Non-Insulin Therapies for Diabetes: GLP-1 Agonists, DPP4 Inhibitors and SGLT2 Inhibitors, 2016 - 2026

Description: The “Non-Insulin Therapies for Diabetes: GLP-1 Agonists, DPP4 Inhibitors and SGLT2 Inhibitors, 2016-2026” report provides a comprehensive analysis of the current market landscape of these therapies and an informed opinion on how the market is likely to evolve over the next decade. The anti-diabetic drugs market broadly comprises of insulin and non-insulin therapies.

Non-insulin therapies are further classified under various categories based on their respective mechanisms of action. Of the different types of non-insulin therapies, GLP-1 agonists, DPP4 inhibitors and SGLT2 inhibitors have been the most popular in the last few years. As mentioned earlier, these therapeutic classes have captured the attention of a number of pharmaceutical companies and drug developers worldwide.

Several companies, including pharmaceutical giants, mid-sized players and start-ups, have come up with innovative technologies and novel formulations of these drug classes. Such advances have generated and sustained significant momentum in this segment of the industry.

Specifically, GLP-1 agonists, which have been researched for several years, have a rich pipeline of clinical and preclinical molecules. DPP4 inhibitors currently have a relatively larger market share; however, they are now giving way to other relatively newer and emerging classes such as SGLT2 inhibitors.

During the course of our study, we identified over 80 molecules belonging to these three drugs classes. More than 70% of the candidates are currently under clinical / preclinical development; the efforts are actively being led by several companies. Focused primarily on these three classes of drugs, this report features:

- An overview of the market landscape highlighting important details on each molecule such as key players, current phase of product development, route of administration and dosage regime.
- Detailed profiles of drugs that have been recently approved / marketed or are in the late stages of development.
- A list of key opinion leaders (KOLs) who were involved in the discovery and development of GLP-1 agonists, DPP4 inhibitors and SGLT2 inhibitors.
- An analysis of recently published clinical trial data depicting the prevalent trends and technical developments that have taken place in the industry.
- A discussion on the potential side effects and warnings issued by regulatory authorities suggesting areas of improvement / guidance for future drug development.
- A list of upcoming non-insulin novel therapies that are currently in early stages of development and likely to become a part of the anti-diabetic drugs market in the near future.

The report also provides an estimate of the likely future size of the non-insulin therapies for diabetes. Our forecast model was built based on an understanding of the existing market trends and likely future opportunities for GLP-1 agonists, DPP4 inhibitors, SGLT2 inhibitors and other non-insulin anti-diabetic drug classes. We have provided informed estimates of the expected future sales of marketed and late stage product candidates under each category, highlighting their share in the overall market over the next ten years.

The research, analysis and insights presented in this report are backed by a deep understanding of key insights gathered from both secondary and primary research. Actual figures have been sourced and analyzed from publicly available data. Unless otherwise specified, all financial figures are presented in USD.

Chapter Outlines

Chapter 2 is an executive summary of the insights captured in our research. The summary offers a high level view on the likely evolution of GLP-1 agonists, DPP4 inhibitors and SGLT2 inhibitors during the coming decade.
Chapter 3 provides a general introduction to diabetes and discusses associated symptoms, available diagnostic methods and tests, and other complications associated with the condition. It also includes a detailed classification of the various therapeutic interventions available for the treatment of diabetes. These include both insulin based and non-insulin therapies. The chapter also provides brief descriptions of their respective mechanisms of action.

Chapter 4 provides a comprehensive overview of the market landscape of GLP-1 agonists, DPP4 inhibitors and SGLT2 inhibitors. It includes information on over 100 different molecules that fall under these classes of drugs. Some of these are already approved and are available in different regions across the globe. The rest are currently in various stages of preclinical / clinical development. The chapter presents analysis of the molecules based on their current phase of development, the various routes of administration being considered for their systemic delivery, dosage frequency, type of molecule and key players involved in developing these molecules.

Chapter 5 contains detailed profiles of recently approved and late stage GLP-1 agonists. Each profile covers information on several aspects of these drugs such as their history of development, clinical trial results, dosage form and regime, recent sales of the product (for marketed drugs), the current status of development, and the collaborations and partnerships that have been inked related to that particular drug / drug candidate.

Chapter 6 contains detailed profiles of recently approved and late stage DPP4 inhibitors. Each profile covers information on several aspects of these drugs such as their history of development, clinical trial results, dosage form and regime, recent sales of the product (for marketed drugs), the current status of development, and the collaborations and partnerships that have been inked related to that particular drug / drug candidate.

Chapter 7 contains detailed profiles of recently approved and late stage SGLT2 inhibitors. Each profile covers information on several aspects of these drugs such as their history of development, clinical trial results, dosage form and regime, recent sales of the product (for marketed drugs), the current status of development, and the collaborations and partnerships that have been inked related to that particular drug / drug candidate.

Chapter 8 focusses on the various side effects reported by patients treated using these drugs. It includes detailed discussions on the potential complications that may arise upon using these drugs, and the warnings issued by the FDA and other regulatory bodies regarding the associated risks. In addition, the chapter lists the various GLP-1 agonists, DPP4 inhibitors and SGLT2 inhibitors that have been terminated during development due to various reasons.

Chapter 9 provides a brief introduction to other novel interventions that are currently being investigated as potential treatment options for diabetes. The chapter also includes an analysis of these novel therapeutic options based on the type of molecule being investigated and phase of development.

Chapter 10 provides a detailed analysis on the likely future size of the non-insulin therapies market over the next decade. It presents comprehensive forecast scenarios for each individual drug class mentioned in the report, namely GLP-1 agonists, DPP4 inhibitors, SGLT2 inhibitors and other non-insulin anti-diabetic drugs.

Chapter 11 presents an analysis of the Key Opinion Leaders (KOLs) in this domain. It contains schematic representations of world maps highlighting the geographical locations of these eminent scientists / researchers. The chapter presents a detailed 2X2 analysis to assess the relative experience of certain KOLs based on the number of clinical studies they participated in and the highest phase of development they investigated.

Chapter 12 provides a detailed analysis of recently published clinical data on GLP-1 agonists, DPP4 inhibitors and SGLT2 inhibitors. It identifies various aspects of the ongoing research and presents analysis highlighting the active drugs, study focus areas and clinical endpoints (safety / efficacy / tolerability / pharmacodynamics / pharmacokinetics) across the published data.

Chapter 13 is a collection of interview transcripts of the discussions we held with key stakeholders in the industry.

Chapter 14 summarizes the entire report. The chapter presents a list of key takeaways and offers our independent opinion on the current market scenario and evolutionary trends that are likely to determine the future of this segment of the industry.
Chapter 15 is an appendix, which provides tabulated data and numbers for all the figures in the report.

Chapter 16 is an appendix, which contains the list of companies and organizations that have been mentioned in the report.

Research Methodology

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 may evolve across different regions and technology segments. Wherever 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

While the focus has been on forecasting the market over the coming ten years, the report also provides our independent view on various technological and non-commercial trends emerging in the industry. This opinion is solely based on our knowledge, research and understanding of the relevant market gathered from various secondary and primary sources of information.

Contents:

1. Preface
   1.1. Scope of the Report
   1.2. Research Methodology
   1.3. Chapter Outlines

2. Executive Summary

3. Introduction
   3.1. Chapter Overview
   3.2. Diabetes: Introduction
   3.2.1. Diabetes: Classification
   3.2.2. Diabetes: Symptoms
   3.2.3. Diabetes: Diagnosis
   3.2.4. Diabetes: Associated Health Risks / Complications
   3.2.5. Diabetes: Therapies
   3.2.5.1. Insulin Therapies
   3.2.5.2. Non-Insulin Therapies
   3.2.5.2.1. Alpha-glucosidase Inhibitors
   3.2.5.2.2. Amylin Agonists
   3.2.5.2.3. Biguanides
   3.2.5.2.4. Dipeptidyl peptidase-4 (DPP4) inhibitors
   3.2.5.2.5. Glinides / Meglitinides
   3.2.5.2.6. GLP-1 Analogs / GLP-1 Agonists
   3.2.5.2.7. Sodium-glucose cotransporter 2 (SGLT2) Inhibitors
   3.2.5.2.8. Sulfonylureas
   3.2.5.2.9. Thiazolidinediones (or 'glitazones'or TZDs)

4. Market Overview
   4.1. Chapter Overview
   4.2. Non-Insulin Anti-Diabetic Therapies: History of Development / Evolution Timeline
   4.3. GLP-1 Agonists, DPP4 Inhibitors and SGLT2 Inhibitors: Overall Market Overview
   4.4. GLP-1 Agonists: Current Market Landscape
4.4.1. GLP-1 Agonists: Approved Drugs
4.4.2. GLP-1 Agonists: Pipeline Drugs
4.4.3. GLP-1 Agonists: Key Players
4.4.4. GLP-1 Agonists: Distribution by Route of Administration
4.4.5. GLP-1 Agonists: Distribution by Dosage Frequency
4.4.6. GLP-1 Agonists: Distribution by Type of Molecule

4.5. DPP4 Inhibitors: Current Market Landscape
4.5.1. DPP4 Inhibitors: Approved Drugs
4.5.2. DPP4 Inhibitors: Pipeline Drugs
4.5.3. DPP4 Inhibitors: Key Players
4.5.4. DPP4 Inhibitors: Distribution by Type of Therapy
4.5.5. DPP4 Inhibitors: Distribution by Dosage Frequency

4.6. SGLT2 Inhibitors: Current Market Landscape
4.6.1. SGLT2 Inhibitors: Approved Drugs
4.6.2. SGLT2 Inhibitors: Pipeline Drugs
4.6.3. SGLT2 Inhibitors: Key Players
4.6.4. SGLT2 Inhibitors: Distribution by Type of Therapy
4.6.5. SGLT2 Inhibitors: Distribution by Dosage Frequency

4.7. GLP-1 Agonists, DPP4 Inhibitors and SGLT2 Inhibitors: Key Players

5. GLP-1 Agonists
5.1. Chapter Overview
5.2. Albiglutide (GSK)
  5.2.1. Product Overview
  5.2.2. History of Development
  5.2.3. Dosage Form, Regimen and Price
  5.2.4. Historical Sales
  5.2.5. Current Status of Development
  5.2.6. Key Clinical Trial Results
  5.2.6.1. Harmony 1 Study (Abstract Number: 2013-LB-5644)
  5.2.6.2. Harmony 2 Study (Abstract Number: 2013-LB-5749)
  5.2.6.3. Harmony 3 Study (Abstract Number: 2013-LB-5750)
  5.2.6.4. Harmony 4 Study (Abstract number: 2013-LB-5751)
  5.2.6.5. Harmony 5 Study (Abstract Number: 2013-LB-5752)
  5.2.6.6. Harmony 6 Study
  5.2.6.7. Harmony 7 Study
  5.2.6.8. Harmony 8 Study
  5.2.7. Recent Collaborations

5.3. Dulaglutide (Eli Lilly / Sumitomo Dainippon Pharma)
  5.3.1. Product Overview
  5.3.2. History of Development
  5.3.3. Dosage Form, Regimen and Price
  5.3.4. Historical Sales
  5.3.5. Current Status of Development
  5.3.6. Key Clinical Trial Results
  5.3.6.1. AWARD-1
  5.3.6.2. AWARD-2
  5.3.6.3. AWARD-3
  5.3.6.4. AWARD-4
  5.3.6.5. AWARD-5
  5.3.6.6. AWARD-6
  5.3.6.7. AWARD-8
  5.3.6.8. AWARD-9
  5.3.6.9. Trulicity® versus Lantus®
  5.3.6.10. Trulicity® versus Victoza®
  5.3.7. Recent Collaborations

5.4. ITCA 650 (Intarcia Therapeutics / Servier)
  5.4.1. Product Overview
  5.4.2. History of Development
5.4.3. Intarcia’s Technology Platform  
5.4.4. Current Status of Development  
5.4.5. Key Clinical Trial Results  
5.4.5.1. FREEDOM 1 HBL: Interim Results  
5.4.5.2. FREEDOM-1 and FREEDOM-1 HBL: Top-Line Results  
5.4.5.3. FREEDOM-2 Comparative Trial: Top-Line Results  
5.4.5.4. FREEDOM-CVO: Top-Line Results  
5.4.6. Funding  
5.4.7. Recent Collaborations  

5.5. Polyethylene Glycol Loxenatide / PEX 168 (Jiangsu Hansoh Pharmaceutical)  
5.5.1. Product Overview  
5.5.2. Current Status of Development  
5.5.3. Key Clinical Trial Results  

5.6. Semaglutide / NN9535 / NN9924 / OG217SC (Novo Nordisk/Emisphere)  
5.6.1. Product Overview  
5.6.2. History of Development  
5.6.3. NN9924 and the Eligen® Technology  
5.6.4. Manufacturing  
5.6.5. Dosage Form and Regimen  
5.6.6. Current Status of Development  
5.6.6.1. PIONEER Clinical Program  
5.6.6.2. SUSTAIN Clinical Program  
5.6.7. Key Clinical Trial Results  
5.6.7.1. NN9535: Phase III Results  
5.6.7.2. NN9924/OG217SC: Phase II Results  
5.6.8. Recent Collaborations  

5.7. Uni-E4 (Uni-Bio Science Group)  
5.7.1. Product Overview  
5.7.2. Key Clinical Trial Results  

6. DPP4 Inhibitors / CD26 Antigen Antagonists  
6.1. Chapter Overview  
6.2. Alogliptin (Takeda / Furiex Pharmaceuticals (Acquired by Forest Laboratories))  
6.2.1. Product Overview  
6.2.2. History of Development  
6.2.3. Dosage Form, Regimen and Price  
6.2.4. Historical Sales  
6.2.5. Current Status of Development  
6.2.6. Key Clinical Trial Results  
6.2.6.1. EXAMINE Program  
6.2.6.2. ENDURE Trial  
6.2.7. Recent Collaborations  

6.3. Trelagliptin (Takeda / 3SBio)  
6.3.1. Product Overview  
6.3.2. History of Development  
6.3.3. Dosage Form, Regimen and Price  
6.3.4. Current Status of Development  
6.3.5. Key Clinical Trial Results  
6.3.6. Recent Collaborations  

6.4. Omarigliptin (Merck)  
6.4.1. Product Overview  
6.4.2. History of Development  
6.4.3. Current Status of Development  
6.4.4. Key Clinical Trial Results  

6.5. Evogliptin (Dong-A Pharmaceutical / Luye Pharma Group / Eurofarma / Geropharm / Alkem Labs)  
6.5.1. Product Overview  
6.5.2. Dosage Forms, Regimen and Price
6.5.3. Current Status of Development
6.5.4. Key Clinical Trial Results
6.5.5. Recent Collaborations

6.6. Gosogliptin (SatRx / Pfizer)
6.6.1. Product Overview
6.6.2. Current Status of Development
6.6.3. Recent Collaborations

6.7. Retagliptin (Jiangsu Hengrui Medicine)
6.7.1. Product Overview
6.7.2. Current Status of Development

7. SGLT2 Inhibitors
7.1. Chapter Overview
7.2. Canagliflozin (Mitsubishi Tanabe Pharma / Janssen / Daiichi Sankyo)
7.2.1. Product Overview
7.2.2. History of Development
7.2.3. Dosage Form, Regimen and Price
7.2.4. Historical Sales
7.2.5. Current Status of Development
7.2.6. Key Clinical Trial Results
7.2.6.1. Long Term Effects in Older Type II Diabetic Patients
7.2.6.2. Real-World Analysis
7.2.6.3. Comparison between INVOKANA® and Other DPP4 Inhibitors
7.2.7. Recent Collaborations

7.3. Luseogliflozin (Taisho Pharmaceutical / Taisho Toyama Pharmaceutical / Novartis)
7.3.1. Product Overview
7.3.2. History of Development
7.3.3. Dosage Form, Regimen and Price
7.3.4. Current Status of Development
7.3.5. Key Clinical Trial Results
7.3.5.1. As a Monotherapy
7.3.5.1.1. Study 1: Placebo Controlled (24 weeks)
7.3.5.1.2. Study 2: Long-Term Treatment (52 weeks)
7.3.5.2. As Combination Therapy
7.3.5.2.1. Study 1: Combination with Glimepiride
7.3.5.2.2. Study 2: Combination with Metformin, DPP4 inhibitor, Pioglitazone, Glinides or alpha-glucosidase inhibitor
7.3.6. Historical Sales
7.3.7. Recent Collaborations

7.4. Tofogliflozin (Chugai Pharmaceutical / Sanofi / Kowa)
7.4.1. Product Overview
7.4.2. History of Development
7.4.3. Current Status of Development
7.4.4. Key Clinical Trial Results
7.4.4.1. As a Monotherapy
7.4.5. Recent Collaborations

7.5. Empagliflozin (Boehringer Ingelheim / Eli Lilly)
7.5.1. Product Overview
7.5.2. History of Development
7.5.3. Dosage Form, Regimen and Price
7.5.4. Manufacturing
7.5.5. Current Status of Development
7.5.6. Key Clinical Trial Results
7.5.6.1. As a Monotherapy: Retrospective Data
7.5.6.2. As a Fixed-Dose Combination Therapy
7.5.6.2.1. Combination with Metformin
7.5.6.2.2. Combination with Linagliptin
7.5.6.3. CV Outcome Results (EMPA-REG OUTCOME®)
10.4. Overall GLP-1 Agonists Market
10.4.1. Liraglutide (1.2mg and 1.8mg)
10.4.2. Exendin-4 / ITCA 650
10.4.3. Exenatide Extended Release
10.4.4. Dulaglutide
10.4.5. Albiglutide
10.4.6. Lixisenatide
10.4.7. Semaglutide Subcutaneous
10.4.8. Liraglutide / Insulin Degludec
10.4.9. Semaglutide Oral / OG217SC / NN9924
10.4.10. Exenatide
10.4.11. Other GLP-1 Agonists

10.5. Overall DPP4 Inhibitors Market
10.5.1. Sitagliptin
10.5.2. Vildagliptin
10.5.3. Saxagliptin
10.5.4. Linagliptin
10.5.5. Alogliptin
10.5.6. Gosogliptin
10.5.7. Other DPP4 Inhibitors

10.6. Overall SGLT2 Inhibitors Market
10.6.1. Sotagliflozin
10.6.2. Empagliflozin
10.6.3. Canagliflozin
10.6.4. Dapagliflozin
10.6.5. Tofogliflozin
10.6.6. Erulgliploflozin
10.6.7. Bexagliflozin
10.6.8. Other SGLT2 Inhibitors

11. Publication Analysis
11.1. Chapter Overview
11.2. Scope and Methodology
11.3. GLP-1 Agonists: List of Publications
11.3.1. Publications on GLP-1 Agonists: Distribution by Focus Drug
11.3.2. Publications on GLP-1 Agonists: Distribution by Key Parameters

11.4. DPP4 Inhibitors: List of Publications
11.4.1. Publications on DPP4 Inhibitors: Distribution by Focus Drug
11.4.2. Publications on DPP4 Inhibitors: Distribution by Key Parameters

11.5. SGLT2 Inhibitors: List of Publications
11.5.1. Publications on SGLT2 Inhibitors: Distribution by Focus Drug
11.5.2. Publications on SGLT2 Inhibitors: Distribution by Key Parameters

12. KOL Analysis
12.1. Chapter Overview
12.2. Scope and Methodology
12.3. GLP-1 Agonists: Key Opinion Leaders
12.3.1. GLP-1 Agonists: Prominent Researchers
12.3.2. GLP-1 Agonists: Leading Key Opinion Leaders
12.4. DPP4 Inhibitors: Key Opinion Leaders
12.4.1. DPP4 Inhibitors: Prominent Researchers
12.4.2. DPP4 Inhibitors: Leading Key Opinion Leaders
12.5. SGLT2 Inhibitors: Key Opinion Leaders
12.5.1. SGLT2 Inhibitors: Prominent Researchers
12.5.2. SGLT2 Inhibitors: Leading Key Opinion Leaders

13. Interview Transcripts

14. Conclusion
14.1. The Lucrative Anti-Diabetic Drugs Market Presents Immense Opportunity to Novel Non-Insulin Therapies
14.2. GLP-1 Inhibitors and DPP4 Inhibitors Currently Dominate; SGLT2 Inhibitors Have Shown Significant Promise
14.3. Companies Targeting Certain Regional Markets are Amongst the Primary Drivers
14.4. Technological Advances and Innovative Drug Development Approaches are Key to Future Success
14.5. Development of Combination Therapies and Several Novel Drug Classes Are Expected to Promote Future Growth
14.6. Multiple Side Effects Associated with the Use of Certain Drug Classes Remain a Concern
14.7. While the Respective Shares of GLP-1 Agonists and SGLT2 Inhibitors are Projected to Increase, Sales of DPP4 Inhibitors Are Likely to Dip

15. Appendix 1: Tabulated Data
16. Appendix 2: List of Companies and Organizations

List of Figures
Figure 3.1 Diabetes: Diagnostic Limits
Figure 3.2 Non-Insulin Therapies for Diabetes
Figure 4.1 Non-Insulin Therapies: Distribution by Drug Class
Figure 4.2 GLP-1 Agonists: Distribution by Phase of Development
Figure 4.3 GLP-1 Agonists: Key Players
Figure 4.4 GLP-1 Agonists: Distribution by Route of Administration
Figure 4.5 GLP-1 Agonists: Distribution by Dosage Frequency
Figure 4.6 GLP-1 Agonists: Distribution by Type of Molecule
Figure 4.7 DPP4 Inhibitors: Distribution by Phase of Development
Figure 4.8 DPP4 Inhibitors: Key Players
Figure 4.9 DPP4 Inhibitors: Distribution by Type of Therapy
Figure 4.10 DPP4 Inhibitors: Distribution by Dosage Frequency
Figure 4.11 SGLT2 Inhibitors: Distribution by Phase of Development
Figure 4.12 SGLT2 Inhibitors: Key Players
Figure 4.13 SGLT2 Inhibitors: Distribution by Type of Therapy
Figure 4.14 SGLT2 Inhibitors: Distribution by Dosage Frequency
Figure 4.15 GLP-1 Agonists, DPP4 Inhibitors and SGLT2 Inhibitors: Key Players
Figure 5.1 Tanzeum® / Eperzan®: Historical Sales, 2014-Q12016 (GBP Million)
Figure 5.2 Trulicity®: Historical Sales, 2014-2015 (USD Million)
Figure 5.3 Trulicity® Historical Sales: Distribution by Region, 2015 (USD Million)
Figure 5.4 ITCA 650: FREEDOM-1 and FREDDOM-1 HBL Clinical Trials
Figure 6.1 Alogliptin: History of Development
Figure 10.19  Linagliptin Sales Forecast, 2016-2026 (USD Million)
Figure 10.20  Alogliptin Sales Forecast, 2016-2026 (USD Million)
Figure 10.21  Gosogliptin Sales Forecast, 2017-2026 (USD Million)
Figure 10.22  SGLT2 Inhibitors Market, 2016-2026 (USD Billion)
Figure 10.23  Sotagliflozin Sales Forecast, 2018-2026 (USD Million)
Figure 10.24  Empagliflozin Sales Forecast, 2016-2026 (USD Million)
Figure 10.25  Canagliflozin Sales Forecast, 2016-2026 (USD Million)
Figure 10.26  Dapagliflozin Sales Forecast, 2016-2026 (USD Million)
Figure 10.27  Tofogliflozin Sales Forecast, 2016-2026 (USD Million)
Figure 10.28  Ertrugliflozin Sales Forecast, 2018-2026 (USD Million)
Figure 10.29  Bexagliflozin Sales Forecast, 2018-2026 (USD Million)

Figure 11.1  Publications on GLP-1 Agonists: Distribution by Focus Drug
Figure 11.2  Publications on GLP-1 Agonists: Distribution by Study Focus, Publication Month and other Parameters
Figure 11.3  Publications on DPP4 Inhibitors: Distribution by Focus Drug
Figure 11.4  Publications on DPP4 Inhibitors: Distribution by Study Focus, Publication Month and other Parameters
Figure 11.5  Publications on SGLT2 Inhibitors: Distribution by Focus Drug
Figure 11.6  Publications on SGLT2 Inhibitors: Distribution by Study Focus, Publication Month and other Parameters

Figure 12.1  GLP-1 Agonists: Mapping Prominent Researchers
Figure 12.2  GLP-1 Agonists: Leading Key Opinion Leaders
Figure 12.3  DPP4 Inhibitors: Mapping Prominent Researchers
Figure 12.4  DPP4 inhibitors: Leading Key Opinion Leaders
Figure 12.5  SGLT2 Inhibitors: Mapping Prominent Researchers
Figure 12.6  SGLT2 Inhibitors: Leading Key Opinion Leaders

Figure 14.1  Overall Non-Insulin Therapies Market Forecast: Distribution by Drug Class, 2016-2026 (USD Billion)

List of Tables
Table 4.1  Anti-Diabetic Drug Classes: History of Development
Table 4.2  GLP-1 Agonists: Approved Drugs
Table 4.3  GLP-1 Agonists: Pipeline Drugs
Table 4.4  DPP4 Inhibitors: Approved Drugs
Table 7.12 Empagliflozin: Active / Planned Clinical Trials
Table 7.13 Empagliflozin: Retrospective Data (After 12 weeks)
Table 7.14 Empagliflozin: Retrospective Data (After 24 weeks)
Table 7.15 Glyxambi®: Phase III Clinical Trial Results
Table 7.16 Glyxambi®: Phase III Clinical Trial Adverse Events
Table 7.17 Ipragliflozin: Active / Planned Clinical Trials
Table 7.18 Ipragliflozin as Combination Therapy: Phase III Clinical Trial Results
Table 7.19 Bexagliflozin: Phase II Clinical Trial Results
Table 7.20 Ertugliflozin: Active/Planned Clinical Trials
Table 7.21 Ertugliflozin: Phase III Clinical Trial Results (VERTIS Mono)
Table 7.22 Ertugliflozin: Phase III Clinical Trial Adverse Events (VERTIS Mono)
Table 7.23 Ertugliflozin: Phase III Clinical Trial Results (VERTIS Factorial)
Table 7.24 Ertugliflozin: Phase III Clinical Trial Adverse Events (VERTIS Factorial)
Table 7.25 Sotagliflozin: Active/Planned Clinical Trials
Table 7.26 Sotagliflozin: Phase IIb Study Results, Reduction in HbA1c levels
Table 7.27 Sotagliflozin: Phase IIb Study Results, Reduction in Blood Pressure
Table 7.28 Sotagliflozin: Phase Ila Study Results
Table 8.1 DPP4 Inhibitors: Regulatory Agencies Warnings
Table 8.2 SGLT2 Inhibitors: Regulatory Agencies Warnings
Table 8.3 DPP4 inhibitors/SGLT2 inhibitors/GLP-1 Agonists: Terminated Molecules
Table 9.1 List of Novel Non-Insulin Therapies for Diabetes
Table 11.1 GLP-1 Agonists: List of Publications
Table 11.2 DPP4 Inhibitors: List of Publications
Table 11.3 SGLT2 Inhibitors: List of Publications
Table 12.1 GLP-1 Agonists: List of Key Opinion Leaders
Table 12.2 DPP4 Inhibitors: List of Key Opinion Leaders
Table 12.3 SGLT2 inhibitors: List of Key Opinion Leaders
Table 15.1 Non-Insulin Therapies: Distribution by Drug Class
Table 15.2 GLP-1 Agonists: Distribution by Phase of Development
Table 15.3 GLP-1 Agonists: Key Players
Table 15.4 GLP-1 Agonists: Distribution by Route of Administration
Table 15.5 GLP-1 Agonists: Distribution by Dosage Frequency
Table 15.6  GLP-1 Agonists: Distribution by Type of Molecule
Table 15.7  DPP4 Inhibitors: Distribution by Phase of Development
Table 15.8  DPP4 Inhibitors: Key Players
Table 15.9  DPP4 Inhibitors: Distribution by Type of Therapy
Table 15.10  DPP4 Inhibitors: Distribution by Dosage Frequency
Table 15.11  SGLT2 Inhibitors: Distribution by Phase of Development
Table 15.12  SGLT2 Inhibitors: Key Players
Table 15.13  SGLT2 Inhibitors: Distribution by Type of Therapy
Table 15.14  SGLT2 Inhibitors: Distribution by Dosage Frequency
Table 15.15  GLP-1 Agonists, DPP4 Inhibitors and SGLT2 Inhibitors: Key Players
Table 15.16  Tanzeum® / Eperzan®: Historical Sales, 2014-Q1 2016 (GBP Million)
Table 15.17  Trulicity®: Historical Sales, 2014-2015 (USD Million)
Table 15.18  Trulicity® Historical Sales: Distribution by Region, 2015 (USD Million)
Table 15.19  Alogliptin: Historical Sales, FY2011-Q1 FY2016 (JPY Billion)
Table 15.20  Alogliptin Historical Sales: Distribution by Region, FY2015 (JPY Billion)
Table 15.21  INVOKANA® / INVOKAMET®: Historical Sales, 2013-Q1 2016 (USD Million)
Table 15.22  INVOKANA® / INVOKAMET® Historical Sales: Distribution by Region, 2015-Q1 2016 (USD Million)
Table 15.23  Terminated Molecules: Distribution by Type of Drug Class
Table 15.24  Terminated Molecules: Distribution by Type of Drug Class and Phase of Development
Table 15.25  Terminated Molecules: Distribution by Type of Drug Class and Year of Termination
Table 15.26  Novel Non-Insulin Therapies for Diabetes: Distribution by Type of Drug Class
Table 15.27  Novel Non-Insulin Therapies for Diabetes: Distribution by Phase of Development
Table 15.28  Novel Non-Insulin Therapies for Diabetes: Distribution by Type of Molecule
Table 15.29  Non-Insulin Therapies for Diabetes Market, 2016-2026 (USD Billion)
Table 15.30  Non-Insulin Therapies for Diabetes Market, 2016, 2021 and 2026: Distribution by Type of Drug Class
Table 15.31  GLP-1 Agonists Market, 2016-2026 (USD Billion)
Table 15.32  Liraglutide (1.2mg and 1.8mg) Sales Forecast, 2016-2026 (USD Million)
Table 15.33  Exendin-4 / ITCA 650 Sales Forecast, 2017-2026 (USD Million)
Table 15.34  Exenatide Extended Release Sales Forecast, 2016-2026 (USD Million)
Table 15.35  Dulaglutide Sales Forecast, 2016-2026 (USD Million)
Table 15.36  Albiglutide Sales Forecast, 2016-2026 (USD Million)
Table 15.37  Lixisenatide Sales Forecast, 2016-2026 (USD Million)
Table 15.38  Semaglutide/NN9535 Sales Forecast, 2018-2026 (USD Million)
Table 15.39  Liraglutide / Insulin Degludec Sales Forecast, 2016-2026 (USD Million)
Table 15.40  Semaglutide Oral / OG217SC / NN9924 Sales Forecast, 2020-2026 (USD Million)
Table 15.41  Exenatide Sales Forecast, 2016-2026 (USD Million)
Table 15.42  DPP4 Inhibitors Market, 2016-2026 (USD Billion)
Table 15.43  Sitagliptin Sales Forecast, 2016-2026 (USD Million)
Table 15.44  Vildagliptin Sales Forecast, 2016-2026 (USD Million)
Table 15.45  Saxagliptin Sales Forecast, 2016-2026 (USD Million)
Table 15.46  Linagliptin Sales Forecast, 2016-2026 (USD Million)
Table 15.47  Alogliptin Sales Forecast, 2016-2026 (USD Million)
Table 15.48  Gosogliptin Sales Forecast, 2017-2026 (USD Million)
Table 15.49  SGLT2 Inhibitors Market, 2016-2026 (USD Billion)
Table 15.50  Sotagliflozin Sales Forecast, 2018-2026 (USD Million)
Table 15.51  Empagliflozin Sales Forecast, 2016-2026 (USD Million)
Table 15.52  Canagliflozin Sales Forecast, 2016-2026 (USD Million)
Table 15.53  Dapagliflozin Sales Forecast, 2016-2026 (USD Million)
Table 15.54  Tofogliflozin Sales Forecast, 2016-2026 (USD Million)
Table 15.55  Ernugliflozin Sales Forecast, 2018-2026 (USD Million)
Table 15.56  Bexagliflozin Sales Forecast, 2018-2026 (USD Million)
Table 15.57  Publications on GLP-1 Agonists: Distribution by Focus Drug
Table 15.58  Publications on DPP4 Inhibitors: Distribution by Focus Drug
Table 15.59  Publications on SGLT2 Inhibitors: Distribution by Focus Drug
Table 15.60  Overall Non-Insulin Therapies Market Forecast: Distribution by Drug Class, 2016-2026 (USD Billion)

Ordering:
Order Online - http://www.researchandmarkets.com/reports/3814650/
Order by Fax - using the form below
Order by Post - print the order form below and send to
Research and Markets,
Guinness Centre,
Taylors Lane,
Dublin 8,
Fax Order Form
To place an order via fax simply print this form, fill in the information below and fax the completed form to 646-607-1907 (from USA) or +353-1-481-1716 (from Rest of World). If you have any questions please visit http://www.researchandmarkets.com/contact/

Order Information
Please verify that the product information is correct and select the format(s) you require.

Product Name: Non-Insulin Therapies for Diabetes: GLP-1 Agonists, DPP4 Inhibitors and SGLT2 Inhibitors, 2016 - 2026
Web Address: http://www.researchandmarkets.com/reports/3814650/
Office Code: SC2GU7B1

Product Formats
Please select the product formats and quantity you require:

<table>
<thead>
<tr>
<th>Product Format</th>
<th>Quantity</th>
<th>Price</th>
</tr>
</thead>
</table>
| Electronic (PDF) -   |          | USD 2349
| Single User:         |          |        |
| Electronic (PDF) -   |          | USD 5499
| Site License:        |          |        |
| Electronic (PDF) -   |          | USD 9999
| Enterprisewide:      |          |        |

* The price quoted above is only valid for 30 days. Please submit your order within that time frame to avail of this price as all prices are subject to change.

Contact Information
Please enter all the information below in BLOCK CAPITALS

Title: [ ] Mr  [ ] Mrs  [ ] Dr  [ ] Miss  [ ] Ms  [ ] Prof
First Name: ___________________________________________ Last Name: _______________________________________
Email Address: * _______________________________________
Job Title: _____________________________________________
Organisation: __________________________________________
Address: ______________________________________________
City: __________________________________________________
Postal / Zip Code: _______________________________________
Country: _______________________________________________
Phone Number: __________________________________________
Fax Number: ____________________________________________

* Please refrain from using free email accounts when ordering (e.g. Yahoo, Hotmail, AOL)
Payment Information

Please indicate the payment method you would like to use by selecting the appropriate box.

☐ Pay by credit card: You will receive an email with a link to a secure webpage to enter your credit card details.

☐ Pay by check: Please post the check, accompanied by this form, to:
Research and Markets,
Guinness Center,
Taylors Lane,
Dublin 8,
Ireland.

☐ Pay by wire transfer: Please transfer funds to:

<table>
<thead>
<tr>
<th>Account number</th>
<th>833 130 83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sort code</td>
<td>98-53-30</td>
</tr>
<tr>
<td>Swift code</td>
<td>ULSBIE2D</td>
</tr>
<tr>
<td>IBAN number</td>
<td>IE78ULSB98533083313083</td>
</tr>
<tr>
<td>Bank Address</td>
<td>Ulster Bank, 27-35 Main Street, Blackrock, Co. Dublin, Ireland.</td>
</tr>
</tbody>
</table>

If you have a Marketing Code please enter it below:

Marketing Code: ______________________

Please note that by ordering from Research and Markets you are agreeing to our Terms and Conditions at http://www.researchandmarkets.com/info/terms.asp

Please fax this form to:
(646) 607-1907 or (646) 964-6609 - From USA
+353-1-481-1716 or +353-1-653-1571 - From Rest of World