Global Report on Obesity

Survey of Market Participants and Emerging Technologies in Obesity

Module #1

What's What. Clinical need, Obesity challenges and current standards of Care.

In this report we provide an understanding of Obesity's epidemiology, the current treatments, trends worldwide, relative benefits of treatments, and the direction of future treatments.

Module #2

What's Now. Current Players and Market Structure.

Here we take a look at the current marketplace; the current players, market share, treatments options, mechanisms of action. Complete review of drugs on the market today, their relative strengths and weakness, with profiles of the leading competitors and their technologies.

Module #3

What's Next. Future Players and Technologies.

This report anticipates a future marketplace by way of new and emerging technology-based companies. We assess their conceptual strengths, weaknesses, and approval expectations to evaluate prospects for success.

Module #4

Who's Who. The Ecosystem. Directory of Important Institutions and Individuals.

The directory comprises an invaluable resource to understand the important competitors and the roles they play in the overall ecosystem. Includes: organization, key contact information, analysis, major events, publications, key management biographies for all the important investment houses, associations, publications, research institutions, foundations and thought leaders.

OneMedResearch

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Global Report on Obesity

besity's intensification and increasing cost to the health care system composes a growing epidemic. An estimated 30% of the US population is considered obese with 6% marked severely or morbidly obese. The combined comorbidities of obese patients are collectively regarded as the biggest single drain on the country's health care system, which is an estimated \$300 billion annual bill.

Yet despite the problem's size, there has been little in the way of new drugs coming to market. The total count is two approved drugs in the last five years and none in the preceding 13 years.

The objective of this research report is to identify the new opportunities and give investors an overall understanding of the obesity market. The full report which is packaged into four sections, contains insight on:

- 32 companies with obesity drugs in development.
- 11 drugs at some stage of the FDA approval. (US only).
- 21 distinct drug targets with non-scientific summaries.
- 18 mechanism of action (MOA) with summaries.

The report also includes profiles of seven promising new entrants as a look at the major actors serving this market:

- 14 venture, private equity funds with active investments.
- Business development contacts and major strategic investors
- 24 professional groups, non-profits, associations, media outlets and influencers.

We have a master report which totals 50 pages 140 citations which is then divided into 4 separate reports:

- 1. What's What. The need, challenges current status.
- 2. What's Now. Current players and market structure.
- 3. What's Next. Future players and technologies.
- **4. Who's Who.** Directory of important institutions and individuals.

ABOUT: OneMedResearch is the research group of OneMedMarket LLC which manages the OneMedForum investment conferences, OneMedMedia and OneMedPlace (www.onemedmarket.com).

The research was conducted between April and July of 2015 by a team of PhD Candidates at leading Universities in addition to by staff at OneMedReseach in New York. The team included: Katie Smolnycki, Prashant Monian, Oluseyi O. Fasoranti, Margaret Elvekrog. Senthilkumar Sivagurunathan was the Project Manager and Jasmin Siegle, Project Advisor. Staff Researcher include Taylor Kinze and Julia Berdecia and Brett Johnson as Managing Director.

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We encourage readers to make suggestions and if possible alert us to additional companies or technologies that may be imminent. An update to this report planned for Release in late October 2015.

For additional information about the report and research services contact us at tkinze@onemedmarket.com or visit www.onemedmarket.com.

Module 1: What's What

What's What. Obesity's clinical need, challenges and current situation. In this report we encapsulate an understanding of the epidemiology, the current treatments, trends worldwide, relative benefits of treatments of obesity. Includes white paper on "What Investors Should Know."
Introduction to Obesity. What Investors Should Know4
Global Obesity Overview: Current Status
TABLE 2. Health risks and conditions associated with overweight and obesity in adults and children.
Treatment Options and Standard of Care
Figure 1. Treatment algorithm for assessment of overweight and obesity patients as suggested by the NHLBI Obesity Education Initiative.
Current Available Therapies for Treating Obesity
TABLE 3. Obesity therapy categories and overview of treatment.
Global Overview of Obesity: Current Status
Figure 2. The WHO Disease Report (2010) of age-standardized prevalence of overweight (a) and obese (b) in WHO Regions and by World Bank income groups.
TABLE 4. Comparison of the prevalence of overweight and obese children and adults from 1980 to 2013 reflecting the Rise in obesity for men, women, boys and girls in the 33 year period globally.
Figure 3. Prevalence of overweight and obesity from 1980–2013 in males and females in developed and developing countries according 2014 Lancet study providing a comparison of growth for both BMI levels of 25 kg/m and 30 kg/m.
Drug Failures and the Phen-Fen Effect
TABLE 34 Anti-nesity drug company closures and drug failures and withdrawals

Module 2: What's Now

What's	Now. Current Players and Market Structure. We take a look at the current marketplace. The current
players	, market share, the various treatments, mechanisms of action. Complete review of drugs on the
market	today, their strengths and weakness, and profiles of the leading competitors and their technologies
Market	segmentation
	TABLE 5. Comparative advantages and disadvantages of medication vs. surgery/devices for treatment of Obesity. Minimum BMI for use, advantages and disadvantages.
	TABLE 6. Data for total bariatric procedures according to the American Society for Metabolic and Bariatric Surgery for 2011-2013.
	Figure 4. Estimated proportion of obesity drugs and device markets by type. Actual and estimated market share of 8 types of treatments of treatments for obesity within the ten-year period between 2009–2019.
	Figure 5. Impact on Obesity drugs since the launch of Contrave on Jan. 16, 2015. A comparison of market share for Belviq and Qsumia since launch of Contrav.
Compe	titive Landscape of Currently Approved Drugs
	TABLE 7. There are currently nine available obesity drugs in the US. For each leadr, we describe their mode of action, trade name, mechanism, and mean adjusted with loss (%).
	Mechanisms of Action Descriptions
	Norepinephrine
	Dopamine
	Serotonin
	Glucagon-like peptides
	Lipases
	Bupropion
	Recent Entrants: FDA-Approved Drugs
	Novo Nordisk: Saxenda
	Orexigen: Contrave
	Comparative Strengths and weaknesses of Medications on Market
	TABLE 8. Comparative Strengths and weaknesses of six leading obesity drugs in US market, including frequent side effects and other notable facts.
	Insurance Coverage & Reimbursement
	Market Penetration
	TABLE 6. Major market sales for obesity drugs (2011-2021) Estimates of market share for approved drugs for in the seven major markets (US, France, Germany, Italy, Spain, United Kingdom and Japan.
	Current sales of new obesity therapies
	TABLE 9. Sales of Emerging Obesity Drugs in the US Market. Comparison of number in filled prescriptions during the 2014, in addition to the first quarter of 2015 through the week ending 5/1/15.

Module 3: What's Next

What's Next. Future Players and Technologies. This report anticipates a future marketplace by way of new and emerging technology-based companies. We assess their conceptual strengths, weaknesses, and approval expectations to evaluate prospects for success.
Drugs in the Approval Pipeline
Phase III drugs & promising phase II drugs
TABLE 10. FDA approved & Phase I/II/III companies that are poised enter in the obesity drug market including the target, mechanism of action, and status of ten either approved or in-testing drugs.
Mechanism of Action Descriptions
MC4 pathway Neuropeptide Y (NPY) Byettay Obinepitide Lipase Inhibitors
TABLE 11. Company profiles for 17 new entrants to the market, providing description, CEO, founding, location, drug and phase, funds raised, investors, and administrative structure.
Pre-Clinical Innovations on the Horizon
TABLE 12. List of companies with obesity drugs in the pipeline. Listing of: drug target, phase, mechanism of action, and notes on 27 companies from around the globe.
Mechanism of Action Descriptions
Melanin concentrating hormone (MCH) Leptin Somatostatin ZAG Ghrelin MC4 receptor
Product Comparison/differentiation
TABLE 13: Comparison of new entrants in the market. Summary of molecule type, mode of administration, and effect. Mechanism of action and phase for 17 new and recent entrants.

Module 4: Who's Who

Who's Who. The Ecosystem. Directory of Important Institutions and Individuals. The directory comprises
an invaluable resource to comprehend the important market players and respective roles in the overall ecosystem. This includes: organization, key contact information, analysis, major events, publications, key management biographies for all the important investment houses, associations, publications, research institutions, foundations, and thought leaders.
Major Investors in Obesity
TABLE 14: Major Investors in Emerging Obesity Drugs. List of 19 Institutional investors into Obesity companies with commentary on strategic relationships.
Venture Capital Investors in New Entrants
TABLE 15: List of Investors and an overview of (1) anti-oesity drug investments and (2) most recent investments.
The Obesity Ecosystem: Research Institutions and KOLs
TABLE 16. Major organizations involved in obesity education, awareness, and research. Summary of mission statement for the 9 leading global obesity organizations.
Recent Developments in Marketplace (Exits/Mergers &Acquisitions)
TABLE 17: Summary of recent market activity for new entrants in the anti-obesity market space. Summary of 13 combinations (merger, acquisition, partnership) transactions in Obesity since 2006.
References (137 Citations)