



Seeing beyond

# Delivering significantly higher aspiration flow rates and shorter core vitrectomy time

Advantages of the 27G DORC TDC VELOCE compared to the 27G DORC TDC vitrectomy probe

## SOURCE

**Title**  
Comparative flow and operating efficiency of TDC Veloce 27-gauge vitrectome: Dual-cut vitrectomy probe evaluations

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**Publication**  
[Comparative flow and operating efficiency of TDC Veloce 27-gauge vitrectome. doi:10.1097/IAE.0000000000004870](https://doi.org/10.1097/IAE.0000000000004870)

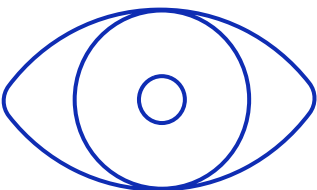
## METHODOLOGY & SETUP

### Setting



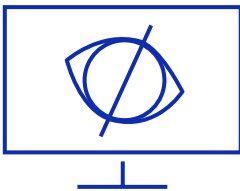
Single-surgeon randomized controlled clinical study

### Sample size clinical study



20 eyes 27-G **DORC TDC 16,000 CPM** probe  
10 eyes 27-G **DORC TDC VELOCE 16,000 CPM** probe  
12 eyes 27-G **DORC TDC VELOCE 20,000 CPM** probe

### Setup



- DORC TDC VELOCE vitrectomy probe
- DORC TDC vitrectomy probe
- DORC EVA NEXUS surgical system

### Methodology

- **IN VITRO:** Aspiration flow of the 27G DORC TDC VELOCE and DORC TDC vitrectomy probes was compared in water, artificial vitreous, and porcine vitreous using the DORC EVA NEXUS surgical system.
- **IN VIVO:** an accompanying randomized clinical study compared core vitrectomy time in patients undergoing 27G vitrectomy using either a DORC TDC VELOCE or DORC TDC vitrectomy probes with DORC EVA NEXUS surgical system.

## RESULTS

Significant overall % increase in flow  
(DORC TDC VELOCE compared to DORC TDC)\*

**In water: 31%**  
**In artificial vitreous: 69%**  
**In porcine vitreous: 37%**

**Up to 41% shorter core vitrectomy time\*\***

with DORC TDC VELOCE  
vs. DORC TDC

### Conclusion

Increased flow with the 27-G TDC VELOCE probe resulted in a significantly shorter core vitrectomy time compared with a standard 27-G TDC probe, suggesting greater procedural efficiency during vitrectomy.

\* in vitro  
\*\* in vivo (based on Table 3)