

Electroretinography (ERG)

DIOPSYS ERG OFFICE-BASED ELECTRORETINOGRAPHY

ERG provides objective, functional information about the performance of the inner retinal cells of the eye. ERG has been recognized as an effective test in helping to diagnose and manage disease including, Glaucoma, Age-Related Macular Degeneration (AMD), and Diabetic Edema.¹⁻³



To learn more, visit www.diopsys.com/ERG

Objective

- No verbal response or “button pushing” is required by the patient.
- Color-coded reports minimize subjective clinician interpretation.
- Reports and documents the results of practitioner intervention and supports medical decision making.

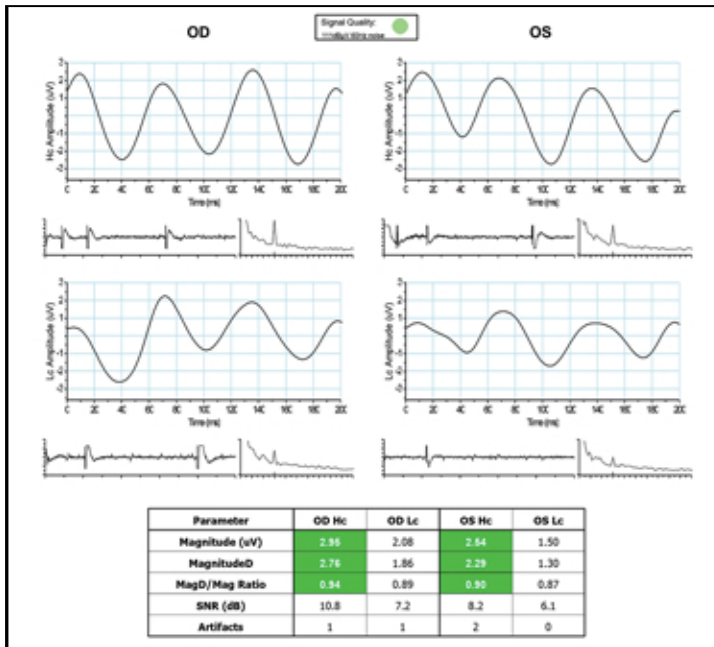
Functional

- Complements structural studies with an analysis of retinal function that is affected by disease or trauma.
- Improves sensitivity and specificity in diagnosing vision disorders when used in conjunction with other diagnostic tests.

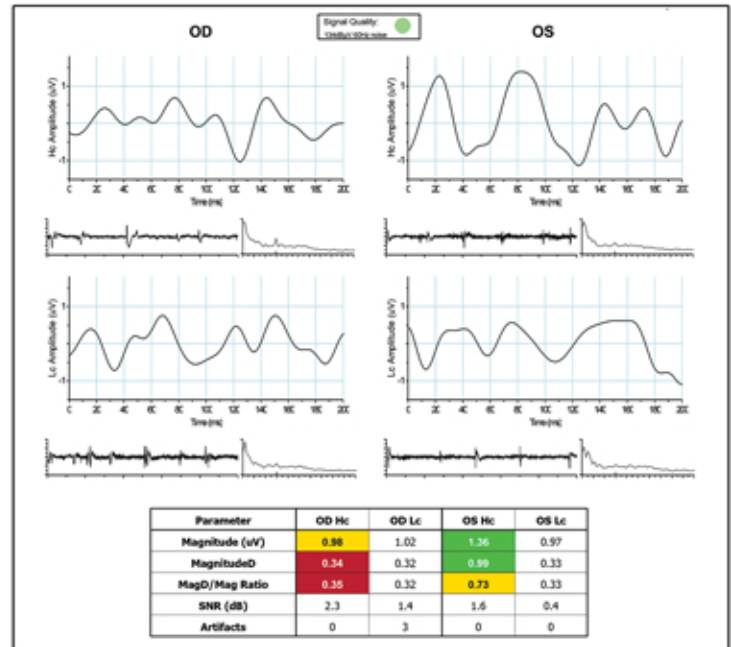
Vision Testing

- **Diopsys® ERG/Contrast Sensitivity Protocol:** Aids in the detection of diseases that affect the retina in a diffuse pattern like Chronic Open Angle Glaucoma (COAG) and Diabetic Retinopathy (DR). Since there is typically no specific topographic pattern of damage, the information collected using this protocol can help in detecting the depth of the macular dysfunction.
- **Diopsys® ERG/Concentric Stimulus Fields Protocol:** Aids in the detection of diseases affecting the central or paracentral area of the macula in specific topographic patterns like Age-Related Macular Degeneration (AMD), Diabetic Macular Edema (DME), and Toxic Maculopathies (e.g. Plaquenil Maculopathy).

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Healthy Eyes



Glaucoma

- All measured parameters (Mag, MagD, MagD/Mag Ratio) are within normal statistical ranges (all green).
- Colorized results for statistical normals are for Hc responses only.

- All OD Hc parameters (Mag, MagD, MagD/Mag Ratio) are borderline or out of statistical ranges.
- OS Hc MagD/Mag Ratio value is borderline.
- Colorized results for statistical normals are for Hc responses only.

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¹Banitt et al. Progressive Loss of Retinal Ganglion Cell Function Precedes Structural Loss by Several Years In Glaucoma Suspects. *IOVS*, March 2013, Vol. 54, No. 3 (From the Bascom Palmer Eye Institute, supported by Grant National Institutes Health National Eye Institute (NIH EY1), NIH Center Grant, and Research to Prevent Blindness)

²Oner et al. Pattern electroretinographic results after photodynamic therapy alone and photodynamic therapy in combination with intravitreal bevacizumab for choroidal neovascularization in age-related macular degeneration. *Doc Ophthalmol*. 2009 Aug;119(1):37-42. doi: 10.1007/s10633-009-9167-8.

³Orkiris A. Pattern electroretinogram changes after intravitreal bevacizumab injection for diabetic macular edema. *Doc Ophthalmol* 2010;120:243-50.

Diopsys Vision Testing Systems are FDA 510(k) cleared; IEC 60601 Certified and follow ISCEV guidelines in stimulus presentation and electrophysiological data collection.