MENVEO (MENINGOCOCCAL VACCINES) – FORECAST AND MARKET ANALYSIS TO 2022
Menveo: Key Metrics in the Nine Major Pharmaceutical Markets

<table>
<thead>
<tr>
<th>2012 Market Sales</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>$125.88m</td>
</tr>
<tr>
<td>5EU</td>
<td>$0.94m</td>
</tr>
<tr>
<td>Japan</td>
<td>N/A</td>
</tr>
<tr>
<td>Australia</td>
<td>$0.04m</td>
</tr>
<tr>
<td>Brazil</td>
<td>N/A</td>
</tr>
<tr>
<td>Total Global*</td>
<td>$126.86m</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Key Events (2012–2022)</th>
<th>Level of Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Menveo received FDA approval for use in infants as young as two months of age in the US in 2013</td>
<td>↑</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2022 Market Sales</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>$162.94m</td>
</tr>
<tr>
<td>5EU</td>
<td>$0.23m</td>
</tr>
<tr>
<td>Japan</td>
<td>N/A</td>
</tr>
<tr>
<td>Australia</td>
<td>$0.04m</td>
</tr>
<tr>
<td>Brazil</td>
<td>N/A</td>
</tr>
<tr>
<td>Total Global*</td>
<td>$163.20m</td>
</tr>
</tbody>
</table>

Source: GlobalData

5EU = five European markets (France, Germany, Italy, Spain, and UK)
N/A: Not Applicable

Sales of Menveo in the Global Meningococcal Vaccines Market 2012–2022

GlobalData estimates the drug sales of Menveo to be $126.86m across seven of the nine major markets covered in this report, which include: US, France, Germany, Italy, Spain, UK, Australia and Brazil. By forecast end in 2022, sales of Menveo will witness an increase. GlobalData estimates the Menveo market to grow at a Compound Annual Growth Rate (CAGR) of 2.6%. This growth will be driven by:

- The increased vaccine coverage rates in the US routine adolescent program, along with inherent population growth
- However, the barriers to Menveo’s growth in the US include cost-effectiveness concerns surrounding an expanded immunization schedule, and anti-vaccine movements.

In contrast to its predicted success in the US, GlobalData does not anticipate sales of Menveo to grow in the other eight markets despite its wide availability.
Executive Summary

Menveo Sales for Meningococcal Vaccines by Region, 2012–2022

<table>
<thead>
<tr>
<th>Region</th>
<th>2012</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>99.21%</td>
<td>99.81%</td>
</tr>
<tr>
<td>EU</td>
<td>0.71%</td>
<td>0.11%</td>
</tr>
<tr>
<td>Australia</td>
<td>0.01%</td>
<td>0.08%</td>
</tr>
</tbody>
</table>

Total: $126.86m

What Do the Physicians Think?

The KOLs interviewed for this report shared their expert insight into the meningococcal vaccines market. These KOLs revealed that, while physicians are relatively happy with the performance of the currently marketed vaccines, they realize that there are still glaring weaknesses in the treatment algorithm that must be addressed. They cite vaccines that offer protection against serogroup B disease as the most important unmet clinical need, and are hopeful that their introduction during the forecast period will revolutionize the marketplace. Additional opportunities for improvement include vaccines with a longer duration of immunity and infant vaccines that are more immunogenic. According to these KOLs, the poor cost-effectiveness characteristic of meningococcal vaccines is also an area of concern and poses a challenge to the expansion of vaccine program coverage. Finally, KOLs recognize the potential impact of anti-vaccine movements on the ability to maintain adequate coverage rates.
Executive Summary

“I think everybody has been hoping for a meningococcal B vaccine. I would say that a serogroup B vaccine is the greatest unmet need in the meningococcal vaccine field today.”

US key opinion leader, March 2013

“I would very much like to see the introduction of an effective serogroup B meningococcal vaccine.”

OUS key opinion leader, February 2013

“Meningococcal vaccination coverage needs to go up.”

US key opinion leader, March 2013

“The epidemiology of the meningococcal disease, both within this country and other countries around the world, varies a lot, and it varies in ways that we don’t completely understand.”

US key opinion leader, March 2013

“The only problem with meningococcal vaccines is the cost-effectiveness, because you have to take into account the fact that the total number of meningococcal disease cases is very low.”

OUS key opinion leader, March 2013
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2 Introduction

2.1 Catalyst

The global meningococcal vaccines market is mature and has experienced limited growth since the introduction of conjugate vaccines, led primarily by Sanofi’s Menactra in the US. The arrival of serogroup B vaccines onto the scene, combined with improved coverage rates of existing programs, is expected to generate modest growth over the forecast period from 2012–2022. Below are the key factors that will contribute to this market growth.

- The introduction of Novartis’ Bexsero and Pfizer’s MnB rLP2086 will provide patients with long-awaited protection against serogroup B disease. These vaccines will occupy the largest empty segment of the meningococcal vaccines space and will have the potential to revolutionize the treatment landscape.

- The expansion of routine immunization programs to include serogroup B vaccines will be essential to the commercial success of these vaccines and highlights the importance of government endorsement in ensuring their widespread usage, as the vast majority of meningococcal vaccines are administered to patients within these routine recommendations.

- The push to improve coverage rates of existing immunization programs will also contribute to market growth, particularly in the US.

- The cost-effectiveness of meningococcal vaccines will be continuously reassessed by cash-strapped governments, creating opportunities for new and existing manufacturers in a market where vaccine preference and usage level do not always correlate with performance in the clinic or the ability to address unmet need. This point will be particularly important for the incorporation of serogroup B vaccines, such as Novartis’ Bexsero, into routine vaccination schedules.

- The entrance of indigenous meningococcal vaccines into emerging markets, such as Brazil, exemplifies the challenges associated with retaining long-term market share in countries that are able to leverage inexpensive manufacturing capacity and buying power to compete with foreign multinational firms.
2.2 Related Reports

- GlobalData (2013). PharmaFocus: Vaccine Adjuvants in Infectious Disease, March, 2013, GDHC001PFR
- GlobalData (2013). PharmaFocus: HIV R&D Strategies, August 2013, GDHC003PFR
- GlobalData (2013). Meningococcal Vaccines – France Drug Forecast and Market Analysis to 2022, September 2013, GDHC144CFR
- GlobalData (2013). Meningococcal Vaccines – Germany Drug Forecast and Market Analysis to 2022, September 2013, GDHC145CFR
- GlobalData (2013). Meningococcal Vaccines – Italy Drug Forecast and Market Analysis to 2022, September 2013, GDHC146CFR
- GlobalData (2013). Meningococcal Vaccines – Spain Drug Forecast and Market Analysis to 2022, September 2013, GDHC147CFR
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- GlobalData (2013). Meningococcal Vaccines – Australia Drug Forecast and Market Analysis to 2022, September 2013, GDHC149CFR
- GlobalData (2013). Meningococcal Vaccines – Brazil Drug Forecast and Market Analysis to 2022, September 2013, GDHC150CFR
- GlobalData (2013). Menveo (Meningococcal Vaccines) – Forecast and Market Analysis to 2022, September 2013, GDHC245DFR
- GlobalData (2013). Nimenrix (Meningococcal Vaccines) – Forecast and Market Analysis to 2022, September 2013, GDHC246DFR
- GlobalData (2013). Menitorix (Meningococcal Vaccines) – Forecast and Market Analysis to 2022, September 2013, GDHC247DFR
- GlobalData (2013). MenHibrix (Meningococcal Vaccines) – Forecast and Market Analysis to 2022, September 2013, GDHC248DFR
- GlobalData (2013). Meningitec (Meningococcal Vaccines) – Forecast and Market Analysis to 2022, September 2013, GDHC249DFR
- GlobalData (2013). Menjugate (Meningococcal Vaccines) – Forecast and Market Analysis to 2022, September 2013, GDHC250DFR
- GlobalData (2013). NeisVac-C (Meningococcal Vaccines) – Forecast and Market Analysis to 2022, September 2013, GDHC251DFR
- GlobalData (2013). Menomune (Meningococcal Vaccines) – Forecast and Market Analysis to 2022, September 2013, GDHC252DFR
- GlobalData (2013). Bexsero (Meningococcal Vaccines) – Forecast and Market Analysis to 2022, September 2013, GDHC253DFR
- GlobalData (2013). MnB rLP2086 (Meningococcal Vaccines) – Forecast and Market Analysis to 2022, September 2013, GDHC254DFR
- GlobalData (2013). Meningococcal Vaccines – Current and Future Players, September 2013, GDHC1019FPR
Appendix

7.7 About GlobalData

GlobalData is a leading global provider of business intelligence in the healthcare industry. GlobalData provides its clients with up-to-date information and analysis on the latest developments in drug research, disease analysis, and clinical research and development. Our integrated business intelligence solutions include a range of interactive online databases, analytical tools, reports, and forecasts. Our analysis is supported by a 24/7 client support and analyst team.

GlobalData has offices in New York, Boston, San Francisco, London, India, and Singapore.

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