Discovering the right partnership for novel drugs!

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The surge in the global demand for outsourcing services or bioservices for drug discovery is a major factor spurring the growth of the global drug discovery market

With a worth of around $113 billion by 2032, the global drug discovery market is primarily driven by the rising prevalence of various diseases such as cardiovascular diseases, diabetes, cancer, respiratory diseases, and neurological disorders, which is significantly fuelling the demand for new and innovative drugs.

Although North America is the largest market for drug discovery, Asia-Pacific (APAC) region is close behind, emerging as the fastest-growing market in this space. According to a recent report by GlobalData, five drugs set for approval in 2023 are projected to attain blockbuster or near-blockbuster status by 2028, with US companies in dominance, followed by Japan.

The US market undoubtedly holds a commanding position in the drug discovery space. Still, the entire credit does not go to Big pharma companies, as they are now on the hunt for contract research organisations (CROs) or contract development and manufacturing organisations (CDMOs) who can give more intellectual inputs rather than traditional services. The surge in the global demand for outsourcing services or bioservices for drug discovery is another major factor spurring the growth of the global drug discovery market.

Amongst numerous players in the global CRDMO space, many Indian companies have now become a preferred choice for big pharma firms to streamline their drug discovery process. Companies such as Aragen Life Sciences, Syngene, Piramal Pharma Solutions, Anthem Biosciences, Aurigene etc., are some of the leading names that are playing a critical role in the process of new drug development globally.

Not just the big end-to-end service providers but small CROs with specific capabilities are also in great demand from those pharma companies looking for expertise in niche therapeutic areas. Such partnerships are also being sought after by drug developers for early-stage development as well as for specialised products.

And the role of technology is going hand-in-hand with these developments to expedite the drug invention process. For example, Hyderabad-based Aragen Life Sciences has recently partnered with FAR Biotech, a US-based, artificial intelligence (AI)-driven, computational drug discovery company, to advance preclinical programmes in neurodegeneration.

On the other hand, Bengaluru-based Syngene has developed Artificial Intelligence (AI) solutions that enable informed decisions in drug discovery and development through learning from historical data and data generated as the project progresses from target identification to final candidate selection.

Likewise, there are other players in the Indian life sciences market, such as New Delhi-based startup Molecule AI which is developing an innovative AI-based platform for drug discovery with a strong focus on data engineering and generative AI models. Such players are emerging as partners for both the bioservices and the pharma sector, offering a perfect model of collaboration to support not only 'Make in India' but 'Invent in India' initiatives! Molecule AI's platform has generated considerable interest in potential partnerships from prominent players in the pharma/biopharma space.

Although the smaller players in the bioservices sector cannot provide an entirely strategic outsourcing solution to the big pharma players, these entrepreneurial ventures have the benefit of less bureaucracy and greater speed. And they possess a solid depth of expertise, too, which makes the association with smaller players very valuable, particularly for many pharma and biotech companies.