



Chapter

Use of Artificial Intelligence and Robotics: Making the Drug Development Process Easier

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ABSTRACT

Robotics is a field of engineering that deals with conception, design, manufacture, and robot operation. Robotics aims to develop intelligent devices that can aid humans in several ways. Medical robots help in surgery, ease hospital logistics, and allow clinical staff to focus more on patients. Robotics is rapidly being used in the pharmaceutical sector to automate specific operations in drug development. This may include drug screening, manufacturing, and anticounterfeiting tasks. It can help to speed up drug discovery by combining Machine Learning and Artificial Intelligence. The ability to investigate and discover new medication candidates has substantially improved as a result of these technical applications of modern disruptive technologies. Automation 146technology may increase the speed of the production process while also making it safer and more efficient, all while lowering the cost of labor. This chapter deliberates about Artificial Intelligence and robotics role in formulation discovery and development. It also describes the various tools and techniques that help in the discovery and development of drugs along with the future perspective.