Peptide Therapeutics in Metabolic Disorders, 2016 - 2025

Description: Peptide therapeutics, due to their numerous advantages such as high selectivity, stability, efficacy, safety, bioavailability and tolerability offer a number of benefits over other therapeutic classes. In addition, peptides (when compared to proteins) are much smaller in size and can be easily synthesized, optimized and evaluated as viable therapeutic solutions for a number of diseases.

These highly favourable and intrinsic characteristics of peptides have caused an evident shift in the interest of pharmaceutical / life science companies towards developing peptide based drugs during the last decade. The number of marketing approvals granted to such molecules has increased recently. Researchers have continued to develop novel strategies to synthesize customized peptides to elicit desired biological responses.

Metabolic disorders have gained significant attention for the development of peptide based therapies. Some of the marketed drugs in this space, including BYETTA® / BYDUREON® and Victoza®, have already emerged as blockbusters with over USD 1 billion annual sales. It is worth highlighting that the evolution of peptides into potent therapeutic solutions has been facilitated by a variety of novel technologies that have been developed by drug / technology developers.

Technologies designed to enhance the stability, increase the bioavailability and facilitate the effective delivery of peptides have acted as key enablers to the market's growth. Specifically, technologies that offer alternative routes of administration (oral / intranasal / transdermal) and sustained drug delivery over a longer time duration are expected to significantly improve patient compliance. In fact, companies have actively entered into collaboration with other stakeholders to either acquire or develop peptide therapies. There have also been a growing number of partnerships related to technology licensing.

The “Peptide Therapeutics in Metabolic Disorders, 2016-2025” report provides a comprehensive analysis of the current market landscape and future outlook of peptide therapeutics targeting metabolic disorders. Novartis’ Miacalcin, a calcitonin analogue, was the first peptide therapeutic approved for the treatment of post-menopausal osteoporosis in 1986. Following Miacalcin, several more peptide based therapies targeting various metabolic diseases have been approved so far. The overall pipeline is rich and continues to grow at a healthy pace. These therapies hold the potential to capture a significant share of the pharmaceutical market in the foreseen future.

A majority of peptide therapeutics that we identified during our research are being developed for the treatment of diabetes, obesity, osteoporosis and acromegaly. In addition, there are several peptide therapeutics targeting other metabolic disorders such as Cushing's disease, hypoglycemia, cystic fibrosis and achondroplasia.

One of the key objectives of the study is to review and quantify the opportunities laid by the development programs of both small and big pharma firms. Amongst other elements, the report elaborates on the following key areas:

- The current state of the market with respect to key players, developmental stage of pipeline products (both clinical / pre-clinical), route of administration and metabolic indications being targeted.
- The innovative technology platforms and delivery systems being offered to eliminate the challenges associated with the administration of peptide therapeutics.
- Partnerships that have taken place in the recent past covering research and development collaborations, manufacturing agreements, license agreements specific to technology platforms or product, co-development and co-commercialization of promising candidates.
- Recently approved and mid / late stage peptide therapeutics in terms of their history of development, available formulations, associated patents, key clinical trials and results.
- The epidemiology and patient population for each key metabolic indication.

The report provides sales forecast for the overall peptide therapeutics market targeting metabolic disorders for the period 2016 - 2025. We have provided three market forecast scenarios to add robustness to our model. Accordingly, the conservative, base and optimistic scenarios represent three different tracks of industry evolution. For the purposes of the study, we interviewed important stakeholders to solicit their opinions and insights.
opinions on upcoming opportunities and challenges that must be considered for a more inclusive growth. All actual figures have been sourced and analyzed from publicly available information.

Chapter Outlines

Chapter 2 presents an executive summary of the report. It offers a high level view on the current scenario of the peptide therapeutics market for metabolic disorders and where it is headed in the mid-long term.

Chapter 3 provides a general introduction to peptide therapeutics. In this section, we have discussed the structure, chemistry and other fundamental aspects of peptides. In addition, we have also discussed the methods of synthesis, purification strategies and stabilization methods for peptides, along with relevant advantages and disadvantages.

Chapter 4 provides a general introduction to metabolic disorders. It includes a comprehensive classification of the various types of metabolic disorders and detailed description of the most common metabolic disorders, along with their respective causes and symptoms.

Chapter 5 provides a comprehensive overview on the landscape of peptide therapeutics for metabolic disorders. It includes information on over 80 different peptide therapeutics that are currently in various stages of development (both clinical and preclinical / discovery). It also contains a detailed analysis of the development pipeline highlighting the different types of peptides and peptide analogues used, their targeted metabolic indications, the current phase of development of each molecule, various routes of administration and the dosage frequency of drugs. In addition, we have presented a detailed ten year forecast, based on primary and secondary research, for the overall market of peptide therapeutics in metabolic disorders.

Chapter 6 focuses on peptide therapeutics that have been / are being developed to specifically target diabetes. It presents an overview of the current market scenario and provides our likely future growth outlook. It includes detailed drug profiles of marketed drugs and drugs in late stages of development. The profiles cover information on several aspects of these therapeutics such as their history of development, clinical trial results, manufacturing, product costs and related collaborations.

Chapter 7 focuses on peptide therapeutics that have been / are being developed to specifically target acromegaly. It presents an overview of the current market scenario and provides our likely future growth outlook. Similar to the previous chapter, this chapter also includes detailed drug profiles of marketed drugs and drugs in late stage of development covering information on several aspects such as their history of development, clinical trial results, manufacturing, product costs and related collaborations.

Chapter 8 focuses on peptide therapeutics that have been / are being developed to specifically target obesity. It presents an overview of the current market scenario and provides our likely future growth outlook. Similar to the earlier chapters, this chapter also includes detailed drug profiles of marketed drugs and drugs in late stage of development covering information on several aspects such as their history of development, clinical trial results, manufacturing, product costs and related collaborations.

Chapter 9 focuses on peptide therapeutics that have been / are being developed to specifically target osteoporosis. It presents an overview of the current market scenario and provides our likely future growth outlook. Similar to the earlier chapters, this chapter also includes detailed drug profiles of marketed drugs and drugs in late stage of development covering information on several aspects such as their history of development, clinical trial results, manufacturing, product costs and related collaborations.

Chapter 10 focuses on peptide therapeutics that have been / are being developed for metabolic disorders other than diabetes, obesity, osteoporosis and acromegaly. Similar to the earlier chapters, this chapter also includes detailed drug profiles of marketed drugs and drugs in late stage of development covering information on several aspects such as their history of development, clinical trial results, manufacturing, product costs and related collaborations.

Chapter 11 highlights the various technologies that are currently being utilized for the development of peptide therapeutics. It includes detailed profiles of the relatively more popular technologies covering their key features and advantages.

Chapter 12 is a collection of interview transcripts of the discussions that we held with key stakeholders in this market. These include Andrew Mallon (CEO, Calista Therapeutics), Andrew Parker (CEO, ArisGen), John
Dodd (VP Discovery and Research, Palatin Technologies) and Dennis Goldberg (President, LipimetiX Development).

Chapter 13 summarizes the overall report. In this chapter, we provide a recap of the key takeaways and also present our independent opinion based on the research and analysis described in the previous chapters.

Chapter 14 is an appendix, which provides tabulated data and numbers for all the figures provided in the report.

Chapter 15 is an appendix, which provides the list of companies and organizations that have been mentioned in the report.

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13.1. Peptide Therapeutics Has Gradually Gained the Attention of Drug Developers
13.2. Metabolic Disorders is One of the Prime Focus Areas
13.3. In Addition to Diabetes, Obesity, Acromegaly and Osteoporosis, Research is Underway on Several Lesser-known Disorders
13.4. Technological Advancements Have Emerged As Strong Enablers to the Ongoing Growth
13.5. Challenges Remain; Innovative Approaches Will Continue to Sustain the Momentum
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