

Persistent corneal epithelial defects (PCEDs) – Pipeline Insight, 2020

<https://marketpublishers.com/r/P7B8062570DCEN.html>

Date: September 2020

Pages: 60

Price: US\$ 1,500.00 (Single User License)

ID: P7B8062570DCEN

Abstracts

This report can be delivered to the clients within 72 Hours

DelveInsight's, "Persistent corneal epithelial defects (PCEDs) – Pipeline Insight, 2020," report provides comprehensive insights about 5+ companies and 5+ pipeline drugs in Persistent corneal epithelial defects pipeline landscape. It covers the pipeline drug profiles, including clinical and nonclinical stage products. It also covers the therapeutics assessment by product type, stage, route of administration, and molecule type. It further highlights the inactive pipeline products in this space.

Geography Covered

Global coverage

Persistent corneal epithelial defects Understanding

Persistent corneal epithelial defects (PCEDs): Overview

The cornea is the transparent, outermost layer of the eye that uniformly refracts the majority of light that enters the eye onto the lens and is essential for ideal vision. The multi-layered corneal epithelium acts as a protective barrier to infectious agents via tight junctions between neighboring cells, and it maintains its smooth optical surface by constantly regenerating cells in the basal cell layer. Persistent corneal epithelial defects (PEDs or PCEDs) result from the failure of rapid re-epithelialization and closure within 10-14 days after a corneal injury, even with standard supportive treatment. Disruptions in the protective epithelial and stromal layers of the cornea can render the eye

susceptible to infection, stromal ulceration, perforation, scarring, and significant vision loss.

Epithelial Wound Healing

In the Case of Injury to the Cornea, Interleukin 1 (IL-1) is secreted by the Damaged Epithelial Cells, Causing some Keratocytes to Undergo Apoptosis and some to Proliferate into Activated Keratocytes. Epithelial Cells will also Secrete Transforming Growth Factor-beta (TGF- β) in Response to Destruction of the Basement Membrane and Results in Myofibroblast transformation. Growth Factors Insulin-like Growth Factor (IGF), Insulin, Epidermal Growth Factor (EGF), platelet-Derived Growth Factor (PDGF), Keratinocyte Growth Factor (KGF), and Hepatocyte Growth Factor (HGF) Play Important Roles in Corneal Wound Healing. EGF, IGF and Insulin Regulate Epithelial Growth and Stromal Keratocyte Activation. KGF and HGF are produced by Keratocytes to influence Migration and Proliferation of Epithelial Cells. PDGF Regulates Epithelial Proliferation and Keratocyte Function.

Etiology

The normal corneal wound healing process can be disrupted from defective epithelial adhesion, limbal stem cell deficiency, surface trauma, medications, infections, and several other etiologies discussed below. The pathophysiology of PED involves proliferation of myofibroblasts and a resulting disordered extracellular matrix, producing an opacity in the cornea.

Diagnosis

Evaluating a Persistent corneal epithelial defects involves fluorescein instillation to monitor the size, location, and depth of the defect. In deeper Persistent corneal epithelial defects, it takes a longer time for the fluorescein to absorb into the epithelium and stroma. A thorough physical exam should reveal findings such as inflammation in the anterior chamber, eyelid abnormalities, or decreased sensation of the cornea, such as in the case of a neurotrophic Persistent corneal epithelial defects.

Treatment

The current standard management of Persistent corneal epithelial defects includes a stepwise strategy, starting with conservative management and progressing to medical or surgical treatments if refractory. This includes lubrication, bandage soft contact

lenses, punctal plugs, debridement, and tarsorrhaphy. Initially, aggressive lubrication every 1-2 hours with preservative-free artificial tears and ocular ointments are applied to the eye.

Bandage soft contact lenses (BCL) along with preservative-free artificial tears and antibiotics are beneficial in protecting the damaged epithelium from mechanical erosion from eyelid blinking, thus aiding the re-epithelialization process.

Surgical interventions, such as debridement and tarsorrhaphy, are effective in most cases of Persistent corneal epithelial defects refractory to medical management.

Tetracyclines, prophylactic topical antibiotics, and steroids are also used as standard therapy for Persistent corneal epithelial defects. Oral tetracyclines exhibit anticollagenolytic activity, inhibiting MMPs produced by inflammation mediators, and have been shown to be effective in healing Persistent corneal epithelial defects within weeks.

Persistent corneal epithelial defects Emerging Drugs Chapters

This segment of the Persistent corneal epithelial defects report encloses its detailed analysis of various drugs in different stages of clinical development, including phase II, I, preclinical and Discovery. It also helps to understand clinical trial details, expressive pharmacological action, agreements and collaborations, and the latest news and press releases.

Persistent corneal epithelial defects Emerging Drugs

Nexagon: OcuNexus Therapeutics / Eyevance Pharmaceuticals

The active ingredient in OcuNexus lead drug product candidate Nexagon is a natural, unmodified oligonucleotide (30-mer) that downregulates expression of the key gap junction protein Cx43. Cx43 is upregulated and overexpressed in pathological conditions such as chemical or thermal injuries to the eye, resulting in non-healing of the crucial epithelial layer of the cornea. Without an epithelium which is a major protective layer of the eye to external stimuli, as well as maintaining a moist and clear surface enabling good vision, the cornea would fibrose or perforate, resulting in loss of vision.

Several patients experiencing the devastation of sight threatening chemical or thermal injury to the eye resulting in a persistent defect of the crucial first layer of the cornea, the epithelium, and that were non responsive to current standard of care (SOC) treatment, have been treated compassionately with Nexagon. Nexagon is formulated in a thermoreversible gel placed under a contact lens or amniotic membrane to ensure contact with the corneal/conjunctival surface for sufficient time to get the active drug into the cell.

Further product details are provided in the report

Persistent corneal epithelial defects: Therapeutic Assessment

This segment of the report provides insights about the different Persistent corneal epithelial defects drugs segregated based on following parameters that define the scope of the report, such as:

Major Players in Persistent corneal epithelial defects

There are approx. 5+ key companies which are developing the therapies for Persistent corneal epithelial defects. The companies which have their Persistent corneal epithelial defects drug candidates in the advanced stage, i.e. phase III include, OcuNexus Therapeutics etc.

Phases

DelveInsight's report covers around 5+ products under different phases of clinical development like

Mid-stage products (Phase II and Phase I/II)

Early-stage products (Phase I/II and Phase I) along with the details of

Pre-clinical and Discovery stage candidates

Discontinued & Inactive candidates

Route of Administration

Persistent corneal epithelial defects pipeline report provides the therapeutic assessment of the pipeline drugs by the Route of Administration. Products have been categorized under various ROAs such as

Intraocular

Molecule Type

Products have been categorized under various Molecule types such as

Antisense oligonucleotides

Product Type

Drugs have been categorized under various product types like Mono, Combination and Mono/Combination.

Persistent corneal epithelial defects: Pipeline Development Activities

The report provides insights into different therapeutic candidates in phase II, I, preclinical and discovery stage. It also analyses Persistent corneal epithelial defects therapeutic drugs key players involved in developing key drugs.

Pipeline Development Activities

The report covers the detailed information of collaborations, acquisition and merger, licensing along with a thorough therapeutic assessment of emerging Persistent corneal epithelial defects drugs.

Report Highlights

The companies and academics are working to assess challenges and seek opportunities that could influence Persistent corneal epithelial defects R&D. The therapies under development are focused on novel approaches to treat/improve Persistent corneal epithelial defects.

Nexagon has orphan designation from the FDA.

Persistent corneal epithelial defects Report Insights

Persistent corneal epithelial defects Pipeline Analysis

Therapeutic Assessment

Unmet Needs

Impact of Drugs

Persistent corneal epithelial defects Report Assessment

Pipeline Product Profiles

Therapeutic Assessment

Pipeline Assessment

Inactive drugs assessment

Unmet Needs

Key Questions

Current Treatment Scenario and Emerging Therapies:

How many companies are developing Persistent corneal epithelial defects drugs?

How many Persistent corneal epithelial defects drugs are developed by each company?

How many emerging drugs are in mid-stage, and late-stage of development for the treatment of Persistent corneal epithelial defects?

What are the key collaborations (Industry–Industry, Industry–Academia), Mergers and acquisitions, licensing activities related to the Persistent corneal epithelial defects therapeutics?

What are the recent trends, drug types and novel technologies developed to overcome the limitation of existing therapies?

What are the clinical studies going on for Persistent corneal epithelial defects and their status?

What are the key designations that have been granted to the emerging drugs?

Key Players

CoDa Therapeutics Inc

Eyevance Pharmaceuticals

OcuNexus Therapeutics

Key Products

CODA001 (Nexagon)

Contents

Introduction

Executive Summary

Persistent corneal epithelial defects: Overview

Causes

Mechanism of Action

Signs and Symptoms

Diagnosis

Disease Management

Pipeline Therapeutics

Comparative Analysis

Therapeutic Assessment

Assessment by Product Type

Assessment by Stage and Product Type

Assessment by Route of Administration

Assessment by Stage and Route of Administration

Assessment by Molecule Type

Assessment by Stage and Molecule Type

Persistent corneal epithelial defects – DelveInsight's Analytical Perspective

In-depth Commercial Assessment

Persistent corneal epithelial defects companies' collaborations, Licensing, Acquisition
-Deal Value Trends

Persistent corneal epithelial defects Collaboration Deals

Company-Company Collaborations (Licensing / Partnering) Analysis

Company-University Collaborations (Licensing / Partnering) Analysis

Late Stage Products (Phase III)

Comparative Analysis

CODA 001: OcuNexus Therapeutics

Product Description

Research and Development

Product Development Activities

Drug profiles in the detailed report.....

Product Development Activities

Pre-clinical and Discovery Stage Products

Comparative Analysis

Product Description

Research and Development

Product Development Activities

Drug profiles in the detailed report.....

Inactive Products

Comparative Analysis

Persistent corneal epithelial defects Key Companies

Persistent corneal epithelial defects Key Products

Persistent corneal epithelial defects- Unmet Needs

Persistent corneal epithelial defects- Market Drivers and Barriers

Persistent corneal epithelial defects- Future Perspectives and Conclusion

Persistent corneal epithelial defects Analyst Views

Persistent corneal epithelial defects Key Companies

Appendix

List Of Tables

LIST OF TABLES

Table 1 Total Products for Persistent corneal epithelial defects

Table 2 Late Stage Products

Table 3 Mid Stage Products

Table 4 Early Stage Products

Table 5 Pre-clinical & Discovery Stage Products

Table 6 Assessment by Product Type

Table 7 Assessment by Stage and Product Type

Table 8 Assessment by Route of Administration

Table 9 Assessment by Stage and Route of Administration

Table 10 Assessment by Molecule Type

Table 11 Assessment by Stage and Molecule Type

Table 12 Inactive Products

List Of Figures

LIST OF FIGURES

Figure 1 Total Products for Persistent corneal epithelial defects

Figure 2 Late Stage Products

Figure 3 Mid Stage Products

Figure 4 Early Stage Products

Figure 5 Preclinical and Discovery Stage Products

Figure 6 Assessment by Product Type

Figure 7 Assessment by Stage and Product Type

Figure 8 Assessment by Route of Administration

Figure 9 Assessment by Stage and Route of Administration

Figure 10 Assessment by Molecule Type

Figure 11 Assessment by Stage and Molecule Type

Figure 12 Inactive Products

I would like to order

Product name: Persistent corneal epithelial defects (PCEDs) – Pipeline Insight, 2020

Product link: <https://marketpublishers.com/r/P7B8062570DCEN.html>

Price: US\$ 1,500.00 (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 <https://marketpublishers.com/r/P7B8062570DCEN.html>

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**

Customer signature _____

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

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