

Continuous Glucose Monitoring: The Current State of the Art

<https://marketpublishers.com/r/CFD782BA53EBEN.html>

Date: April 2020

Pages: 76

Price: US\$ 1,975.00 (Single User License)

ID: CFD782BA53EBEN

Abstracts

REPORT SCOPE:

The scope of this study includes what a CGM is, how it works and how a PWD wears the device. This study also includes advances in the technology—both those advances being seen in the market today and advances for which CE mark or FDA approval is pending. There is a section covering the pancreas and diabetes, including the continued growth in the number of diabetics and prediabetics in the U.S. and elsewhere. It covers selected clinical trials pertinent to the evolution and proliferation of CGMs. The scope of this report includes novel CGMs and components in development. These may or may not ever see market launch but should nonetheless be of interest to industry managers.

Also covered here are selected regulatory and reimbursement affairs. Regulatory guidelines need to keep abreast of the technological developments so that safe, effective devices may enter the market. Without sufficient, carefully crafted reimbursement or payer coverage, the devices will never get off the ground. Both favorable regulatory and reimbursement guidelines are needed if manufacturers are to continue to develop and commercialize the best equipment for managing diabetes.

Selected companies are profiled in this report. These include not only the market leaders—Dexcom, Medtronic, Abbott, Tandem and Insulet—but also smaller companies working on promising technology.

Not covered in the scope of this report is in-depth analysis of market values and growth rates. These are available in other BCC Research reports. Also not covered is the ultimate in artificial pancreas: the cell-based implant. While these are under development, for practical purposes implants seem to be some distance down the road.

REPORT INCLUDES:

An overview of the current state of the art for Continuous Glucose Monitoring (CGM) for diabetes

Analyses of global market trends with data from 2018, 2019, and projections of compound annual growth rates (CAGRs) through 2024

Encompassing details of CGM functionalities like how they work, who can use one, and when a CGM could help to better manage the disease

Examination of the critical issues within the CGM market, including technological developments, geographic trends, market dynamics, adoption trends and clinical trials

Evaluation of current market size, market forecast and future of the CGM device industry

Market share analysis of the leading players of the industry and their comprehensive company profiles

Contents

CHAPTER 1 INTRODUCTION

Study Goals and Objectives
Reasons for Doing This Study
Scope of Report
Information Sources
Methodology
Analyst's Credentials
BCC Custom Research
Related BCC Research Reports

CHAPTER 2 EXECUTIVE SUMMARY

Overview of the Pancreas
T1D and T2D
Tight Glycemic Control and the Importance of Time in Range
CGMs on the U.S. Market
The iCGM Trend
Timeline of Recent Device and Software Approvals
Increasing Patient Choice and Device Interoperability
Advances in the Closed-Loop Insulin Delivery System
Tandem's Control-IQ Technology
WaveForm Technologies' Cascade CGM
Novel Device Developments
Smartwatches and Wristbands
Implantable CGM Sensors
Regulatory and Reimbursement Events
FDA Approves New Interoperable Insulin Dosing 'Controller'
FDA's 'Breakthrough Device Designation' for Diabetes Management Devices
CGM for T2Ds
CGM Usage for T2Ds in the European Union
Selected Clinical Trials

CHAPTER 3 DEFINITIONS

What Does the Pancreas Do?
T1D

T2D

A Few Statistics

Improving Hemoglobin A1c (HbA1c) Control

Tight Glycemic Control and the Importance of Time in Range

Daily Diabetes-Oriented Tasks of a Person with T1D

Advantages of CGM for Managing Glucose Levels

How a Diabetic Uses a CGM

CGMs Currently on the Market in the EU and U.S.

The FDA and ACE Pumps

CHAPTER 4 INCREASING PATIENT CHOICE AND DEVICE INTEROPERABILITY

Advances in the Closed-Loop Insulin Delivery System

Barriers to a Fully Automated Closed-Loop System

Tandem's Control-IQ Technology

Tidepool Loop and Interoperable Insulin Pumps

Medtronic's Next-Gen Advanced Hybrid Closed Loop System

Medtronic's European Envision Pro CGM

Biolinq's New CGM Sensor

Insulet's Omnipod

Dexcom CGM

Senseonics and Its Eversense Implantable CGM

Lilly: Connected Pens, Dexcom and Hybrid Closed-Loop System

WaveForm Cascade CGM

Timeline of Recent Device and Software Approvals

CHAPTER 5 NOVEL CGMS AND COMPONENTS IN DEVELOPMENT

Smartwatches and Wristbands

Apple

Alertgy

Know Labs

PKvitality

Prediktor Medical

Traditional Wearable Sensors

I-SENS Inc.

Pacific Diabetes Technologies

Medtrum Technologies Inc.

SanVita Medical, LLC

Infinovo
GlucoRx
Implantable CGM Sensors
Integrated Medical Sensors Inc.
Profusa
GlySens
PercuSense
Patch/Microneedle Sensors
Nemaaura Medical
Sano
University of California, San Diego
Other Potential Noninvasive CGMs

CHAPTER 6 TECHNOLOGICAL PROMISES OR HYPE?

MIT and Noninvasive Blood Glucose Monitoring
How Raman Spectroscopy Works
The Future of Raman Spectroscopy for Measuring Blood Glucose
Optogenetics: Ready to Revolutionize Diabetes Treatment?
NASA, Mars and Diabetes
Cam Med's Bandage-Like, Flexible 'Patch' Insulin Pump

CHAPTER 7 SELECTED REGULATORY AND REIMBURSEMENT AFFAIRS

The iCGM Trend
iCGM Development 'Helped' Along by Hackers
iCGM: The Most Important Trend in CGMs
FDA Approves New Interoperable Insulin Dosing 'Controller'
FDA's 'Breakthrough Device Designation' for Diabetes Management Devices
Medicare Supports CGM Smartphone App Use for Diabetes
CGM for T2Ds
CGMs Have Come Far Since 1999
Data Show Improved Glycemic Control in T2Ds
CGMs Advanced to the Point of Cost Savings, Even for T2Ds
CGM Usage for T2Ds in the European Union
Dexcom Granted CE mark for CGM Use by Pregnant Women
February 2019: FDA Approves Tandem's and Insulet's ACE Pumps

CHAPTER 8 SELECTED CLINICAL TRIALS

The International Diabetes Closed Loop Trial: Clinical Acceptance of the Artificial Pancreas

Description

Method

Conclusions

The VRIF Trial: Hypoglycemia Reduction with Automated-Insulin Delivery System

Description

Method

Conclusions

The International Diabetes Closed Loop (iDCL) Trial: Clinical Acceptance of the Artificial Pancreas in Pediatrics: A Study of t: Slim X2 With Control-IQ Technology

Description

Method

Conclusions

Project Nightlight: Efficacy and System Acceptance of Dinner/Night vs. 24 hr Closed Loop Control

Description

Method

Conclusions

PROMISE Study: An Evaluation of an Implantable Continuous Glucose Sensor up to 180 Days

Description

Method

Conclusions

Evaluation of Two Different Glucose Monitoring Treatments and Their Impact on Time in Target, Sleep and Quality of Life in Children with Type 1 Diabetes and Primary Caregivers: The QUEST Study

Description

Method

Conclusions

Continuous Glucose Monitoring and Management In Type 2 Diabetes (T2D) (COMMITTED)

Description

Method

Conclusions

CHAPTER 9 COMPANY PROFILES

ABBOTT LABORATORIES
ALERTGY
BETA BIONICS
BETA-O2 TECHNOLOGIES
BIGFOOT BIOMEDICAL
BIOLINQ
CAM MED INC.
DEXCOM
DIABELOOP SA
ELI LILLY & CO.
EOFLOW INC.
INSULET CORP.
LIFESCAN
MEDTRONIC DIABETES
NEMAURA MEDICAL INC.
PACIFIC DIABETES TECHNOLOGIES
PREDIKTOR MEDICAL
ROCHE DIABETES CARE
SENSEONICS
TANDEM DIABETES CARE INC.
TIDEPOOL
WAVEFORM TECHNOLOGIES

CHAPTER 10 APPENDIX: TERMS AND ABBREVIATIONS

List Of Tables

LIST OF TABLES

Table 1: Timeline of Selected Device Approvals in the U.S. and EU

Table 2: Normal and Elevated HbA1c Levels

Table 3: Timeline of Selected Device Approvals in the U.S. and EU

Table 4: Selected Start-up Developers of CGM and Sensors

Table 5: Closed Loop Trial: Arms and Intervention/Treatment

Table 6: The VRIF Trial: Arms and Intervention/Treatment

Table 7: The International Diabetes Closed Loop (iDCL) Trial: Arms and Intervention/Treatment

Table 8: Project Nightlight: Arms and Intervention/Treatment

Table 9: PROMISE Study: Arms and Intervention/Treatment

Table 10: The QUEST Study: Arms and Intervention/Treatment

Table 11: COMMITTED: Arms and Intervention/Treatment

Table 12: Terms and Abbreviations

List Of Figures

LIST OF FIGURES

Figure 1: Global CGM Market Share, by Type of Users, 2018

Figure 2: Anatomy of the Pancreas

Figure 3: Selected Global, U.S., EU and Rest of World Diabetes Statistics

Figure 4: Global CGM Market Share, by Type of User, 2018

I would like to order

Product name: Continuous Glucose Monitoring: The Current State of the Art

Product link: <https://marketpublishers.com/r/CFD782BA53EBEN.html>

Price: US\$ 1,975.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/CFD782BA53EBEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970