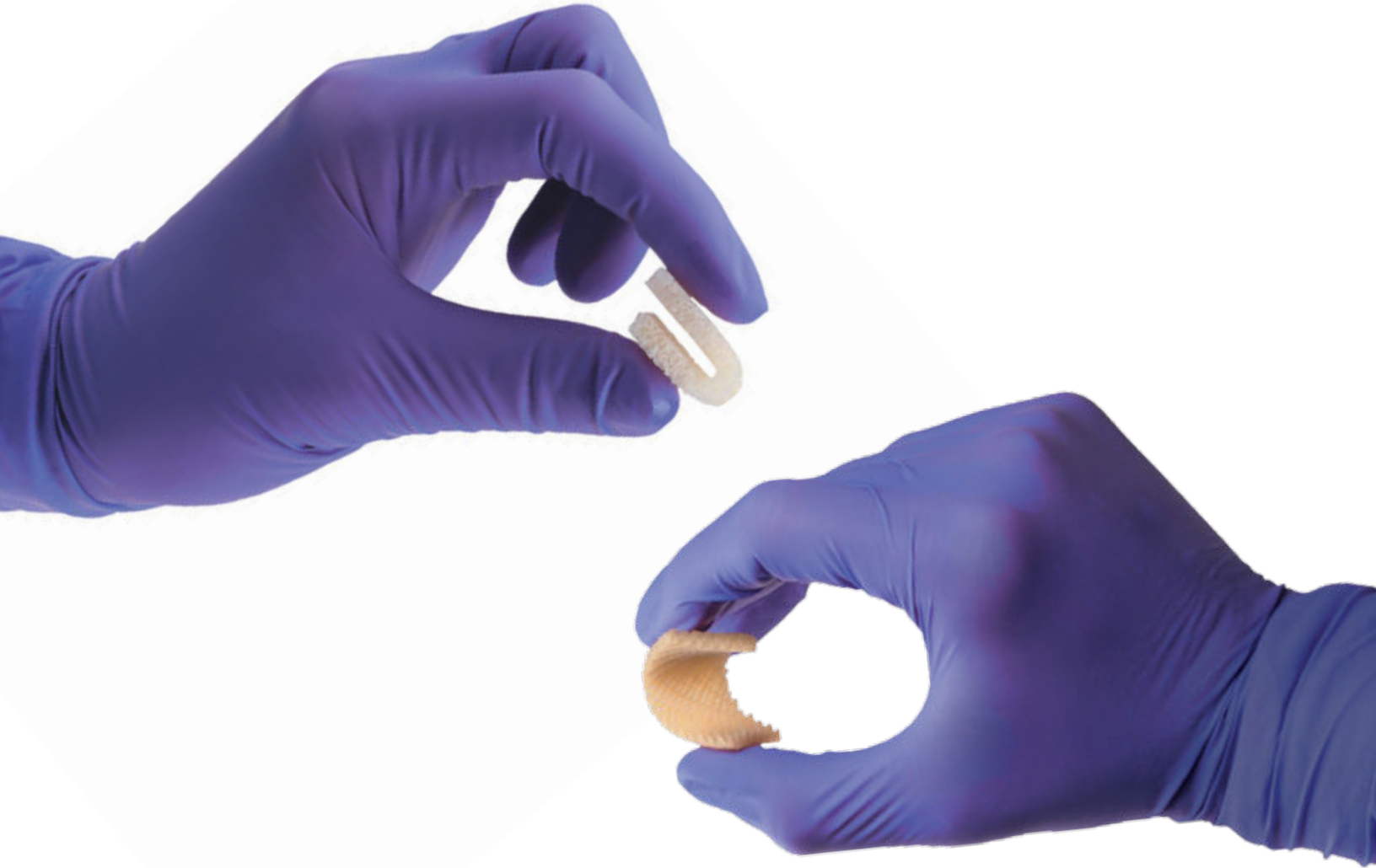




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Biologic Solutions

Indux™

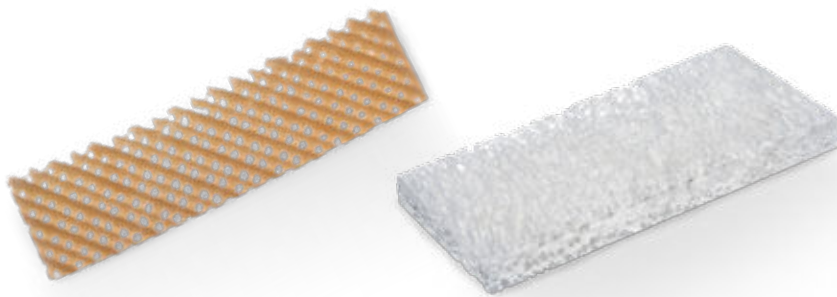
Cancellous Sponge
and Cortical Strip

Combining structure and flexibility

Indux Cancellous Sponge and Cortical Strip

The Indux family of products includes the Indux Cancellous Sponge and Indux Cortical Strip. Both have been demineralized to expose the inherent growth factors that are essential for new bone formation.

In addition to the osteoinductive properties from the demineralization process, these grafts provide diverse structures that allow for various levels of osteoconductivity. **Each has its own unique abilities, combining structure and flexibility, making these grafts attractive for a variety of spinal applications.**



Indux Cancellous Sponge



Designed To Deliver Osteoinductive Bone with Sponge-like Handling

The Indux Cancellous Sponge products are machined from a single piece of cancellous bone. The cancellous bone is demineralized, exposing the inherent growth factors that are essential for new bone formation.

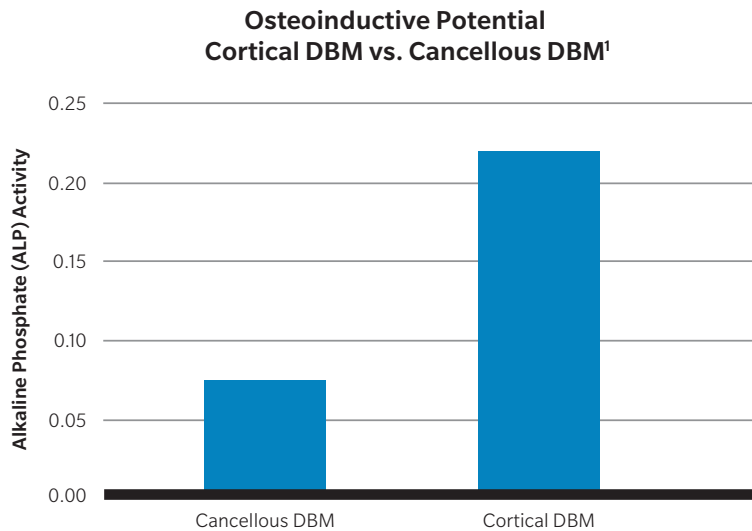
In addition to these osteoinductive properties, these grafts maintain the natural trabecular structure of cancellous bone, providing an ideal scaffold for cellular infiltration and bone formation. Rehydration can be achieved with blood, bone marrow aspirate (BMA) or saline solution. Rehydration with BMA allows for the potential introduction of osteogenic cells and completion of the bone remodeling triad.

The demineralization process and trabecular structure provide sponge-like handling, which allows the grafts to fit into a variety of bone voids or spinal cavities. When compressed, these products expand to fill the contours of a void, thereby minimizing the space between the graft and the host bone.

Indux Cortical Strip

Combining Structure and Flexibility in a Unique Design

The Indux Cortical Strip is a robust single-piece construct with a unique crosshatch pattern that maintains structure and flexibility.



Facilitates the Bone Healing Environment

The demineralization process exposes the inherent bone-growth factors that occur naturally in cortical bone across the significantly increased surface area that is created by the intricate machining process. The resultant channels allow for more rapid vascularization and osteointegration.

Targeted Approach

The Indux Cortical Strip should be placed directly in contact with decorticated, bleeding bone. The strip can be shaped to fit into a void or placed in the gutters of the posterolateral spine with local bone, demineralized bone matrix (DBM) and/or BMA.

Completion of the Bone Growth Triad

The Indux Cortical Strip can be rehydrated with blood, BMA or saline solution. Rehydration with BMA allows for the introduction of the patient's osteogenic cells, which completes the bone remodeling triad when added to the osteoinductive and osteoconductive scaffold of the Indux Cortical Strip.

The Evolution of Osteoinductive Bone Grafting Materials²⁻⁵

1965

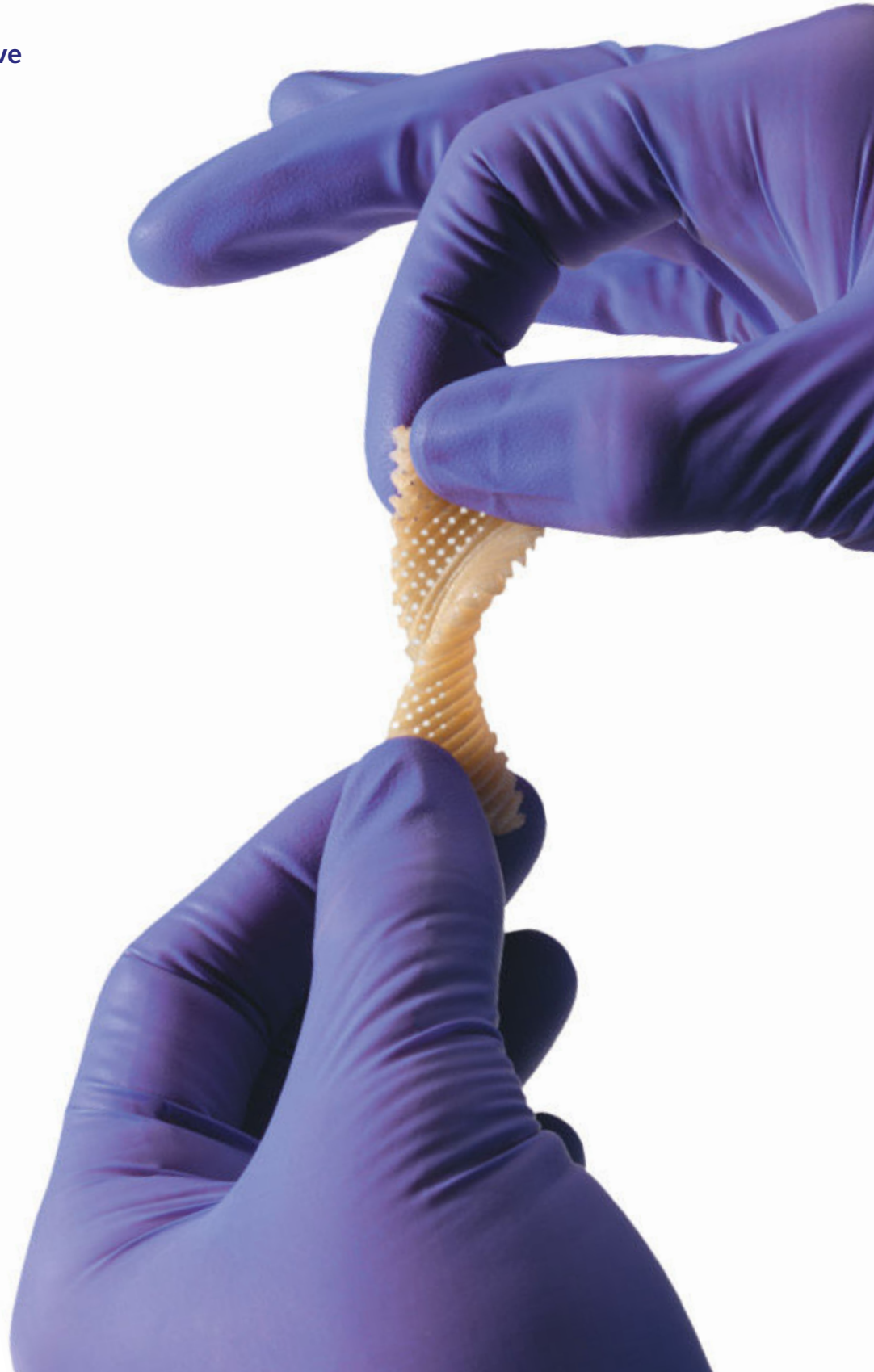
Marshall Urist discovers that DBM can induce bone formation.

1971

Urist develops the concept of an osteogenic protein—a substance that is naturally present in bone and is responsible for regeneration and repair activity.

1991

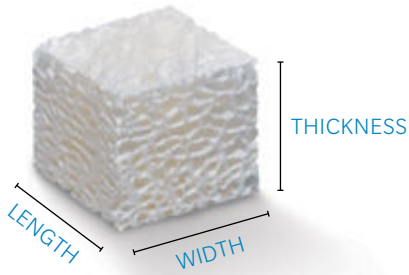
Orthopedic surgeons use DBM for the first time as a bone grafting material that incorporates naturally occurring osteogenic proteins.



Indux Features and Benefits



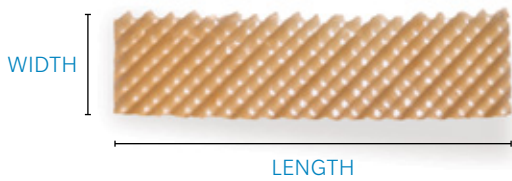
Part Numbers



Indux Cancellous

DESCRIPTION, LENGTH × WIDTH × THICKNESS	PART NUMBER
Indux Cancellous Cube, 14mm × 14mm × 14mm	45-3214

DESCRIPTION, LENGTH × WIDTH × THICKNESS	PART NUMBER
Indux Cancellous Strip, 50mm × 20mm × 5mm	45-3250
Indux Cancellous Strip, 50mm × 25mm × 8mm	45-3208
Indux Cancellous Strip, 30mm × 20mm × 5mm	45-3230



Indux Cortical

DESCRIPTION, LENGTH × WIDTH × THICKNESS	PART NUMBER
Indux Cortical Strip, 15mm × 11mm × 5mm	45-3008
Indux Cortical Strip, 50mm × 14mm × 5mm	45-3009

References

1. Data on file (Lab# R7501-7503).
2. Urist MR. Bone: formation by autoinduction. *Science*. 1965;150(3698):893–9.
3. Urist MR, Finerman G. Bone cell differentiation and growth factors. *Science*. 1983;220:680–686.
4. Urist MR, Lietze A. A solubilized and insolubilized bone morphogenetic protein. *Proc Natl Acad Sci*. 1979;76:1828–1832.
5. Bagaria V, Prasada V. Bone morphogenetic protein: current state of field and the road ahead. *J Orthopaedics*. 2005;2(4):e3.



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