

R1  R2  R3  PG0  PG1  Estagiário  Tecnólogo   
PIBIC Last Name - Magalhães Junior First Name - Octaviano Middle -  
Service (sector) Retina and Vitreous N° CEP  
 Estagiário  Tecnólogo

### **COMPARISON OF 25G SYSTEMS FLOW**

AUTHORS: Octaviano Magalhães Junior, MD; Maurício Maia, MD; André Maia, MD; Paulo Augusto de Arruda Mello Filho, MD; Michel Eid Farah, MD

PURPOSE: To compare the 25 gauge infusion and extrusion fluid volumes of different pars plana vitrectomy systems.

METHODS: Infusion and aspiration rates of different 25 gauge systems (Alcon, Bausch & Lomb, New Dorc, and Old Dorc) was measured in vitro using balanced saline solution for several levels of bottle heights (40cm, 60cm, 80cm, 100cm, 120cm), cutter velocity (without cutter, 800 cpm, 1100 cpm, 1500 cpm), and aspirating power (100 mmHg, 200 mmHg, 300 mmHg, 400 mmHg, 500 mmHg).

RESULTS: All infusion flow velocities (in each bottle height) and aspiration rates were different in paired t test ( $p < 0,001$ ).

CONCLUSION: The 25 gauge infusion and extrusion fluid volume of pars plana vitrectomy systems were different. This study showed to be helpful to a better comprehension of this new pars plana vitrectomy technique.