

**COST MADE LOWER...  
SURGERY MADE EASIER...  
RECOVERY MADE QUICKER...**

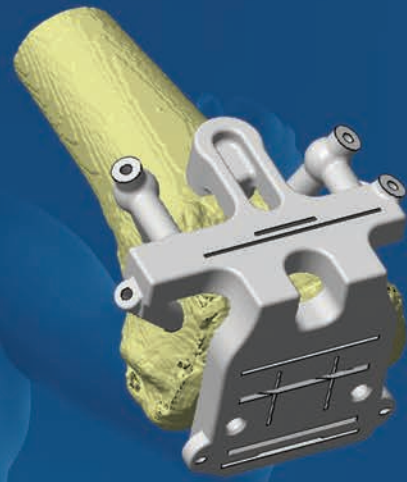
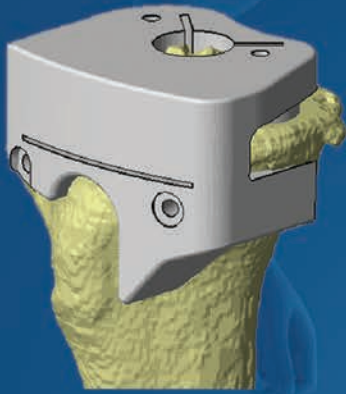


**SurgiNovi**

**Rapid Reproducible Results**

## TKR 15-IN-1 PST FEMORAL CUTS

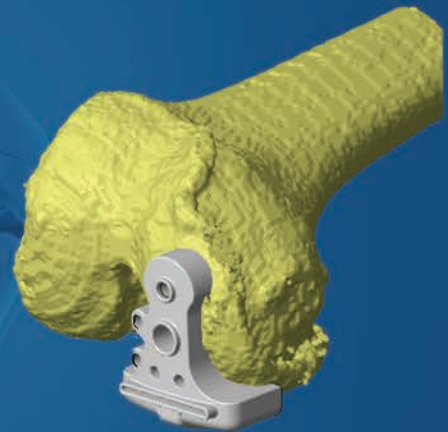
Surgeons can easily perform all the femoral TKR cuts using the **15-in-1** Femoral PST. These include distal, posterior, anterior, posterior and anterior chamfer, notch and box cuts. The template also includes multiple pin positioning holes for firmer fixation to the femoral condyles and femoral component peg drilling holes.



The tibial TKR cut can be carried out using the **SurgiTotal** Tibial PST as well as drilling the tibial component stem hole and cutting the tibial component keel slots all at the same time.

## UNICOMPARTMENTAL PKR

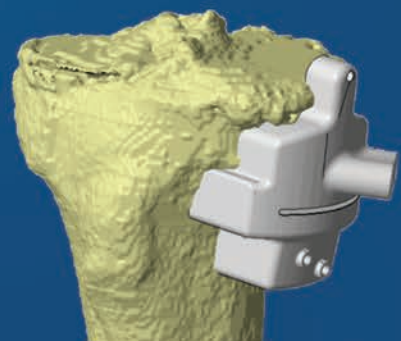
The femoral **PKR-PST** provides easier access to the multiple pin positioning holes allowing for firmer fixation of the template to the femoral condyle.



The **Tibial PKR-PST** includes a unique double slot design which allows the removal of more bone without the need to remove and reattach the template saving operating time.

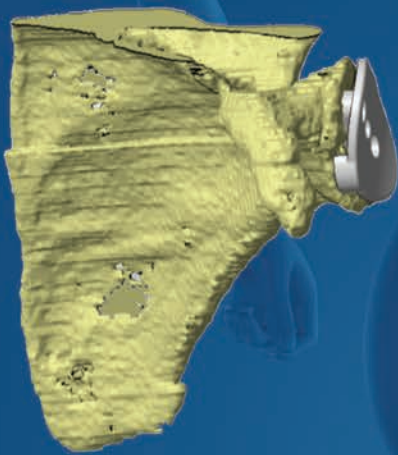
## OSTEOTOMY PST

The **SurgiOst PST** allows a single cut to perform either a varus or valgus deformity correction. Four of the pin positioning holes provide firm fixation. A fifth hole ensures accurate levelling of the tibial plateau.



## SHOULDER PST

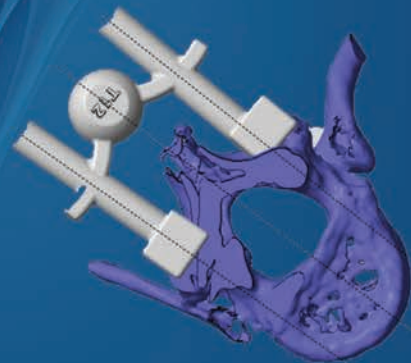
The **Humeral PST** is the first custom-made humeral template that matches the cutting guide to the bone surface by uniquely factoring in the removal of all impinging osteophytes. This improves the guide's accuracy. Three pin positioning holes and a hooked extension placed over the humeral head ensure firmer fixation.



The **Glenoid PST** is placed tightly over the glenoid to allow surgeons to drill holes that match the peg diameters of the glenoid component being implanted.

## SPINE PST: PEDICLE SCREW FIXATION

The design and correct positioning of the **SurgiSpond PST** rely on the accurate measurements taken of the spinous and transverse processes and the articular surfaces of each vertebra requiring pedicle screws.



The **SurgiScol Spine PST** is a paired pedicle screw fixation guide used for scoliosis correction that consists of a set of twelve parts covering T1 to T12. Surgeons can select the appropriate number of Spine PSTs required during preoperative planning.

# BENIGN TUMOURS & FRACTURE FIXATION

**SurgiNovi** provides custom-made PST plate guides that are matched to the individual dimensions of patients requiring treatment for the removal of benign tumours and complicated fractures that require precise screw fixation. The PST guide has four pin fixation holes and two sets of grooves (one proximal and one distal) which clearly indicate the outer boundaries and levels of the tumour or fracture being treated.



## Awards :

1. Entrepreneur UK Alumni Award, British Council 2018.
2. Semi-finalist Business Plan Competition for PSI Innovation, Orthopaedic Research Society (ORS), USA, 2018.
3. IFIA Laurel of 4th World Cup of Computer Implemented Inventions, International Federation of Inventors Association, Hungary 2014 & 2016.
4. Gold Medal at Geneva Inventions 2014.
5. Hap Paul award, International Society for Technology in Arthroplasty, USA 2010.

## Publications :

1. Computer-assisted total knee arthroplasty using patient-specific templating. *Clinical Orthopaedic and Related Research*. 2006; 444:184–92.
2. Custom made cutting guides for TKA. In *Surgery of the Knee (5th Ed.)*, Insall JN, Scott N (Eds). Churchill Livingstone. 2012; 1240–1254.
3. Hospital-based Patient-specific Templates for Total Knee Arthroplasty: A Proof of Concept Clinical Study. *Techniques in Orthopaedics*. 2017.
4. Computer Assisted Orthopaedic Surgery for Hip and Knee. *Current State of the Art in Clinical Application and Basic Research*. 2018; Pages 41–51.
5. Postoperative Mechanical Axis Alignment and Components Position after Conventional and Patient-Specific Total Knee Arthroplasty. *Scientific Research*. 2016; 6(8): 253–258.
6. Comparison of the logistics between the conventional instruments and patient-specific templating in total knee replacement in the low-income setting. Makram AM, Makram OM, Youssef Michael, Hafez MA. *Health Policy and Technology*. 2021 December.

## Granted Patents :

1. Device and method for fitting an artificial knee joint using universal electronic templates which can be adapted to all artificial joints in: USA (no. 10/849636), Canada (no. 2,914,713), Nigeria (no. 7968), Jordan (no. 3690), Iraq (no. 5292), Korea (Allowance)
2. An apparatus and system for acquiring data from bones and joints, plan surgery and manufacturing instruments or implants in: USA (no. 10/966787), Europe (no. 3,448,237), Lebanon (no. 11172)
3. A method for connecting custom made guides to conventional instruments of joint replacement in: Sudan (no. PCT/SD/463), Egypt (Accepted)
4. An artificial joint for a patient in severe injury, deformity or curvature of the knee joint in: Egypt (no. 30020)
5. A Method For Treating And Repairing Knee Fractures Resulting From Benign Tumors Using Patient-Specific Electronic Templates in: USA (Allowance)

## Headquarters:

Cardiff House, Cardiff Road,  
Barry, Vale of Glamorgan,  
Wales, United Kingdom, CF63 2AW

Telephone : + 44 (0) 1446 508002

Mobile : + 44 (0) 7956 716670

Email : [info@surginovi.co.uk](mailto:info@surginovi.co.uk)



[www.surginovi.co.uk](http://www.surginovi.co.uk)