

ABSTRACT:

Company name: CURESPONSE * Website: www.curesponse.com *

VP R&D name: Vered Bar*

CATEGORY: Biotech*

- Personalized Medicine; Navigating Strategic Pathways – Pharma or Payers or Both

Abstract

Optimizing Anticancer Treatment Management with a Functional Patient Derived Explants (PDE) Assay

Precision cancer therapy holds great promise for transforming patient outcomes through targeted disease management. Although genomic analysis has become a cornerstone of personalized cancer medicine, its impact on extending survival compared to traditional drug therapies has been limited. Furthermore, while identifying genomic mutations, these analyses often propose multiple therapeutic options without clarifying the most effective treatment strategy. To enhance disease management in cancer care, we have developed the cResponse® platform. This innovative platform combines genomic and functional drug sensitivity testing to optimize treatment plans specifically for each patient.

The cResponse® platform is capable of cultivating Personal Derived Explants (PDE) to accurately predict human responses to a wide spectrum of cancer therapies and oncology drug candidates, achieving an unprecedented 90% accuracy rate. This groundbreaking technology demonstrates remarkable versatility across various cancer types and treatment modalities.

Addressing a critical challenge in cancer treatment, where many drugs yield moderate to low response rates (20%-50%), necessitating a trial-and-error approach in matching drugs with patients, CURESPONSE offers a unique solution. By assessing treatment effect against a patient's tissue, the platform enables personalized matching with the most effective drug from the outset. This personalized approach minimizes unnecessary side effects, reduces treatment delays, and optimizes healthcare resource allocation.

The cResponse test demonstrated high predictive accuracy and substantial clinical actionability in real-world oncology practice. It enabled oncologists to identify more effective therapies in nearly 60% of cases where the physician's initial choice was predicted to be ineffective. In patients with documented outcomes, test-guided treatment changes led to improved clinical responses in the majority of cases. These findings support the integration of cResponse as a functional decision-support tool that complements genomic testing, enhances personalized treatment planning, and has the potential to improve patient outcomes and healthcare resource utilization.