

# Tavelli et al., 2025



Academia



30  
Patients



6 Month  
Follow-up



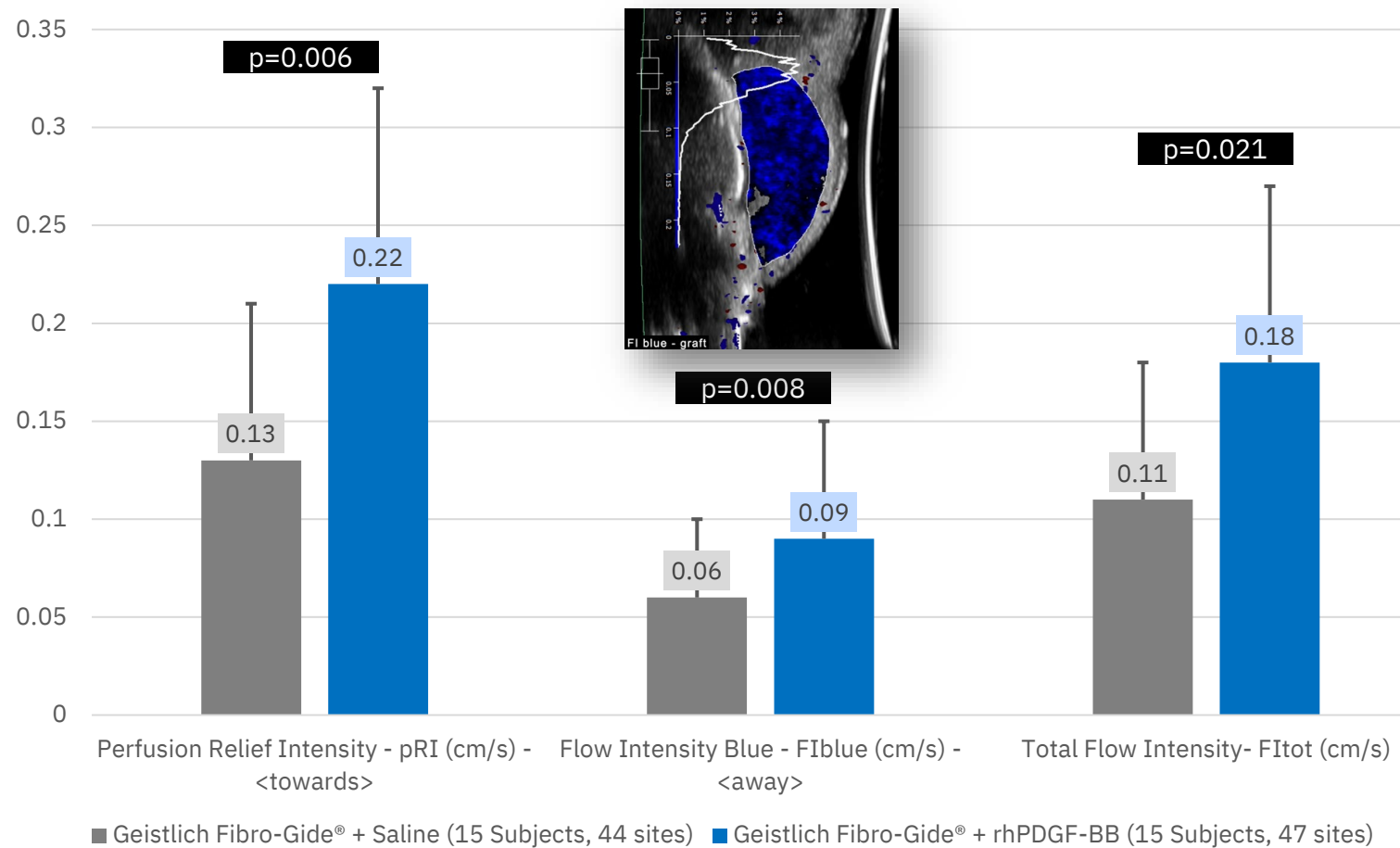
## DISCLAIMER

The following page contain summaries of data published by Tavelli et al., 2025 as interpreted by Geistlich. Although we try to reflect to the best of our knowledge the results and conclusions of the cited studies, errors cannot be excluded. We explicitly emphasize that the authors of the cited study cannot be held responsible for the content of the summaries.

## Soft Tissue Regeneration

# Tissue Perfusion Assessment After Root Coverage with Geistlich Fibro-Gide® (with and without rhPDGF-BB)

### Key Tissue Perfusion Improvement Metrics (Within the Graft at 2 Weeks)



## Key Message

This randomized controlled trial demonstrated that Geistlich Fibro-Gide® loaded with rhPDGF-BB may lead to faster healing, reduced inflammation, and greater stability of the gingival margin and soft tissue volume.

## Study results

- **Early Tissue Perfusion Predicts Clinical Success:** Sites treated with Geistlich Fibro-Gide® + rhPDGF-BB showed significantly higher blood flow at 2 weeks, correlating with better root coverage and tissue thickness outcomes at 6 months.
- **Higher Volumetric Gains with rhPDGF-BB:** The test group exhibited higher total flow intensity (FITot) and mean flow intensity (FImean), leading to greater volumetric and gingival thickness gains at 6 months compared to controls.
- **Biomarker Insights Enhance Clinical Understanding:** Biomarker analysis revealed higher expressions of IL-1 $\beta$ , PDGF-BB, and VEGF at test sites compared to control sites over three months. Higher PDGF-BB levels at one week were inversely correlated with patient-reported recovery time.



Level-1: Triple-Blind RCT



30 Patients



Academia



6 Months



To compare sites treated with either Geistlich Fibro-Gide® loaded with recombinant human platelet-derived growth factor-BB (rhPDGF-BB) or Geistlich Fibro-Gide® with saline in terms of tissue perfusion, root coverage, gingival thickness, and biomarker expression.

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