



# STIMULAN<sup>®</sup>

POWER TO TRANSFORM<sup>™</sup>

Uniquely  
engineered  
for the  
precision and  
control you  
demand  
every time

# Control and performance at your fingertips

STIMULAN is a truly absorbable calcium sulfate precision engineered with your demands at the forefront.

- ✓ One of the few calcium compounds FDA cleared for infected sites<sup>1</sup>
- ✓ No hydroxyapatite, insoluble impurities or PMMA debris
  - Does not cause third body damage<sup>2-4</sup>
  - Does not prevent use in articulating surfaces<sup>2-4</sup>
  - Does not act as a nidus for infection<sup>5-10</sup>

## Properties that drive performance

The unique crystal configuration and construction of STIMULAN brings its own set of qualities to fully support your infected cases.<sup>11</sup>

- Physiological pH level
- Controlled purity (no insoluble impurities)
- No hydroxyapatite
- Hydrophilic

## See the STIMULAN difference in your cases

- ✓ Truly absorbable<sup>5-10</sup>
- ✓ Optimal absorption profile<sup>5-10</sup>
- ✓ Reliable setting time<sup>12</sup>
- ✓ Physiological compatibility with the body<sup>5,10,12</sup>
- ✓ No third body damage<sup>2-4</sup>



# STIMULAN<sup>®</sup>

## Consistency is hard earned and uniquely achieved

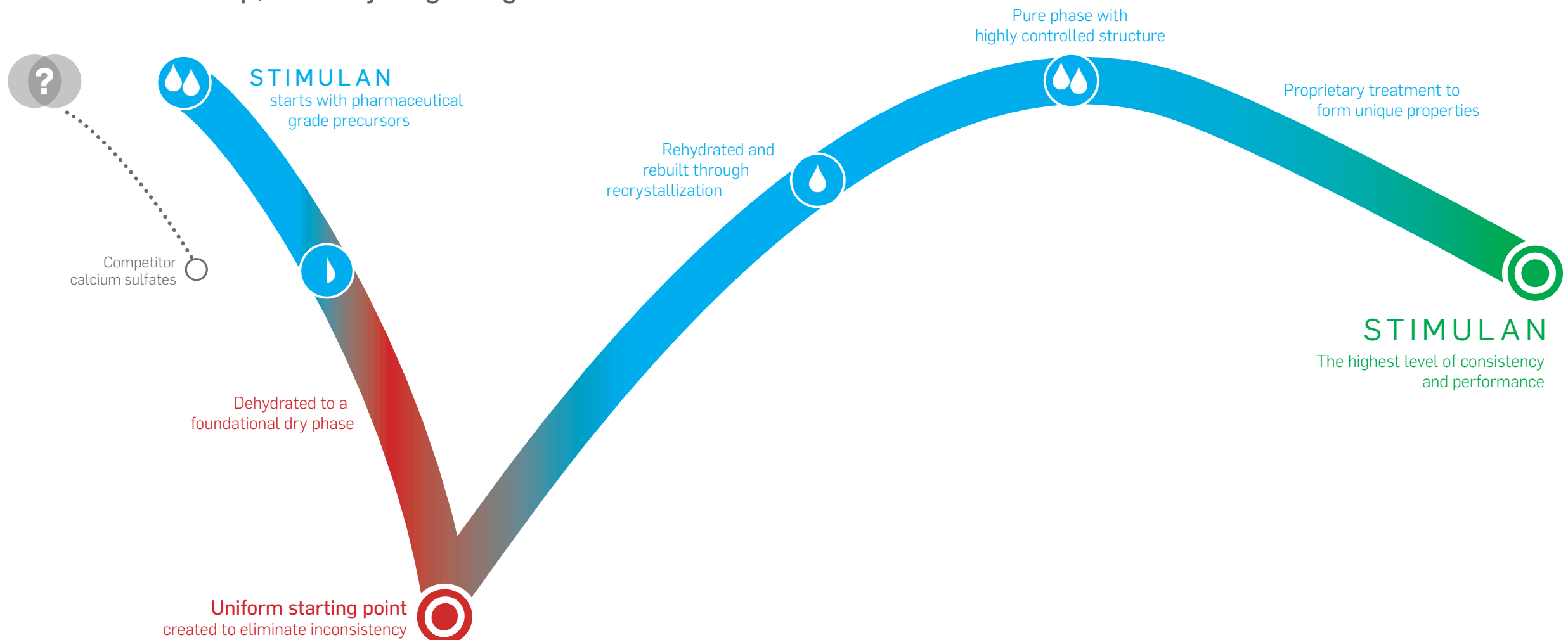
There is no shortcut to perfection. Which is why we go the extra mile to bring you the exceptional performance characteristics of STIMULAN – all made possible through our proprietary DRy26<sup>®</sup> methodology.

Each and every synthesis of STIMULAN undergoes a 26 step process that starts with pharmaceutical grade precursors and takes over 6 weeks to reach maturity.

Our unique DRy26<sup>®</sup> recrystallization method dehydrates then rehydrates to precisely restructure the calcium sulfate. This ensures a uniform starting point from which the material is rebuilt under strictly controlled conditions for the highest level of consistency.

The result is as you would expect from the world's leading expert in innovative calcium technologies.

## Where others stop, we are just getting started



## Case-by-case flexibility and success

Every part of STIMULAN has been designed to provide simplicity, intra-operative flexibility and optimum results. A variety of formats are available, all convenient to prepare and fast to set.



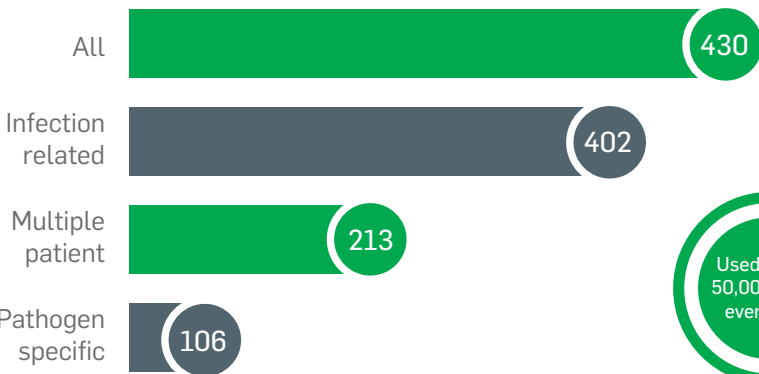
## Support as reliable as our outcomes

To ensure that you achieve the consistent results you expect, our comprehensive network of regional calcium sulfate specialists, expert sales representatives and surgeons already using STIMULAN are ready to support your use.

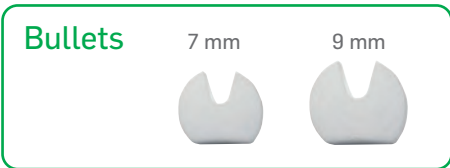
## Unrivalled evidence and expertise brings confidence

With our industry-leading knowledge, dedication and experience, you can be sure that the high level of consistency you demand in your cases will be met.

Peer reviewed papers, presentations and posters to date



Used in over 50,000 cases every year



# STIMULAN<sup>®</sup>

## When you need it – STIMULAN delivers every time

- ✓ FDA cleared for placement at an infected site<sup>1</sup>
- ✓ Uniquely engineered through our DRy26<sup>®</sup> recrystallization method<sup>11</sup>
- ✓ No hydroxyapatite, insoluble impurities or PMMA debris<sup>5-10</sup>
- ✓ Does not cause third body damage<sup>2-4</sup>
- ✓ Does not prevent use in articulating surfaces<sup>2-4</sup>
- ✓ Does not act as a nidus for infection<sup>5-10</sup>
- ✓ Truly absorbable<sup>5-10</sup>
- ✓ Reliable for time sensitive situations<sup>12</sup>

Find out more at [biocomposites.com](http://biocomposites.com)

**References:** **1.** Biocomposites, STIMULAN Instructions for Use (USA). **2.** Cowie, R.M., et al., Influence of third-body particles originating from bone void fillers on the wear of ultra-high-molecular-weight polyethylene. *Proc Inst Mech Eng H*, 2016. 230(8): p. 775-83. **3.** Cowie, R.M., et al., The Influence of Third Body Damage by a Calcium Sulfate Bone Void Filler on the Wear of Total Knee Replacements., in *Orthopaedic Research Society Annual Meeting*. 2016: Orlando, FL. p. 103. **4.** Lewicki, K., et al., The Effect of Absorbable Calcium Sulfate on Wear Rates in Ultra-high-Molecular-weight Polyethylene: Potential Implications for Its Use in Treating Arthroplasty Infections. *J Am Acad Orthop Surg*, 2017. **5.** Somasundaram, K., et al., Proximal humeral fractures: the role of calcium sulphate augmentation and extended deltoid splitting approach in internal fixation using locking plates. *Injury*, 2013. 44(4): p. 481-7. **6.** Lei, D., et al., Treatment of Distal Radius Bone Defects with Injectable Calcium Sulphate Cement., in *Bone Grafting*, A. Zorzi, Editor. 2012, InTech. p. 125-134. **7.** Lei, D., L. Jing, and S. Yang-yong, Calcium sulfate versus calcium phosphate in treating traumatic fractures. *JOURNAL OF CLINICAL REHABILITATIVE TISSUE ENGINEERING RESEARCH*, 2008. **12.** **8.** Lei, D., Z. Ma, and X. Jing, Treatment of bone defect with injectable calcium sulfate powder in distal fractures of radius. *Chinese Journal of Bone Tumor and Bone Disease*, 2007. **9.** Aiken, S.S., J.J. Cooper, and S. Zhou, Osseointegration of a calcium sulphate bone substitute in a large animal model, in *The 5th International Congress of Chinese Orthopaedic Association*. 2010: Chengdu, China. **10.** Lazarou, S.A., G.B. Contodimos, and I.D. Gkegkes, Correction of alveolar cleft with calcium-based bone substitutes. *J Craniofac Surg*, 2011. 22(3): p. 854-7. **11.** Cooper, J.J., Method of producing surgical grade calcium sulphate; Patent. 1999. **12.** Biocomposites Ltd, Data on file.

For indications, contraindications, warnings and precautions see Instructions for Use. Concurrent use of locally administered antibiotics may affect setting time. This brochure may include the use of STIMULAN or techniques that go beyond the current clearance/approval granted by the relevant regulatory authority. Please contact your local representative for further information.

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Patents granted: GB2367552, EP 1204599 B1, US 6780391, EP 2594231 B1, US 8883063, CN ZL201210466117.X, GB2496710, EP 3058899 B1, US 10390954, US 10,588,748, CN ZL201610089710.5

Patents pending: GB1502655.2, GB1704688.9, EP 18275044.8, US 15/933936, CN 108619579A