# The impact of AI and recent developments in the pharmaceutical R&D steps

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### **Abstract**

During recent months & years, our daily reality was "stormed" by the presence of AI (artificial intelligence) models and applications, with a massive impact on our working and living routine. Modern medicine and the pharmaceutical system must be included in AI's essential impact and rising importance.

Today, many healthcare professionals consider the "AI role" as one of the most critical factors that can change our way of developing modern drugs with the highest level & standard of quality, safety, and efficacity.

Many ongoing examples perfectly describe the importance of AI applications in procedures, the methodology of pharmaceutical research, and final development steps (R & D), with constant and continuous updates. We are facing new unique features and characteristics, but at the same time, there are many new challenges, including scientific, clinical, economic, ethical, regulatory, and political ones.

This presentation would like to focus on a detailed overview of recent developments related to Al applications (ChatGPT, et others) and their specific aspects, impacting R&D phases, pharmaceutical drug development, and pharmacist-patient everyday interactions. Discussions will include critical elements such as clinical trials, regulatory & legal aspects, pharmacovigilance, and special attention to our Albanian reality, its status, with local characteristics, problems, findings, and possible solutions.

#### References

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## **Figures**



Figure 1: ChatGPT logo

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