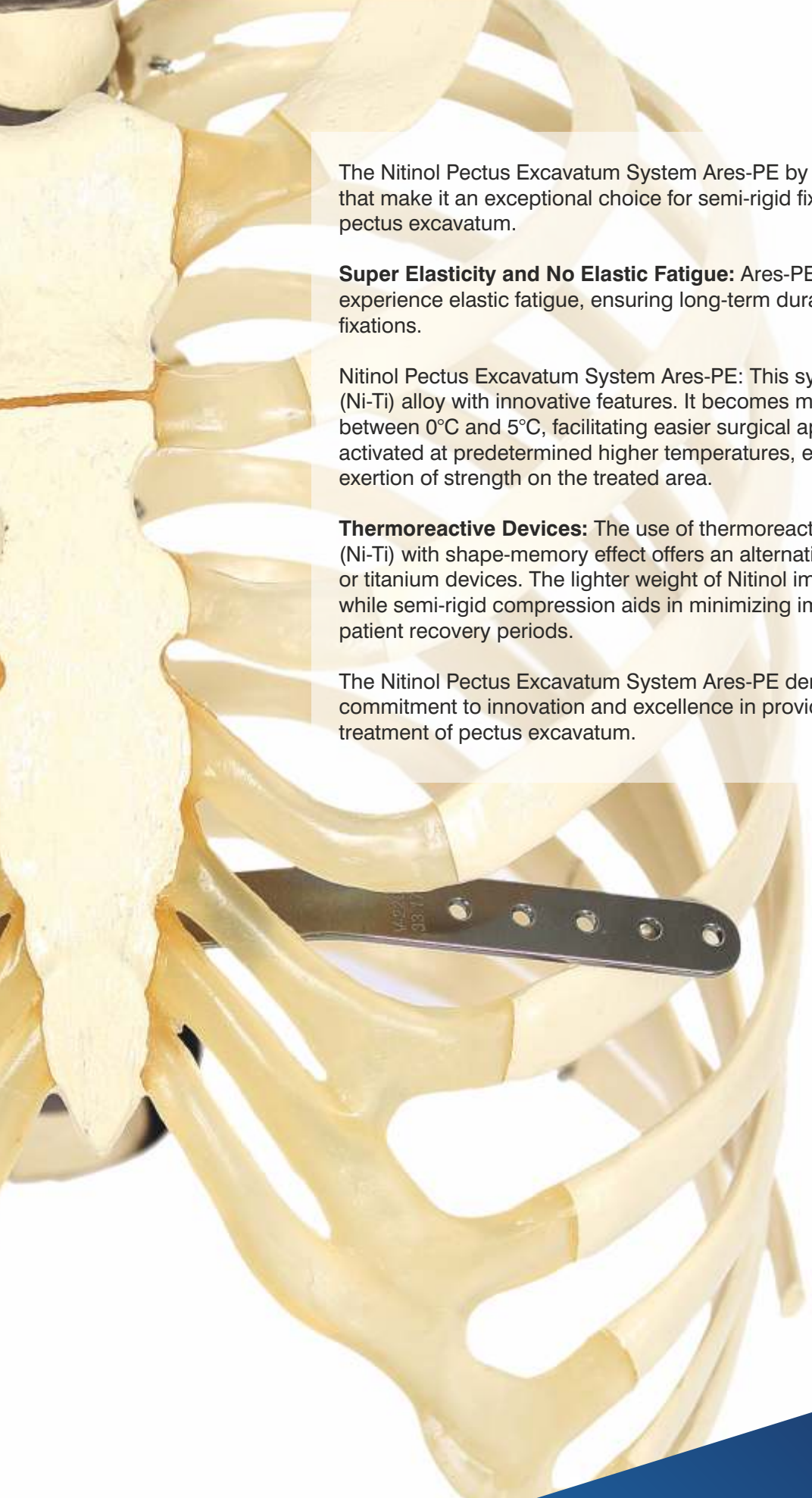




The Nitinol Pectus Excavatum System Ares-PE by Adaptia offers unique properties that make it an exceptional choice for semi-rigid fixations in the treatment of pectus excavatum.

Super Elasticity and No Elastic Fatigue: Ares-PE is super elastic and does not experience elastic fatigue, ensuring long-term durability and reliability in semi-rigid fixations.

Nitinol Pectus Excavatum System Ares-PE: This system is crafted from a Nitinol (Ni-Ti) alloy with innovative features. It becomes malleable at temperatures between 0°C and 5°C, facilitating easier surgical application. Its memory effect, activated at predetermined higher temperatures, enables dynamic and continuous exertion of strength on the treated area.

Thermoreactive Devices: The use of thermoreactive devices made from Nitinol (Ni-Ti) with shape-memory effect offers an alternative to traditional stainless steel or titanium devices. The lighter weight of Nitinol implants reduces surgical trauma, while semi-rigid compression aids in minimizing immobilization and shortening patient recovery periods.

The Nitinol Pectus Excavatum System Ares-PE demonstrate Adaptia's commitment to innovation and excellence in providing advanced solutions for the treatment of pectus excavatum.



Adaptia is a Division of Teamplast S.r.l.
Via Don A. Ravizza, 42
24060 Castelli Calepio (BG) - Italy
Tel. 035 426 1307

www.adaptia.it

ORDER INFORMATION

Support Plate Ares-PE	Ref. Number	Description	Length (mm)	Width (mm)	Thickness (mm)
	ARES PE B160	Pectus Excavatum System Nitinol Bar 160	mm 160	mm 12	mm 2
	ARES PE B180	Pectus Excavatum System Nitinol Bar 180	mm 180	mm 12	mm 2
	ARES PE B200	Pectus Excavatum System Nitinol Bar 200	mm 200	mm 12	mm 2
	ARES PE B220	Pectus Excavatum System Nitinol Bar 220	mm 220	mm 12	mm 2
	ARES PE B240	Pectus Excavatum System Nitinol Bar 240	mm 240	mm 12	mm 2
	ARES PE B260	Pectus Excavatum System Nitinol Bar 260	mm 260	mm 12	mm 2

Support Plate Ares-PE	Ref. Number	Description	Length (mm)	Width (mm)	Thickness (mm)
	ARES PE ST20	Bar Stabilizer (Titanium)	mm 60	mm 20	mm 7

Instrument set	Reference Number	Description	Function
	RO1S	Straight rasp	Straigh rasp to reset costal cartilage
	RO2C	Curved rasp	Curved rasp to resect costal cartilage
	RO3R	Reversed rasp	Reverse rasp to resect costal cartilage
	SD01	Screwdriver Support	Screwdriver for fixing the stabilizer to the base bar
	SB101	Bar Indicator	Indicator to select the size of the support bars

BrandSpecialist



Ares-PE
Revolutionizing
Pectus Excavatum
Treatment



www.adaptia.it

Ares-PE

Revolutionizing Pectus Excavatum Treatment.

The Nitinol Pectus Excavatum System Ares-PE represents a breakthrough in medical devices for treating pectus excavatum. Made from Nitinol (Ni-Ti), this system offers unparalleled advantages over traditional implants crafted from special steel.

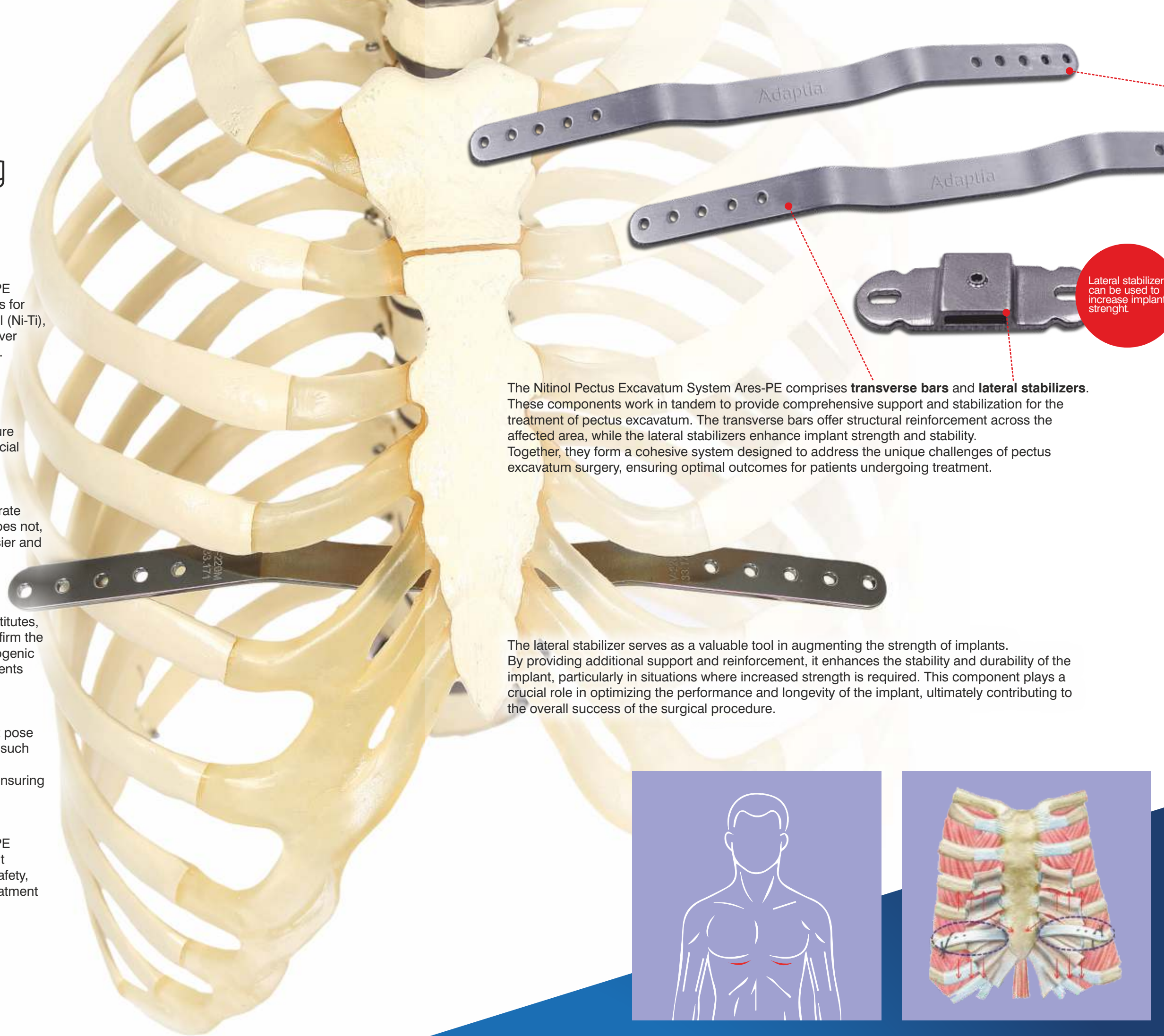
Biocompatibility: Ares-PE is non-toxic and completely biocompatible, ensuring optimal compatibility with the human body. This feature makes it superior to implants made from special steel.

Ease of Removal: Unlike implants that integrate with bone tissue (osteointegrate), Ares-PE does not, making subsequent removal significantly easier and less invasive.

Safety: Extensive in vivo and in vitro studies conducted by leading university research institutes, along with long-term clinical experience, confirm the safety of Ares-PE. It does not induce cancerogenic phenomena, providing peace of mind to patients and healthcare professionals alike.

Diagnostic Compatibility: Ares-PE does not pose challenges with image diagnosis techniques such as CT scans and MRIs. Unlike ferromagnetic implants, it does not interfere with imaging, ensuring accurate diagnostic evaluations.

The Nitinol Pectus Excavatum System Ares-PE represents a new standard in medical implant technology, offering superior performance, safety, and compatibility for patients undergoing treatment for pectus excavatum.



The Nitinol Pectus Excavatum System Ares-PE comprises **transverse bars** and **lateral stabilizers**. These components work in tandem to provide comprehensive support and stabilization for the treatment of pectus excavatum. The transverse bars offer structural reinforcement across the affected area, while the lateral stabilizers enhance implant strength and stability. Together, they form a cohesive system designed to address the unique challenges of pectus excavatum surgery, ensuring optimal outcomes for patients undergoing treatment.

The lateral stabilizer serves as a valuable tool in augmenting the strength of implants. By providing additional support and reinforcement, it enhances the stability and durability of the implant, particularly in situations where increased strength is required. This component plays a crucial role in optimizing the performance and longevity of the implant, ultimately contributing to the overall success of the surgical procedure.

The Nitinol Pectus Excavatum System Ares-PE, developed by Adaptia, is crafted from a cutting-edge Nitinol (Ni-Ti) alloy, incorporating innovative features that set it apart from traditional implants. This alloy is meticulously engineered to offer superior flexibility, durability, and biocompatibility, ensuring optimal performance and patient outcomes. With its innovative design and advanced materials, Ares-PE represents a significant advancement in medical implant technology, providing surgeons and patients alike with a reliable and effective solution for the treatment of pectus excavatum.

Lateral stabilizer can be used to increase implant strength.

The Nitinol a smart material with great potential in biomedical implants.

Nitinol is a shape memory metal alloy that exhibits unique properties, such as the ability to return to its original shape after being deformed. The name "Nitinol" is a combination of the words "Nickel Titanium" and "Naval Ordnance Laboratory", which refers to the US Navy laboratory where the alloy was first discovered.

The main composition of Nitinol is a binary alloy of nickel and titanium. This alloy exhibits a martensitic phase transition, which is responsible for its shape memory properties. The alloy can exist in two main crystalline phases: the austenitic phase, which is its original form, and the martensitic phase, which is a deformed form. When Nitinol is heated above a certain temperature called the "transition temperature", it transitions from the martensitic to the austenitic phase and returns to its original shape.

Ares-PE is a system to treat pectus excavatum with minimally invasive procedure.

