( ) R1 ( ) R2 ( ) R3 (X) PG0 ( ) PG1 ( ) Estagiário ( ) Tecnólogo ( ) PIBIC Last Name - Oliveira First Name - Filipe Middle -

Service (sector) Cataract **-** CLINICAL TRIALS Nº CEP

X) PG ( ) Estagiário ( ) Tecnólogo

Pratical reasons (inability to position the patient at the machine or head tremor) or due to ocular disease that impairs fixation (macular degeneration or dense amblyopia.

PURPOSE: The purpose of this study was to identify the rate of measurement acquisition failure due to senile cataract and how this varies with severity and morphology. **METHODS:** A retrospective review was carried out from subjects datas enrolled in a clinical trial. Lens opacities classification based on Lens Opacities Classification System III (LOCS III) scores, optical biometry (IOLMaster) signal-to-noise ratio and ultra-sonic A-scan (Axis II Quantel Medical) were analysed. **RESULTS:** A total of 25 subjects (50 cataractous eyes) mean age 68.3 ±9.2 years (range 49 to 78 years) were analysed and was observed that the cataract caused measurement acquisition failure from optical biometer in 13 (26%) cases and 6 (12%) cases were borderline measures. All cases presented posterior subcapsular classification and all of them were mixed and had several levels of severity, except in one case that presented with total cataract. However, in the borderline cases there was a similarity with the severity and morphology observed in the failure cases although have been possible to obtain unrealible measurements. All cases could be measured with ultrasound. **CONCLUSIONS** Measurement failure may occur at lower levels of posterior subcapsular cataract although some of them with same severity and morphology cataract were measured as borderline cases. The association between measurement acquisition and severity was evidenced, wich supports previous reports, but related to the morphology there was no association with nuclear opalescence or cortical cataracts.