

Reviving shelved compounds to augment pipeline

Why taking a fresh look at shelved compounds, a necessity of the times?

With 2000+ compounds dropping off the development pipeline annually, over \$ 20 billion worth of research investment of the Innovator companies has accumulated. Discovering new putative targets for these shelved compounds to bring them back into development pipeline for different indication is therefore, a smart decision both from scientific and business perspective. The impact on the Return on R&D Investment of even one ReViva success is significant for the Innovator company.

What is ReViva?

Under a ReViva engagement, VLife employs its core technologies, super computing infrastructure, expertise in scientific research and existing information to discover new putative targets for the customer's shelved compound. A successful ReViva engagement would move such a shelved compound back into development pipeline at only incremental cost. Such revived compound may have shorter development effort as significant information may already be generated about its behavior prior to it being shelved. Given the high Benefit to Input and Benefit to Effort ratio, ReViva is just a smart thing to do.

What is ReViva approach?

The molecule structures of shelved compounds delivered to VLife under confidentiality agreement are explored for new putative targets using proprietary VLifeRVHTS technology platform and VLifeRBS Decision Support system. This study involves exploration of each shelved compound over a 1000+ putative targets. The results for the compound are compared with the outcome for other known ligands for each target to establish its relative merit. In-depth analysis of this extensive study leads to identification of targets through which the shelved molecules may impart a potential therapeutic effect. The molecule is then studied on each of the shortlisted targets through Target binding study (where the bio-assays are available and the compound is provided by the customer). This basic delivery from ReViva can be extended at the option of the customer to include API – Putative Target binding study through crystallography for higher assurance and in-vivo studies etc. VLife employs its Project Management expertise to conduct experimental validations through its partners who are experts in their respective fields.

Key benefits of ReViva:

1. Potential to augment development pipeline at shorter time and shorter development timeframe.
2. Successful engagements help salvage sunk cost in shelved compounds to improve RoI.

