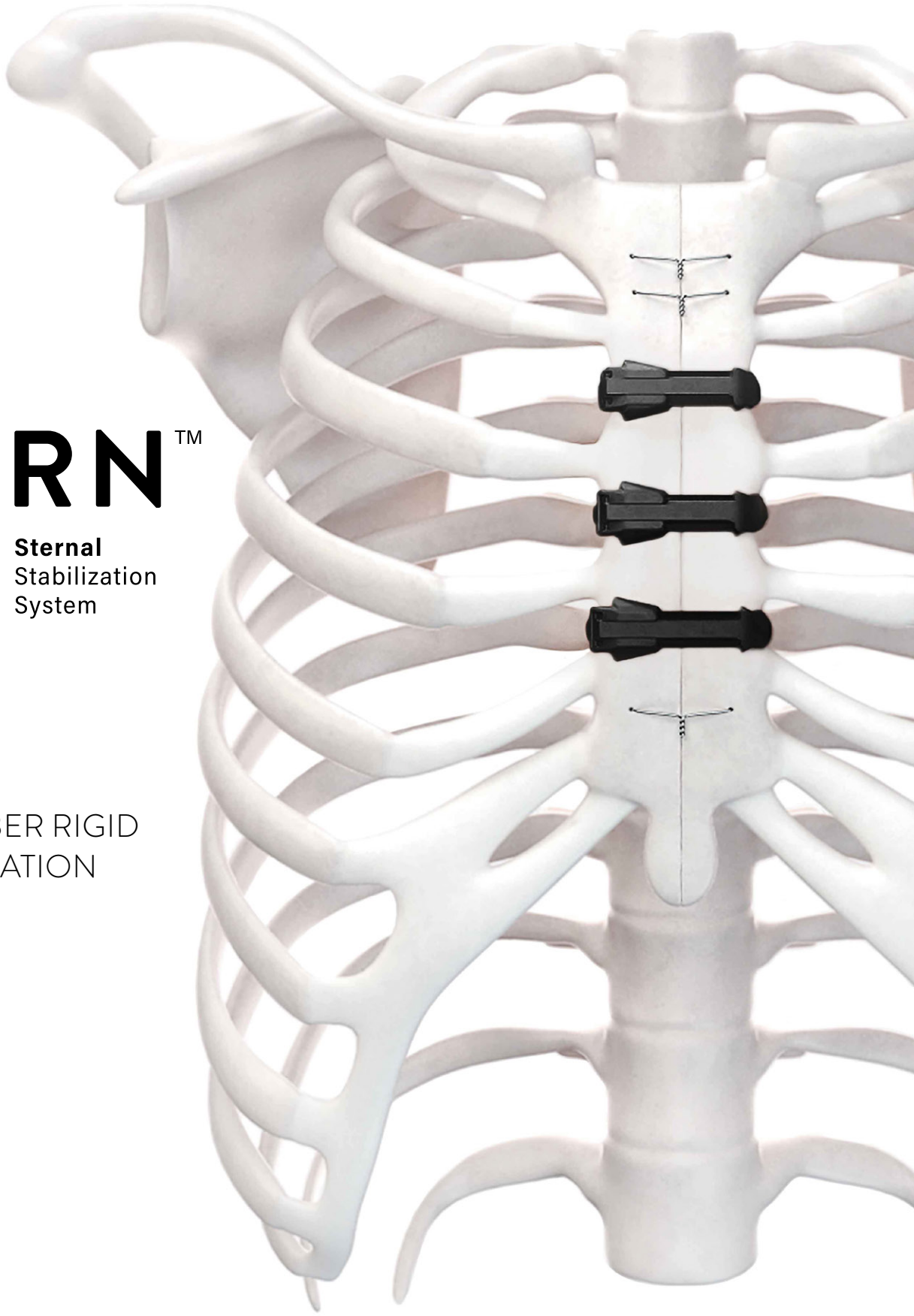
NEOS™ surgery

STERN FIX™

Sternal Stabilization System



CARBON FIBER RIGID STERNAL FIXATION

FDA cleared.

www.neosurgery.com

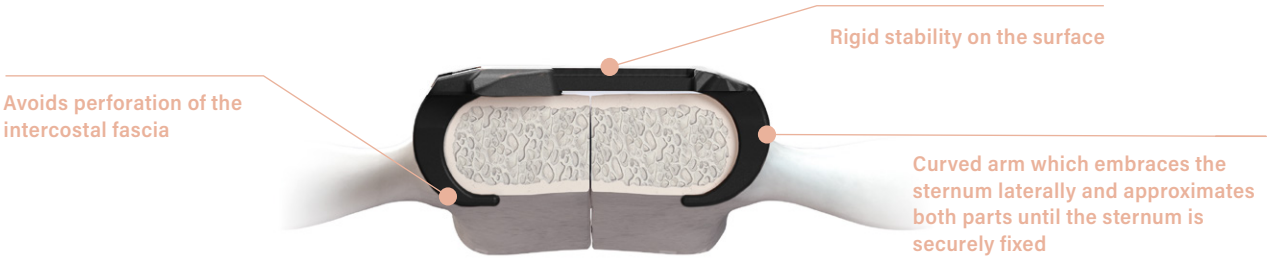
STERN FIX IS MADE OF A CARBON FIBER PEEK MATRIX

A high-performance material with biocompatible and mechanical properties that provides an alternative to titanium and steel alloys.[1,2]

This CARBON FIBER compound is an excellent material to be used in sternal closure, as it closely matches the cortical bone properties and it has a gentle interface with the sternal bone.[3]

DESIGNED TO IMPROVE PATIENT RECOVERY

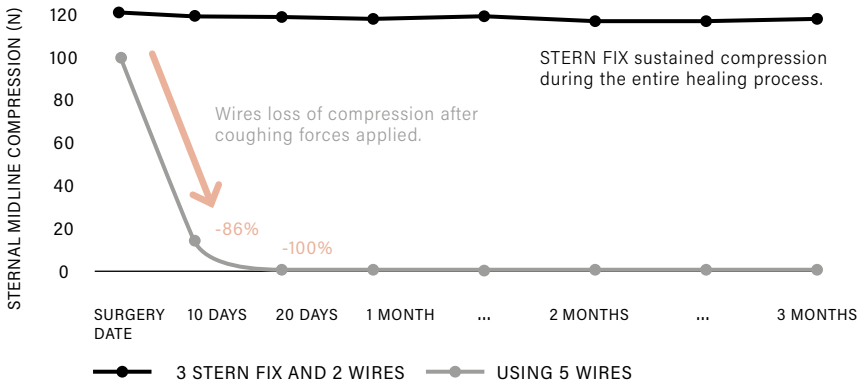
The optimized atraumatic design improves pressure distribution for a reduced risk of bone cut-through. Also provides multi-axis stability in all three-planes.



CONTINUOUS STERNAL COMPRESSION

STERNAL UNION

DURING 1.8M CYCLES (3 MONTHS HEALING PROCESS) APPLYING NORMAL BREATHING AND COUGHING FORCES.[4]



The combination "of" STERN FIX + wires provides a continuous contact between the two halves of the sternum, with a sustained compression strength during the entire healing process.

When using traditional wires closure, mechanical testing results showed a significant loss of compression after coughing forces were applied (-86%).[5]

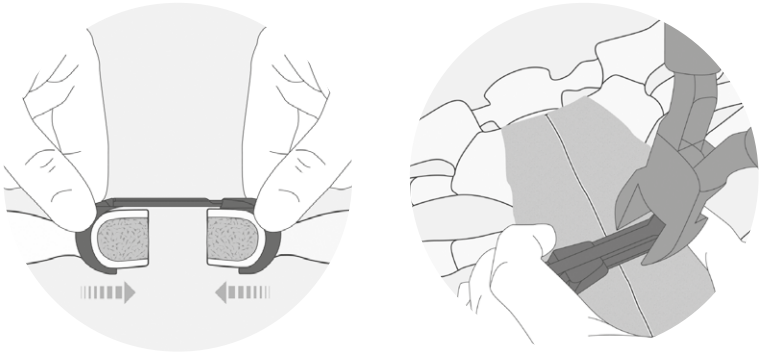
EASY IN / OUT

Intuitive application method with reduced number of instruments.

Needle-free implant.

Quick re-entry with a standard wire cutting tool.

Compatible with Minimal Invasive Surgery.



1 Mbogori M, Vaish A, Vaishya R, Haleem A, Javaid M. Poly-Ether-Ether-Ketone (PEEK) in Orthopaedic Practice-A Current Concept Review. Journal of Orthopaedic Reports. 2022;1(1):3-7. doi:10.1016/j.jorep.2022.03.013

2 Ma H, Suonan A, Zhou J et al. PEEK (Polyether-Ether-Ketone) and Its Composite Materials in Orthopedic Implantation. Arabian Journal of Chemistry. 2021;14(3):102977. doi:10.1016/j.arabjc.2020.102977.

3 Invibio biomaterial solutions. PEEK-OPTIMA™ REINFORCED CARBON FIBER REINFORCED COMPOUND

4 Mechanical test NEOS.

5 J. Adams et al., "Comparison of force exerted on the sternum during a sneeze versus during low-, moderate-, and high-intensity bench press resistance exercise with and without the valsalvamaneuver in healthy volunteers". The American Journal of Cardiology. 2014, vol. 113, no. 6, pp. 1045–1048

NEOS™ surgery

NEOS SURGERY S.L
www.neosurgery.com

C/Ceramistes, 2
08290 - Cerdanyola del Vallès
(BARCELONA) - SPAIN

SC0100FL V.2401