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Breast cancer: Only pharma pipeline with 1k drugs in development

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The breast cancer treatment pipeline's exceptional levels of activity and innovation, with a staggering 1,050 drugs in active development across all stages and 347 first-in-class programs, may significantly alter the clinical and commercial landscape of the disease market over the next decade, according to business intelligence provider GBI Research.

The company's latest report states that factors driving such innovation and potential for breakthrough drugs include a very large and growing patient pool, a well-established market with multiple unmet needs, and a robust understanding of the disease pathophysiology, facilitating the development of novel compounds that may fill such needs.

Mr Dominic Trewartha, Managing Analyst for GBI Research, explains: "Breast cancer has the largest product pipeline in the pharmaceutical industry, and its significant patient population and successful commercialization of drugs such as Herceptin have attracted a great deal of R&D investment.

"The sheer number of first-in-class products in development reflects a deepening scientific understanding of the underlying pathophysiology of breast cancer and a growing list of molecules that have been implicated in the initiation and progression of the disease.

"Although the development of products for novel molecular targets is risky, as their role in disease pathophysiology is often poorly characterized, the breast cancer pipeline also has the potential to yield therapies that outperform existing products and mechanisms of action."

While the cure rate for early-stage breast cancer is currently high, and the safety and tolerability profiles of existing monoclonal Antibodies (mAbs) are strong, more advanced forms of the disease, such as metastatic cancer, are not so

treatable.

Mr Trewartha explains: "Due to the highly complex and polygenic nature of breast cancer, it is unlikely that the inhibition of a single target will be sufficient to substantially improve the prognosis in the clinic.

"However, it is far more likely that the concurrent use of multiple targeted therapies, along with other available modes of therapy, will be able to do this, which will positively change the clinical landscape."