

2nd International Conference on

Eye, Ophthalmology, Optometry and Therapy

June 17-18, 2026 | London, UK

Volume: 17

Precision Retinal Imaging and Emerging Therapies for Macular Diseases

Anat Loewenstein

Tel Aviv University, Israel

Retinal diseases, including age-related macular degeneration, diabetic macular edema, and retinal vein occlusion, remain major causes of vision impairment worldwide. Advances in multimodal retinal imaging and pharmacological innovation have transformed clinical management by enabling earlier diagnosis and more personalized treatment. This presentation reviews the latest developments in optical coherence tomography, OCT angiography, fundus autofluorescence, and artificial intelligence-assisted retinal image analysis for identifying disease progression and guiding therapeutic decisions. The session will discuss advances in anti-VEGF therapy, long-acting intravitreal implants, complement inhibitors, and emerging gene-based treatments designed to improve visual outcomes while reducing treatment burden. Current clinical evidence supporting individualized treatment strategies, biomarker-guided therapy, and tele-retinal screening programs will also be presented. Future perspectives include precision ophthalmology, digital healthcare integration, and regenerative therapies aimed at preserving retinal function and preventing blindness.

Biography

Anat Loewenstein is Chair of the Department of Ophthalmology at Tel Aviv Medical Center and Professor of Ophthalmology at Tel Aviv University, Israel. Her research focuses on retinal diseases, retinal imaging, diabetic retinopathy, and age-related macular degeneration. She has made significant contributions to clinical retina research and innovative retinal therapies.