

# Oragraft® MD 70/30

# **Clinical Overview**

OraGraft MD 70/30 is a particulate bone graft combining 70% mineralized ground cortical with 30% demineralized ground cortical. The combination leverages the benefits of space maintenance with ground cortical with the osteoinductive potential of demineralized ground cortical. This combination has been shown in studies to provide a favorable environment for the regeneration of vital bone.<sup>1-5</sup>

# **Features & Benefits**

- **Convenient:** 70/30 mix reduces time to blend grafts chair-side and minimizes the need to carry multiple graft types in inventory.
- **Sterile:** Sterilized using patented and proprietary Allowash XG® technology, which provides a sterility assurance level (SAL) of 10<sup>-6,</sup> without compromising the graft's inherent osteoconductive properties.<sup>6</sup>
- Packaging: Double-barrier sterile packaged for aseptic delivery to the sterile field.
- Osteoconductive: Natural bone matrix facilitates cell attachment and proliferation as well as vascular in-growth.
- Osteoinductive Potential: Demineralized using proprietary PAD® technology that targets optimal residual calcium levels of 1-4% without compromising the graft's inherent osteoconductive properties or osteoinductive potential.<sup>7-10</sup>





# OraGRAFT MD 70/30 250-1000 microns Ambient Temperature Storage\* (10°C - 37°C) / 3 Year Shelf Life Size Order Code 0.5 cc MD050 1.0 cc MD010 2.0 cc MD020

# Instructions for use available at LifeNetHealth.org/IFU

# References

- Histologic healing following tooth extraction with ridge preservation using mineralized versus combined mineralized-demineralized freeze-dried bone allograft: a randomized controlled clinical trial. Borg TD, Mealey BL.
   J Periodontol. 2015 Mar;86(3):348-55. doi: 10.1902/jop.2014.140483. Epub 2014 Nov 21. PMID: 25415247 Conclusion: "Combination allograft results in increased vital bone formation while providing similar dimensional stability of the AR compared to FDBA alone in AR preservation." AR = Alveolar Ridge.
- Extraction site preservation using new graft material that combines mineralized and demineralized allograft bone: a case series
  report with histology. Holtzclaw D. Compend Contin Educ Dent. 2014 Feb;35(2):107-12; quiz 112.
   PMID: 24571560 Abstract: "The results of this case series suggest that blended bone allograft containing a 70 to 30 ratio of
  mineralized to demineralized cortical bone particles can be successfully used to facilitate future placement of dental implants
  with as little as 14 weeks of healing."
- Semin Arthroplasty. 1993 Apr;4(2):58-63. The biology of bone grafts. Goldberg VM1, Stevenson S. PMID: 10148544 Extract: "Cortical
  grafts, whether autogeneic or allogeneic, at least initially act as weight-bearing space fillers"
- 4. J Periodontol. 1997 Nov;68(11):1085-92. Effect(s) of the demineralization process on the osteoinductivity of demineralized bone matrix. Zhang M1, Powers RM Jr, Wolfinbarger L Jr. PMID: 9407401 Extract: "...bone demineralized to levels of approximately 2% residual calcium provided for maximum osteoinductive potential in both assay systems."
- 5. J Periodontol. 2016 Sep;87(9):1022-9. doi: 10.1902/jop.2016.160139. Epub 2016 Apr 30. Effect of Healing Time on New Bone Formation After Tooth Extraction and Ridge Preservation With Demineralized Freeze-Dried Bone Allograft: A Randomized Controlled Clinical Trial. Whetman JJ, Mealey BLI. PMID: 27133791
  Conclusion: "This study indicates significantly greater new vital bone formation occurs after tooth extraction and ridge prese preservation with DFDBA when sites healed for 18 to 20 weeks compared with 8 to 10 weeks prior to dental implant placement"
- 6. Independent sources include the Virginia Commonwealth University Medical Center and the American Association of Mechanical Engineers. Data of file at LifeNet Health.
- Zhang M, Powers R, Wolfinbarger L. (1997). Effect(s) of demineralization process on the osteoinductivity of demineralized bone matrix. J Periodontol, 68:1085-1092.
- 8. Turonis JW, McPherson JC 3rd, Cuening MF. (2006). The affects of residual calcium in decalcified freeze-dried bone allograft in a critical-sized defect in the Rattus norvegicus calvarium. J Oral Implantol. 32(2), 55-62.
- Herold RW, Pashley DH, Cuening MF. (2002). Effects of varying degrees of allograft decalcification on the cultured porcine osteoclast cells. J Periodontol, 72(2), 213-219.
- Mott DA, Mailhot J, Cuenin MF, Sharawy M, Borke J. (2002). Enhancement of osteoblast proliferation in vitro by selective enrichment of demineralized freeze-dried bone allograft with specific growth factors. J Oral Implantiol, 28(2), 57-66.





<sup>\*</sup>While ambient room temperature has not been defined by regulatory bodies, LifeNet Health would recommend storage at 2°C - 37°C, with excursions of less than 24 hours up to 40°C. If an excursion outside this range occurs, please contact LifeNet Health.