The Future of Ophthalmology

Trends and innovations that will impact eye care in the coming decade

(Swipe to learn)

3D Printing

Ophthalmologists can use 3D printing to build models to plan for surgery and to create custom artificial corneas for patients.

Synthetic Cornea Implants

Biocompatible implants that can help restore vision for patients with corneal blindness.

Artificial Retinas

While still in the early research stages, scientific advances on the understanding of the neural basis of vision, as well genetics of eye disease, could potentially lead to the development of artificial retinas.

Multifocal Lens Implants

Continued innovation and advancements of implants that enable patients to see clearly both near and far without glasses.

Retinal Imaging

Advances in retinal imaging techniques lead to faster treatment for patients, as well as ability to explore new treatments for eye diseases in clinical trials.

Personalized Medicine

Eye disease will be understood on a proteomic and genetic level. Biomarkers can be used to identify and target eye diseases, with treatment customized to each patient.

Source: Lexitas Pharma Services

Artificial Intelligence

Computer learning and computer vision algorithms can lead to new ophthalmology treatments by analyzing images obtained throughout clinical trials.

Source: Lexitas Pharma Services

Use Of Large Datasets

Use of large datasets, such as the IRIS registry (one of the largest and most robust real-world datasets), can lead to the development of computer algorithms that can identify clinical trial patients likely to respond to a particular therapy.

Source: Lexitas Pharma Services

Gene Therapy

Gene therapy uses a patient's genetic makeup to create a healthy copy of a faulty gene. Once introduced into the patient's eye, it can potentially cure previously untreatable conditions and bring hope to patients living with genetic eye diseases.

Source: Ophthalmology Breaking News

Digital Therapies

Digital tools can be used to treat and manage eye diseases. These types of digital therapeutics have the potential to be employed for conditions such as dry eye and amblyopia.

Source: Ophthalmology Breaking News

Brought to you courtesy of Lexitas Pharma Services, a 100% ophthalmicsfocused product development organization.

To learn more about each of these trends, please refer to list of sources below:

<u>Medical Trends Now</u> <u>https://medicaltrendsnow.com/ophthalmology/trends-in-ophthalmology/</u>

<u>Lexitas Pharma Services</u> <u>https://www.linkedin.com/pulse/ophthalmology-clinical-trials-predictions-2023--3c</u>

OphthalmologyBreakingNews https://ophthalmologybreakingnews.com/top-10-eye-care-trends-to-watch-in-the-next-decade

