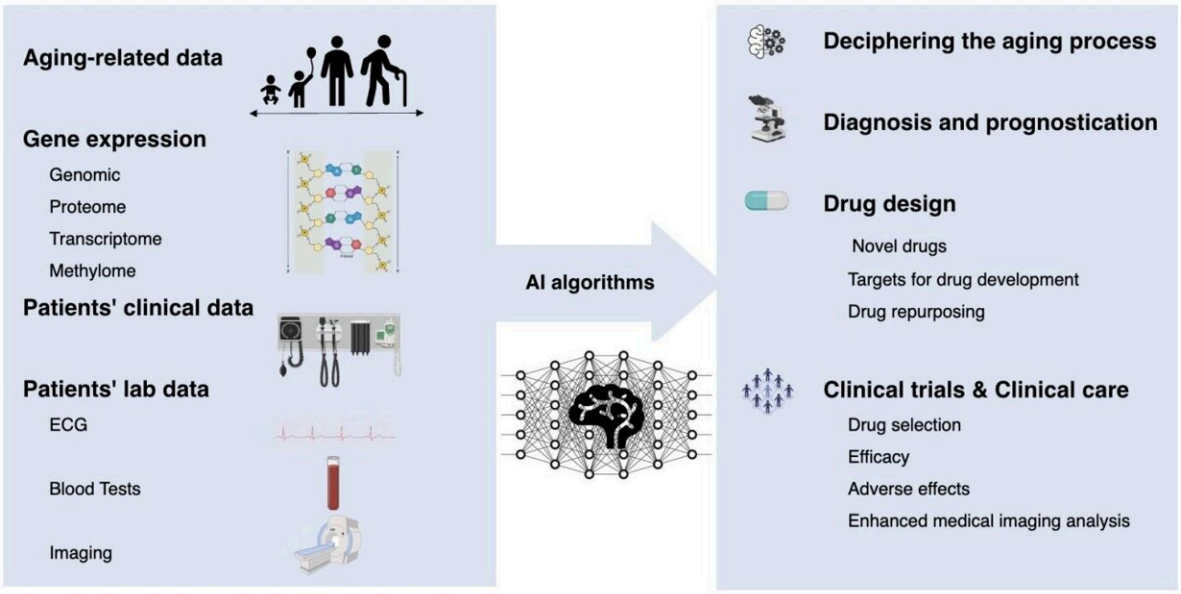
Artificial intelligence for aging research in cancer drug development

December 7 2023



Artificial intelligence for aging research in cancer drug development. Credit: 2023 Shirini et al.

A new editorial paper was published in *Aging*, entitled, "Artificial intelligence for aging research in cancer drug development."

Aging is a multifactorial and complex process associated with various diseases, including cancer. In light of the growing aging population, the need for effective cancer treatments is more significant than ever.

Artificial intelligence (AI) plays an increasingly crucial role in aging research and cancer drug development in revealing the critical drivers of outcomes among a wide range of intrinsic and extrinsic factors.

In recent years, the use of AI in aging research has been rapidly increasing, suggesting that AI-based analysis of health care data may enhance clinical care.

In this new editorial, researchers Dorsa Shirini, Lawrence H. Schwartz, and Laurent Dercle from Columbia University Medical Center provide an overview of the potential benefits as well as the technical caveats of adopting AI to help researchers identify new targets, develop more effective therapies, and accelerate the discovery process of drug development in the context of aging research.

"In this review, we discuss how we could leverage AI technologies to consider a patient's unique aging profile and tailor cancer treatment more precisely to the individual. This approach would help optimize treatment outcomes, minimize treatment-related risks, and improve the overall quality of care for patients, considering the complex interplay between aging and cancer treatment response."

More information: Dorsa Shirini et al, Artificial intelligence for aging research in cancer drug development, *Aging* (2023). DOI: 10.18632/aging.204914

Provided by Impact Journals LLC

Citation: Artificial intelligence for aging research in cancer drug development (2023, December 7) retrieved 10 May 2024 from https://medicalxpress.com/news/2023-12-artificial-intelligence-aging-cancer-drug.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.