Competitor Fact Sheet: PRO-DENSE™

Biocomposites

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Feature	genex®	PRO-DENSE™ Wright Medical Group
Composition	Powder: 50% β-tricalcium phosphate, 50% $CaSO_4$ hemihydrate Mixing solution: Sterile water[1]	Powder: 75% $CaSO_4$ hemihydrate, 25% brushite + granular β-tricalcium phosphate Mixing solution: Neutralized glycolic acid[4,5]
Scaffold type	Osteoconductive with negative surface charge for accelerated bone restoration[2]	Osteoconductive[5]
Available sizes	5cc, 10cc	2cc, 5cc, 7cc, 10cc, 12cc, 15cc, 40cc 15cc Core Decompression Kit[5,6]
Setting time	15 minutes[1]	20-30 minutes[5]
Temperature sensitive setting	No[1]	No[5]
Drillable when fully set	Yes[1]	Yes[5,6]
Versatility	Moldable, packable, injectable[1]	Packable, injectable[6]
Injection flexibility	• Luer Lock syringe with narrow plastic cannula included for hard-to-reach defects • OsteoPrecision™ Graft Delivery Device available to withstand insertion pressure	• Delivery syringe with two cannula sizes included • Disposable syringe only kit available
Impurities	No[1]	Unknown

Feature	genex®	PRO-DENSE™ Wright Medical Group
Claimed absorption rate	Up to 12 months[3]	6-12 months[5]
Fully absorbs	Yes[1]	May not fully absorb[1]
Dry compressive strength	15 MPa[1]	25 MPa[1]
Radiopaque	Yes[1]	Yes[5]
pH	Physiologic[1]	Acidic[1]
Key selling points and weaknesses	(+) Precisely balanced β-tricalcium phosphate/calcium sulfate hemihydrate[1] (+) 100% Pharmaceutical-grade $CaSO_4$ component (+) Contains no Hydroxyapatite (HA) or insoluble impurities[1] (+) Fully absorbed within 12 months[3] (+) No contraindication against use in articulating surfaces[1] (+) Physiologic pH[1] (+) Hydrophilic[1] (+) Provides options for injection flexibility (+) Drillable when fully set[1] (+) Radiopaque[1] (+) Negatively charged surface chemistry accelerates bone growth up to 5x normal levels[2] (+) Restores bone to normal trabecular structure in 36 weeks[3] (+) Comprehensive support network for our customers and hospitals	(+) Indicated for use in benign bone cysts and tumors in children ages 6+[6] (+) Available in a core decompression kit for avascular necrosis[5,6] (+) Radiopaque[5] (+) Drillable when fully set[5,6] (-) Brushite component converts to Hydroxyapatite (HA) after implantation[1] (-) HA has a slow and incomplete absorption rate[1] (-) HA can cause a long-term nidus for infection[1] (-) Contraindicated in articulating surfaces[6] (-) Acidic pH[1] (-) Hydrophobic[1] (-) Long setting time

* (+) = competitor selling points
(-) = competitor weaknesses

References:

1. Biocomposites, Data on file.
2. Cooper, J.J., J.A. Hunt, and F. Pu, Enhancing the Osteogenic Potential of Bioabsorbable Implants through Control of Surface Charge. Presented at the Society for Biomaterials 2007 Annual Meeting. 2007: Chicago, Illinois, USA.
3. Yang HL et al. Bone healing response to a synthetic calcium sulfate/beta-tricalcium phosphate graft material in a sheep vertebral body defect model. J Biomed Mater Res B Appl Biomater 2012;100B(7):1911-21.
4. Pro-Dense™ Injectable Regenerative Graft Technical Monograph. 2019 Wright Medical Group N.V. or its affiliates. AP-010805A 19-Nov-2018.
5. Pro-Dense™ Injectable Regenerative Graft Competitive Guide. 2018 Wright Medical Group N.V. or its affiliates. AP-002461B_21-Nov-2018.
6. Pro-Dense™ Injectable Regenerative Graft Comprehensive Surgical Technique Booklet. 2019 Wright Medical Group N.V. or its affiliates. AP-010792A_16-Nov-2018.

For indications, contraindications, warnings and precautions see Instructions for Use.

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