Vaccines

US Industry Study with Forecasts for 2014 & 2019

Study #2667 | August 2010 | $4700 | 239 pages
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US demand to grow 5.6% annually through 2014

The US vaccines market experienced meteoric growth between 2004 and 2009. This growth came as a result of the introduction of significant new products, such as Merck’s GARDASIL, the establishment and improvement of blockbuster vaccines like Pfizer’s PREVNAR, and substantial new public health recommendations for adult and adolescent vaccines to address a wide range of diseases. Also at play has been public response to the threat of a pandemic outbreak of H1N1 influenza, which spurred the revamping of production processes to meet sudden demand. New technologies and applications have rejuvenated research efforts to develop products, and an industry that was once highly concentrated is now seeing the entry of new players, from small, research-based firms to established companies. This high level of demand for vaccines in the US will be sustained in the coming years, growing 5.6 percent annually to $14.2 billion in 2014. In the years that follow, ongoing introduction of new products to prevent or to treat complex human diseases, such as cancer, will continue to advance vaccines sales.

Adult, adolescent vaccines to outpace pediatric

Historically, pediatric vaccines dominated the market, but in 2006 adult and adolescent vaccines began to match pediatric demand. Public health recommendations for adult boosters against common diseases, the introduction of new vaccines for pneumonia and shingles, and the importance of seasonal influenza immunization have led to significant growth in this segment, which is expected to exceed $4.4 billion in 2014.

Pedicritical vaccines demand will exceed $4.9 billion in 2014 and will continue to grow, although not at the pace of demand for adult and adolescent vaccines. While patents are expiring for vaccines that have long been used against common childhood diseases, new patented combination vaccines are being introduced that reduce the number of injections and protect against wider arrays of diseases.

Demand for developmental vaccines is expected to reach $2 billion in 2014. New applications are being used to treat people who have already acquired disease, as with PROVENGE (Dendreon), licensed in 2010 for advanced prostate cancer patients. Several new vaccines to treat or prevent cancer are expected to be licensed in a few years.

Demand for animal vaccines is forecast to expand 4.7 percent annually to 2014. An increasing focus on food safety, the widening availability of pet health insurance and new product introductions will promote growth. Continuing advances in biotechnology will broaden the range of disease targets adaptable to animal vaccines.
Sample Text, Table & Chart

ANIMAL VACCINES

Canine Vaccines

Demand for canine vaccines is forecast to increase 4.6 percent per year to $263 million in 2014. This increase is driven by an increasing dog population, increased health care spending per dog, and the development of a variety of new products specifically for dogs. Dogs will remain one of the most important animals kept as pets in the US with the canine population expected to increase to 77 million in 2014. Common canine diseases include distemper, parvovirus, coronavirus, bordetella, adenovirus, leptospirosis, hepatitis, parainfluenza, rabies and Lyme disease. Other frequent problems include infestation with fleas and ticks, worms and other parasites as well as age-related conditions such as cancer, heart disease and vision problems. Trends prompting increased consumer spending on pet health care have spurred the development of new vaccines.

Pfizer produces DEFENSOR against rabies, BRONCHICINE CAe for bordetella, and FIRSTDOSE to prevent canine coronaviral gastroenteritis. Pfizer also offers a vaccine to prevent canine periodontitis. Fort Dodge Animal Health, owned by Pfizer, produces DURAMUNE, one of the best-selling vaccine products in the US. It protects against parvovirus, distemper, adenovirus and canine parainfluenza; it is available in combination with other canine vaccines. Fort Dodge’s GIARDIA VAX prevents disease caused by Giardia, a waterborne protozoal parasite; while LYMEVAX protects dogs against Lyme disease caused by Borrelia burgdorferi. In 2009, Boehringer Ingelheim Vetmedica began marketing many of these established brands (including DURAMUNE and RABVAC) under the terms of its acquisition of major product lines from Pfizer and Fort Dodge. Boehringer Ingelheim Vetmedica also makes SOLO-JEC as a vaccine against distemper, adenovirus, parainfluenza, parvovirus and other diseases.

<table>
<thead>
<tr>
<th>TABLE V-1</th>
<th>HUMAN VACCINES DEMAND (million dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>1999</td>
</tr>
<tr>
<td>Resident Population (million persons)</td>
<td>279.0</td>
</tr>
<tr>
<td>$ vaccines/capita</td>
<td>6.3</td>
</tr>
<tr>
<td>Human Vaccines Demand</td>
<td>1744</td>
</tr>
<tr>
<td>Pediatric Vaccines</td>
<td>1249</td>
</tr>
<tr>
<td>Adult &amp; Adolescent Vaccines</td>
<td>325</td>
</tr>
<tr>
<td>Pandemic Influenza Vaccines</td>
<td>--</td>
</tr>
<tr>
<td>Biodefense Vaccines</td>
<td>--</td>
</tr>
<tr>
<td>Travel Vaccines</td>
<td>--</td>
</tr>
<tr>
<td>Developmental Vaccines</td>
<td>--</td>
</tr>
<tr>
<td>% human vaccines</td>
<td>72.1</td>
</tr>
<tr>
<td>Total Vaccines Demand</td>
<td>2418</td>
</tr>
</tbody>
</table>

CHART VII-2

US ANIMAL VACCINES MARKET SHARE BY COMPANY, 2009 ($1.6 billion)

<table>
<thead>
<tr>
<th>Company</th>
<th>Market Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Markel</td>
<td>72.0%</td>
</tr>
<tr>
<td>Pfizer</td>
<td>28.0%</td>
</tr>
<tr>
<td>Other</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

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Sample Profile, Table & Forecast

COMPANY PROFILES

Heska Corporation
3760 Rocky Mountain Avenue
Loveland, CO 80538
970-493-7272
http://www.heska.com

Revenues: $76 million (2009)
Research and Development Expenditures: nearly $2 million (2009)
Employment: 275 (2009)
Key Products:
feline and bovine vaccines

Heska Corporation develops, manufactures, markets and supports veterinary products designed for the canine and feline companion animal health markets. The Company conducts operations through two segments: Core Companion Animal Health, and Other Vaccines, Pharmaceuticals and Products.

Heska participates in the US vaccine industry through both the Core Companion Animal Health and the Other Vaccines, Pharmaceuticals and Products segments. Via the Core Companion Animal Health segment, which generated 2009 revenues of $66 million, Heska produces and sells feline vaccines, in addition to pharmaceuticals, supplements, diagnostics and other products. The Company’s feline vaccines, which are marketed under the ULTRANASAL brand name, are three-way modified live vaccine combinations engineered to prevent disease caused by three common feline respiratory viruses: calicivirus, rhinotracheitis virus and panleukopenia virus. Heska also makes a two-way ULTRANASAL feline vaccine designed to prevent disease caused by rhinotracheitis and calicivirus. Both types of vaccines are administered by dropping the liquid preparation into the nostrils of cats and kittens.

"Most demand will be for hepatitis B vaccines, which will increase marginally to $195 million for 11.4 million doses. The single hepatitis B vaccine will experience competition from COMVAX, Merck’s combination vaccine for hepatitis B and Haemophilus b, which reentered the market in August 2010 following a voluntary recall."

--Section V, pg. 82
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Enzymes
US demand for enzymes will rise 4.8% annually to 2014. Gains will be driven by continued expansion of higher-value specialty enzymes in pharmaceuticals, diagnostics, research and biotechnology, and biocatalysts. In the biofuels segment, growth will moderate as the industry transitions to cellulases for producing biomass ethanol. This study analyzes the $2.2 billion US enzymes industry, with forecasts for 2014 and 2019 by market and product. It also evaluates company market share and profiles industry competitors.

#2670 ............... September 2010 ............... $4900

Pet Health: Products & Services
US retail spending on pet health products and services will rise 6.5% yearly through 2014. Pet insurance will be the fastest growing service from a small base. Pharmaceuticals recently became the largest product category—surpassing parasiticides—and will be among the fastest growing, second only to dietary supplements. This study analyzes the US pet health industry, with forecasts for 2014 and 2019 by service, product, condition and animal. The study also evaluates company market share and profiles industry players.

#2660 ............... August 2010 ............... $4800

Nanotechnology in Health Care
US demand for nanosized medical products will grow 17.1% yearly though 2014. Cancer and central nervous system disorders will be the fastest growing applications. Nanomedicines will provide the best opportunities, while nanotech medical supplies and devices grow the fastest from a small base. This study analyzes the $34.2 billion US nanotechnology medical product industry, with forecasts for 2014 and 2019 by product and application. It also evaluates company market share and profiles industry participants.

#2622 ............... June 2010 ............... $4800

Implantable Medical Devices
US demand for implantable medical devices will increase 8.3% annually through 2014. Gains will be driven by the development of next generation devices based on new technologies and improved materials. Spinal implants, cardiac stents and orthobiologics will be among the fastest growing product categories. This study analyzes the $33 billion US implantable medical device industry, with forecasts for 2014 and 2019 by procedure, material and type. It also evaluates company market share and profiles 36 industry competitors.

#2599 ............... April 2010 ............... $4800

World Nutraceutical Ingredients
Global nutraceutical ingredient demand will rise 6.2% yearly through 2013. China and India will be the fastest growing markets while the US remains the largest. Best prospects include soy proteins; additives lutein and lycopene; vitamins A and E; minerals calcium and magnesium; and extracts ginkgo biloba and glucosamine. This study analyzes the $16 billion world nutraceutical ingredient industry, with forecasts for 2013 and 2018 by product, world region and for 12 countries. It also details market share and profiles industry players.

#2565 ............... November 2009 ............... $5800