Kandaswamy et al., 2026

Academia

15 Patients

6-9 Month Follow-up

DISCLAIMER

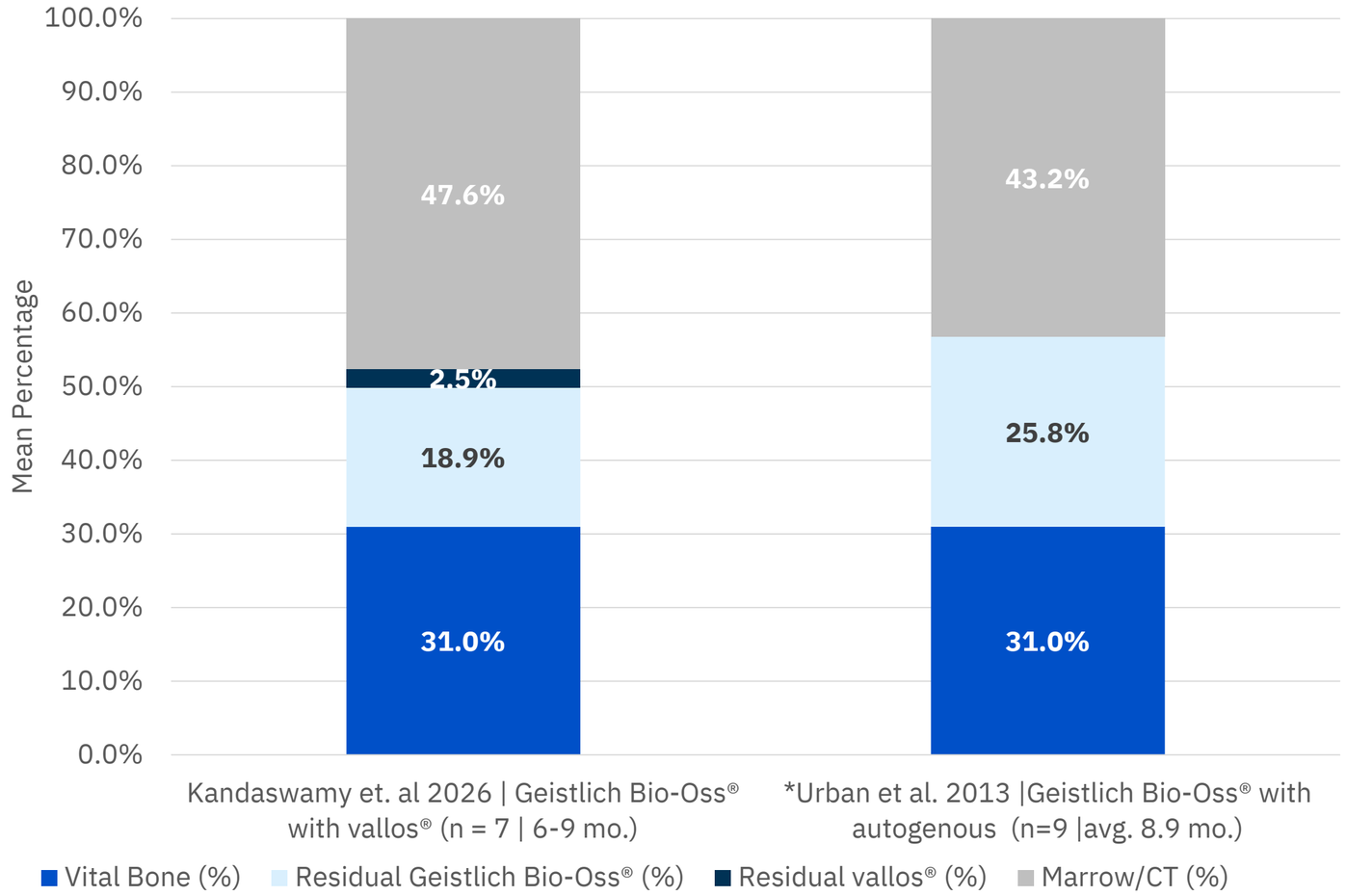
The following page contain summaries of data published by Kandaswamy et al., 2026 as interpreted by Geistlich. Although we try to reflect to the best of our knowledge the results and conclusions of the cited studies, errors cannot be excluded. We explicitly emphasize that the authors of the cited study cannot be held responsible for the content of the summaries.

2-Stage Implant Placement | Ridge Augmentation

Histologic Outcomes of Layered Ridge Augmentation

Histologic & Histomorphometric Analysis at 6–9 Months

N = 7 (Bio-Oss® + vallos®) vs. N = 9 (Bio-Oss® + autogenous bone, literature)



Key Message

Layered horizontal GBR using vallos® beneath Geistlich Bio-Oss® and protected by Geistlich Bio-Gide® achieves predictable ridge width gains, balanced remodeling, and substantial vital bone formation—without the morbidity of autogenous bone harvesting.

Study results

- **Layered GBR Enhances Biology and Stability:** vallos® against native bone supports osteoinductive remodeling, while a buccal Geistlich Bio-Oss® layer maintains ridge contour and volume.
- **Geistlich Bio-Gide® Supports Predictable Healing:** The collagen membrane stabilizes the graft, protects the site, and supports angiogenesis; no membrane exposures were observed.
- **Effective Vital Bone Formation Without Autograft:** ~31% vital bone at 6–9 months, comparable to autograft protocols, with minimal vallos® remnants.
- **Reliable Horizontal Bone Gain:** Mean gain of ~4 mm with controlled, biologically favorable shrinkage.

Level 2 Evidence: Prospective Single-Arm Clinical Cohort

15 Patients

Academia

6-9 Months

The aim of this study was to evaluate horizontal bone gain, graft stability, and vital bone formation following layered vallos® – Geistlich Bio-Oss® ridge augmentation.

Kandaswamy E et al. *Clin Adv Periodontics*. 2026; 1-12. https://doi.org/10.1002/cap.70108 Read Now
*Urban et al. *Int J Periodontics Restorative Dent*. 2013;33(3):299-307. doi:10.11607/prd.1407