

DIGIROP Prediction models for severe retinopathy of prematurity

Severe retinopathy of prematurity, ROP, is a potentially blinding eye disease diagnosed primarily in extremely preterm babies. Advances in medicine and healthcare have led to increased survival for infants with decreasing gestational age, and therefore also the increased need for ROP screening and treatment. Less than 10% of all screened infants develop severe ROP and need treatment. This thesis aimed to develop and validate prediction models for severe ROP requiring treatment without compromising infant safety. The clinical implication of the decision support tool is early identification of infants who can be released from all or some ROP screening sessions, thus reducing the number of unnecessary examinations in this fragile population. This work will hopefully contribute to the better well-being of infants, improved health economy, and enable healthcare professionals to focus on the right patient at the right time.



Aldina Pivodic, MSc in Mathematics, has since 2004 worked with medical statistics in clinical research towards academia and pharmaceutical and medical technology companies. She undertook her doctoral studies in 2019-2023.

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