

## Abstract 208

### **INTEGRATING RETEVAL PORTABLE ELECTRORETINOGRAPHY IN RETINAL PRACTICE: A HANDS-ON COURSE FOR DIAGNOSIS AND MANAGEMENT OF INHERITED AND ACQUIRED RETINAL DISORDERS**

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This course aims to equip ophthalmologists, optometrists, and retina specialists with practical expertise in utilizing the Reteval® portable electroretinography (ERG) device for diagnosing and managing inherited and acquired retinal disorders. Participants will gain proficiency in interpreting ERG waveforms, correlating functional data with clinical findings, and applying insights to guide treatment decisions.

A blended learning curriculum was designed for 40 participants, combining:

**Didactic Sessions:** Lectures on ERG principles, Reteval's technology (portable full-field and flicker ERG), and clinical applications (e.g., retinitis pigmentosa, diabetic retinopathy, toxic retinopathies).

**Case-Based Workshops:** Interactive analysis of 15 cases spanning pediatric and adult populations, emphasizing differential diagnosis (e.g., distinguishing cone dystrophy vs. occult macular dystrophy).

**Hands-On Training:** Simulated patient scenarios using standardized protocols for electrode placement, artifact troubleshooting, and real-time data acquisition.

**Competency Assessment:** Pre- and post-course tests evaluating diagnostic accuracy and interpretation skills.

**Skill Improvement:** Post-course scores aiming for 88% of participants achieving competency in ERG interpretation.

**Clinical Utility:** 94% reported confidence in integrating Reteval into practice for early disease detection (e.g., monitoring hydroxychloroquine toxicity) and pediatric assessments.

**Device Advantages:** Highlighted portability (94% approval), rapid setup (<5 minutes), and patient comfort compared to traditional ERG systems.

The Reteval portable ERG system bridges the gap between functional testing and clinical practice, enabling point-of-care diagnosis in diverse settings. This hands-on course empowers clinicians to leverage ERG data for personalized management of complex retinal diseases. Future iterations will include AI-driven waveform analysis modules to enhance diagnostic precision.