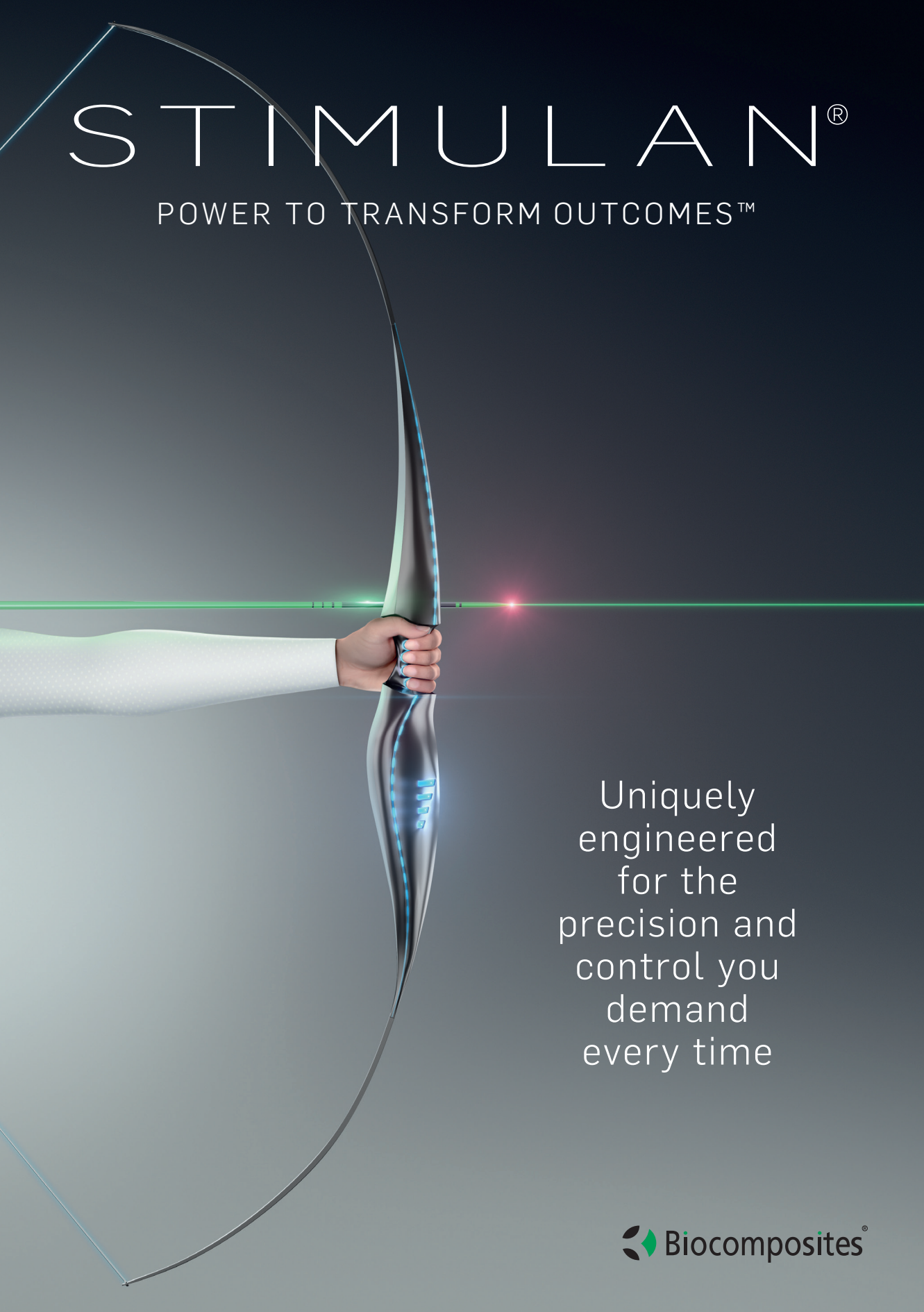


# STIMULAN<sup>®</sup>

POWER TO TRANSFORM OUTCOMES<sup>™</sup>

A hand holding a futuristic, glowing blue bow against a dark background with a green laser line.

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.

- ✓ Approved for placement at an infected site<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>

# STIMULAN<sup>®</sup>

## Consistency is hard earned and uniquely achieved

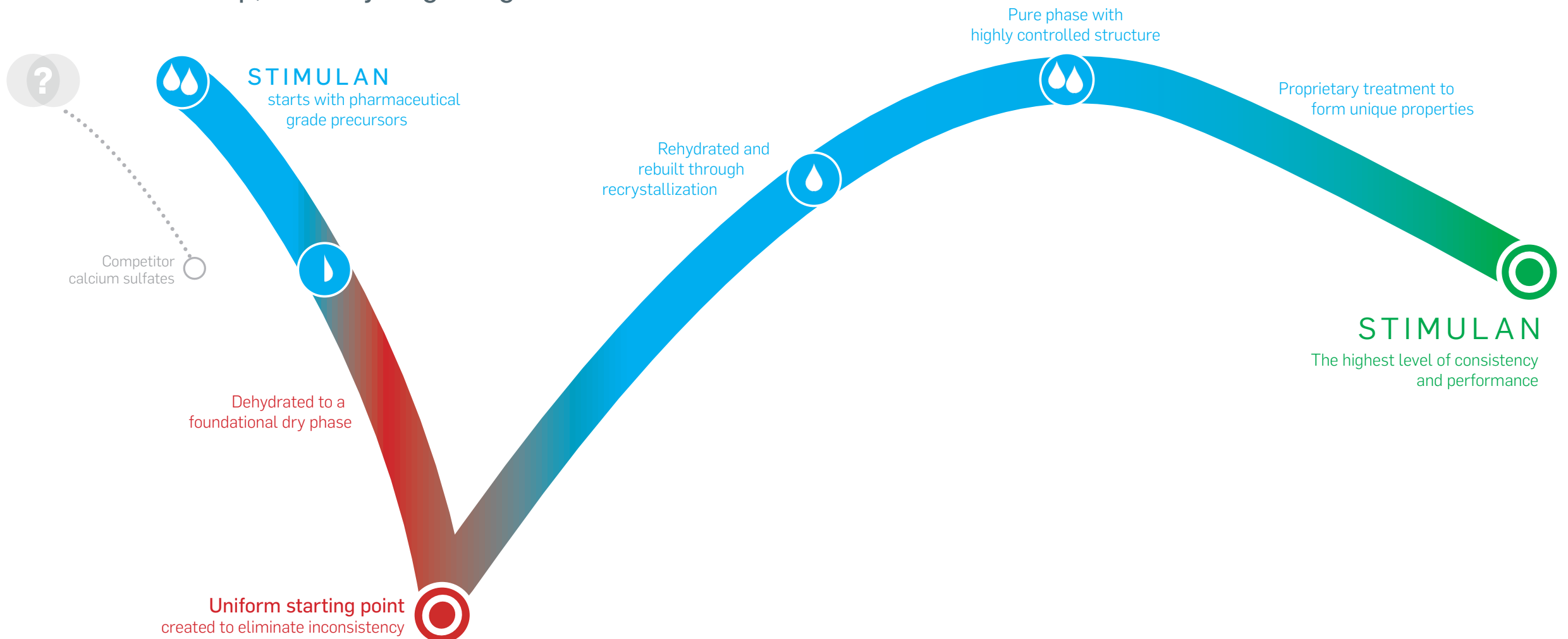
There is no shortcut to perfection. Which is why we go the extra mile to bring you the exceptional performance characteristics of STIMULAN – all made possible through our proprietary DRy26™ methodology.

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™ 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.

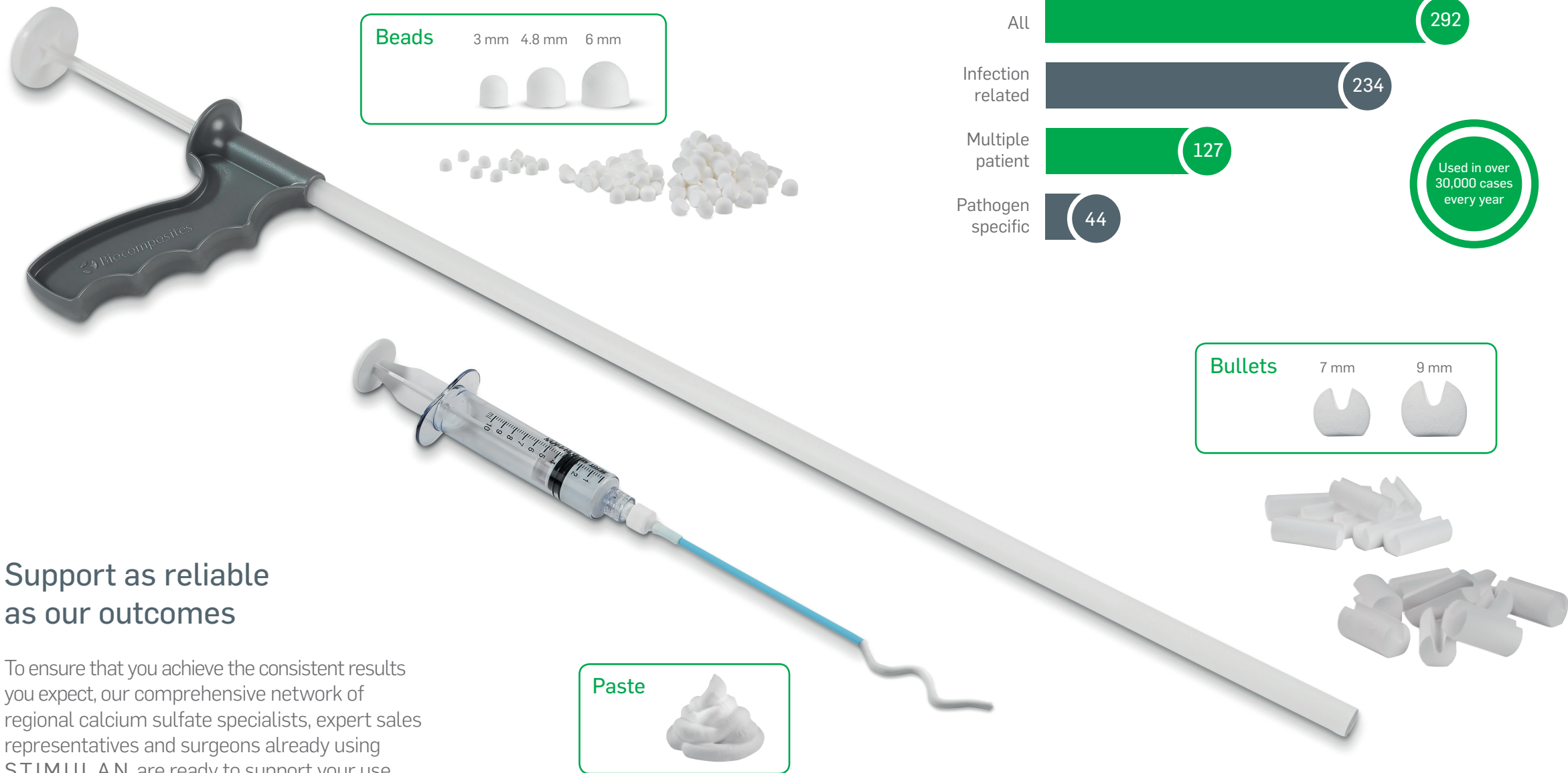
The result is as you would expect from the world's leading expert in innovative calcium technologies.

## 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.



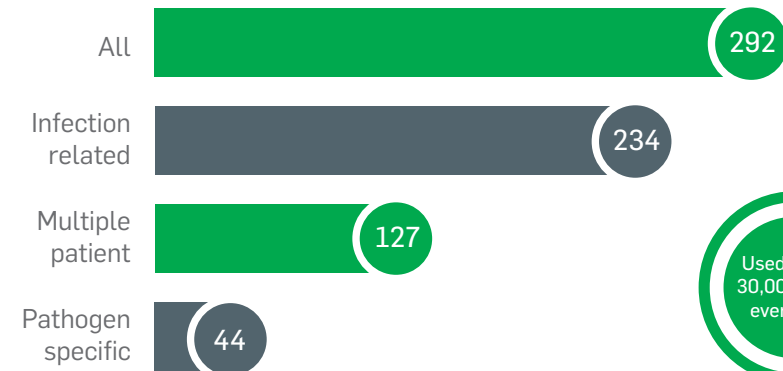
## Support as reliable as our outcomes

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.

## Unrivaled 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 30,000 cases every year



## 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>

- Easily mixed with liquid, powder and heat-sensitive antibiotics<sup>12</sup>
- Physiological pH
- 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>
- ✓ Predictable elution profile<sup>13-14</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>
- ✓ Low levels of drainage<sup>15</sup>

# STIMULAN®

## When you need it – STIMULAN delivers every time

- ✓ Approved for placement at an infected site<sup>1</sup>
- ✓ Uniquely engineered through our DRy26™ recrystallization method<sup>11</sup>
- ✓ Optimal absorption profile<sup>5-10</sup>
- ✓ May be mixed with antibiotics<sup>1</sup>
- ✓ Predictable elution profile<sup>13-14</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>
- ✓ Low levels of drainage<sup>15</sup>

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

**References:** **1.** Biocomposites, STIMULAN Instructions for Use. **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, Data on file. **13.** Aiken, S.S., et al., Local Release of Antibiotics for Surgical Site Infection Management Using High-Purity Calcium Sulfate: An In Vitro Elution Study. *Surg Infect (Larchmt)*, 2014. **14.** Gauland, C., The use of antibiotic impregnated, implanted synthetic calcium sulphate tablets in the treatment of soft tissue, vancomycin resistant, enterococcus infections, in The Symposium on Advanced Wound Care and Wound Healing Society Annual Meeting, 2011: Gaylord Texan Hotel & Convention Center, Dallas, Texas. **15.** McPherson, E.J., Dissolvable Antibiotic Beads in Treatment of Periprosthetic Joint Infection. The Use of Synthetic Pure Calcium Sulfate (Stimulan®) Impregnated with Vancomycin & Tobramycin, in 2nd Annual Oxford Bone Infection Conference (OBIC). 2012: Oxford, UK.

For indications, contraindications, warnings and precautions see Instructions for Use. The treating physician is responsible for deciding the type and quantity of antibiotic used. Concurrent use of locally administered antibiotics may affect setting time. The mixing of antibiotics with the STIMULAN Kit / STIMULAN Rapid Cure device is considered off-label usage of the medicinal product. To do so is at the professional risk of the surgeon / healthcare professional.

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

Patents pending: GB1502655.2, US 15/040075, CN 201610089710.5, US 15/288328, GB1704688.9, EP 18275044.8, US 15/933936