

# Total Knee Arthroplasty



I am the robot



*François Kelberine*

*Aix en Provence & Gap*

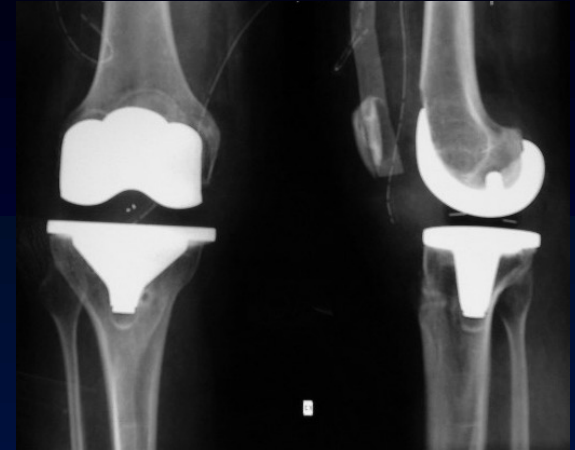
# Number of TKA +UKA around 2020

- ✓ France : 111 000
- ✓ Europe : 720 000
- ✓ Australie : 70 000
- ✓ USA : 790 000
- ✓ Asia : 1,4 million



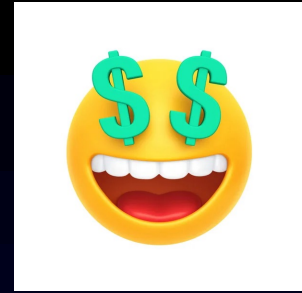
# %age Robotic TKA + UNI

- ✓ France : 2 to 3%
- ✓ Europe : 1 to 3%
- ✓ Australie : almost 50%
- ✓ USA : ?
- ✓ Asia : ?? < 0,5%



So many arthroplasties well done....

# Robots



- ✓ Closed systems

- ✓ Pb of production / distribution implants = self-limiting

- ✓ Complications

- ✓ Robot does not skip classical ones

- ✓ Specific : breakdown!

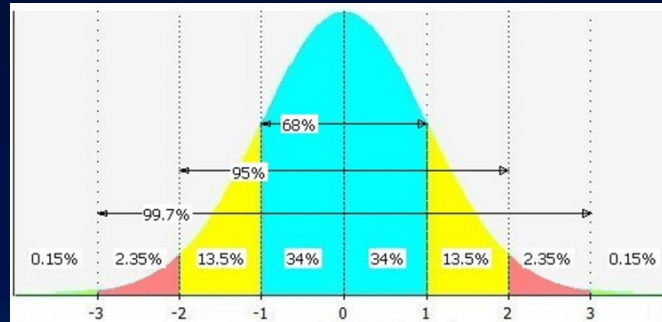
- ✓ Others compagnies??

- ✓ Development



# Advantages of Robotics

- ✓ Avoid malposiotoning (outliners)
  - ✓ Younger surgeon
  - ✓ Suppose to limit re-surgery



- ✓ True support of industry / planning & OR

# Huge problems

✓ Cost ++

✓ Lacks

✓ Patella

✓ Re surgery

✓ Learning curve for low volume primary arthroplasties

✓ Education?



# Preference = Education

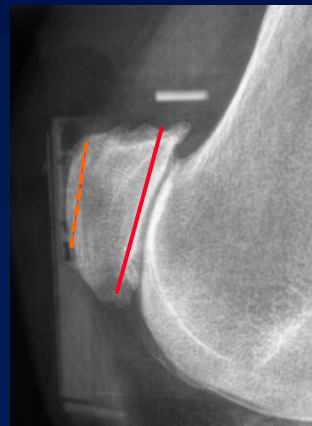
## ✓ Basics

*eg*: Different alignments

## ✓ Principles

✓ Pre & per operative controls

## ✓ Patella



# Goal = Strategy

✓ Chose the type of implant (*eg*: constrain)

✓ Chose the technique

✓ Cuts

✓ Ligaments balance

✓ Positioning of implants



✓ Envision per operative difficulties

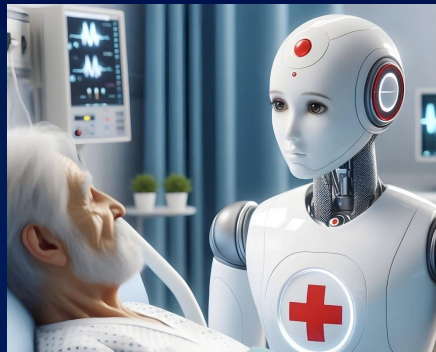
✓ Anticipate the expectations



# For your knee... you should prefer?



Without robot  
or  
Nono the little robot



# Take home messages

- ✓ Individual based surgery
- ✓ Understand your choice
- ✓ Patella ++ : never included in tka causing pb
- ✓ Just presently be realistic