elucidating drug mechanisms, the integration of NGS and CRISPR can signi cantly accelerate the preclinical development phase. Faster validation of targets and mechanisms enables quicker progression to clinical trials [9], potentially bringing new treatments to patients more rapidly.

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While the combination of NGS and CRISPR holds immense promise, it also raises ethical and technical considerations. e