

BIOABSORBABLE INTERFERENCE SCREW

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### BIOABSORBABLE

### **BIOABSORBABLE** INTERFERENCE SCREW

### **Ligament surgery**

**ARTHROTWIST** is a bioresorbable cannulated screw specially designed for ligamentoplasty surgical tech-niques such as anterior/posterior cruciate ligament recons-tructions, reinsertion of the long-head of the biceps ten-don or ankle ligaments.

**ARTHROTWIST** offers a complete range of screws and tools that ensure a secure fixation of the transplants.

**ARTHROTWIST** is suitable for current ligamentoplasty techniques (bone-tendon-bone or soft tissues grafts in femoral or tibial tunnels).



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### Screw 100% PLA poly(70/30 ; L/DL)Lactide

PLA is a well-known polymer, the degration of this material happens through hydrolysis. **ARTHROTWIST** PLA is radiotransparent.

### **ARTHROTWIST TCP**

Screw 70%PLA / 30% β-TCP



 $\beta$ -TCP particules are sub-micron sized. The mixing of these two materials is performed by a chemical reaction which results in a homogeneous combination. Distribution into the PLA matrix is homogeneous and free of agglomerates allowing a better bone integration. TCP into the PLA matrix keeps a neutral pH of the material by buffer effect during the degradation time and reduces risk of inflammation.

 $\beta\text{-TCP}$  is also an osteoconductive material which promotes bone ingrowth.

### RESORPTION

**ARTHROTWIST** screws are stable 6 months postoperative, that ensures a proper healing. Then they are slowly hydrolyzed by water from surrounding tissues and fully replaced by neoformed bone after **24 months.** 





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# HIGH TORQUE RESISTANCE

**ARTHROTWIST** was designed to reduce the risk of breakage. The screws have a triangular inner cone with rounded angles. The transmission of the torque is performed by compression and not in shearing mode. This increases the torque failure resistance of **ARTHROTWIST** range in comparaison with others absorbable screws.



**ARTHROTWIST** has a sharp tip combined to a double thread for a faster and efficient insertion.

Internal design of the tip avoids any contact

between the screwdriver and soft tissues.



### **DOUBLE THREAD – FAST SCREWING**

**ARTHROTWIST** has a double thread that reduces the number of turns to introduce the screw in comparaison with single thread design.

### **FLAT HEAD**

A flat head prevents tissue's friction at the bone surface after implantation. The screw can be inserted with accuracy ; this is particularly suitable for tibial tunnel.

### **FULL RANGE**

The interference screws **ARTHROTWIST** are available in 9 references, including 6 diameters and 4 lengths suitable for current ligamentoplasty techniques.



**ARTHROTWIST TCP IN VIVO IMPLANTATION\*** 

SPECIAL INTERNAL CONFIGURATION



Cohesion of new bone ingrowth all around the screw



Screw distorsion during process of resorption

Implant



Interdigitation of new bone into screw's fragments

Neoformed bone

ATT 40 STWIST

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### **STORAGE**

**ARTHROTWIST** must be stored in its original unopened packaging in a clean and dry place at ambient temperature (maximum 37°C). For any further information, please refer to the IFU.

### **PRODUCTS**

**ARTHROTWIST** are delivered double packed in an aluminium pouch and sterilized by ethylene oxide. They are ready to use.

#### Single Use. Do not re-sterilize.

Instrumentation set is available for ligamentoplasty procedure. Please contact us for more information.

ARTHROTWIST PLA	Reference	ARTHROTWIST TCP	Reference
Ø 6 mm – L 20 mm	10001399-PLA1	Ø 6 mm – L 20 mm	10001399-PLATCP1
Ø 7 mm – L 24 mm	10001399-PLA2	Ø 7 mm – L 24 mm	10001399-PLATCP2
Ø 7 mm – L 30 mm	10001399-PLA3	Ø 7 mm – L 30 mm	10001399-PLATCP3
Ø 8 mm – L 24 mm	10001399-PLA4	Ø 8 mm – L 24 mm	10001399-PLATCP4
Ø 8 mm – L 30 mm	10001399-PLA5	Ø 8 mm – L 30 mm	10001399-PLATCP5
Ø 9 mm – L 24 mm	10001399-PLA6	Ø 9 mm – L 24 mm	10001399-PLATCP6
Ø 9 mm – L 30 mm	10001399-PLA7	Ø 9 mm – L 30 mm	10001399-PLATCP7
Ø 10 mm – L 30 mm	10001399-PLA8	Ø 10 mm – L 30 mm	10001399-PLATCP8
Ø 11 mm – L 35 mm	10001399-PLA9	Ø 11 mm – L 35 mm	10001399-PLATCP9

\*Data provided by the manufacturer

Document design date : February 2020 - Range : Absorbable interferrence screw -Manufac-turer : TEKNIMED - Brand Name ; ARTHROTWIST - Medical Device Class : III - CE Mark N° : 0086 BSI - User : Health professional - Indications : Ligamentoplasty procedures, biceps tenodesis - Recommendations for use: it is highly recommended to read the labels and the IFU.



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