
**Long-Term Re-Detachment Rates of Pneumatic Retinopexy versus Pars Plana Vitrectomy in
Retinal Detachment: a PIVOT Post-Hoc Analysis**

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Introduction: The purpose of our study was to assess long-term re-detachment rates following pneumatic retinopexy (PnR) versus pars plana vitrectomy (PPV) in rhegmatogenous retinal detachments (RRD).

Methods: "Conducted post-hoc analysis of the "PnR versus PPV for the Management of Primary RRD Outcomes Randomized Trial" (PIVOT) trial. PIVOT participants were ineligible if any re-intervention to reattach the retina was performed within one year of the initial procedure. Re-detachment was determined by medical chart review or telephone interview. The latter was the only accepted method for those with less than two years of follow-up (otherwise marked as unreachable and excluded).

Results: After exclusion of ineligible and unreachable participants from the PIVOT trial, 61 (72.6%) PPV participants and 62 (80.5%) PnR participants were analyzed by either chart review or phone call. Long term re-detachment rate was 0% and 1.61% (1/62) in the PPV and PnR groups respectively ($p=0.32$). The mean follow-up duration in years was 4.34 ± 2.80 versus 4.26 ± 2.81 in the PPV and PnR groups, respectively.

Conclusion: There was no statistically significant difference in long-term re-detachment rates for PnR vs PPV. Both procedures are durable treatment options for RRD over an extended period, rarely requiring additional intervention for re-detachment.