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**Screening for Retinopathy of Prematurity in
Premature Babies Born in North Macedonia
– 15 Years Results (2008-2023)**

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Purpose: Retinopathy of prematurity (ROP) is a vasoproliferative disorder of the retina and a leading cause of visual impairment and childhood blindness worldwide. The purpose of this paper is to analyze the possibility of developing ROP and the need for treatment in premature babies, born in North Macedonia in period from 2008-2023.

Materials and methods: In this retrospective study was analyzed the data of premature babies which were followed in the period from 2008-2023. In Republic of North Macedonia for screening of ROP are used recommendations from the American Association for Pediatric Ophthalmology and Strabismus, with clearly defined inclusions for the screening program for ROP of all prematurus with a birth weight (BW) of 1500 g or less and / or born at 30 gestational weeks (GW) or earlier and selected infants with a birth weight between 1500 to 2000 g with unstable clinical course.

Results: According to the adopted criteria, screening was conducted in 5914 premature babies with 19795 examinations. Screening in these prematures resulted in the detection of active premature retinopathy with an absolute indication of active treatment in 664 prematures. In addition, 383 newborns were treated with laser photocoagulation, while 281 children with Anti-VEGF therapy.

Conclusion: The results concluded that premature infants born at 30 gestational weeks (GW) or earlier and/or birth weight (BW) 1500g or less and selected prematures with a birth weight between 1500 g and 2000 g but with unstable clinical course and neonatology high risk assessment, should mandatorily be screened for ROP.

Keywords: screening for ROP, retinopathy of prematurity (ROP), prematures, birth weight (BW), gestational age (GA), laserphotocoagulation (LPC).