# Article information:

Artificial intelligence for multimodal data integration in oncology: Cancer Cell
[https://www.cell.com/cancer-cell/fulltext/S1535-6108(22)00441-X](https://www.cell.com/cancer-cell/fulltext/S1535-6108%2822%2900441-X)

# Article summary:

1. Artificial intelligence (AI) models can be used to integrate different data modalities in oncology, providing opportunities to increase accuracy of diagnostic and prognostic models.

2. AI models can discover novel patterns within and across modalities suitable for explaining differences in patient outcomes or treatment resistance.

3. Challenges in clinical adoption of AI models are discussed, as well as emerging solutions for AI interpretability and multimodal data fusion and association discovery.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article provides a comprehensive overview of the potential applications of artificial intelligence (AI) models in oncology, particularly for multimodal data integration. The authors discuss the advantages of using AI models to identify predictive features within and across modalities, as well as strategies for AI interpretability and directions for AI-driven exploration through multimodal data interconnections. The article is written from an objective perspective, presenting both the potential benefits and challenges associated with the use of AI in oncology. The authors provide evidence to support their claims, such as examples of diagnostic markers (e.g., prostate-specific antigen values), predictive markers (e.g., microsatellite instability), and prognostic markers (e.g., tumor grade). Additionally, they discuss potential risks associated with the use of AI models, such as bias due to incomplete or inaccurate data sets or lack of interpretability due to complex algorithms. The article does not appear to be biased towards any particular point of view or agenda; rather it presents a balanced overview of the current state-of-the-art in this field while also highlighting areas that require further research and development.

# Topics for further research:

* AI-driven oncology
* AI-based predictive biomarkers
* AI-driven data integration
* AI interpretability in oncology
* AI-driven exploration of multimodal data
* AI-related risks in oncology

# Report location:

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