

UTILITY OF AUTOLOGOUS PLATELET-RICH FIBRIN (L-PRF) COMPARED WITH A XENOGENIC BONE SUBSTITUTE COMBINED WITH COLLAGEN MATRIX FOR ALVEOLAR PRESERVATION. A RANDOMIZED CONTROLLED TRIAL. VOLUMETRIC ANALYSIS



Universidad de
los Andes

Sanz Antonio^{*}, Nehme Michelle^{*}, Cáceres Felipe^{*,**}, Imbarack Macarena^{*}, Acuña Jaime^{*,***}, Vega Vicente^{*}

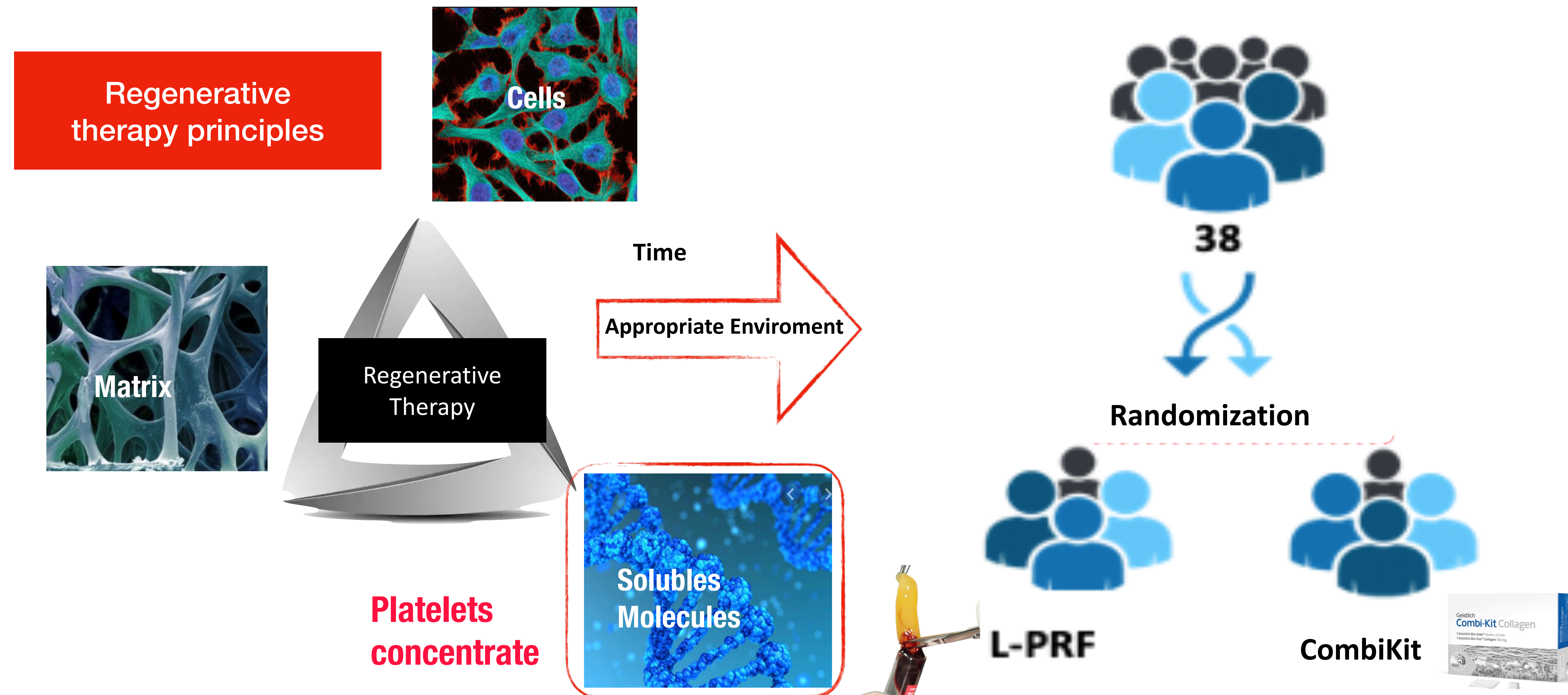
Clinical Trials Protocol ID CPI-ODO:16, ClinicalTrials.gov. ID NCT05572242

^{*} Graduate program in Oral and Maxillofacial Implantology, Diagnostic and Surgical Sciences department, Faculty of Dentistry, Universidad de los Andes, Chile. ^{**} Clinical practice at Clinica Universidad de los Andes, Chile. ^{***} Hospital San José, SSMN, Chile.

Alveolar ridge preservation is a clinical procedure that aims to maintain the contour and volume of the alveolar process to facilitate the future installation of a dental implant.

Ridge preservation means alveolar regeneration.

Randomized clinical trial comparing L-PRF vs Xenogenic bone substitutes along with collagen membrane.

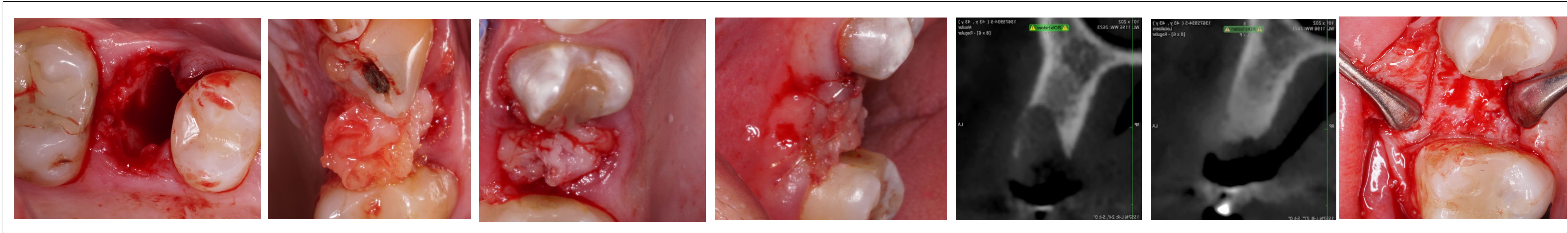




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L-PRF

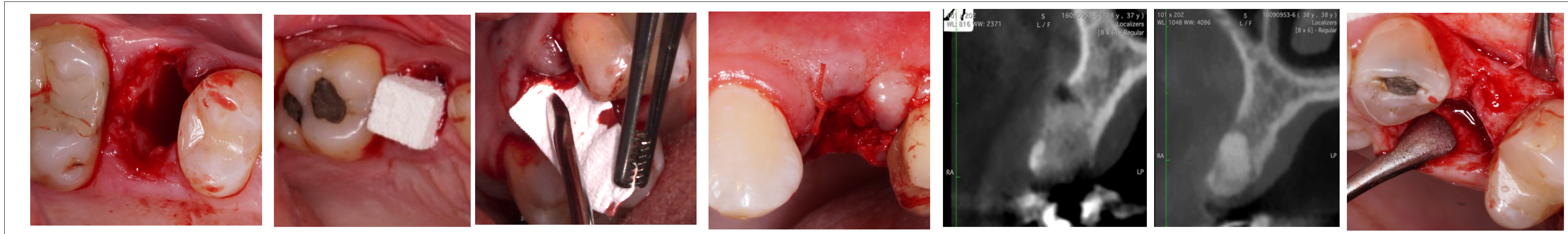


FIRST SURGICAL PROCEDURE

IMMEDIATE
CBCT

4 MONTHS
CBCT

XENOGENIC BONE



FIRST SURGICAL PROCEDURE

IMMEDIATE
CBCT

4 MONTHS
CBCT



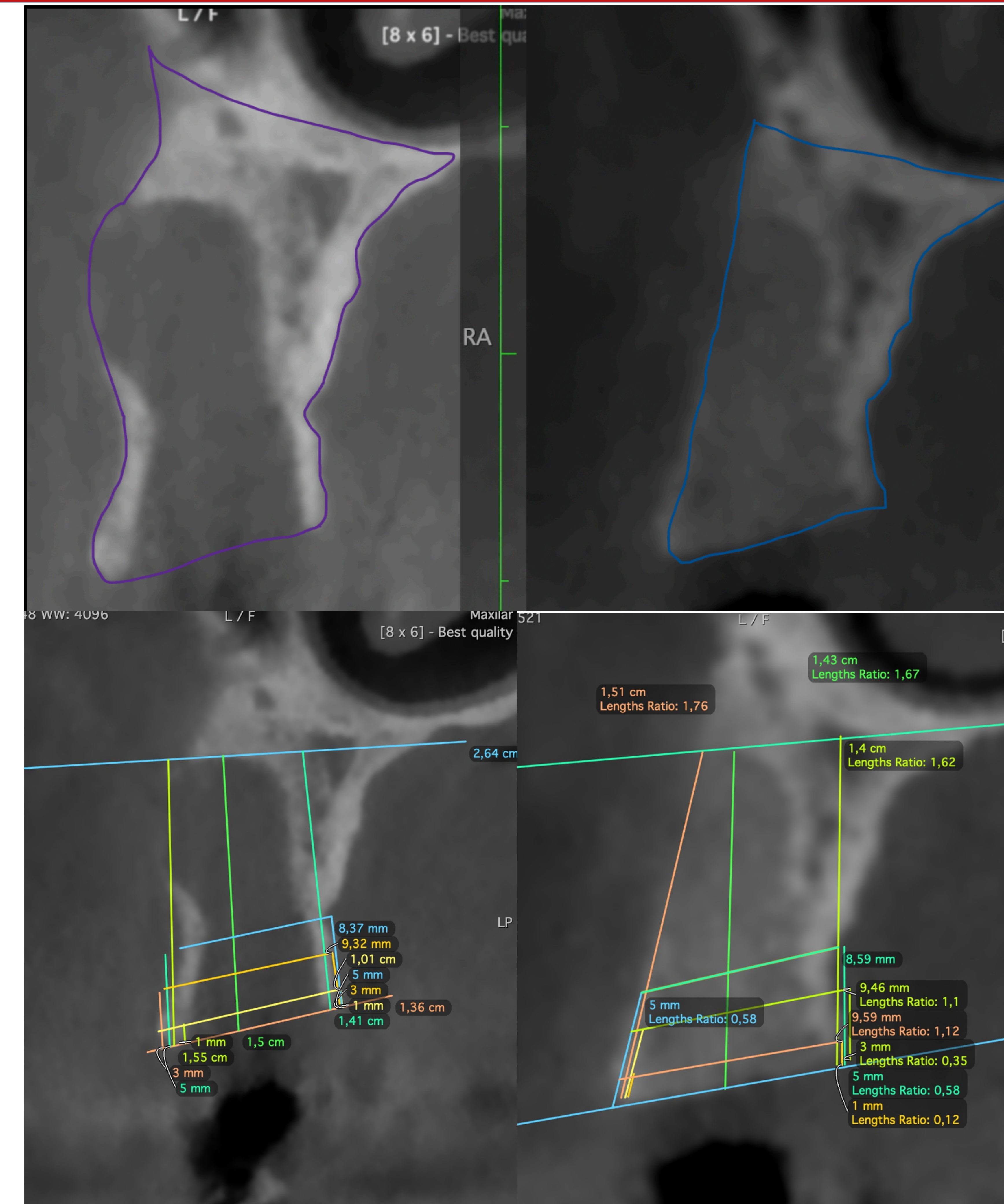
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VOLUMETRIC ANALYSIS – OSIRIX SOFTWARE

The volume of the preserved segment was calculated in the previous CBCT and in the CBCT after 4 months, a difference was made between both volumes for each patient, obtaining a percentage of preservation for each study group.





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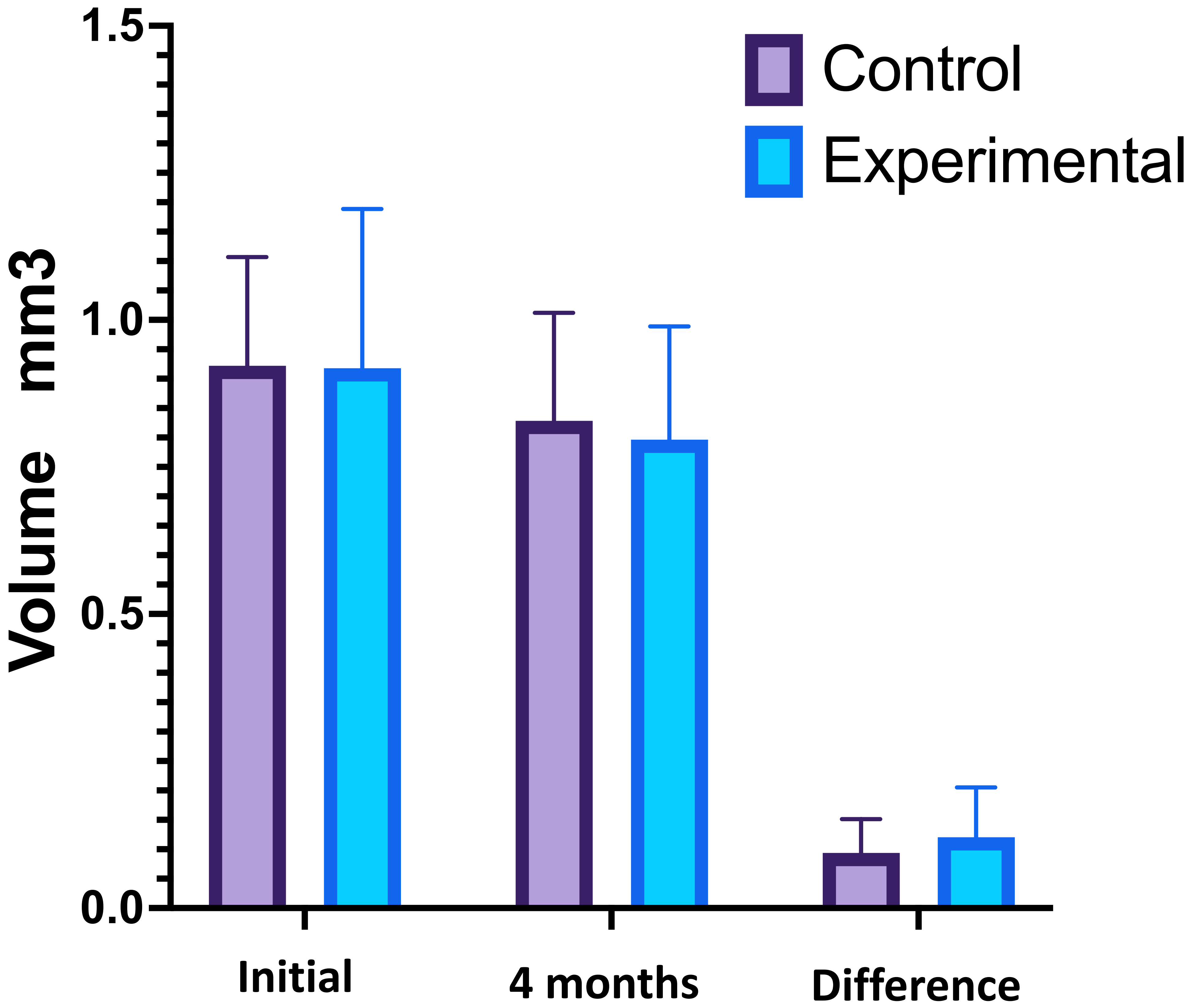
	Baseline Average Volume	4 Months Average Volume	BL – 4M	Average Preservation %	95% CI
Control group (n=7)	0.92 ± 0.19 mm ³	0.85 ± 0.18 mm ³	0.09 ± 0.06mm ³	89.73%	0.05- 0.14 mm
Experimental group (n=8)	0.91 ± 0.27 mm ³	0.79 ± 0.19 mm ³	0.12 ± 0.08 mm ³	87.99%	0.04 – 0.2 mm

p-value = 0.49

Average and standard deviation of the initial volume and the volume at 4 months of the control and experimental group. Difference and standard deviation of the Initial averages – 4 months of each group. Percentage calculation of preservation (Volume 4 months/Initial Volume). P-value of the Welch test for non-inferiority.

CONCLUSIONS

Despite the limitations of the partial report of results, it can be concluded that socket preservation with L-PRF presents comparable results with socket preservation with xenograft and collagenous membrane.



References:

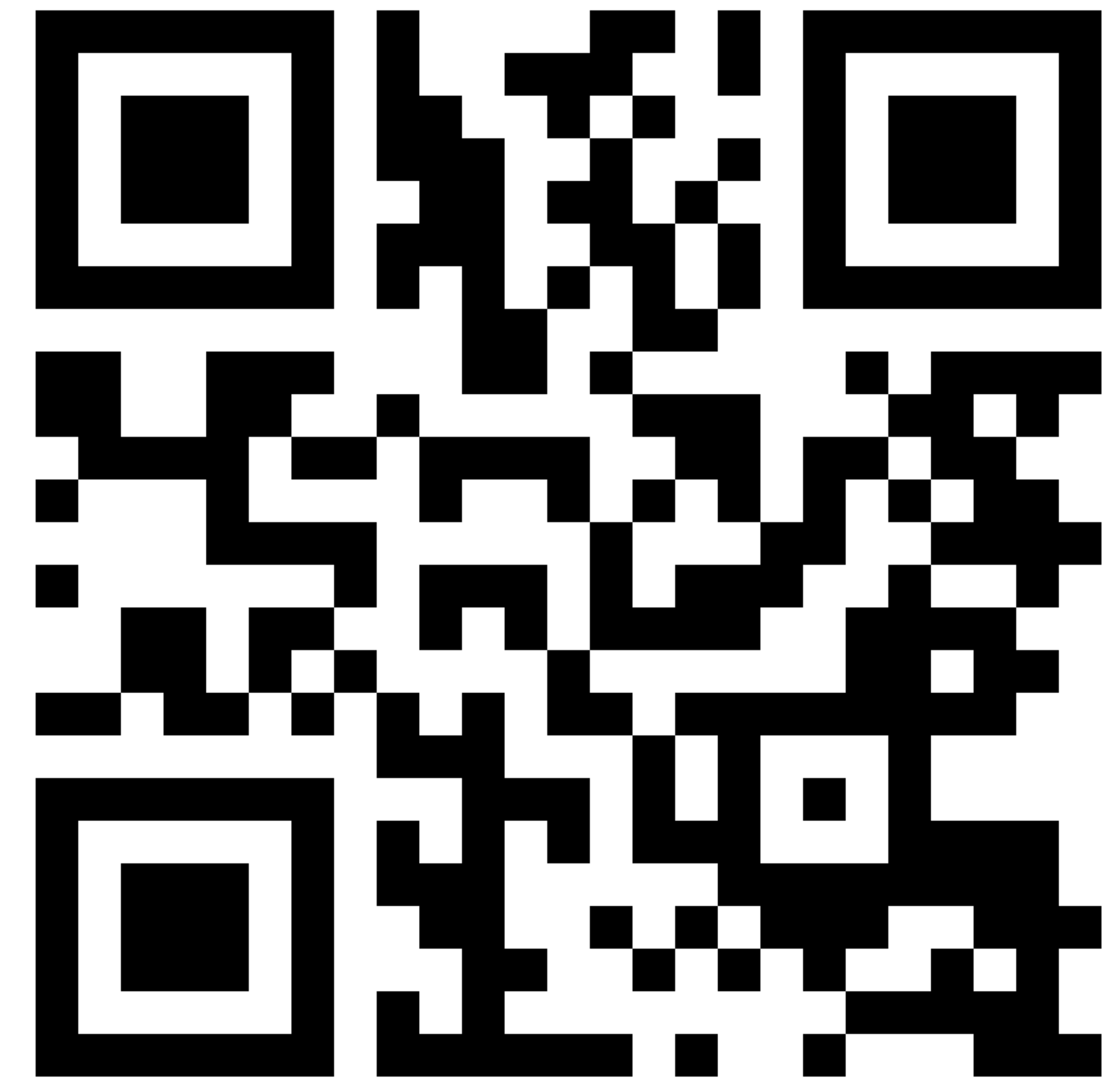
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6. Cha J-K, Song YW, Park S-H, Jung RE, Jung U-W, Thoma DS. Alveolar ridge preservation in the posterior maxilla reduces vertical dimensional change: A randomized controlled clinical trial. Clinical Oral Implants Research. 2019;30(6):515-23.



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References:

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