

# SkyWalker® Robotic Platform

Paired with Evolution® Medial-Pivot Knee System





#### \$250M Global Company

- Selling in approximately 45 Countries
- Operations in 11 countries
- 760 MPO employees
- US and China-based manufacturing
- Broad graphical reach



#### **60 years of orthopedics experience**

- Hip and knee product lines
- 100,000+ annual procedures
- Clinically supported superior knee offering
- Innovative fast recovery hip offering
- Robotic offering in U.S.
- 10% growth globally in 2022



- New technology offerings SkyWalker® Robotic Platform
- Geographic expansion into major market countries (e.g. Brazil, Australia and India)
- New product development



### The orthopedic landscape and healthcare environment are changing rapidly. What started as an interest in enabling technologies has evolved into a race to include data collection and insights through the whole continuum of care.

- There is a lot of potential for significant robotic adoption robotics will become the new standard of care
- **Expanding Robotic Applications Contribute to Growth**

#### IN 2022



The US Robotic Ortho Market reached \$442.97 M



Robotic-Assisted **Procedures** 

#### **EXPECTED IN 2023**



Robotic TKA is projected to account for

**79.6%** 

of all Robotic TJR procedures, and

23.8% of all Primary TKA procedures

#### **EXPECTED IN 2026**



The US Robotic Ortho Market will reach

\$1.14B

Increasing at a 5-YR CAGR of 19.2%



Robotic TKA is projected to account for

48.5%

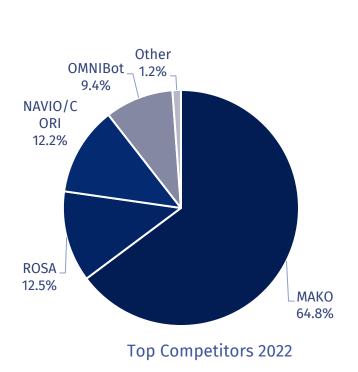
Robotic-Assisted **Procedures** 

### **Technology Assessment Framework**

?	What problem is the technology addressing?	Challenges being addressed in total knee arthroplasty:  • 20% patient dissatisfaction  • Opportunity to Reduce outliers  • Poor function  • Lower implant survivorship  • Need for revision surgery, roughly 25% of all revisions are the result of laxity  • Lack of conformity
	What is the value to the patient?	Patients: The clinical value of combining Medial-Pivot kinematics with SkyWalker  • real-time ligament balancing  • precise implant sizing  • intraoperative procedural optimization  Should elevate the patient care experience resulting in:  • Better stability  • Less post-operative pain  • Higher level of patient satisfaction (95%)
<u>O</u>	What is the value to the physician?	<ul> <li>Optimized patient specific placement and the alignment</li> <li>Maximize functionality and increase patient satisfaction</li> <li>Clinical evidence (Evolution Medial-Pivot Knee) 98% survivorship</li> <li>Informed decision making in real-time</li> <li>Adaptable to surgeon's workflow</li> </ul>
	What is the value to the hospital?	<ul> <li>Opportunity to reduce outliers</li> <li>Precise 3D/CT based platform, patient specific data, surgeon/OR staff know sizes ahead of time</li> <li>Reduction in inventory</li> <li>Strategic robotic partner for market and clinical development</li> <li>Center of Excellence for SkyWalker Robotic Platform</li> </ul>
4	What direct competitors exist in this space? What is your competitive advantage?	Stryker (MAKO) Smith + Nephew (Cori) Zimmer Biomet (Rosa) DePuy (VELYS) See next slide

## **Competitive Orthopedic Robotic Landscape**

Top competitors have robotic platforms with more than one application and hold the largest market share



Competitor	MicroPort Orthopedics	Stryker	Zimmer Biomet	Smith + Nephew	DePuy
Robotic System	SkyWalker® Total Knee System	MAKO Robotic-Arm Assisted Surgery	ROSA® Knee System	NAVIO Robotic System	VELYS™ Robotic-Assisted Solution
Launch	<ul> <li>TKA – 2022</li> <li>THA – COMING SOON!</li> <li>UKA – COMING SOON!</li> </ul>	<ul> <li>UKA - 2009</li> <li>TKA - 2017</li> <li>THA - 2015</li> </ul>	<ul> <li>TKA – 2019</li> <li>UKA - 2020</li> <li>THA – 2021</li> </ul>	<ul> <li>UKA - 2013 TKA - 2017</li> <li>THA - 2022</li> </ul>	• TKA - 2021
Imaging Type	• CT-based	• CT-based	<ul> <li>Imageless</li> <li>2D to 3D x-ray Atlas™</li> </ul>	<ul> <li>Imageless</li> </ul>	• Imageless
Implant Design	Evolution <sup>®</sup> Medial-Pivot Knee System	Triathlon Primary Total Knee System CR/PS Femur with CR/PS/MC poly	Persona® The Personalized Knee® CR/PS Femur with CR/PS/CS poly	JOURNEYO II Bi- Cruciate Stabilized CR Femur - BCS poly	ATTUNE™ Knee System CR/PS Femur - CR/PS/MS Poly

#### SkyWalker® IS A ROBOTIC PLATFORM PAIRED WITH A TRUE MEDIAL PIVOT DESIGN



## Celebrating 25 Years of Clinical Success in 2023<sup>1</sup>

EVOLUTION® MEDIAL-PIVOT KNEE SYSTEM

2023





95%<sup>2</sup>
PATIENT
SATISFACTION



98.8%<sup>2</sup>
SURVIVORSHIP
AT 17 YEARS

Designed to Replicate Natural stability and Motion<sup>1</sup>



MicroPort

1998

Advance® Medial-Pivot Knee System

The FIRST fully commercialized medial-pivot knee system

NOTE: Products referenced above are of the sole ownership of MicroPort Orthopedics.

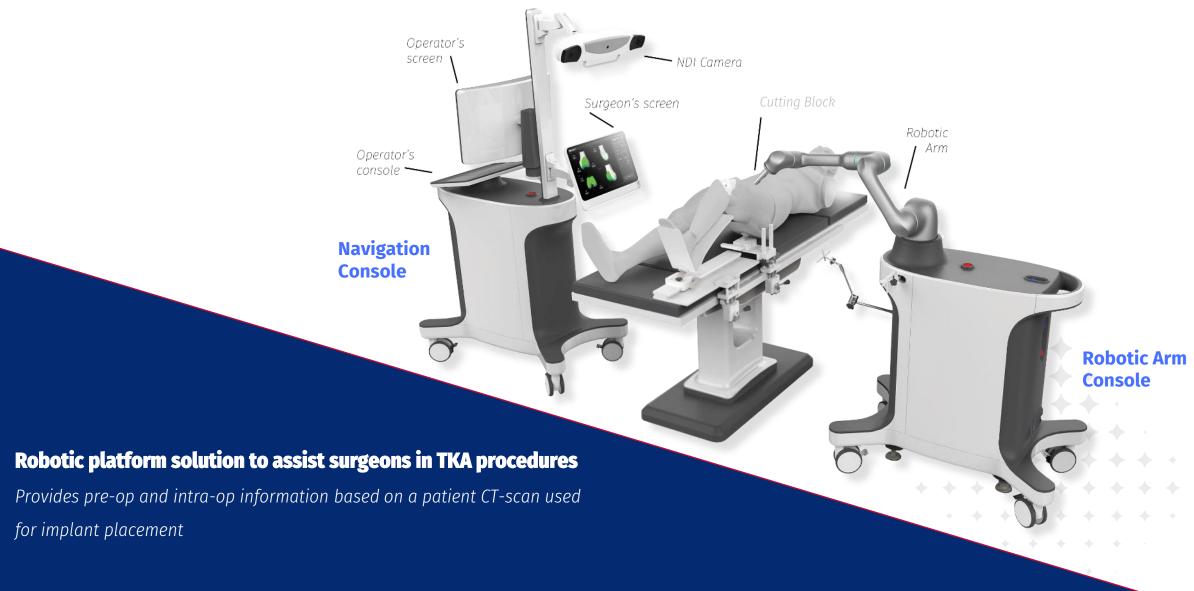
<sup>1.</sup> MPO data on file

<sup>2.</sup> Based on a retrospective study of Advance® Medial-Pivot. Macheras, G.A.; Galanakos, S.P.; Leptsos, P.; Anastasopoulos, P.P.; Papadakis, S. A. A long term clinical outcome of the Medial Pivot Knee Arthroplasty System. The Knee 24 (2017): 447-453

66 The clinical value of combining Medial-Pivot kinematics with real-time gap balancing and intra-op data offers an opportunity for procedural optimization facilitated by the SkyWalker® Total Knee System\* aiming to elevate the patient care experience



## SkyWalker® Surgical Robot\*\* with Evolution® Medial-Pivot Knee System



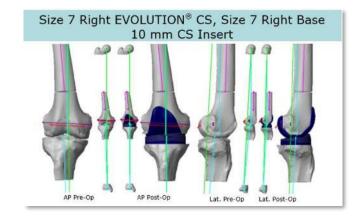
## **Evolution of Pre-Op Planning - Enhanced Planning Capabilities**

#### **X-Ray Templating**

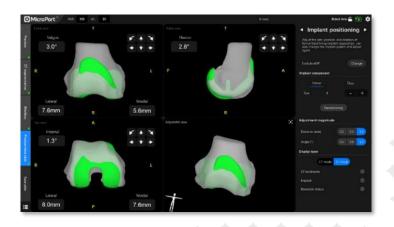


- CT-based
  - Recreates patient-specific anatomy
- Customized pre-op plan
  - Based on surgeon's preferences
- = Tailored both to the patient and the surgeon









For the Skywalker<sup>™</sup> Total Knee System



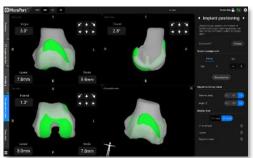
## Skywalker™ Total Knee System Interface

#### **CT Scan**

## Community on the second of the

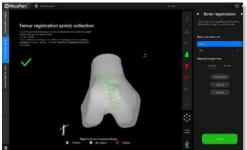
- Patient-specific data
- 3D model recreates patient's anatomy

#### **Preoperative planning**



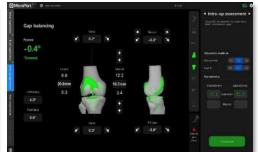
- Customized plan based on each surgeon's preferences
- Implant sizing and placement are planned preoperatively

#### **Bone Registration**



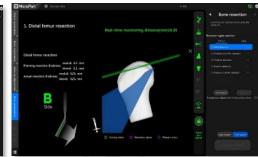
 Marries the CT-scan, pre-op plan and patient-specific 3D model

#### **Gap Balancing**



 Data-driven intra-op gap balancing in extension and flexion position

#### Resection



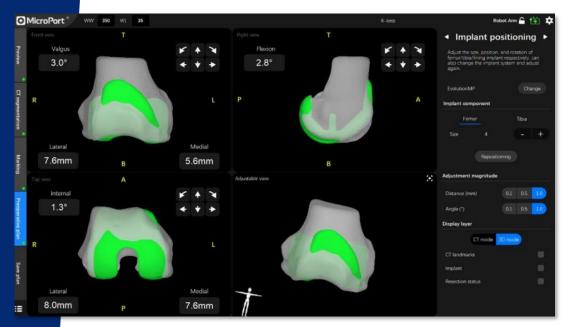
- Robotically located cutting planes
- Assists the surgeon during osteotomy

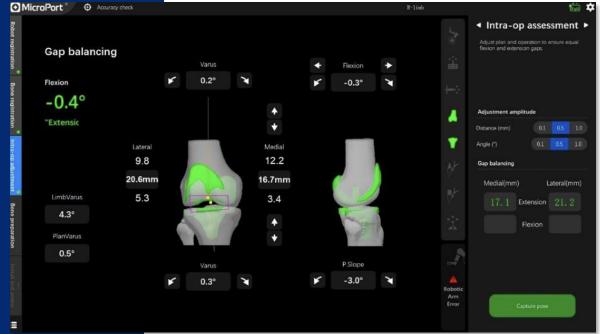


## Real-Time Gap Balancing & Streamlined Customizable Workflow

#### For the Skywalker<sup>™</sup> Total Knee System

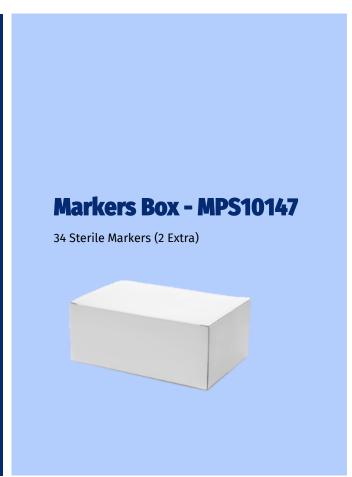
- Intra-op assessment
- Data-driven execution
- = Informed decision making
- Adaptable to surgeon's workflow
- "The robot can follow your lead"
- = Power to decide in a more informed

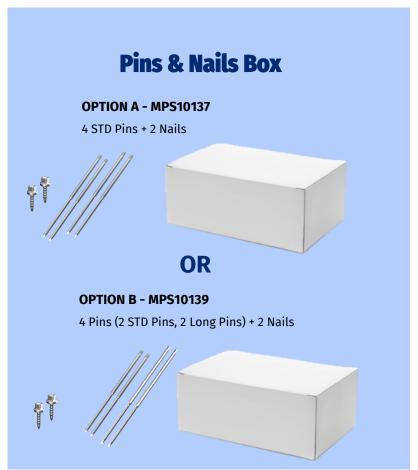




## **Skywalker™ Knee Instrumentation and Disposables**







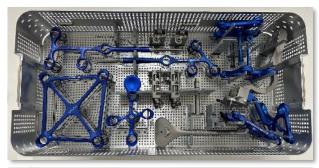
1 Sterile Drape - MPS10001



## **Skywalker™ Knee Instrumentation and Disposables**

#### **SkyWalker® Surgical Platform**

Knee Application Kit

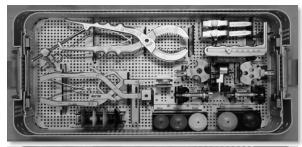




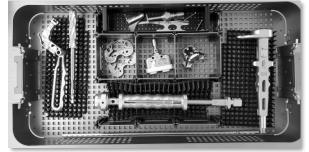
Only 1 additional tray

#### SkyWalker.® Surgical Platform

• Evolution® ICE Trays







#### **Evolution® Medial-Pivot Knee System\***

- Cemented and cementless CS, CR, PS
- E200 and ICE instrumentation

Note: Also compatible with Advance® Medial-Pivot Knee System

- Less instruments and trays (no cutting blocks, IM rod, etc. required)
- Surgeon and OR staff know the sizes ahead of time



## **Skywalker® Robotic Program Implementation**

#### **Robot Install**

#### **CT Training**

## **Case Scheduling**

## **OR Staff Training**

#### SPD Staff Training

#### Case Run-Through

#### **First Case**



- Robotic Unit delivered and fully installed by the SkyWalker® System team in tandem with local Biomed
- In-Servicing dates established with OR management
- Determine which CT facility the surgeon would like to use for CT scans and certify them on the CT protocols
- SkyWalker® system team will take full responsibility for this step



- Schedule staffing in the room along with date and time of the first surgical cases
- SkyWalker® system team to work with surgeon to ensure scan is done at a minimum 7 days prior to surgery



- Complete staff training for entire staff group
- Complete a sawbones case demo with surgical team who will be in the room the day before surgery



- · Deliver robotic trays to SPD and ensure they are properly trained on sterilization
- Sterilize trays and establish where they will live during the trial time frame
- Ensure trays are complete



- The day or two days before the case do a full robotic run through of the case with a sawbones to ensure all staff are comfortable with the system and workflow
- Double check trays and inventory
- Review the surgical case plan with the surgeon



- SkyWalker® system staff member(s) will arrive early to the case the morning of and ensure proper trays and disposables are in the room
- Following the case, all staff and surgeon team members participating in the case will complete the post case survey



## **Installation, Service & Maintenance**

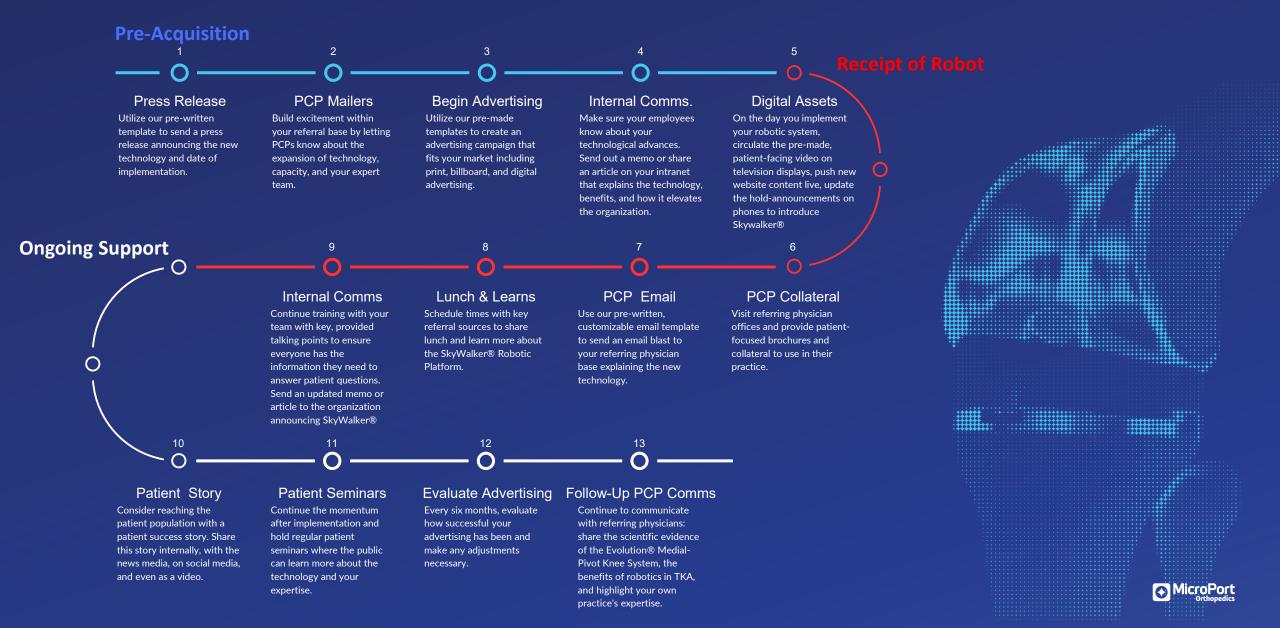
- Key competitors all offer and deliver on excellent service levels for their medical robotic equipment.
- A 98% uptime is a category expectation. Importantly, based on competitive experience this high success bar should be eminently achievable.

#### **Essential Care Plan**

- Software updates
- Preventative Maintenance
- System Repairs
  - Replacement parts
  - 100% labor and travel



## SAMPLE SKYWALKER® MARKETING ROADMAP



## **Co-Marketing Program**

Here at MicroPort Orthopedics, we strive to be your partner in communications and promotions. When you purchase a SkyWalker® Surgical Robot, you gain access to templates, pre-drafted communication, and digital collateral to help skyrocket your program and success. These tools provide the resources your organization needs to effectively reach your key audiences:

- Referring Physicians
- Patients



#### You'll unlock access to a guidebook for building your own promotional calendar with access to exclusive resources, including:

#### News Media and General Public

- Pre-written, customizable press releases
- Templates for print and digital advertising
  - Facebook ads
  - Google Ads
  - Banner ads
  - Standard-sizes for print ads
- Customizable social media posts
- Template for future patient stories

#### Patient Facing Content

- Patient-facing video content
- Patient brochures
- Guides and support for patient events and seminars.
- Template for future patient stories

#### Referring Physician Content

- Internal promotional content
- Referring Physician Collateral:
  - Brochures
  - Postcards
  - Email template
- Support for Lunch and Learns



#### SkyWalker Robotic Platform Volume Partnership

_		100	_			22
Se	pte	mb	er 3	0.2	20	23

It is my pleasure to provide you with the following Per Procedure proposal to acquire the MicroPort Skywalker system and pay for it as it is utilized.

- 60 Months **Agreement Duration:**
- **Monthly Procedure Volume Target:** 25 Total Procedures (Manual Knees/Hips/SkyWalker Knees
- 6 Procedures **Monthly Robotic Procedure Target:**
- **Each Per Procedure Fee Includes:** 
  - One MicroPort SkyWalker Robotic Platform
  - One Year Warranty
  - One Implant per procedure
- \$2,750 Per Procedure with Knee Implant \$3,250 Per Procedure with Hip Implant \$600 Per Procedure with SkyWalker Disposables Per Procedure Fee:
- Purchase Option at Agreement Conclusion: Fair Market Value

Thank you for your consideration of this proposal. If you have any questions, please contact me.

If you wish to proceed, please sign below, scan and email this proposal back to me.

#### **MicroPort Orthopedics**

**Thomas Kearney** 

thomas.kearney@ortho.microport.com

- Agreed Subject to Credit Approval and Review of Per Procedure Program Documentation

DATE:	/	' /	
D/ \  L.	/	/	

#### **SkyWalker Robotic Platform FMV Partnership Options**

September 30, 2023

Thank you for the opportunity to provide this Lease Proposal which offers a choice of three payment plans.

- Equipment: Microport SkyWalker Robotic Platform
- Amount Financed: \$425,000
- Payment Options: 36 Mos. @ \$9,855 /mo. OR 48 Mos. @ \$9,234 /mo. OR 60 Mos. @ \$8,100 /mo.
- Purchase Option at Lease Conclusion: Renew Lease, Return Equipment, or Purchase Equipment for Fair Market Value
- 100% Section 179 Tax Deduction: You may qualify for a deduction from this year's taxable income equal to
- 100% of the Equipment Price. Please check with your accountant for details.

Thank you for your consideration of this proposal. If you have any questions, or wish to proceed, please contact me. *Interest rates are rising, this proposal is valid for 10 days.* 

Thank you for your consideration of this proposal. If you have any questions, please contact me.



## SkyWalker Robotic TKA Platform Partnership Options

SkyWalker	Capital Purchase	Capital FMV Lease	Robotic Placement		
Cases per Month	N/A	N/A	25		
Term	N/A 36/48/60 Month 60 Months	60 Months			
Payment Terms	Net 30 Days	Monthly	Monthly	<ul> <li>Robotic Volume Placement</li> <li>60 Month Agreement</li> <li>Monthly robotic case (6)</li> <li>number must be achieved</li> </ul>	
Essential Care Plan	sential Care Plan 60K	60K	60K	<ul> <li>*Total Volume         commitment (25 Total         Cases monthly, Manual         Knee/Hip/Robotic Knee         Monthly Case         Commitment).</li> </ul>	
Warranty	1-year Warranty	1-year Warranty	1-year Warranty		Monthly Case
Cost	\$425,000 system + Implant/Disposables	\$9.855/36month system \$9,234/48month system \$8,100/60month system + Implant/Disposables	\$2,750. Knee Implant \$3,259. Hip Implant \$600. Robotic Disposables		

### **Key Considerations**

**Topic** 

Indications for use

**Growth strategies** 

<ul> <li>OSR-1100-NB SkyWalker Robotic Platform</li> <li>10008-NB-SUB Robotic Arm &amp; Accessoreis</li> <li>10010-NB-SUB Surgical Console Package</li> <li>10014-NB-SUB Navigation Console Packaged</li> <li>10019-NB Knee Kit</li> <li>10021-NB Knee Tray</li> <li>10023-NB Leg Positioner</li> <li>E.Z.3626-NB Monitors</li> <li>E.Z.5500-NB Foot Switch</li> </ul>		
SkyWalker is a Robotic Platform designed to have applications added to its clinical capabilities (THA/UKA are planned additions to the platform. MPO will work with Scripps Health on an upgradability pathway.		
<ul> <li>MPS10147 Markers</li> <li>MPS10137 Option A (Pins)</li> <li>MPS10139 Option B (Pins)</li> <li>MPS10001 Drape</li> </ul>		
<ul> <li>Essential Care Plan</li> <li>Software updates</li> <li>Preventative Maintenance</li> <li>System Repairs</li> <li>Replacement parts</li> <li>100% labor and travel</li> </ul>		
<ul> <li>Slightly smaller than but comparable in space to MAKO/ROSA System.</li> <li>Robotic Specialist will run system and interact with surgeon/staff during each procedure</li> </ul>		

**Notes** 

SkyWalker Total Knee System is intended to assist the surgeon to perform Total Knee Arthroplasty (TKA) procedures by providing software-defined spatial boundaries for orientation and reference information to anatomical structures for the accurate placement of compatible knee

implant components. It is indicated for use in TKA procedures in which the selection of stereotactic surgery is appropriate, and the

- Quarterly Business Reviews (QBR)
  Partnership w/Scripps Health to onl
- Partnership w/Scripps Health to onboard and educate additional physician users

anatomical bony structures can be identified with a CT based model

- Co-marketing opportunities
   Modial Bivet Bo
- Medial Pivot Performance + Technology enabled implantation