

# INTRAVITREAL BEVACIZUMAB VS LASER PHOTOCOAGULATION IN RETINOPATHY OF PREMATURITY

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## Background

Laser photocoagulation (LPC) is considered the standard treatment for retinopathy of prematurity (ROP), but LPC is destructive, causes complications, and does not prevent all vision loss. Recently, bevacizumab (a vascular endothelial growth factor inhibitor) has been used with positive results.

## Purpose

To evaluate the efficacy and safety of intravitreal bevacizumab vs. LPC in preterm infants with ROP grades 1 to 3+.

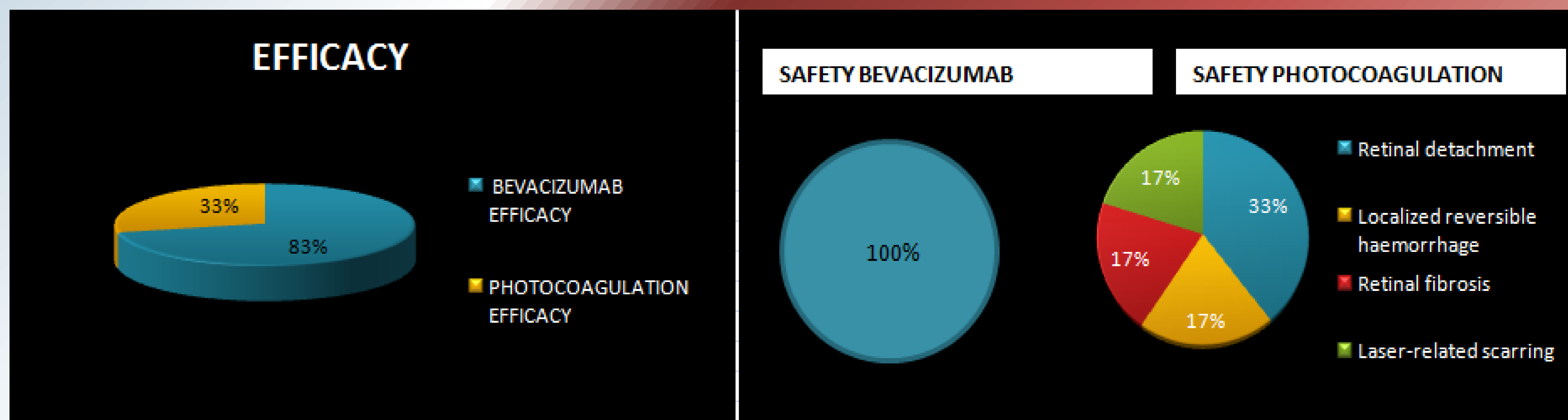
## Material and methods

Ten-month retrospective study that included patients with gestational age of less than 30 weeks diagnosed with ROP grades 1 to 3+, and weight <1,500 g.

The subjects received either a single dose of bevacizumab 0.625 mg at three months post-gestational age, or LPC at four-to-eight weeks. The primary efficacy and safety endpoints for both arms of treatment were: complete vascularization (CV) in both eyes, and absence of adverse events.

## Results

Twelve patients were included, six for each treatment arm. The proportion of females was 50% for the bevacizumab group and 66.6% for the LPC group. Mean gestational age was 25 weeks [23-29] in both groups.



## Conclusions

In this cohort, intravitreal bevacizumab was more effective and safer than LPC in the treatment of ROP grades 1-3+. This is consistent with previous published studies, and supports the use of the antiangiogenic over LPC in the treatment of ROP.