( ) R1 ( ) R2 ( ) R3 (X) PG0 ( ) PG1 ( ) Estagiário ( ) Tecnólogo ( ) PIBIC Last Name - Melo First Name - Luiz Middle - Alberto S

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Discriminant Analysis Models Using Confocal Scanning Laser Ophthalmoscopy Measurements in Brazilians

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Purpose: To develop a discriminant analysis model using optic nerve head measurements obtained by confocal scanning laser ophthalmoscopy (HRT-II) in Brazilians. **Material and Methods:** Sixty healthy individuals (118 eyes) and 60 glaucomatous patients (116 eyes) were included. All subjects underwent optic nerve head image acquisition using the HRT-II. Training (117 eyes) and test (117 eyes) samples were constituted from a random allocation of each subject's eyes. A discriminant analysis model was elaborated based on the training sample. This model was then validated in the test sample, and its results were compared to results of other models described in the literature applied to the same test sample. The area under receiver operating characteristic curve (AROC), as well as, sensitivity and specificity were analyzed. **Results:** The AROC, specificity and sensitivity of this study model were 0.91, 86.4% and 77.6%, respectively. The AROC and specificities of literature models ranged from 0.81 to 0.88 and from 78.0% to 81.4%, respectively. The sensitivity of literature models was 74.1%. **Conclusions:** The discriminant analysis model elaborated from the Brazilian population showed better results than other models described in the literature when used in Brazilians.