

OSTEOPORE TO COMMERCIALISE INNOVATIVE TECHNOLOGY THAT ACCELERATES BONE AND TISSUE REGENERATION

Highlights:

- *Osteopore signs two initial non-binding term sheets to licence innovative bioactive technology designed to **accelerate** bone and tissue regeneration, for Osteopore's incorporation into implants.*
- *The application of this technology for Osteopore's PCL-TCP has been developed in collaboration with Institute of Molecular and Cell Biology, A*STAR Research Entities ("IMCB"). A*STAR is Singapore's lead public sector R&D agency.*
- *The technology is based on a bioactive compound that aims to drastically speed up bone and tissue growth, which could lead to faster recovery times, fewer complications, lower healthcare costs, and expanded treatment options.*
- *This technology puts Osteopore in the position to tap on the biologics market, which is slated to reach USD 420.5 billion by 2025¹.*
- *Both Osteopore and Accelerate Technologies Pte Ltd ("Accelerate"), A*STAR's technology transfer arm, will now work towards negotiating and signing formal licensing agreements, which will give Osteopore rights to commercialise the technology.*
- *Osteopore will also lead the first human clinical trial to evaluate the safety, efficacy, and long-term benefits of the compounds across a range of bone growth applications. Positive results from clinical trials could present Osteopore with additional commercial opportunities and reshape the way medical professionals approach bone-related treatments.*

14 April 2023: Osteopore Limited (ASX: OSX) ("Osteopore" or the "Company"), a global leader in the manufacture of innovative regenerative implants that empower natural tissue regeneration, is pleased to announce it has signed a non-binding term sheet with Accelerate Technologies Pte Ltd (A*STAR's technology transfer arm), to commercialise potentially ground-breaking materials designed to **accelerate** bone and tissue regeneration. Both companies will now progress towards negotiating and signing formal licencing agreements.

The Agency for Science, Technology and Research (A*STAR) is Singapore's lead public sector R&D agency. Through open innovation, A*STAR collaborates with partners in both the public and private sectors to benefit the economy and society.

¹ <https://blog.marketresearch.com/top-3-biologics-market-trends-that-boost-industry-growth>

Since 2009, Osteopore and IMCB have been working together to incorporate these bioactive compounds into Osteopore's implants. These compounds may have the potential to provide unprecedented clinical outcomes by significantly speeding up bone regeneration, leading to faster recovery times, reduced complications, and improved overall patient health.

The compounds have now reached a technology readiness level (TRL) for human clinical trials. These trials will assess the safety, efficacy, and long-term benefits of the compounds in various medical applications.

If the clinical trials yield positive results, this breakthrough could present Osteopore with additional commercial opportunities. The introduction of these compounds into the market has the potential to reshape the way medical professionals treat patients with tissue loss, ultimately improving patient care and outcomes. Importantly, these compounds provide a potential market opportunity of USD 420.5 billion (by 2025). Specifically in relation to HS3, a molecule targeting bone morphogenetic protein-2, the market size is projected to reach USD 675.7 million by 2030².

Executive Chairman Mark Leong said: *"We have been incredibly privileged to work alongside IMCB to incorporate these bioactive compounds into our implants, bringing about a potential paradigm shift in the field. As we commence clinical trials, we believe that the successful implementation of this technology will not only provide significant benefits to Osteopore, but also transform the way bone-related procedures are conducted."*

First-in-human clinical trial

The technology platform centred on Heparan Sulphate (HS) was developed by IMCB. HS is a large sugar molecule that targets specific growth factors in the body. Pre-clinical studies have shown promising safety and efficacy results.

Osteopore will lead the first-in-human clinical trial at the National University Hospital, Singapore. This trial involves the application of an HS molecule called HS3, a molecule targeting bone morphogenetic protein-2 (BMP-2), in patients undergoing knee preservation surgery via High Tibial Osteotomy.

The trial aims to demonstrate accelerated bone regeneration capabilities, assess long-term benefits, and potential risks. Success in these trials will solidify Osteopore's leadership in bone regeneration procedures and pave the way for broader adoption of this innovative technology in various applications.

Potential future advantages arising from the trial could include:

- Accelerated bone growth leads to faster recovery times, enabling patients to regain mobility and return to daily activities sooner

² <https://www.biospace.com/article/bone-morphogenetic-protein-bmp-2-market-size-report-2022-2030/#:~:text=Published%3A%20Jul%2006%2C%202022%20The%20global%20Bone%20Morphogenetic,2021%2C%20at%20a%20CAGR%20of%204.4%25%20during%202022-2030>

- Reduction in healing time minimises risks of complications, such as infections or implant failures, improving overall patient safety
- The technology has the potential to reduce the need for additional surgeries, lowering healthcare costs and patient burden
- Enhancing bone growth can benefit a wide range of patients, from those with traumatic injuries to those requiring joint replacements or dental implants
- Rapid bone regeneration could transform the medical field, expanding treatment options and opening new possibilities for complex procedures and patient cases

Scope of Licence (subject to execution of licence agreements)

The first non-binding term sheet provides the scope and field of use for the licence to be granted by Accelerate to Osteopore, including for HS3 use in CMF, dental and orthopaedic long bone indications, medical implants which are expected to combine bone-enhancing HS3 with polycaprolactone (PCL) based scaffolds.

The second non-binding term sheet provides the scope and field of use for the licence to be granted by Accelerate to Osteopore, including for HS6, 7, 8, 9, 16 for research and clinical use.

The formal licence agreements are expected to be executed in 3-6 months' time. The non-binding term sheets provide for a grant of an exclusive, royalty bearing, non-transferable, revocable for cause licence to use the technology. The term of the licence is expected to be for the duration of the patents. Osteopore does not anticipate these licence agreements to have an immediate or short-term material impact on its operating results. The term sheets contain termination provisions standard for agreements of this nature.

The significance of this announcement is that the term sheet with Accelerate, the technology transfer arm of A*STAR, a leading Singaporean public sector R&D agency, further enhances the bone regeneration capabilities of Osteopore, and progressing with a first-in-human clinical trial with the application of a Heparan Sulphate molecule.

This announcement has been approved for release by the Board of Osteopore.

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About Osteopore Limited

Osteopore Ltd is an Australian and Singapore based medical technology company commercialising a range of products specifically engineered to facilitate natural bone healing across multiple therapeutic areas. Osteopore's patented technology fabricates specific micro-structured scaffolds for bone regeneration through 3D printing and bioresorbable material.

Osteopore's patent-protected scaffolds are manufactured using a proprietary manufacturing technique with a polymer that naturally dissolve over time to leave only natural, healthy bone tissue, significantly reducing post-surgery complications commonly associated with permanent bone implants. Our 3D printer technology is not available in the market and unique to Osteopore.

Forward-Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices, or potential growth of Osteopore Limited, are, or may be, forward-looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and uncertainties. Actual results may differ materially from those expressed or implied by these forward-looking statements depending on various factors.