**Benchmarking – Praxiteles**

**Overview**

Praxiteles is a 2 dimensional cutting guide for total knee replacement surgeries. A guide jig is accurately positioned by Praxiteles allowing the surgeon to make planar cuts to the bone.

**Functions**

User Interaction:

* Installation/Mounting- robot mounts on femur via a 2 pins
* Model Input- Uses Praxim's bone morphing technology
* User Connection- The surgeon cuts the bone using the cutting jig that has been positioned by Praxiteles
* Tool Connection- Tool is not attach, just guided by jigs
* Device Motion- Praxiteles has two degrees of freedom. This allows for the position of the jig to accommodate all the planar cuts required.
* On/Off Functionality- yes
* Sterilization- The drive unit can be removed during sterilization
* Maintenance- not specified
* Positioning Calibration- Not specified
* Positioning Awareness- The position of the cutting jig is tracked, but the surgeon is responsible for the cutting tool itself

Autonomous:

* Provides tool-position constraint- Constrains tool movement by positioning cutting jigs
* Monitoring/Awareness of Tool Position- Aware of jig position, but not of cutting tool position
* Method of 3D Movement- Two rotational axis allow for accurate position of cutting jig
* Conversion of Input into Traceable Surface- Input via Praxim's bone morphing technology allows for tracing of planar surfaces



Modes of Operation

* On- yes
* Off- yes
* Idle- not specified