Ophthalmology Devices Global Market

[PRODUCTS (Diagnostics, Surgical and Vision Care); APPLICATIONS (Cataract, Glaucoma, Age related macular degeneration, Diabetic Retinopathy and Others); END- USERS (Hospitals, Academic & Research Institutes and Others); Regional (North America, Europe, Asia Pacific and Rest of the World)]

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1 REPORT DESCRIPTION

Ophthalmology is a segment of medical science associated with study of anatomy, physiology, diseases of human eye, and developing various therapeutic methods to treat eye diseases. Some of the major eye diseases are either age-related or caused due to chronic disorders. They include various degenerative eye diseases like macular degeneration, cataract, ocular hypertension (glaucoma), and refractive errors among others. Revolution in the field of medical science has led to the rapid development of ophthalmology devices that are invented to effectively treat ocular defects and disorders.

Ophthalmology devices market is segmented on the basis of products type as diagnostic devices, surgical devices and vision care. Based on the applications the ophthalmology devices market is segmented into cataract, glaucoma, age-related macular degeneration, diabetes retinopathy and others (refractive errors, amblyopia, and strabismus). End-users are segmented into hospitals, academic and research laboratories, and others (private eye clinic and vision care outlets).

The global ophthalmology devices market is expected to grow at a CAGR of around XX% from 2015 to 2021. Increasing incidence of degenerative diseases of eyes, increasing baby boomer population, increase in R&D activities in ophthalmology key players and extensive use of high-end technologies involving use of software and computer aided devices and platforms in ophthalmology drives the market of ophthalmology devices market. Lack of ophthalmologists, economic slowdown and saturation of the market in developed countries are the factors hampering the market growth.

Lifestyle changes owing to increase in ocular cancer, diabetes and macular degeneration patients, early diagnosis and treatment of diseases, advancement of technology with its wide application areas shows that ophthalmology devices market has vast opportunities in the coming years.

North America accounts for the highest market share followed by Europe. Steep rise in ageing population, increase in minimally invasive surgeries and favourable government policies makes U.S. the leader of ophthalmology devices market. However, Asian countries especially India and
China’s are the fast growing regions with its growing demand for ophthalmology devices and increasing research investments.

Major players in ophthalmology devices market include Abbott Medical Optics, Inc. (U.S.), Alcon Laboratories, Inc. (U.S.), Bausch & Lomb, Inc. (U.S.), Carl Zeiss (Germany), Essilor International SA (U.S.), Haag-Streit Holding AG (Switzerland), Hoya Corporation (Japan), Nidek Co. Ltd (Japan), STAAR Surgicals (U.S.) and Topcon Corporation (Japan).

The report provides an in depth market analysis of the above mentioned segments across the following regions:

- North America
- Europe
- Asia-Pacific
- Rest of the World (RoW)
### TABLE 1

**OPHTHALMOLOGY GLOBAL MARKET REVENUE, BY REGION, (2013-2021) ($MN)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>North America</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Europe</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>RoW</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Total</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>13,129</td>
<td>XX</td>
</tr>
</tbody>
</table>

Source: American Genetic Association (AGA), Genome Wide Association (GWA), American Society of Gene Therapy (ASGT), Nanotechnology and Integrated Microsystems Associations (NIMA), International Electrotechnical Commission (IEC), MEMS Associations, World Health Organization (WHO), Industry expert Interviews, and IQ4I analysis

North America commanded the largest revenue of $XX million of the global biochips market in 2014. The market is expected to grow at a CAGR of 15% from 2015 to 2021 to reach $XX million by 2021. Asia Pacific is expected to grow at a strong CAGR of XX% during the forecast period.
2  GLOBAL OPHTHALMOLOGY DEVICES MARKET, BY PRODUCTS

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnostic Devices</td>
<td>XX</td>
<td>1,749</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
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<tr>
<td>Surgical Devices</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Vision Care</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>Total</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
</tbody>
</table>


Vision care commanded the largest revenue of $XX million of the ophthalmology global devices market in 2014. The market is expected to grow at a CAGR of XX% from 2015 to 2021 to reach $XX million by 2021. Surgical devices segment is expected to grow at highest CAGR of XX% during the forecast period.
3 OPHTHALMOLOGY DEVICES GLOBAL MARKET, BY APPLICATIONS

FIGURE 1

OPHTHALMOLOGY DEVICES GLOBAL MARKET REVENUE, BY APPLICATION (2014 V’S 2021) ($MN)
4 OPTHALMOLOGY DEVICES GLOBAL MARKET, BY END-USERS

FIGURE 2

OPHTHALMOLOGY DEVICES GLOBAL MARKET REVENUE, BY END-USERS (2013 V’S 2021) ($MN)
5  MARKET ANALYSIS

5.1 DRIVERS

5.1.1 INCREASE IN R&D ACTIVITIES BY OPHTHALMOLGY KEY PLAYERS

The R&D activity in ophthalmology is attractive because of the size of the market and unmet needs. Pharmaceutical companies are venturing into ophthalmology devices market through acquisitions and investing vast resources in R&D. To capture this emerging opportunity, big companies such as Alcon (acquired by Novartis AG) are investing about $XX million or XX% of their global revenue for research and development of medical devices. To keep abreast with the technological developments and to increase product portfolio large corporations are purchasing niche players. As result of its investments a number of new products were introduced such as surgical vitreoretinal instrument ULTRAVIT, Centurion vision system phacoemulsification platform. Baby boomer population is reaching an age where the number of people with eye problems such as cataract, AMD, diabetic macular edema (DME) and glaucoma are on rise and present a very large market opportunity for development of cost effective yet innovative solutions.
5.2 MARKET SHARE ANALYSIS BY MAJOR PLAYERS

FIGURE 3

OPHTHALMOLOGY DEVICES GLOBAL MARKET SHARE ANALYSIS, BY KEY PLAYERS, 2014

Essilor International SA is proved to be the leader in the ophthalmology devices market, with a largest share of 24.2% of the global ophthalmology devices market. Essilor is the world leader in the production of ophthalmic lenses along with ophthalmic optical equipment. The company has adapted acquisition as a key strategy to penetrate high value markets. For instance, Costa Inc X-Cel Optical is mainly focused to get access to technologies like Transition Optical for photochromatic lenses technology and Suntech Optical for sun lenses.
6 INTRODUCTION

6.1 RESEARCH METHODOLOGY

The research on ophthalmology devices market involved both widespread secondary and primary research. The secondary research was carried out on company websites, annual reports, SEC filings, associations, articles, press releases and journals to identify and collect both the qualitative and quantitative data related to ophthalmology devices. The primary sources were experts from supply side such as CEOs, directors, VP’s, international/regional marketing managers, and marketing executives and from demand side such as private eye clinics, hospitals, and purchase managers. All the primary sources were interviewed to acquire and verify critical qualitative and quantitative information and also to assess the future forecast of the all segments of the ophthalmology devices market. Along with these the additional information extracted was about the key players in this industry with their market revenues, products and developments. The factors responsible for growth and restriction of the ophthalmology devices market along with the future opportunities were also determined through secondary research and verified through primary sources.

The following illustrative figure shows the market research methodology applied in making this report on the ophthalmology devices global market.
FIGURE 4

RESEARCH METHODOLOGY: OPHTHALMOLOGY DEVICES GLOBAL MARKET

Secondary Research
- Technical information of Ophthalmology Devices
- Strategic insights, financial revenues and competitive intelligence of Key players
- Applications and end-users market of ophthalmology devices
- Upcoming technologies and growth scenario of sub markets and parent market

Primary Research
- Market size, CAGR and market trends validation
- Market size of sub segments and market shares of major players
- Upcoming trends and technological advancements in devices.
- Validation of factors influencing market and regional market shares

Market Breakdown
- Bottom-up and Top-down approach
- Data triangulation
- Qualitative & Quantitative analysis
- Ophthalmology devices market segmentation
6.1.1 MARKET SIZE ESTIMATION

The size of the ophthalmology devices global market and its various segments and sub-segments were estimated and validated through secondary and primary research. All the ophthalmology devices market percentage shares, splits, and breakdowns were determined using secondary sources and verified through primary sources to get the final quantitative and qualitative data. This data is consolidated and added with detailed inputs and analysis from IQ4I and presented in this report.

![OPHTHALMOLOGY DEVICES MARKET: TOP-DOWN AND BOTTOM-UP APPROACH](image-url)

**FIGURE 5**

**OPHTHALMOLOGY DEVICES MARKET: TOP-DOWN AND BOTTOM-UP APPROACH**

- Top players Market Revenue in the ophthalmology devices
  - Market: Abbott Medical Optics, Inc (U.S.), Alcon laboratories, Inc (U.S.), Bausch & Lomb, Inc (U.S.), Carl Zeiss (Germany), Essilor International SA (France), Haag-Streit Holdings AG (Switzerland), Hoya Corporation (Japan), Johnson & Johnson (U.S.), Nidek Co. Ltd (Japan), STAAR Surgical (U.S.), Topcon Corporation (Japan)
The top-down approach was used to derive the ophthalmology devices global market as well as the ophthalmology devices market by product type, applications and end users. Different percentage splits were applied for different segments of the ophthalmology devices market. Even the geographical splits differ in each of the disciplines. The bottom-up approach was followed for market share analysis of the key players and there by deriving the final global ophthalmology devices market value.

**FIGURE 6**

**OPHTHALMOLOGY DEVICES MARKET: FORECASTING MODEL**
6.1.2 MARKET BREAKDOWN AND DATA TRIANGULATION

FIGURE 7

OPHTHALMOLOGY DEVICES MARKET: MARKET BREAKDOWN & DATA TRIANGULATION

- Market share of ophthalmology devices market in Medical Devices Global Market
- Top-down Primary Research
- Bottom-up Secondary Research
- Financial/Annual reports
- Investor Presentations
- SEC filings
- Scientific Journals
- Organizations/Associations & Groups

Ophthalmology Devices Market (~XX Bn) (2014)

Market Share analysis of key players:
- AMO (U.S.), B&L (U.S.), Carl Zeiss (Germany), NIDEK CO, LTD (Japan), J&J (U.S.), Hoya Corporation (Japan), STAAR Surgical (U.S.), Alcon (U.S.)

Demand & Supply side:
- Laboratories, Research institutes, Healthcare Institutions, Executives from major companies, Consultants
6.1.3 ASSUMPTIONS

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market Revenue</td>
<td>The global ophthalmology devices market revenue is estimated to be ~8% of the global medical device market. The value is cross validated through bottom-up and top-down approach as well.</td>
</tr>
<tr>
<td>Market growth</td>
<td>The CAGR for the forecasted period (2015-2021) is assumed to be normalized and the effect of inflation, recession, economic downturn, regulatory or policy changes, or other factors are not considered.</td>
</tr>
<tr>
<td>Applications Market</td>
<td>The applications splits were assumed based on the contribution of diagnostic devices, surgical devices and vision care in respective application area. These were cross verified with primary data as well.</td>
</tr>
<tr>
<td>Segmental &amp; Sub segmental market shares</td>
<td>The market shares are analysed purely based on the primary inputs, in case of the data non availability for the sub markets the parent market trend has been assumed for the forecasted period.</td>
</tr>
<tr>
<td>Market Share</td>
<td>Market share analysis of key players is performed in two ways i.e., based on the primary research rankings (Market penetration of players) and the other based on the estimated ophthalmology devices product revenues of key players.</td>
</tr>
</tbody>
</table>
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