

Editorial: AI is a transformative tool in precision oncology

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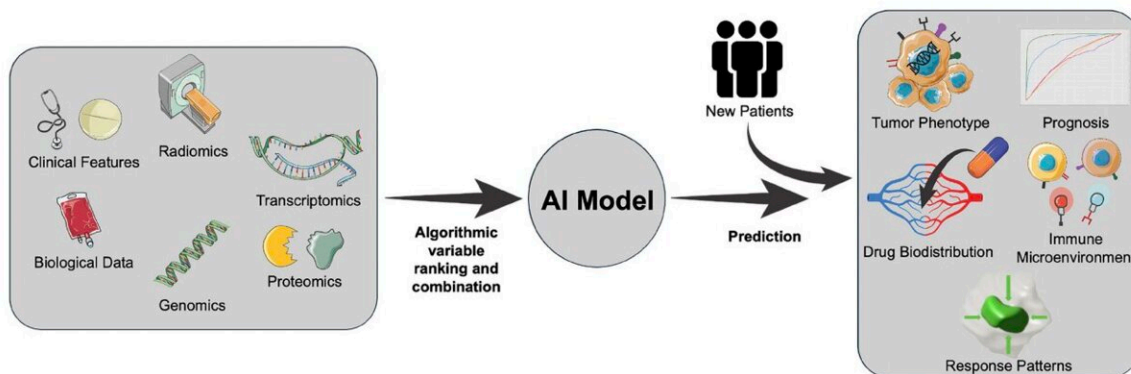


Figure 1: Overview of AI model development for use in oncology patients.

Overview of AI model development for use in oncology patients. Credit: McGale et al.

A new editorial was published in *Oncotarget*, titled "[Artificial intelligence: A transformative tool in precision oncology.](#)"

Artificial intelligence (AI) is revolutionizing society and [health care](#), opening new possibilities for precision medicine. In oncology, immunotherapy (IO) has similarly transformed [cancer treatment](#) with novel therapeutic mechanisms, but it has also introduced atypical response patterns that challenge traditional evaluation methods.

In this [editorial](#), researchers Jeremy McGale, Matthew J. Liao, Egesta Lopci, Aurélien Marabelle, and Laurent Dercle from the Department of Radiology at Columbia University in New York, explore AI's role in addressing these challenges. They focus on the development of new biomarkers for precise disease characterization, particularly those using imaging for the early response assessment of cancer patients treated with IO.

Additionally, the researchers highlight a comprehensive review that applied AI/radiomics to cross-sectional imaging (PET, CT, MRI) showcasing the current landscape in IO treatment. They also determined that of 87 relevant studies, most utilized algorithms to predict treatment response or prognosticate survival at predetermined time points.

"In conclusion, although AI/Radiomics in IO is a rapidly advancing field, there remains significant room for improvement," said the researchers.

More information: Jeremy McGale et al, Artificial intelligence: A transformative tool in precision oncology, *Oncotarget* (2024). [DOI: 10.18632/oncotarget.28639](#)

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