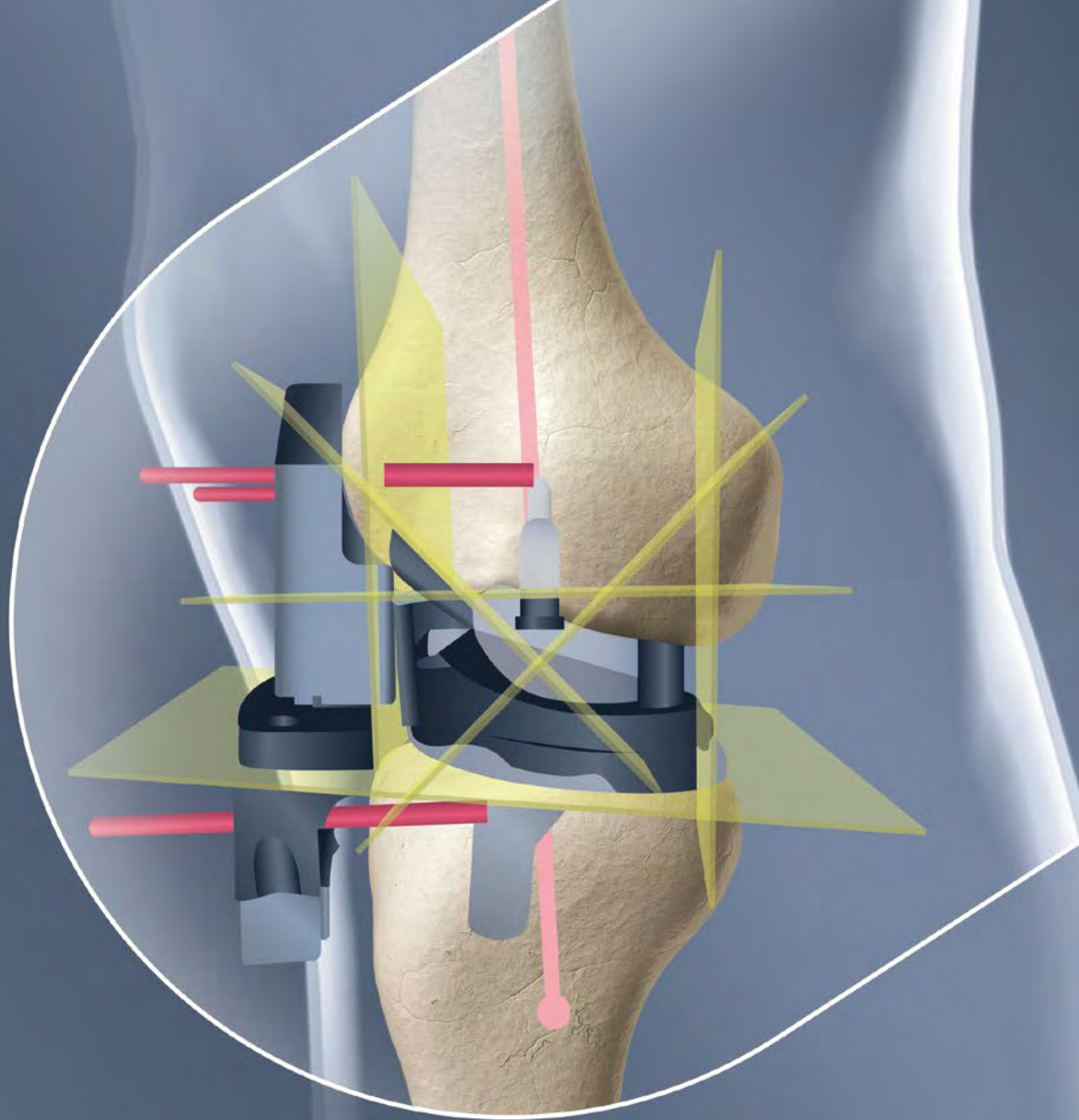


# SURGICAL AUGMENTED REALITY

REVOLUTIONIZING  
ORTHOPEDIC SURGERY



VAPTID

ACCURATE. INTELLIGENT. ACCESSIBLE.

# ACCURATE. INTELLIGENT. ACCESSIBLE.

## ABOUT VARTID

**VARTID** – an acronym that stands for **Virtual Augmented Real Time Diagnostics** – is dedicated to driving progress in the development of **Computer Assisted Surgery (CAS)** systems for orthopedic procedures, aiming to advance the field.



# HOW AR & AI TRANSFORMS SURGERIES?

## AI-POWERED MOVEMENT TRACKING

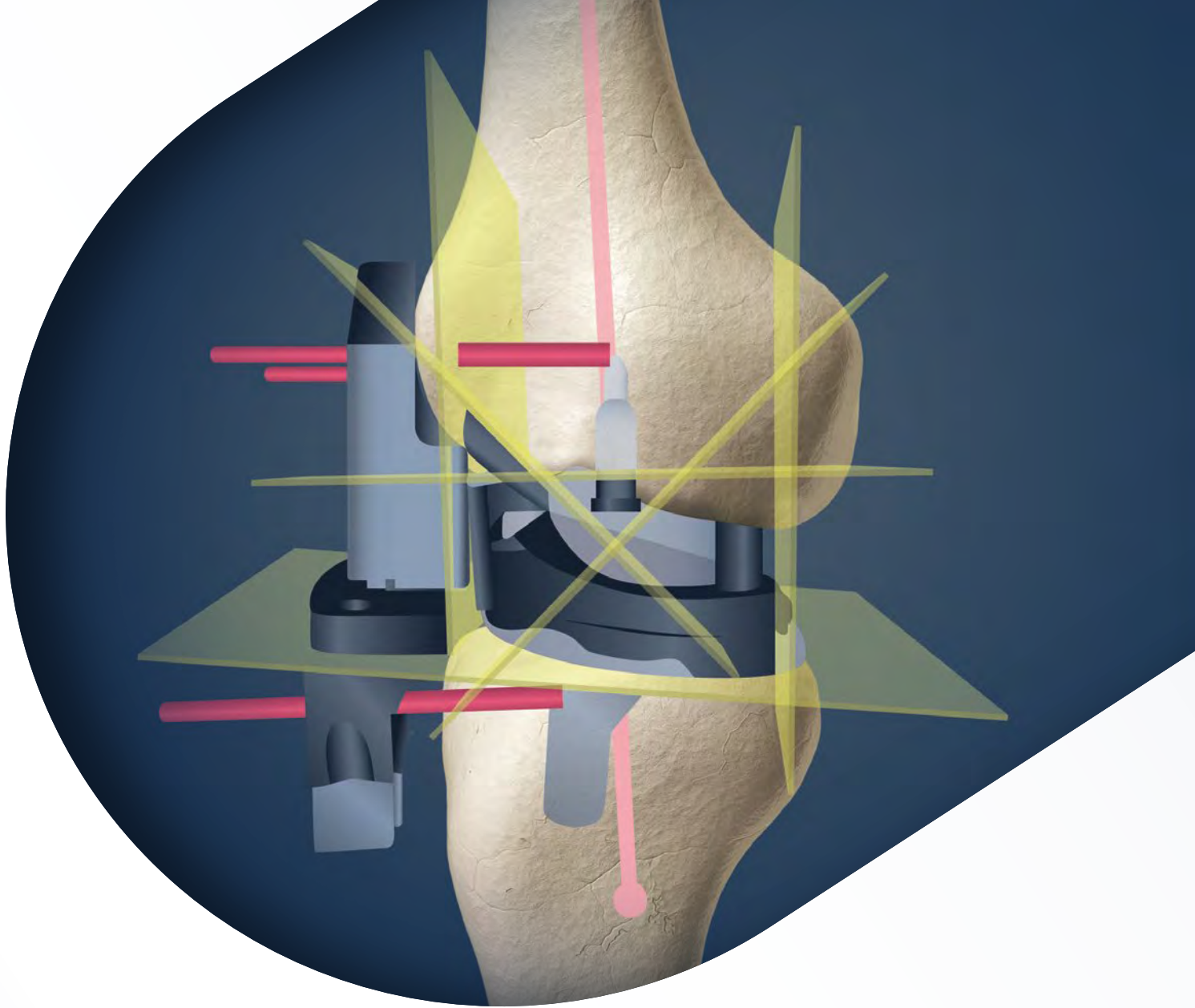
The **“3D Dynamics Sensor”**, powered by **AI technology** (neural networks), continuously feeds **real-time information** to the AR glasses during surgery. Virtual elements are generated by the software based on the patient’s image data. As a result, these virtual elements remain in sync with bodily motion during surgery.

The unique **“3D Dynamics Sensor”**, the soul of **VARTID**, provides more **security, reliability, and accuracy** to surgeons both before and during operation without external markers, due to the ability to follow movement in a way that has not been experienced before.

The **VARTID surgical augmented reality system** fundamentally transforms orthopedic surgical procedures allowing preoperative planning, intraoperative navigation and education at once.\* This data driven, AI enhanced innovation sets a new standard for quality in joint surgeries, ensuring optimal outcomes for both patients and doctors.

*\*Coming soon, not FDA cleared*



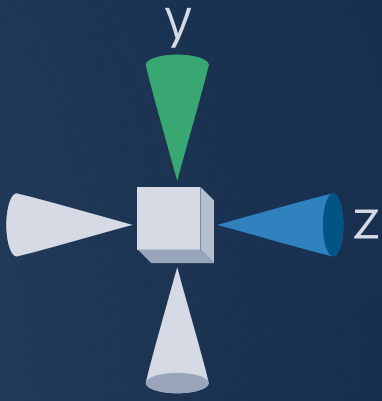


**VARTID**  
DESIGNER®

# QUICK AND EASY SURGICAL PLANNING

A HIGH-LEVEL INTERFACE  
TO PLAN SURGERIES IN ADVANCE

The **VARTID Designer**® for surgical planning equips physicians with a **higher level of precision** through a 3D transformation of image documentation, complemented by the integration of virtual guides and signals. These signals can be retrieved step by step during surgery. Each vector shape is scaled, so the system can help choose the right prosthesis.



The **VARTID Designer**<sup>®</sup>, procedures can be vividly demonstrated, cases and plans interpreted and evaluated collaboratively, and the system can even be employed in a dynamic, interactive manner.

## MAIN FEATURES



AUTOMATED  
ALGORITHM



AI-IMPROVED  
REFERENCE POINT  
PLACEMENT



AUTOMATED  
3D VISUALIZATION



AI-ENHANCED  
3D PREPLANNING



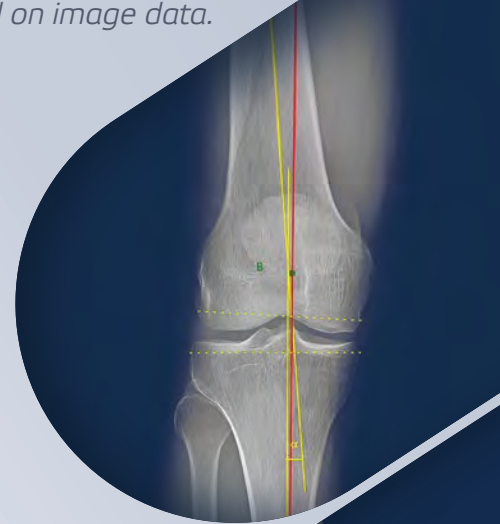
AUTOMATED  
RESECTION PLANE  
CALCULATION



AUTOMATIC TEMPLATE,  
CUTTING BLOCK,  
AND PROSTHESIS  
SELECTION

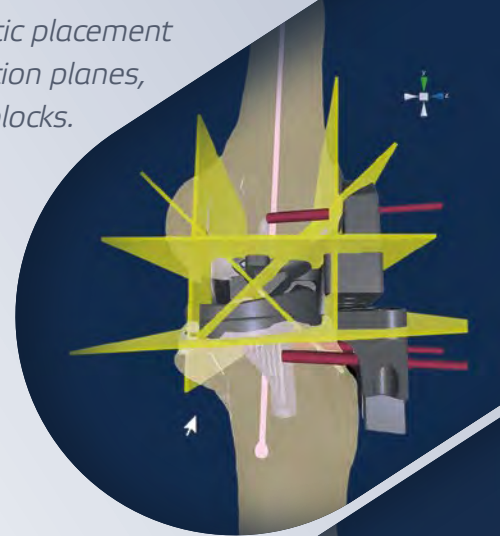
1

*Reference points and axes, along with resection lines are automatically calculated by AI based on image data.*



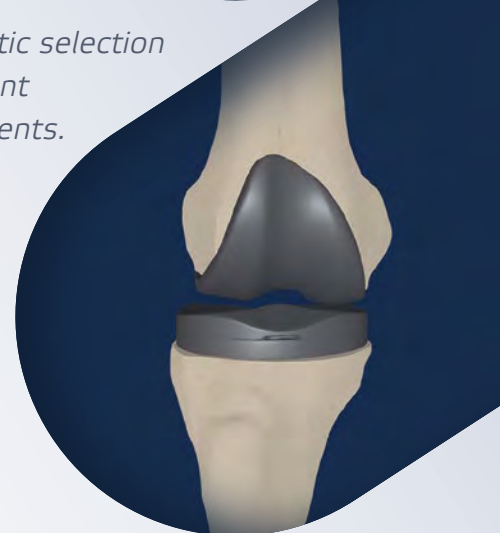
2

*Automatic placement of resection planes, cutting blocks.*



3

*Automatic selection of implant components.*





**VARTID**  
SURGERY®

# INTRAOPERATIVE NAVIGATION

AI ENHANCED REAL TIME NAVIGATION  
WITHOUT MARKERS

**VARTID Surgery®** ensures the highest accuracy and **motion-tracking precision using real-time data** as well as a patented targeting system during surgery. The solution guarantees maximum precision and accuracy for the medical team throughout surgical procedures.

*Precise holographic projection of cutting blocks, templates, prosthesis on anatomical body part, step-by-step navigation.*

In practice, **VARTID Surgery**<sup>®</sup> guides the hands of the physicians relying on pre-made plans, providing a greater sense of security.

## MAIN FEATURES



REAL TIME MARKERLESS  
INTRAOP NAVIGATION



AUTOMATED  
BODY TRACKING AND  
MOTION TRACKING



PRECISE OVERLAY  
OF COMPONENTS  
(DRIVEN BY AI)



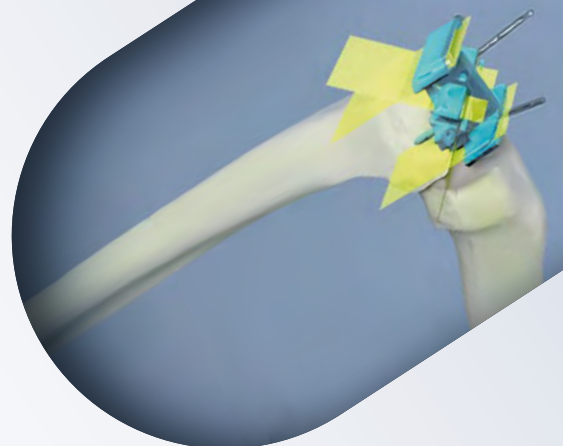
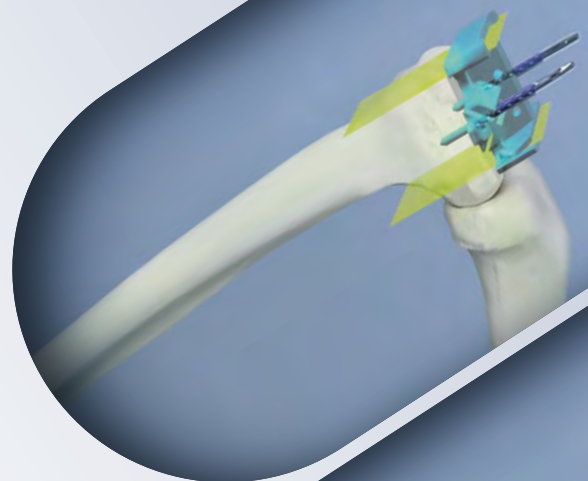
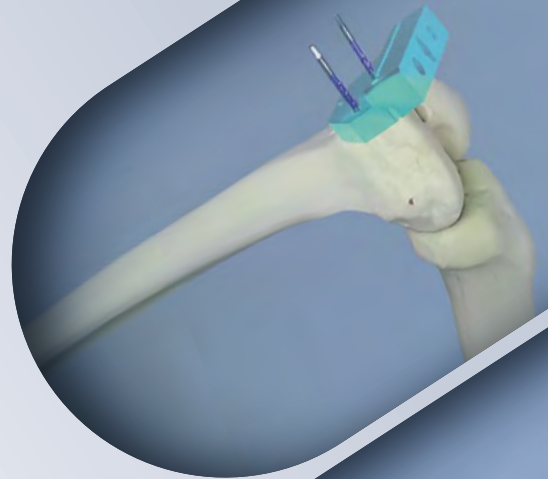
INTUITIVE INTERFACE  
& CONTINUOUS  
DOCUMENTATION



VOICE CONTROL,  
HOLOGRAPHIC  
SELECTION PANEL



BUILT-IN  
GAP BALANCE





# PRECISION PACKED SURGICAL TRAINING

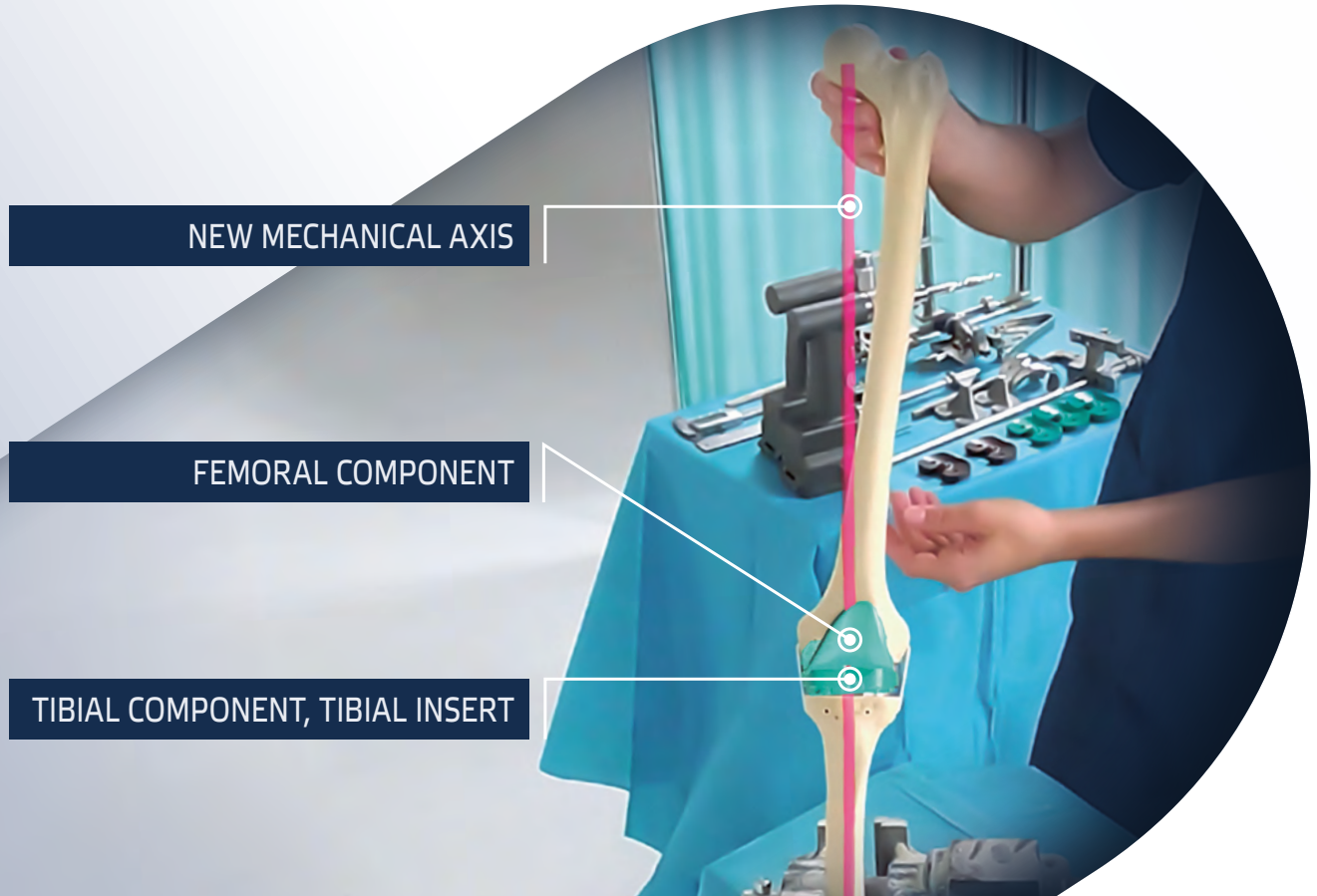
**VARTID Surgery® Trainer** opens doors to innovative surgical practices and educational opportunities. It creates an opportunity for physicians for continuous learning and future optimization.

## IDEAL FOR EDUCATION AND DEMONSTRATION

Digital documentation enables the easy sharing of intricate surgical designs with patients, enhancing understanding and a **sense of security**. The design phase also stands as an exceptional **educational tool**.

## RISK FREE HANDS-ON SURGICAL TRAINING

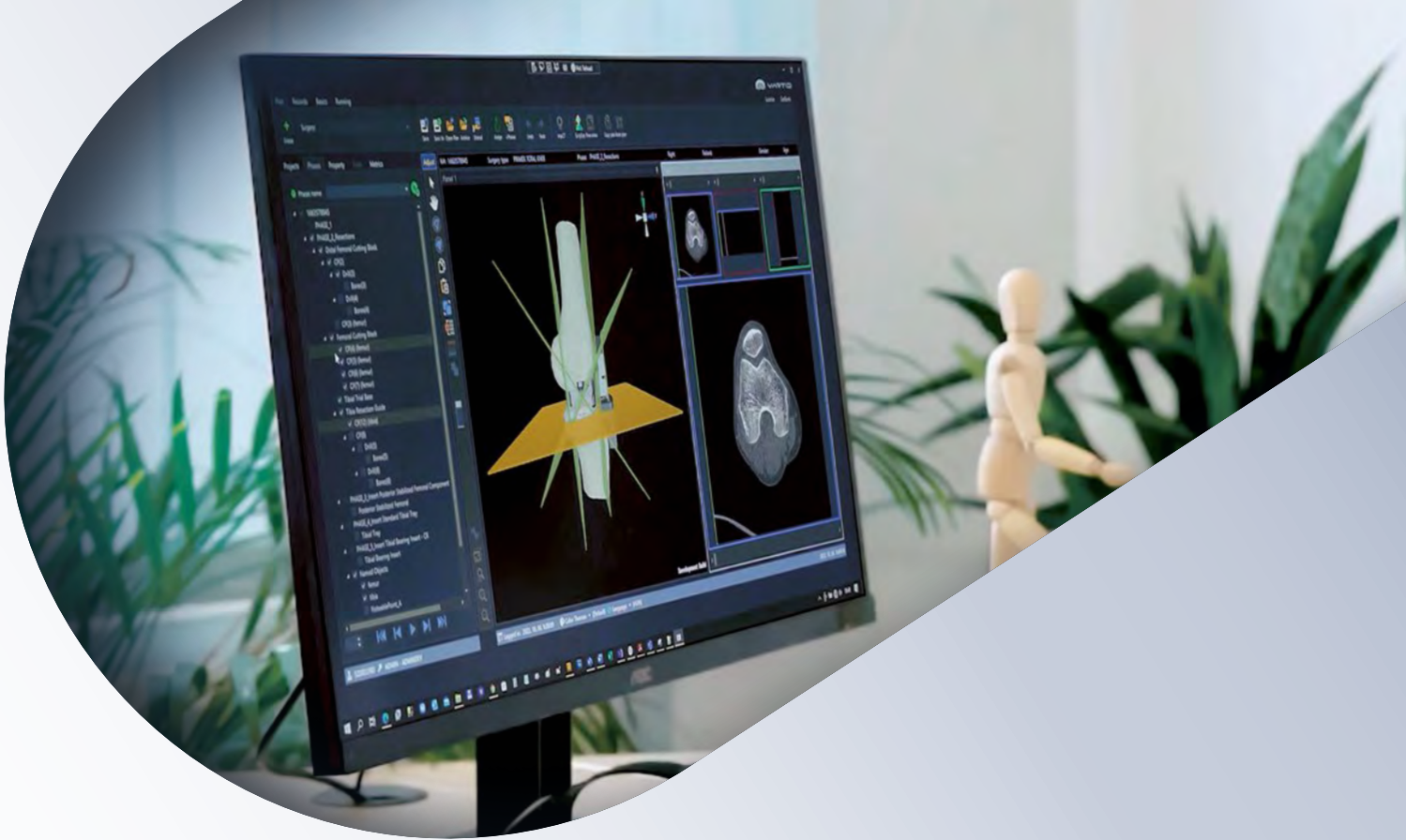
The **VARTID Surgery® Trainer**, designed for educational purposes provides realistic surgical simulation. It ensures hands-on training with the highest precision and accuracy during sawbone surgery by utilizing real-time data and advanced targeting.



NEW MECHANICAL AXIS

FEMORAL COMPONENT

TIBIAL COMPONENT, TIBIAL INSERT



# COMPREHENSIVE PRESENTATION AND EDUCATION

## DOCUMENTATION

**VARTID Records**® offers **comprehensive post-surgery documentation** through the digital recording of the entire process. Through the **VARTID Records**® presentation and education system, each step of the surgical procedure is recorded. This solution enables other physicians to observe specific surgical procedures while ensuring the protection of patient data.

## EXCELLENT FOR PLANNING AND PRESENTATION

Beyond creating educational presentations, it offers seamless export functionality for digitally recorded information. Whether you're preparing for a lecture, conducting research, or managing patient records, our tool simplifies the process, saving you time and effort.



# BENEFITS



SUSTAINABLE  
AND TRANSPARENT



AUTOMATION  
AND EFFICIENCY



ACCURATE POSITIONING  
AND ALIGNMENT



PERSONALIZED  
SURGERY



ANATOMICAL  
REFERENCE TRACKING



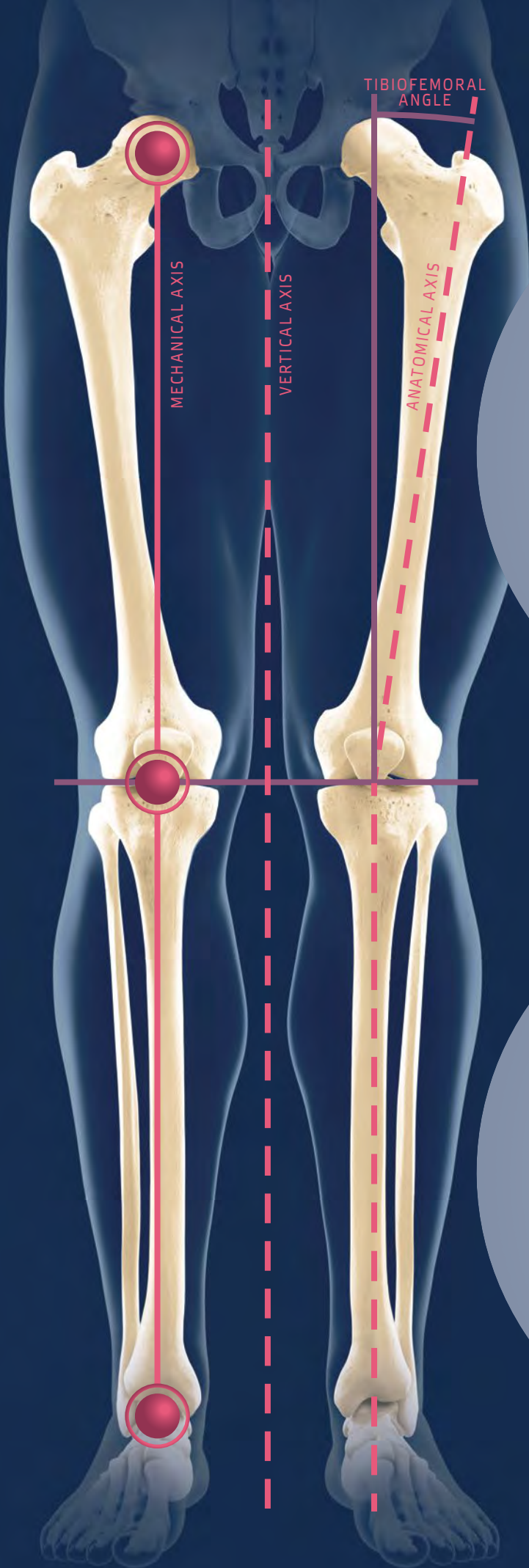
TRAINING  
AND EDUCATION



REMOTE  
COLLABORATION



PATIENT  
EDUCATION



## OUR VISION

is to provide affordable orthopedic care which has higher accuracy, is highly mobile and effective both in the hospital and in the field.

## OUR MISSION

is to implement our technique to be accepted worldwide and to become the future standard of care. We are dedicated to equipping operating rooms with advanced tools that are not only more effective but also less error prone, providing surgeons with a higher confidence of success.



**VARTID**  
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Contact us at

[info@vartid.com](mailto:info@vartid.com)

+36 30 653 8966

or visit

[www.vartid.com](http://www.vartid.com)

