

## **PUBLICATION HIGHLIGHTS A NOVEL CERAMENT® CARRIER WITH BONE ACTIVE AGENTS ENHANCING BONE FORMATION**

**Lund, Sweden, 08.00 CET, 22 January 2018** – BONESUPPORT™, an emerging leader in innovative injectable bio-ceramic bone substitute products to treat bone voids caused by trauma, infection, disease or related surgery based on its unique platform announces that a paper “Gelatin- hydroxyapatite-calcium sulphate based biomaterial for long term sustained delivery of bone morphogenic protein-2 and zoledronic acid for increased bone formation: In-vitro and in-vivo carrier properties, - D Raina et al 2018- has been published online in the Journal of Controlled Release.

The paper\* can be viewed here: <https://authors.elsevier.com/a/1WPE7cl2~mAUJ>

The publication shows that a novel macro-porous biomaterial, Gelatin/CERAMENT, is an efficient carrier for the long-term, sustained delivery of recombinant bone morphogenic protein (rhBMP-2) and zoledronic acid (ZA) leading to increased bone formation in a pre-clinical animal model when compared to commercially available carrier for rhBMP-2.

BONESUPPORT has acquired the IP to the novel Gelatin/CERAMENT biomaterial from Seagles AB, a company owned by Lars Lidgren, who is one of the members of the Swedish/Indian research group that developed the new material and the founder of BONESUPPORT. A first patent application covering a macro porous biopolymer ceramic biomaterial as a carrier for bone active agents was submitted to the European Patent Office in September 2017.

Mr Deepak Raina, Department of Orthopedics, Medical Faculty, Lund University, Sweden, and lead author of the publication, said: “In this study, we produced and characterized a novel macroporous gelatin/CERAMENT-based cryogel scaffold for the delivery of rhBMP-2 and ZA. In-vivo experiments showed that the scaffold enabled increased bone formation compared to a currently approved carrier with BMP. We believe that it is a crucial step in the development of biomaterials that are needed to facilitate the co-delivery of rhBMP-2 and ZA, to enhance bone growth in demanding clinical situations where bone regeneration is essential but difficult to achieve.”

Dr Jerry Chang, Executive Vice President and Head of Research and Development at BONESUPPORT, said: "The Journal of Controlled Release publication clearly shows the potential of a novel CERAMENT-based biomaterial as a carrier of bioactives designed to enhance bone growth. We believe the acquisition of this technology is an important addition to our product pipeline which is focused on meeting the growing clinical need for novel osteoinductive synthetic bone graft substitutes for a broad range of orthopedic indications and, in particular in the spine.”

## Press Release

### **About BONESUPPORT™**

BONESUPPORT is an innovative and rapidly growing commercial stage orthobiologics company, based in Lund, Sweden. The Company develops and commercializes innovative injectable bio-ceramic bone graft substitutes that remodel to the patient's own bone and have the capability of eluting drugs directly into the bone void.

BONESUPPORT's marketed bio-ceramic bone graft substitutes CERAMENT® BONE VOID FILLER (BVF), CERAMENT® G\* and CERAMENT® V\* are all based on the Company's novel and proprietary CERAMENT technology platform.

The Company's products are targeting a large addressable market opportunity across trauma, chronic osteomyelitis (bone infection), revision arthroplasty (replacement of a joint prosthesis) and infected diabetic foot.

BONESUPPORT's total sales increased from SEK 41 million in 2014 to SEK 105 million in 2016, representing a compound annual growth rate of 60 percent. The Company's financial target is to achieve revenue exceeding SEK 500 million in the financial year 2020, with a gross margin exceeding 85 percent and a positive operating profit.

The Company's research and development is focused on the continuing development and refinement of its CERAMENT technology to extend its use into additional indications by the elution of other drugs and therapeutic agents. The Company currently has a pipeline of pre-clinical product candidates that have been designed to promote bone growth.

BONESUPPORT is listed on Nasdaq Stockholm and trades under the ticker "BONEX" (ISIN code: SE0009858152). Further information is available at [www.bonesupport.com](http://www.bonesupport.com)

\*CERAMENT G: Not available in the United States, for investigational use only. CERAMENT V: Not available in the United States

BONESUPPORT™ and CERAMENT® are registered trademarks.

### **For more information contact:**

Richard Davies, CEO  
+46 (0) 46 286 53 71

Björn Westberg, CFO  
+46 (0) 46 286 53 60  
[ir@bonesupport.com](mailto:ir@bonesupport.com)

### **Citigate Dewe Rogerson**

Pip Batty, David Dible, Shabnam Bashir  
+44 (0)20 7282 1022  
[bonesupport@citigatedewerogerson.com](mailto:bonesupport@citigatedewerogerson.com)