# Addressing cancer challenges with AI: Orakl Oncology's innovative approach



The increasing incidence of cancer, particularly among younger adults, poses significant challenges in the field of medical research and drug development. Notably, a high percentage of new drug compounds fail to advance through clinical trials, raising questions about the efficacy of current trial designs. French entrepreneur Fanny Jaulin, co-founder of Orakl Oncology, highlighted the complexity of this issue, indicating that the failure of a drug in trials doesn't necessarily reflect its potential effectiveness. "Just because a drug isn’t successful in clinical trials doesn’t mean it’s not a good drug," Jaulin stated in an interview with TechCrunch.

Founded in 2023 as a spinoff from the Gustave Roussy Institute of Oncology, Orakl Oncology aims to address these challenges by leveraging artificial intelligence (AI) in clinical trial methodologies. Jaulin noted that while numerous companies are now integrating AI into drug discovery, Orakl's unique approach lies in its dual focus on both data and biology. This hybrid model differentiates Orakl from competitors that primarily concentrate on one aspect or the other. Jaulin draws a parallel between her company and Tempus, a health technology firm that went public earlier this year, underscoring the complementarity of data and biological insights in tackling the complexities of cancer.

The innovative process pioneered by Orakl involves creating avatars that merge the characteristics of real patients with biological tissue. This has led to the use of organoids—miniaturized and simplified versions of human organs—for trial purposes. The data component of Orakl's strategy encompasses approximately 40 variables per patient, enhancing the understanding of the unique nature of each tumour. However, Jaulin acknowledged that Orakl’s patient data corpus is still comparatively smaller than those of its larger rivals, focusing initially on colorectal and pancreatic cancers.

As part of its long-term strategy, Orakl plans to roll out two main products: O-Predict and O-Validate. O-Predict is designed to assist drug developers in forecasting patient responses to drug candidates, while O-Validate reverses the process, allowing AI and data-led biotech companies to assess drug efficacy based on specific patient profiles. This strategic differentiation aims to provide substantial utility across various segments of the pharmaceutical industry.

To support this commercialization strategy, Orakl recently concluded a seed funding round, supplementing the €3 million pre-seed round obtained earlier in 2023. The latest round, spearheaded by the European VC fund Singular, comes alongside non-dilutive funding from Bpifrance, including accolades like the Grand Prix i-Lab. With these investments, Orakl's total funding has approached €15 million.

While a significant portion of the funding will be allocated to building a commercial team to secure contracts, Jaulin emphasised that her motivation for venturing into entrepreneurship is fundamentally rooted in addressing the pressing needs of cancer treatment. With cancer increasingly viewed as a chronic condition and the available therapeutic options considered "undersized for what’s at stake," Jaulin’s overarching aim is to enhance the precision medicine discovery process, thereby ensuring that more effective treatments reach patients in need.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

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* <https://www.cancer.gov/types/aya> - Provides detailed statistics and types of cancers common among adolescents and young adults, including survival rates and treatment considerations.
* <https://www.yalemedicine.org/news/early-onset-cancer-in-younger-people-on-the-rise> - Discusses the rise in early-onset cancers among younger adults, including the types of cancers and the challenges in diagnosis and treatment.
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* <https://techcrunch.com/2024/12/03/orakl-oncology-combines-data-and-biology-to-bring-new-drugs-to-cancer-patients/> - Please view link - unable to able to access data