Introducing Shire in Ophthalmics
Sponsored by Shire

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Ophthalmics is a new business unit at Shire, and the way we’re building it is aligned with our aspiration to become a leading biotech company. We are investing significantly in research and development, aiming to bring innovation to the market. By focusing on our understanding of the needs of patients and physicians, we believe we can deliver against enormous unmet need in this area.”

In just over one year, the company has made remarkable progress, having brought together a dedicated and experienced team of experts in ophthalmics and developed a robust pipeline through a combination of strategic acquisitions and organic growth. The company continues its focus on pursuing promising treatment options for rare eye diseases as well as those for anterior and posterior eye conditions.

People, pipeline, products, and promise

Shire’s vision in Ophthalmics is focused on four critical success factors:

• People
• Pipeline of therapeutic candidates
• Products that will deliver innovation and meet unmet needs
• Promise to the eyecare community

People

Over the last 18 months, Shire has brought together a strong leadership team with significant depth of expertise in ophthalmic medicine. The current team has more than 100 years of combined eyecare experience, and the company continues to invest, hiring high-caliber talent with ophthalmic experience for both R&D and commercial operations.

Shire’s approach to the development of the Ophthalmics unit is to leverage a biotech and entrepreneurial spirit, with the resources more typical of a larger company.

As a result, the company has hired professionals who are exceptionally entrepreneurial in their outlook, committed to launching new products to meet unmet needs, and determined to make a difference. The Ophthalmics team embodies a start-up mentality that is helping Shire to not just focus on its goals, but to achieve them in record time.
People

Robert Dempsey  
Vice President, Head of Ophthalmics  
Mr. Dempsey comes to Shire with more than 23 years of senior leadership experience focused in the area of eyecare. Prior to joining Shire, he served in multiple leadership positions in ophthalmics, overseeing the creation and execution of overall medical strategy for commercial and pipeline products.

Chris Pearson  
Commercial Strategy Lead, Ophthalmics  
Mr. Pearson began his career at Shire more than 17 years ago, and has since developed an expertise in brand management, launch preparation, and commercial strategy. He has worked across multiple business units at the company, providing commercial direction for the early development of Shire’s specialty pharmaceutical portfolio.

Vic Noble  
Head of Marketing, Ophthalmics  
Ms. Noble has a proven track record developing and launching brands over the last 20 years. She is a passionate leader with expertise in leveraging strategy, creative, and technology to help brands build enduring relationships with their customers, while driving sales. Most recently, Ms. Noble served as the Consumer Marketing Lead for the Ophthalmics Business Unit.

Steven Zhang, MD, PhD  
Global Medical Team Lead, Ophthalmics  
Dr. Zhang brings deep medical affairs experience in systemic and topical anti-infectives and anti-inflammatories, including several years in ophthalmology. He also has a strong background in medical affairs lifecycle management and post-market clinical development.

Susan Benton  
Head of Business Development, Ophthalmics  
With more than 25 years of commercial business experience in ophthalmology, Ms. Benton has extensive expertise in business development, strategic and brand marketing, and trade sales and distribution.

Reza Haque, MD, PhD  
Clinical Therapeutic Head, Ophthalmics  
Dr. Haque brings more than 20 years of experience in ophthalmics research and development, clinical development, project management, and medical affairs to the team. He has been involved in a number of ophthalmics New Drug Applications and has been an essential contributor to several pharmaceutical eyecare products.

Scott Hunter  
ECP Marketing Lead, Ophthalmics  
Mr. Hunter brings more than 12 years of eyecare industry experience focused on therapies spanning ocular inflammation and pain, bacterial conjunctivitis, glaucoma, and uveitis. His strong background in the ophthalmic pharmaceutical industry, which ranges from clinical research to market analytics and marketing, provides the expertise that will help the company build a strong position in the eyecare space.

Shire’s Ophthalmics team by the numbers

- 100+ Years of Eyecare Experience
- 44 Eyecare Product Launches
- 37 Eyecare Brands
Pipeline and Products

Phthalmics is a global pharmaceutical market with significant unmet medical need in both front of the eye and back of the eye conditions. Retinal degenerative diseases, glaucoma, and dry eye are diseases that affect millions globally and represent an opportunity for innovative treatments. Phthalmics is an area that aligns with Shire’s existing focus on specialty conditions as well as its expertise in developing and commercializing therapeutics for rare diseases.

The growth of Shire in Phthalmics has been driven by a combination of strategic acquisitions and organic growth. Recent acquisitions of Foresight Biotherapeutics, SARcode Bioscience, Premacre AB, and BIKAM Pharmaceuticals mark a solid demonstration of the company’s commitment to phthalmics and to advancing investigational candidates at all stages of development.

As a result, the company currently has an Phthalmics pipeline of investigational products at various stages of development, including in dry eye, infectious conjunctivitis, retinopathy of prematurity, autosomal dominant retinitis pigmentosa, and glaucoma.

Shire’s Phthalmics pipeline as of September 2015

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<td>Infectious conjunctivitis</td>
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<td>Autosomal dominant retinitis pigmentosa</td>
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<td>Glaucoma</td>
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Promise

To deliver on a promise of developing innovative specialty medicines in therapeutic areas of both unmet patient and physician needs, Shire recognizes the importance of building strong and sustainable relationships with professional and advocacy organizations. Through regular and open dialogue, Shire aims to better understand and address the needs of the entire eyecare community. To learn more about Shire’s philosophy and commitment, visit www.shire-eyes.com.

1. Shire is committed to working with organizations that further education around eye health, for example the Tear Film & Ocular Surface Society (TFOS). Shire currently sits on the TFOS Corporate Advisory Board and is a Platinum Sponsor of its DEWS II Workshop.

2. Shire is committed to working with patient groups like the Foundation Fighting Blindness (FFB) to raise awareness, support education and research, and enhance the dialogue between patients and eyecare professionals. In 2015, Shire announced a research agreement with the FFB to further research for a novel treatment for autosomal dominant retinitis pigmentosa, for which there are no currently approved treatment options.

3. The company has established relationships with professional organizations representing ophthalmologists, optometrists, opticians, and technicians, such as the American Academy of Ophthalmology (AAO), the American Academy of Optometry (AAOpt), Ophthalmic Women Leaders (OWL), and the Joint Commission on Allied Health Personnel in Ophthalmology (JCAHPO).

4. In addition, since 2014, Shire has had a presence at the major eye health medical meetings, including Royal Hawaiian Eye, South Eastern Congress of Optometry (SECO), American Society of Cataract & Refractive Surgery (ASCRS), Ophthalmic Imaging Association (OIA), Association for Research in Vision and Ophthalmology (ARVO), American Optometric Association (AOA), AAO, and AAOpt. By attending these meetings to engage with the spectrum of eyecare professionals, Shire is learning where there are areas of the greatest unmet need, and how best to focus its efforts on addressing those gaps in care.
Introducing Shire in Ophthalmics
Entrepreneurial energy, extensive experience

When you combine entrepreneurial energy with extensive eye-care experience, you get a biotech company that is able to fuel innovation at a rapid rate. While still very new to the eyecare space, Shire is determined that the name of the company will be synonymous with innovation in areas of high unmet need for ophthalmic conditions.

Evidence of this entrepreneurial spirit can be seen in Shire’s approach to building an Ophthalmics pipeline, which employs a multi-channel strategy of in-house R&D, creative research partnerships, and strategic acquisitions.

**In-house R&D**

While some have recently questioned the value of in-house R&D, Shire has always placed significant value on the output of its internal R&D teams. Much of the focus is on areas of high unmet need which, if successful, may provide value to both eyecare professionals and patients.

With almost 20% of the company involved in R&D, Shire has demonstrated company-wide that internal discovery can be a valuable contributor to the pipeline and ultimately the growth of the company. Accordingly, research and development in ophthalmics will play a key role in the overall strategy.

**Creative research partnerships**

Shire has a long history of successful research collaborations, and ophthalmics is no exception. In May 2015, the company announced a new agreement with the Foundation Fighting Blindness focused on furthering research for a novel treatment for autosomal dominant retinitis pigmentosa. This agreement is a good example of the creative approaches in early-stage research and development that the company has made in an effort to address unmet need in the ophthalmic rare diseases space.

**Strategic acquisitions**

In the last two years, Shire has made four significant acquisitions in eyecare: SARCode and Premacure in 2013, Bikam Pharmaceuticals in 2014, and Foresight Biotherapeutics in 2015. A total investment of just over half a billion dollars, the acquisitions are a balance of early- and late-stage molecules, for which Shire can leverage its strong multi-channel strategy in research and development.

I believe our move into ophthalmics signals an important and exciting step for everyone within the eyecare community, and I welcome discussion with those who would seek to help us understand where the areas of greatest unmet need are in this space. I think the tendency is for companies to enter into a disease area and do things the way they’ve always done them. While Shire can certainly leverage a lot of expertise in developing and bringing drugs to market, we recognize that ophthalmics comes with some unique challenges and expertise. I look forward to engaging with this thoughtful and passionate community in the years to come and to a future filled with innovation in the support of unmet needs in ophthalmics.

Flemming Ornskov, MD
CEO, Shire
Q&A with Bob Dempsey on his recent move to Shire

Q: Bob, you’re now heading the Ophthalmics Business Unit within Shire. What prompted your move?

A: My career has spanned more than two decades in the eyecare space, including in senior leadership roles at Allergan, Inspire, and—most recently—at Bausch + Lomb. I enjoyed the roles I had and the contributions I made to those companies. But when I was presented with an opportunity to head up the emerging Ophthalmics Business Unit within Shire, I couldn’t turn it down. There were too many exciting opportunities to say no. Primarily, it meant I would have the luxury of hiring the team to lead this endeavor, and I would have the opportunity to build an anterior and posterior portfolio that has the potential to meet many unmet needs in the space.

In addition, I admired Shire’s mission: We are a company committed to the development of treatments for rare diseases and other specialty conditions. This resonated with me.

I also liked the fact that Shire was committed to R&D. In fact, 20% of the overall team at Shire work in R&D. The opportunity to be part of a company that believes in and puts resources behind acquisitions as well as internal organic growth was a big draw for me as I see it as a strong indicator of staying power in the space. Based on our recent track record in these areas, including four significant acquisitions in eyecare in the last two years—a total investment of just over half a billion dollars—I’d say we are using our resources very well.

Q: You’ve said that the Ophthalmics Business Unit has a very entrepreneurial outlook. Can you tell us more about that?

A: At Shire, each business unit is encouraged to leverage an entrepreneurial spirit more typically associated with biotech, but with the resources more typical of a larger company. This approach has already yielded incredible results.

For the Ophthalmics team in particular, we have more than 100 years of eyecare experience across commercial, medical affairs, and R&D, but we’re very entrepreneurial in our outlook and we’re determined to make a difference for patients and professionals alike.

Q: What are the things you like most about working in this start-up-like environment?

A: When I joined Shire as the vice president and business unit head, I had the luxury of building my own team and I could draw upon the relationships that I had built over the years to bring on board some of the most renowned and respected minds in the ophthalmics field. However, I also brought on individuals with both a solid business acumen and an open mind. Together, we’re able to navigate through obstacles without losing sight of why we do what we do—and that’s for the patients in need.

Q: What advice would you give those in big companies considering taking the leap and joining a new business unit or start-up?

A: I would advise anyone considering a move to a new and growing entity, as with any new change of career, to ask yourself: “What do you like about the company—its mission, the work, the team?” Be brutally honest with yourself about the answers. When days are hectic, you need to know why you’re there and why you do what you do.

To learn more about Shire in Ophthalmics, visit www.shire.com
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