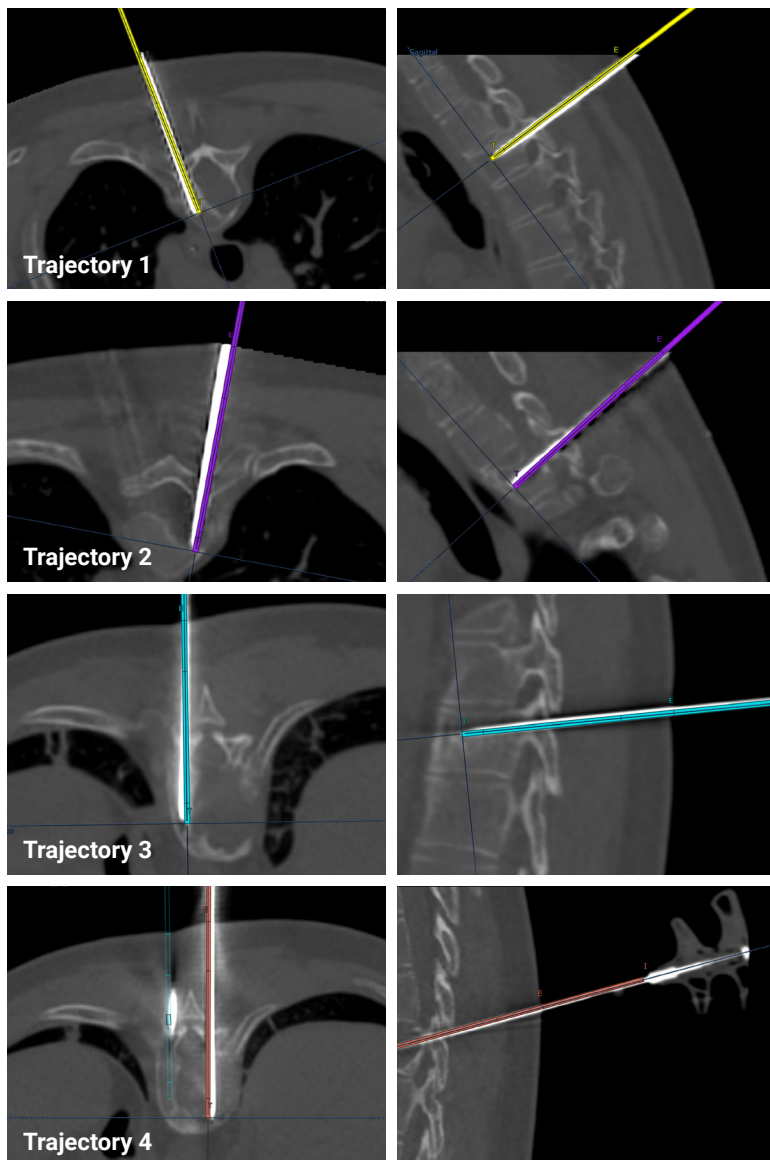# Epione® robotic T3 and T10 vertebroplasty

- Challenging trajectories with high angulations in vertebrae
- Trajectories right on target with mean lateral accuracy of 1.8mm

Planned (color) compared to Achieved (white) in axial and coronal views

Trajectory 1

Trajectory 2

Trajectory 3

Trajectory 4

Final control CT-scan

Physician: Dr. Deschamps, Interventional Radiologist
Institution: Gustave Roussy, Interventional Radiology Department
Location: Villejuif, France

Background:
T3 and T10 metastases from kidney cancer.

Approach:
The patient was treated in the prone position (head first), under general anaesthesia. Using the **Epione® System**, four introducers were placed with two inserted in T3 and two in T10 for cementoplasty.

1 Plan / Target

Four trajectories with high angulations were planned in the vertebrae with **Epione® Software**. The **Epione® Robotic Arm** positioned automatically to the desired depth and location.

The **Introducer Guide** secured the guiding axis despite strong mechanical forces due to hammering.

2 Deliver

The physician inserted four introducers (*Thiebaud t'BM II 15cm 11G*). The four trajectories were achieved with mean lateral accuracy of 1.8mm. No robotic nor manual correction was required after intermediate control CT scan.

- **Trajectory 1:** 1.8mm lateral accuracy
- **Trajectory 2:** 1.7mm lateral accuracy
- **Trajectory 3:** 2.0mm lateral accuracy
- **Trajectory 4:** 1.8mm lateral accuracy

The physician then performed cementoplasty.

3 Outcomes

No adverse events had occured during the procedure.

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