

# **Ophthalmic Drugs: World Market Prospects 2013-2023**

https://marketpublishers.com/r/O13ECFEB8C0EN.html Date: March 2013 Pages: 222 Price: US\$ 2,635.00 (Single User License) ID: O13ECFEB8C0EN

# Abstracts

#### **Report Details**

#### How to find trends and revenue predictions for the ophthalmic drug industry

What are the commercial prospects for treating eye disorders? Visiongain's new report gives you forecasted revenues to 2023. It explains trends, opportunities and prospects for ocular drugs.

Our study lets you assess sales data at overall world market, submarket and national level. There you find that industry's most promising and lucrative segments, helping your research and analyses.

Therapies for treating eye disorders and diseases have rising demand. See the future of ophthalmic medicines and discover how sales of ocular drugs can increase.

#### Forecasts and other analyses to help you stay ahead in knowledge

In our work you find revenue forecasting to 2023, historical data, growth rates and market shares. Also, you see qualitative analysis (inc. SWOT), business outlooks and research and development (R&D). You receive 48 tables, 74 charts and 9 interviews.

Is finding commercial details a challenge? With our report you can get ahead in knowledge, benefiting your research, analyses and decisions. Find trends, innovations and opportunities. You see what's happening.

Discover areas that will prosper, reducing the risk of your being left behind.

The following sections show how you benefit from our new study.



Discover prospects for the world market and submarkets

Along with revenue prediction for the overall world market, you see forecasts to 2023 for these five submarkets:

Glaucoma treatments

Anti-allergy, anti-inflammatory and anti-infective agents

Retinal disorder treatments

Dry eye treatments

Other medicines.

With our investigation you gain business research and analysis with individual sales predictions and discussions. You find analysis of competition, as well as commercial drivers and restraints. See what's likely to achieve the most success.

You can gain competitive advantages by understanding the trends, opportunities and challenges facing the ophthalmic drug market.

See revenue forecasts for products

How will leading ophthalmic drugs perform to 2023 at world level? Our work shows you revenue forecasts for 20 top products, including Lucentis, Eylea, Visudyne, Xalatan/Xalacom, Patanol and Restasis.

Discover how high revenues can go, to 2023, finding areas and years with highest predicted growth. You see what's happening, understanding trends, challenges and opportunities.

Our work also breaks the main world forecast into leading geographical markets.

#### What prospects for leading countries?

Developments worldwide will influence the market, especially rising demand in



emerging countries. Our report shows outlooks for the industry.

You see individual forecasts to 2023 for ten national markets, getting overall revenues:

US

Japan

Germany, France, UK, Italy and Spain (EU5)

Brazil, India and China

Discover progress and outlooks. You assess the industry's future - hear about developments and find their significance.

You find potential. Our analyses show growth will occur in established pharma markets and in developing countries. In particular, drug launches from 2013 to 2023 will change medical prescribing and the commercial landscape.

Research and development - assess innovation, trends and possibilities

What about R&D - the pipeline for new drugs? You see trends for these areas:

Glaucoma treatments

Anti-allergy, anti-inflammatory and anti-infective agents

Retinal disorder treatments

Dry eye treatments

Other progress in ophthalmic treatments.

Our study also discusses these candidates and others:

Neuroprotective agents



RNA interference technology

Ocular implants

Gene therapy.

There's strong, promising R&D for treating ocular disorders. Novel compounds and new formulations with high safety, efficacy and affordability are in great demand. See what's happening.

What affects ophthalmic drugs treatments from 2013?

Our report discusses issues and events affecting that industry and market from 2013 onwards:

Increasing prevalence of eye disorders

Reimbursement for ophthalmic pharmaceuticals

Patient compliance

Generic competition.

Also, we discuss these aspects of the field:

Development of new drug delivery methods and formulations

Sustained-release ocular Implants

New ophthalmic therapeutic applications for drugs.

See what the future holds. You investigate technological, economic and political matters, finding emphasis on companies, competition and business outlooks.

#### Leading companies and 2015 market value



We predict the overall world market for ophthalmic drugs will reach \$21.9bn in 2015, and expand further to 2023.

What are leading companies doing? Our work discusses Allergan, Novartis, Pfizer, Roche and other pharmaceutical companies, evaluating prospects of the industry and market.

Prospects for R&D are strong, and from 2013 onwards there will arise many opportunities. Our work shows you the technological and commercial possibilities, helping you stay ahead.

Eight ways Ophthalmic Drugs: World Market Prospects 2013-2023 helps

To sum up, our investigation gives you the following knowledge:

Revenues to 2023 for the overall world market and 5 submarkets - you discover that industry's prospects

Forecasting to 2023 for the US, Japan, Germany, France, UK, Spain, Italy, Brazil, India and China - you see leading national sales potentials

Discover revenue forecasts to 2023 for 20 leading products -- you find sales outlooks for top brands

Review R&D, seeing pipeline trends by therapeutic area - you hear about progress in those research areas, finding technological and medical possibilities

Opinions on the sector - you read our industry interviews

Understanding of competition and opportunities - you see what affects that industry, learning what shapes its future

Analysis of what stimulates and restrains the industry and market - you assess challenges and strengths

Prospects for established firms and those seeking to enter the sector - you explore needs, practices and outlooks for success.



#### You gain information found nowhere else

That work gives independent analysis. You receive business intelligence found only in our report, seeing where technological and financial prospects are most rewarding.

With our study you are less likely to fall behind in knowledge or miss opportunity. See how you could benefit your research, analyses and decisions, also saving time and getting you recognition for insight.

You see prospects for ophthalmic drugs by ordering now

Visiongain's new study is for everyone needing analysis of the industry and market for ophthalmic medicines. You find data, trends and predictions. Please order our report now.



# Contents

### **1. EXECUTIVE SUMMARY**

- 1.1 Aims, Scope and Format of the Report
- 1.1.1 Chapter Outlines
- 1.2 Research and Analysis Methods

# 2. OPHTHALMIC DISORDERS AND TREATMENTS

- 2.1 The Ophthalmic Drug Market
- 2.2 Ophthalmic Disorders
- 2.3 The Human Eye and the Vision Process
- 2.4 Glaucoma
- 2.4.1 Primary Open Angle Glaucoma: The Most Common Type of Glaucoma
- 2.4.2 Closed Angle Glaucoma
- 2.4.3 Secondary Glaucoma
- 2.4.4 Congenital Glaucoma
- 2.4.5 Normal Tension Glaucoma
- 2.4.6 Ocular Hypertension
- 2.4.7 Glaucoma Risk Factors
- 2.4.8 Diagnosis of Glaucoma
- 2.4.9 Prevalence of Glaucoma
- 2.4.10 Treatment of Glaucoma
- 2.4.11 Prostaglandins are the First-Line Treatment of Choice
- 2.4.12 Second-Line Glaucoma Treatments
- 2.4.13 Combination Treatments
- 2.4.14 Laser Treatment
- 2.4.15 Surgery (Trabeculectomy)
- 2.5 Age-Related Macular Degeneration (AMD)
  - 2.5.1 Dry AMD
  - 2.5.2 Wet AMD
  - 2.5.3 AMD Risk Factors
  - 2.5.4 Diagnosis of AMD
  - 2.5.5 Prevalence of AMD
  - 2.5.6 Treatment of AMD
- 2.6 Diabetic Retinopathy
  - 2.6.1 Diagnosis of Diabetic Retinopathy
  - 2.6.2 Prevalence of Diabetic Retinopathy



- 2.6.3 Laser and Surgical Treatments are the Main Treatments for Diabetic Retinopathy
- 2.6.4 Pharmaceutical Treatments
- 2.7 Ophthalmic Allergies
  - 2.7.1 Allergic Conjunctivitis is the Most-Common Eye Allergy
- 2.7.2 Ophthalmic Allergy Treatments
- 2.8 Ophthalmic Inflammatory Disorders
  - 2.8.1 Uveitis is the Most Common Ocular Inflammatory Disease
  - 2.8.2 Ophthalmic Inflammatory Drugs
- 2.9 Ophthalmic Infections
- 2.9.1 Types of Eye Infection
- 2.9.2 Treatment of Eye Infections
- 2.10 Dry Eye Syndrome
  - 2.10.1 Causes and Prevalence of Dry Eye Syndrome
  - 2.10.2 The Mainstay of Dry Eye Treatment is Artificial Tears
  - 2.10.3 Prescription-Only Drugs for Dry Eye are Limited
  - 2.10.4 Tear Augmenters (Punctal Plugs)

# 3. THE WORLD OPHTHALMIC PHARMACEUTICAL MARKET, 2013-2023

- 3.1 The Ophthalmic Pharmaceutical Market in 2011
- 3.1.1 The Anti-Glaucoma Segment had the Largest Market Share in 2011
- 3.1.2 Top Twenty Ophthalmic Pharmaceutical Brands, 2011
- 3.1.3 Four Manufacturers Account for Over Half the Market
- 3.2 World Ophthalmic Pharmaceutical Market Forecasts, 2013-2023
  - 3.2.1 Growth Expected in the Ophthalmic Pharmaceutical Market from 2013-2017

3.2.2 What are the Prospects for the Ophthalmic Pharmaceutical Market from 2018-2023?

3.3 Ophthalmic Pharmaceutical Therapeutic Category Market Forecasts, 2013-2023

- 3.3.1 Retinal Disorders Will Power Growth from 2011-2017
- 3.3.2 Retinal Disorder Revenue Growth Will Slow from 2018-2021

3.3.3 High Growth and Return to Market-Leading Position for Anti-Glaucoma Drugs from 2021 to 2023

# 4. THE ANTI-GLAUCOMA MARKET, 2013-2023

- 4.1 The Anti-Glaucoma Drug Market in 2011
  - 4.1.1 Prostaglandin Analogues Led the Anti-Glaucoma Market in 2011
  - 4.1.2 Xalabrands (Xalatan/Xalacom)
  - 4.1.3 Lumigan Franchise



- 4.1.4 Cosopt/Trusopt
- 4.1.5 Travatan Z
- 4.1.6 Alphagan
- 4.1.7 Combigan
- 4.1.8 Azopt
- 4.1.9 Extravan/Duotrav
- 4.2 Anti-Glaucoma Market Forecasts, 2013-2023
- 4.2.1 Generic Competition Will Affect the Anti-Glaucoma Market from 2011-2017
- 4.2.2 Novel Anti-Glaucoma Drugs Will Drive Growth from 2018-2023
- 4.2.3 Xalabrands (Xalatan/Xalacom) Sales Forecast, 2013-2023
- 4.2.4 Lumigan Franchise Sales Forecast, 2013-2023
- 4.2.5 Cosopt/Trusopt Sales Forecast, 2013-2023
- 4.2.6 Travatan Z Sales Forecast, 2013-2023
- 4.2.7 Alphagan Sales Forecast, 2013-2023
- 4.2.8 Combigan Sales Forecast, 2013-2023
- 4.2.9 Azopt Sales Forecast, 2013-2023
- 4.2.10 Extravan/DuoTrav Sales Forecast, 2013-2023

### 5. THE OPHTHALMIC ANTI-ALLERGY/INFLAMMATORY/INFECTIVE MARKET

- 5.1 The Ophthalmic Anti-Allergy/Inflammatory/Infective Market in 2011
  - 5.1.1 Patanol
  - 5.1.2 Vigamox/Vegamox
  - 5.1.3 TobraDex
  - 5.1.4 Pataday
  - 5.1.5 Cravit
  - 5.1.6 Acular
  - 5.1.7 Xibrom/Bromday
- 5.2 Ophthalmic Anti-Allergy/Inflammatory/Infective Market Forecasts, 2013-2023
- 5.2.1 Innovation in the Anti-Allergy/Inflammatory/Infective R&D Pipeline
- 5.2.2 Patanol Sales Forecast, 2013-2023
- 5.2.3 Vigamox Sales Forecast, 2013-2023
- 5.2.4 TobraDex Sales Forecast, 2013-2023
- 5.2.5 Pataday Sales Forecast, 2013-2023
- 5.2.6 Cravit Sales Forecast, 2013-2023
- 5.2.7 Acular Sales Forecast, 2013-2023
- 5.2.8 Xibrom/Bromday Sales Forecast, 2013-2023

# 6. THE RETINAL DISORDER MARKET, 2013-2023



#### 6.1 The Retinal Disorder Treatment Market

6.1.1 Wet AMD has the Largest Market Share of the Retinal Disorders Market

6.1.2 Lucentis Controls the Retinal Disorder Market in 2011

6.1.3 Visudyne was the Second Highest Selling Retinal Disorder Drug in 2011

6.1.4 Eylea, the New Retinal Disorder Drug in 2011

6.1.5 Lucentis has Sidelined Macugen but Faces Potent Threat from Avastin and Eylea

- 6.1.6 Eylea Clinical Trials Data
- 6.1.7 Eylea and the Davis-Smyth VEGF-Trap Patents
- 6.1.8 Allergan's Ozurdex, First Drug Therapy for Macular Oedema
- 6.2 Retinal Disorder Market Forecasts, 2013-2023
- 6.2.1 Eylea and Lucentis Will Drive the Retinal Disorder Market from 2011-2017
- 6.2.2 Novel Drugs and New Disease Treatments will Drive Growth from 2018-2023
- 6.2.3 Lucentis Sales Forecast, 2013-2023
- 6.2.4 Eylea Sales Forecast, 2013-2023
- 6.2.5 Visudyne Sales Forecast, 2013-2023

# 7. THE DRY EYE MARKET, 2013-2023

- 7.1 The Dry Eye Drug Market in 2011
  - 7.1.1 Restasis Prescription Drug for Dry Eye
- 7.1.2 Allergan's Refresh Brand, including Celluvisc, is the Second-Best-Selling Dry Eye Product
- 7.1.3 Hyalein: Marketed in Japan and China
- 7.1.4 The OTC Market for Artificial Tears is Fragmented and Competitive
- 7.2 Dry Eye Market Forecasts, 2013-2023
  - 7.2.1 Increased Sales of Dry Eye Prescription Drugs Forecasted from 2013-2017
- 7.2.2 Growth in the Dry Eye Market Will Decline after 2013
- 7.2.3 Restasis Sales Forecast, 2013-2023
- 7.2.4 Refresh Brand including Celluvisc: Sales Forecast, 2013-2023
- 7.2.5 Hyalein Sales Forecast, 2013-2023

# 8. ISSUES AFFECTING THE MARKET FOR OPHTHALMIC DRUGS, 2013-2023

- 8.1 SWOT Analysis of the Ophthalmic Drugs Market
- 8.2 Strengths of the Ophthalmic Pharmaceutical Market
  - 8.2.1 Development of New Drug Delivery Methods and Formulations
  - 8.2.2 Intraocular Injections



- 8.2.3 Sustained-Release Ocular Implants
- 8.2.4 Gene Therapy and RNA Interference Technology
- 8.2.5 New Ophthalmic Therapeutic Applications for Drugs
- 8.2.6 Development of Neuroprotective Anti-Glaucoma Medications
- 8.3 Weaknesses of the Ophthalmic Pharmaceutical Market
- 8.3.1 The Ophthalmic Pharmaceutical Market Will Face Generic Competition
- 8.3.2 Avastin is Cannibalising Lucentis Revenues
- 8.4 Opportunities for the Ophthalmic Pharmaceutical Market
- 8.4.1 Aging of the World Population
- 8.4.2 Increasing Prevalence of Diabetes and Other Health Challenges
- 8.4.3 Increasing Prevalence of Eye Disorders
- 8.4.4 Retinal Disorders Will Have the Most-Marked Increases in Prevalence
- 8.4.5 Increasing Prevalence of Glaucoma, Dry Eye and Other Ophthalmic Disorders
- 8.4.6 Generous Reimbursement for Ophthalmic Pharmaceuticals
- 8.5 Threats Facing the Ophthalmic Pharmaceutical Market
- 8.5.1 Patient Compliance
- 8.5.2 The Rate of Diagnosis for Eye Disorders is Low

### 9. NATIONAL MARKETS FOR OPHTHALMIC PHARMACEUTICALS, 2013-2023

- 9.1 Ophthalmic Pharmaceuticals: Leading National Markets, 2011
- 9.2 Leading Developed-Country Ophthalmic Pharmaceutical Markets
- 9.2.1 The US Ophthalmic Pharmaceutical Market, 2013-2023
- 9.2.2 The Japanese Ophthalmic Pharmaceutical Market, 2013-2023
- 9.2.3 Leading European Ophthalmic Pharmaceutical Markets, 2013-2023
- 9.3 Emerging-Economy Ophthalmic Pharmaceutical Markets
  - 9.3.1 Ophthalmic Pharmaceuticals in Developing Countries
  - 9.3.2 The Chinese Ophthalmic Pharmaceutical Market, 2013-2023
  - 9.3.3 The Indian Ophthalmic Pharmaceutical Market, 2013-2023

# **10. THE OPHTHALMIC PHARMACEUTICAL R&D PIPELINE**

10.1 The Ophthalmic Pharmaceutical Pipeline: Richest in Anti-Glaucoma and Retinal Disorder Agents

10.2 The Anti-Glaucoma Pipeline

10.2.1 Neuroprotection Will Be the Most Important Anti-Glaucoma Pipeline Development

10.2.2 Taflotan/DE-085 (Santen/Asahi)

10.2.3 Azarga (Alcon)





- 10.2.4 PF-4217329 (Pfizer)
- 10.2.5 Anecortave (Alcon)
- 10.2.6 DNB-001 (Danube)
- 10.2.7 BVT.28949 (Biovitrum)
- 10.2.8 OT-730 (Othera/QLT)
- 10.2.9 AL-37807 (Alcon/Novartis)
- 10.2.10 QLT's Punctal Plug Delivery Technology
- 10.2.11 PF-03187207 (NicOx/Pfizer)
- 10.2.12 Y-39983 (SNJ-1656/Sanju)
- 10.2.13 DE-111/DE-118 (Santen)
- 10.3 The Ophthalmic Anti-Allergy Pipeline
  - 10.3.1 Bepreve (ISTA/Senju)
  - 10.3.2 FOV1101/Prednisporin (Fovea/CombinatoRx)
  - 10.3.3 DE-103 (Santen)
  - 10.3.4 DE-114 (Santen)
  - 10.3.5 Vekacia (Ciclosporin/Santen)
- 10.4 The Ophthalmic Anti-Inflammatory Pipeline
- 10.4.1 T-Pred (ISTA)
- 10.4.2 AzaSite Plus/ASV-502 (InSite Vision)
- 10.4.3 AzaSite Xtra/ISV-405 (InSite Vision)
- 10.4.4 Durezol (Senju/Sirion Therapeutics/Alcon)
- 10.4.5 Luveniq (Lux Biosciences)
- 10.4.6 Simulect (Cerimon)
- 10.4.7 EGP-437 (EyeGate Pharma)
- 10.5 The Ophthalmic Anti-Infective Pipeline
- 10.5.1 TobraDex ST (Alcon/Novartis)
- 10.5.2 ISV-403/Besifloxacin (Bausch & Lomb)
- 10.5.3 Moxifloxacin/Dexamethasone (Alcon/Novartis)
- 10.5.4 Aganocide (Alcon/NovaBay)
- 10.5.5 Finafloxacin (Alcon/MerLion)
- 10.6 The Retinal Disease Pipeline
- 10.6.1 Retinal Diseases Have the Richest Pipeline
- 10.6.2 Jetrea (ThromboGenics/Novartis)
- 10.6.3 Arxxant (Eli Lilly/Alcon/Takeda)
- 10.6.4 Recombinant Human VEGF Receptor-Fc Fusion Protein (Chengdu Kanghong Biotech)
  - 10.6.5 Ozurdex (Allergan)
  - 10.6.6 MC-1101 (MacuCLEAR)
  - 10.6.7 Vitrase/Vitragen (ISTA)



- 10.6.8 DE-109 (Santen)
- 10.6.9 Bevasiranib/Cand5 (OPKO Health)
- 10.6.10 Atacand/TCV-116 (AstraZeneca/Takeda)
- 10.6.11 Medidur Technology and Iluvien (pSivida/Alimera Sciences/Pfizer)
- 10.6.12 NT-501 (Neurotech)
- 10.6.13 Microplasmin (ThromboGenics)
- 10.6.14 Novadur/Sustained-Release Brimonidine (Allergan)
- 10.6.15 RTP801i-14/PF-4523655/PF-655 (Quark/Silence/Pfizer)
- 10.6.16 AGN-745/SIRNA-027 (Allergan/Merck & Co.)
- 10.6.17 DARPin/MP0112/AGN-150998 (Allergan)
- 10.6.18 ATG-3 (CoMentis)
- 10.6.19 OT-551 (Othera)
- 10.6.20 Fovista (Ophthotech)
- 10.6.21 Fenretinide (Sirion Therapeutics/ReVision)
- 10.6.22 Pazopanib (GlaxoSmithKline)
- 10.6.23 RPE65 Gene Therapy (Targeted Genetics)
- 10.6.24 Zybrestat (OXiGENE/Symphony ViDA)
- 10.6.25 Lucentis (Novartis) for Pathological Myopia
- 10.6.26 AtuRNAi/PF-04523655 (Pfizer)
- 10.6.27 RN6G/PF-04382923 (Pfizer)
- 10.6.28 iSONEP
- 10.6.29 Squalamine (OHR Pharmaceutical)
- 10.6.30 ESBA 1008 (Alcon)
- 10.6.31 Pan-90806 (PanOptica)
- 10.6.32 PDS 1.0 (ForSight VISION4)
- 10.6.33 AVA-101(Avalanche Biotechnologies)
- 10.6.34 AAV2-sFLT01 (Genzyme)
- 10.6.35 RetinoStat (Oxford BioMedica)
- 10.6.36 IBI-20089 (Icon Bioscience)
- 10.6.37 Volociximab (Ophthotech)
- 10.6.38 JSM6427 (Shire)
- 10.6.39 AL-39324 (Alcon)
- 10.6.40 Vatalanib (Novartis)
- 10.6.41 TG100801 (Sanofi)
- 10.6.42 AL-78898A (Alcon)
- 10.6.43 Soliris (Alexion)
- 10.6.44 FCFD4514S (Genentech)
- 10.6.45 ARC1905 (Ophthotech)
- 10.6.46 AGN208397 (Allergan)



- 10.6.47 ACU-4429 (Acucela)
- 10.6.48 Tandospirone (Alcon)
- 10.6.49 VAR10200 (Varinel)
- 10.6.50 Betamethasone Microsphere (Santen)
- 10.6.51 SK-0503 (Sanwa Kagaku Kenkyusho)
- 10.6.52 Cortiject (Novagali Pharma)
- 10.6.53 ALG-1001 (Allegro Ophthalmics)
- 10.6.54 Difluprednate (SJE-2079/Sanju)
- 10.7 The Dry Eye Pipeline
- 10.7.1 Prolacria (Inspire/Allergan/Santen)
- 10.7.2 Cyclosporine Ophthalmic Solution (Sirion Therapeutics)
- 10.7.3 Rebamipide (Otsuka/Acucela)
- 10.7.4 DE-101/Rivoglitazone (Santen)
- 10.7.5 Ecabet Sodium (ISTA)
- 10.7.6 Remura (ISTA)
- 10.7.7 SAR 1118 (SARcode)
- 10.7.8 DE-110 (Santen)
- 10.7.9 DE-089 (Santen)
- 10.7.10 Cyclokat (Ciclosporin/Santen)
- 10.7.11 Tofacitinib (Pfizer)

10.8 The Pipeline for Other Ophthalmic Indications Includes Eyelash Growth Stimulators

# **11. EXPERT VIEWS FROM OUR SURVEY**

11.1 Professor Leonard Bielory, MD, Director, STARx Allergy and Asthma Centre, LLC, and Professor of Medicine, Paediatrics, Ophthalmology and Visual Sciences, and Centre for Environmental Prediction, Rutgers University, Springfield, NJ, USA

- 11.1.1 Anterior Inflammatory Disease: Under-diagnosed and Under-treated?
- 11.1.2 On Current Developments in Ocular Inflammation and Therapeutic Agents
- 11.1.3 On Future Treatments for Ophthalmic Inflammatory Disorders
- 11.1.4 R&D and Pipeline Developments
- 11.1.5 On Therapeutic Areas Offering Growth Opportunities

11.2 Dr Victor Chong, MD, FRCS, FRCOphth, Consultant Ophthalmic Surgeon and Clinical Senior Lecturer in Ophthalmology, University of Oxford, Oxford Eye Hospital, Oxford, UK

- 11.2.1 Key Unmet Needs
- 11.2.2 Research and Development
- 11.2.3 Limitations of Ophthalmic Treatments



- 11.2.4 Challenges in the Development of Ophthalmic Drugs
- 11.2.5 Complexities Involved in Developing New Ophthalmic Drugs
- 11.2.6 Growth Opportunities in the Ophthalmic Drug Market
- 11.2.7 Challenges Facing the Ophthalmic Pharmaceutical Industry
- 11.2.8 Main Regions Offering Growth Potential
- 11.2.9 Needs of Glaucoma Patients
- 11.2.10 Future Treatments for Glaucoma
- 11.2.11 Pipeline Developments from a Physician's Perspective
- 11.2.12 Prospects for Replacing Current Treatments
- 11.2.13 Novel Treatments for Ophthalmic Diseases

11.3 Dr Christopher Rhodes, PhD, Chief Technology Officer, SKS Ocular, San Diego, California, USA

- 11.3.1 Key Unmet Needs
- 11.3.2 Challenges Facing the Ophthalmic Pharmaceutical Industry
- 11.3.3 Limitations of Ophthalmic Treatments
- 11.3.4 On Ocular SKS and Ophthalmic Market
- 11.3.5 On R&D and Ophthalmic Market in the Future
- 11.3.6 On Therapeutic Areas Offering Growth Opportunity

11.4 Professor David T. Shima, PhD, Institute of Ophthalmology, University College London, UK

- 11.4.1 On the Role of VEGF in Retinal Disorders
- 11.4.2 On Candidate Molecule E10030
- 11.4.3 On Candidate Molecule JSM 6427
- 11.4.4 On New Sustained Release Formulations
- 11.4.5 On Delta-Notch Signalling
- 11.4.6 Potential Clinical Crossovers Between Ophthalmology and Oncology
- 11.4.7 Commercial and Clinical Possibilities in the Ophthalmology Market
- 11.4.8 On the Possibilities of Research into the Endothelial Fenestra
- 11.5 Dr Paul Ashton, President & CEO, pSivida, Watertown, MA, USA
  - 11.5.1 On the Challenge of Getting Drugs to the Retina
  - 11.5.2 On pSivida's Drug Delivery Platforms
  - 11.5.3 On Iluvien and DR/DME
  - 11.5.4 On Implant Technology and Drug Delivery
  - 11.5.5 On pSivida's Pipeline Products
  - 11.5.6 On Lucentis, Avastin and VEGF-Trap
  - 11.5.7 On Challenges of siRNA
- 11.6 Expert Interview 6: Authority from a Company in the Sector (Views Provided Anonymously)
  - 11.6.1 Key Unmet Needs





- 11.6.2 Challenges facing Ophthalmic Sector
- 11.6.3 On Current Ophthalmic Treatments and their Effectiveness
- 11.6.4 On Opportunities in the Ophthalmic Sector

11.7 Interview with Sean Ainsworth, CEO and Founder of RetroSense Therapeutics, Ann Arbor, MI, USA

- 11.7.1 The Optogenetic Approach to Vision Restoration
- 11.7.2 Choosing Disease Targets and Delivery Vectors
- 11.7.3 The Regulatory Picture
- 11.7.4 Gene Therapies in AMD and Other Ophthalmic Therapeutic Areas
- 11.7.5 The Next Ten Years for Gene Therapy
- 11.8 Interview with Philip G. Ralston, Jr., CEO of MacuCLEAR, Plano, Texas, USA
  - 11.8.1 MC-1101: Identifying and Treating Chiou Syndrome
  - 11.8.2 Preventing Dry AMD Progression
  - 11.8.3 Treating the Root Cause of Dry AMD
  - 11.8.4 Phase III: Endpoints and Prospects for MC-1101

11.9 Interview with Dr Michael Stewart, Associate Professor, Mayo Clinic, Jacksonville, Florida, USA

- 11.9.1 The Impact of Eylea, 2011-2012
- 11.9.2 The Comparative Dosing Schedules of Eylea and Lucentis
- 11.9.3 Patient Transitioning to Eylea: Salvage Switching
- 11.9.4 Avastin after the CATT Study
- 11.9.5 Prospects for Eylea in Other Indications and Combinations
- 11.9.6 Future Possibilities in Wet AMD Treatment

# **12. CONCLUSIONS**

- 12.1 Ophthalmic Pharmaceuticals: An Attractive Niche Market
- 12.2 Ophthalmic Pharmaceutical Market Forecast to 2023
- 12.3 What Will Succeed in the Ophthalmic Pharmaceutical Market?
- 12.4 Where Will the Ophthalmic Pharmaceutical Market Grow Fastest?



# **List Of Tables**

# LIST OF TABLES

Table 2.1 Glaucoma Drug Types, 2013

Table 2.2 AMD Drug Types, 2013

Table 2.3 Ophthalmic Allergy Drug Types, 2013

Table 2.4 Ophthalmic Inflammatory Disorder Drug Types, 2013

Table 2.5 Ophthalmic Anti-Infective Drug Types, 2013

Table 3.1 Ophthalmic Pharmaceutical Therapeutic Category Sales and Market Shares, 2011

Table 3.2 Top 20 Ophthalmic Pharmaceutical Brands: Sales and Market Shares, 2011

Table 3.3 Top 10 Ophthalmic Pharmaceutical Manufacturers: Sales and Market Shares, 2011

Table 3.4 World Ophthalmic Pharmaceutical Market: Revenue Forecast, 2011-2017

Table 3.5 World Ophthalmic Pharmaceutical Market: Revenue Forecast, 2018-2023

Table 3.6 World Ophthalmic Pharmaceutical Market by Therapeutic Category: Revenue Forecasts, 2011-2017

Table 3.7 World Ophthalmic Pharmaceutical Market by Therapeutic Category: Revenue Forecasts, 2018-2023

Table 4.1 Leading Anti-Glaucoma Brands: Sales and Market Shares, 2011

Table 4.2 World Anti-Glaucoma Market: Sales Forecast, 2011-2017

Table 4.3 World Anti-Glaucoma Market: Sales Forecast, 2018-2023

Table 4.4 Leading Anti-Glaucoma Brands: Sales Forecasts, 2011-2017

Table 4.5 Leading Anti-Glaucoma Brands: Sales Forecasts, 2018-2023

Table 5.1 Therapeutic Category Sales and Market Shares in the Ophthalmic Anti-

Allergy/ Inflammatory/Infective Segment, 2011

Table 5.2 Leading Anti-Allergy/Inflammatory/Infective Brands: Sales and Market Shares, 2011

Table 5.3 Ophthalmic Anti-Allergy/Inflammatory/Infective Market: Sales Forecast, 2011-2017

Table 5.4 Ophthalmic Anti-Allergy/Inflammatory/Infective Market: Sales Forecast, 2018-2023

Table 5.5 Leading Anti-Allergy/Inflammatory/Infective Brands: Sales Forecasts, 2011-2017

Table 5.6 Leading Anti-Allergy/Inflammatory/Infective Brands: Sales Forecasts, 2018-2023

Table 6.1 Therapeutic Category Sales and Market Shares in the Retinal DisordersSegment, 2011



Table 6.2 Leading Retinal Disorder Brands: Sales and Market Shares, 2011 Table 6.3 World Retinal Disorder Market: Sales Forecast, 2011-2017 Table 6.4 World Retinal Disorder Market: Sales Forecast, 2018-2023 Table 6.5 Leading Retinal Disorder Brands: Sales Forecasts, 2011-2017 Table 6.6 Leading Retinal Disorder Brands: Sales Forecasts, 2018-2023 Table 7.1 Leading Dry Eye Brands: Sales and Market Shares, 2011 Table 7.2 World Dry Eye Market: Sales Forecast, 2011-2017 Table 7.3 World Dry Eye Market: Sales Forecast, 2018-2023 Table 7.4 Leading Dry Eye Brands: Sales Forecasts, 2011-2017 Table 7.5 Leading Dry Eye Brands: Sales Forecasts, 2018-2023 Table 8.1 SWOT Analysis: Strengths and Weaknesses of the World Ophthalmic Drugs Market. 2013-2023 Table 8.2 SWOT Analysis: Opportunities and Threats in the World Ophthalmic Drugs Market, 2013-2023 Table 8.3 Expected Patent Expiries for Leading Ophthalmic Pharmaceuticals, 2009-2014 Table 8.4 Ophthalmic Disorder Prevalence Forecasts Table 9.1 Leading National Markets for Ophthalmic Pharmaceuticals: Sales and Market Shares, 2011 Table 9.2 Leading National Markets for Ophthalmic Drugs: Revenue Forecasts, 2011-2017 Table 9.3 Leading National Markets for Ophthalmic Drugs: Revenue Forecasts, 2018-2023 Table 10.1 Select Drugs in the Anti-Glaucoma Pipeline, 2013 Table 10.2 Select Drugs in the Ophthalmic Anti-Allergy Pipeline, 2013 Table 10.3 Select Drugs in the Ophthalmic Anti-Inflammatory Pipeline, 2013 Table 10.4 Select Drugs in the Ophthalmic Anti-Infective Pipeline, 2013 Table 10.5 Select Drugs in the Retinal Disease Pipeline, 2013 Table 10.6 Select Drugs in the Dry Eye Pipeline, 2013 Table 10.7 Select R&D Pipeline Drugs for Other Ophthalmic Indications, 2013



# About

#### Lucentis Controls the Retinal Disorder Market in 2011

Sales of Lucentis (ranibizumab, Genentech/Roche/Novartis), indicated for the treatment of patients with wet AMD, were \$3772m in 2011 and \$2935m in 2010 compared to \$2338m for the fiscal year 2009 (Table 6.2 and Figure 6.2). In 2007 rapid domination of the wet AMD market occurred, when Lucentis revenues grew to \$1208m, and increased further to \$1761m in 2008.Lucentis is an antibody fragment (recombinant humanised IgG1 kappa isotype monoclonal antibody fragment), which binds to and inhibits the biologic activity of vascular endothelial growth factor A (VEGF-A), a growth factor essential for the formation of new blood vessels. By binding to VEGF-A, Lucentis reduces abnormal vessel growth and leakage of fluid into the retina. This allows the retinal structure to return to normal. Lucentis is the first such treatment that has been shown to improve vision rather than simply slow vision loss. Lucentis stabilises vision in most wet AMD patients treated, and improves vision and vision-related quality of life in a significant number of patients, reports indicate. Lucentis is recommended to be administered by intravitreous injection once a month.

Genentech/Roche markets Lucentis in the US, where the FDA approved the drug in June 2006. Lucentis was Roche's number ten best selling pharmaceutical product in 2008. It maintained that position in 2009, generating sales revenues of \$1121m for the company. Roche reported annual revenues for the drug of 1,523CHF (\$1402m) for 2010 and \$1722m in 2011. Novartis markets Lucentis outside the US, and achieved \$1217m in sales in 2009. Novartis reported sales of \$1533m and \$2050m for the 12 month period to Q4 in 2010 and 2011 respectively. Lucentis was approved for use in the EU in January 2007 and is now marketed in many markets worldwide, including Japan since April 2009.

#### Visudyne was the Second Highest Selling Retinal Disorder Drug in 2011

Visudyne (verteporfin, QLT/Novartis) is indicated for the treatment of patients with the predominantly classic variant of AMD (comprising about a quarter of AMD patients). Therapy involves intravenous infusion of Visudyne, followed by exposure of the eye to a non-thermal diode laser. This activates the drug and produces a reaction that destroys abnormal blood vessels. Visudyne therapy is typically given approximately every three months and as many times as needed, to prevent re-growth of abnormal blood vessels (typically six to seven treatments over two to three years). Visudyne does not restore



vision, however. The FDA approved Visudyne in 2000, and it is now marketed worldwide. Visudyne was the second-highest selling retinal disorder drug of 2009, with total revenues of \$106m. Sales in 2010 declined to \$91m, a decline of 14.5% over the previous year. In 2011 sales remained steady to record \$90m.



#### I would like to order

Product name: Ophthalmic Drugs: World Market Prospects 2013-2023 Product link: https://marketpublishers.com/r/O13ECFEB8C0EN.html Price: US\$ 2,635.00 (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 <u>https://marketpublishers.com/r/O13ECFEB8C0EN.html</u>

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

Custumer signature \_\_\_\_\_

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

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