Fc Protein and Glycoengineered Antibodies Market (2nd Edition), 2016 - 2026

Description: The “Fc Protein and Glycoengineered Antibodies Market (2nd Edition), 2016-2026” report was commissioned to examine the various aspects of engineering an antibody to develop novel drugs for addressing several oncology and non-oncological disorders. This market has steadily evolved over the last few years.

The report examines several elements of developing these next generation antibodies, such as the technologies used for their production, site of engineering in an antibody and a robust landscape in the form of clinical / preclinical pipeline. For the purposes of this report, engineered antibodies are defined as antibodies that have been modified in their Fc region. The two types of modification considered include:

- Fc Glycoengineering (referred to as ‘Glycoengineering’ in the report)
- Fc Protein engineering

As pharmaceutical companies continue to initiate and expand their research programs in this area, one of the key objectives outlined for this report was to understand the future potential of the market. This was done by analyzing:

- The Fc protein and glycoengineered antibody pipeline in terms of phase of development, type of therapy (monotherapy or combination therapy) and target indications.
- Technologies established by various players for development of engineered antibody therapeutics including the key mechanism involved, licencing activity, advantages and the molecules being developed using the technology.
- Partnerships that have taken place in the recent past covering technology licensing, product development and commercialization agreements, clinical trial collaborations, product license agreements, acquisitions and other relevant agreements.
- Inherent threats to growth in the short and long term.
- The likely adoption of the Fc protein and glycoengineered antibodies by understanding the competition posed by the current treatment plans and the expected growth rate over the coming few years.

The study provides a detailed market forecast and opportunity analysis for the short-mid term (2016-2021) and long term (2021-2026). The research, analysis and insights presented in this report include potential sales of the approved drugs and the ones in late stages of development (phase III). To add robustness to our model, we have provided three scenarios for our market forecast; these include the conservative, base and optimistic scenarios.

Our opinions and insights, presented in this study were influenced by several discussions we conducted with experts in this area. All actual figures have been sourced and analyzed from publicly available information forums and primary research discussions. Financial figures mentioned in this report are in USD, unless otherwise specified.

Example Highlights

- Overall, we have identified nearly 70 products in marketed, clinical and preclinical stages of development; nearly 60% of the pipeline accounts for molecules in clinical development.
- The market is characterized by the presence of both small and big pharma players. Notable examples of small to mid-sized firms include (in alphabetical order) arGEN-X, Celldex Therapeutics, Clovis Oncology, Five Prime Therapeutics, Genmab, Immune Design, MorphoSys, TG Therapeutics and Zymeworks. The larger companies in the domain include Amgen, AstraZeneca/MedImmune, Boehringer Ingelheim, Roche/Genentech, Kyowa Hakko Kirin and Merck.
- Several firms have also developed their proprietary technologies for Fc optimization and glycoengineering monoclonal antibodies. Examples include (in alphabetical order) BioWa with its POTELiGENT® technology, Glycart with its GlycoMab Technology, Glycotope with its GlycoExpress™, ProBioGen with its GlymaxX® technology and Xencor with its XmAb Fc technology.
- Encouraging clinical results and prospects in multiple disease areas have yielded an intense framework of collaborative and licensing activity in this field. In fact, between 2005 and February 2016, there have been over 80 collaborations in this space.
- With two approved drugs, the glycoengineered antibodies are likely to emerge as the forerunner in the
short term (84% of the market share by 2021). Subsequently, the Fc protein engineered antibodies are likely to garner a higher proportion (55% by 2026); specifically, Atezolizumab (by Roche) and Durvalumab (by AstraZeneca/MedImmune) are expected to be blockbusters.

- The overall market is anticipated to grow aggressively at a healthy annual growth rate of over 40% between 2016 and 2026. In the longer term, we expect the market to continue to rise steadily with high adoption rates of marketed drugs and approval of new drugs and indications.

Research Methodology

Most of the data presented in this report has been gathered via secondary and primary research. For all our projects, we conduct interviews with experts in the area (academia, industry, medical practice and other associations) to solicit their opinions on emerging trends in the market. This is primarily useful for us to draw out our own opinion on how the market will evolve across different regions and technology segments. Where possible, the available data has been checked for accuracy from multiple sources of information.

The secondary sources of information include

- Annual reports
- Investor presentations
- SEC filings
- Industry databases
- News releases from company websites
- Government policy documents
- Industry analysts' views

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