



Step by step description - Use of SeeStar[®] Guiding Device and SeeGrid[®] Positioning Indicator

Before use, please read the Instructions For Use which accompany the product for indications, contraindications, warnings and precautions.

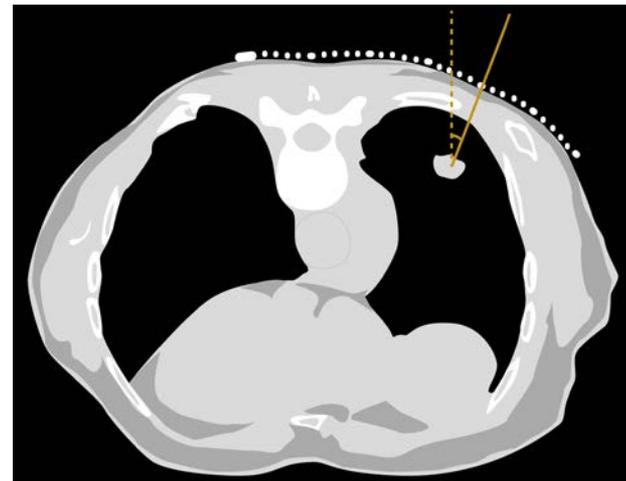
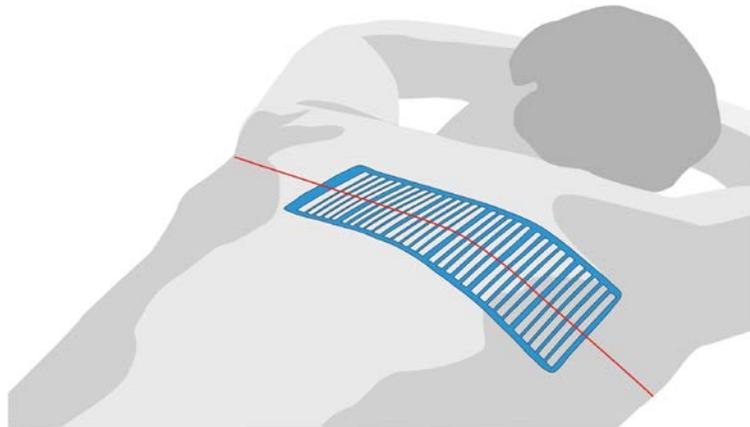
Caution: Federal law restricts this device to sale by or on the order of a physician.

Step 1

Place SeeGrid[®] on the skin. Make a CT scan.

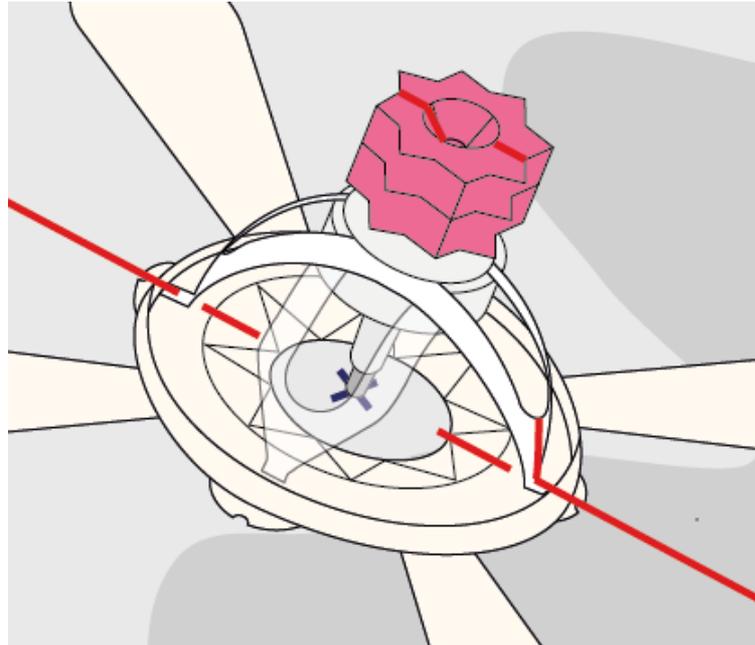
SeeGrid[®] is visible on the CT image and the desired entry point can easily be located by counting the bars of the grid.

Mark the entry point on the patient's skin. Apply local anaesthetic and make a small incision at the entry point as per normal routine.



Step 2

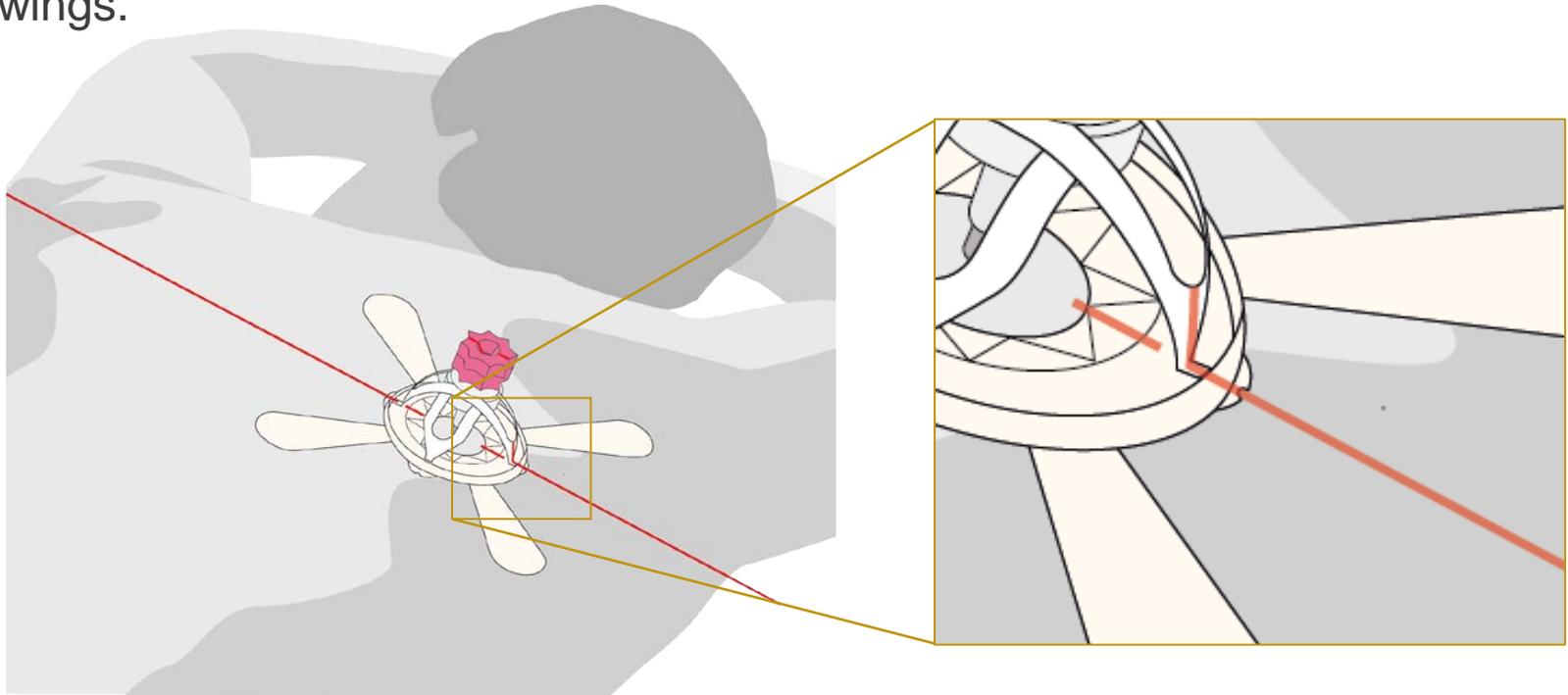
Place SeeStar[®] on the patient with the distal end of the needle guide on the mark.



Step 3

To be correctly positioned, one of the arches of SeeStar[®] shall be placed in the plane and aligned with the laser line produced by the CT equipment. To help the placement, there are notches in the baseplate that shall match with the laser line.

Fasten SeeStar[®] on the patient's skin using the adhesive backing on the wings.

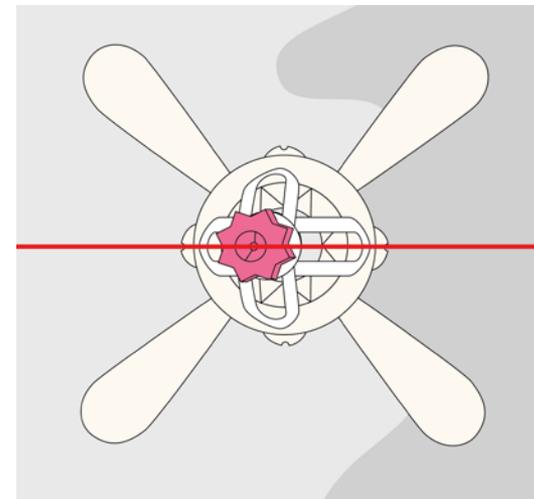
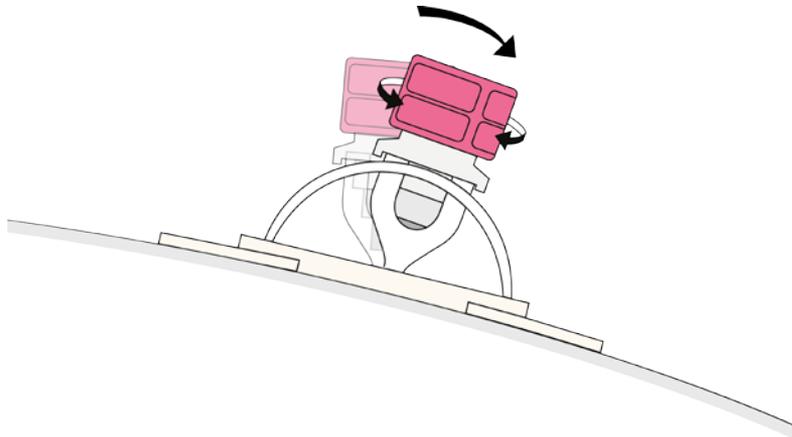


Step 4

Position the needle guide at the desired angle calculated from the CT image. Make sure that the needle guide is in open position and can easily be rotated before positioning it.

To make sure the needle guide stays in the correct image plane, the center of the proximal end of the needle guide shall coincide with the CT equipment's laser line.

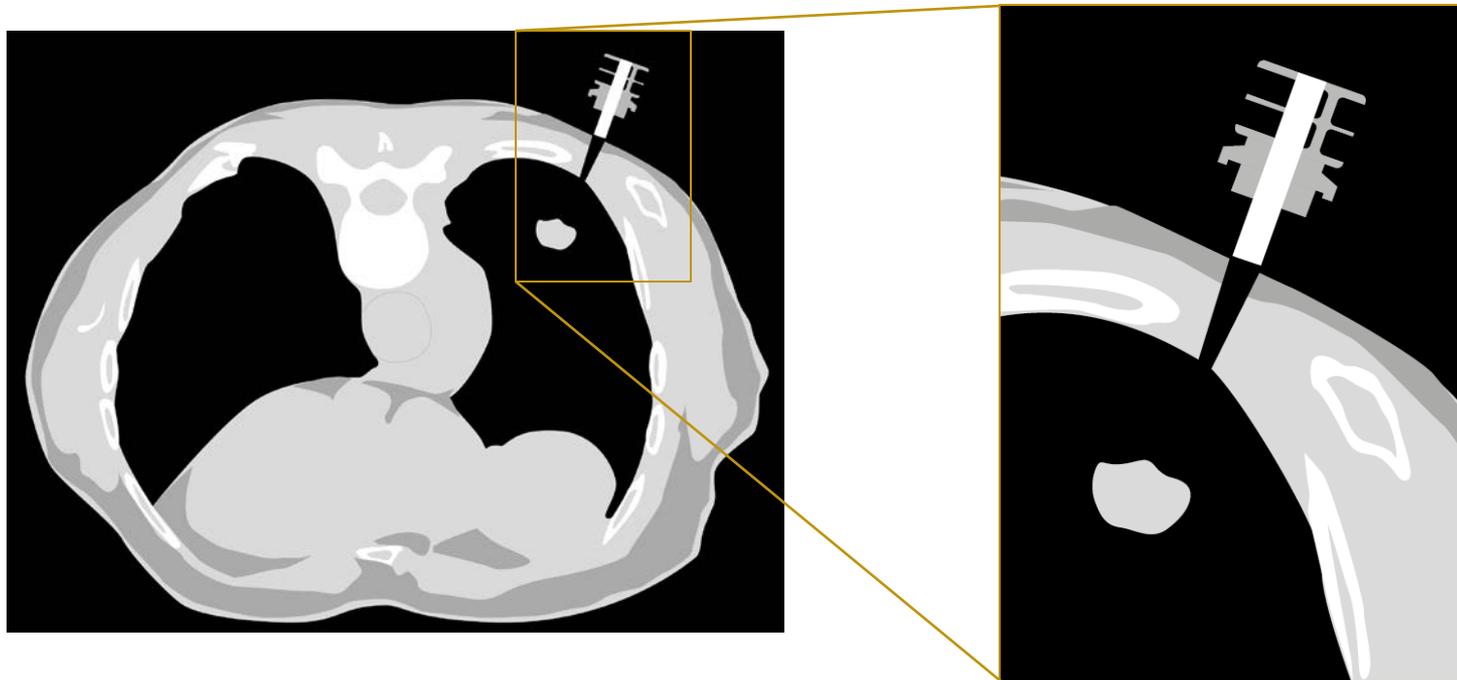
After positioning, lock the guide in the desired position by twisting the cap clockwise.



Step 5

Make a CT scan to check the puncture route. The linear artifact on the CT image marks the puncture route through the body.

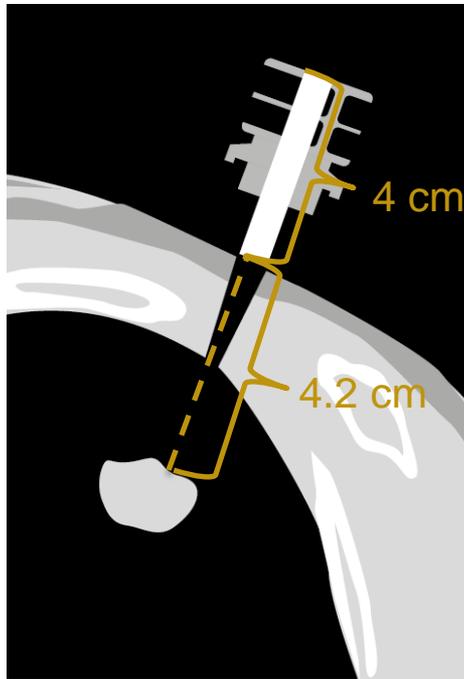
The whole metal part of SeeStar[®] shall be visible on the image to ensure that the guide is placed in the image plane.



Step 6

Before carrying out the puncture, calculate the puncture depth. Note that the needle guide is 4 cm, which needs to be added to the puncture depth.

Indicate the desired depth on the puncture needle.



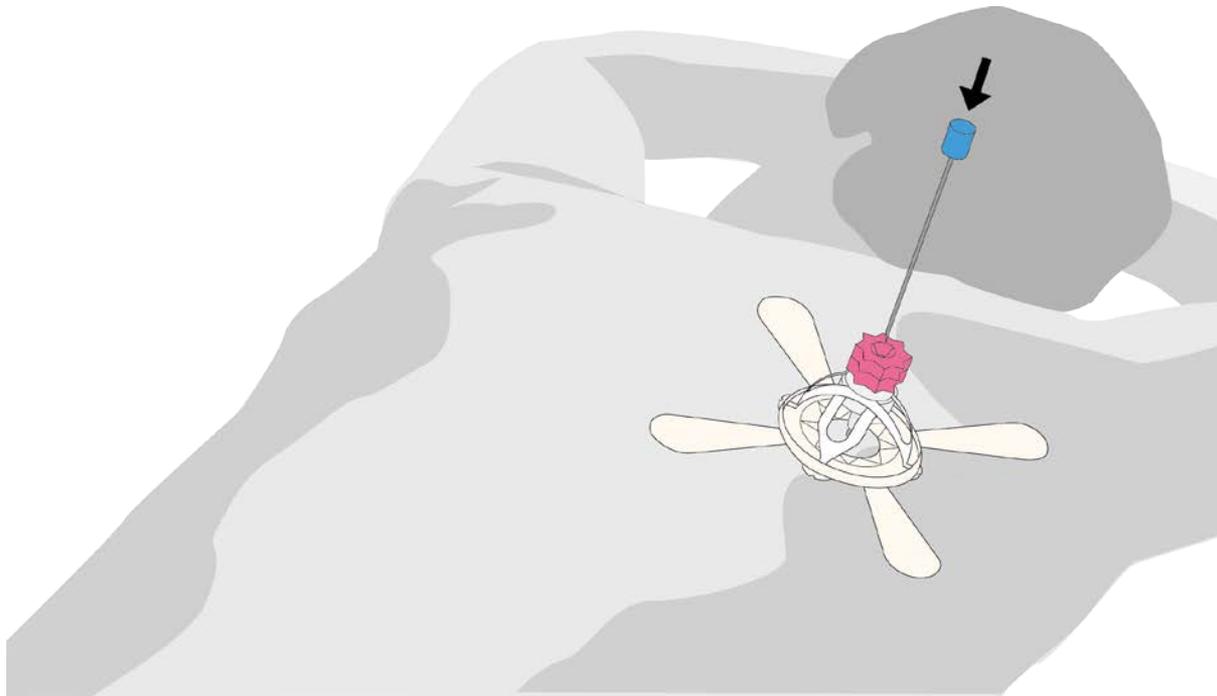
Example:

Desired depth	4.2 cm
Needle guide length	4 cm
<hr/>	
Puncture depth	8.2 cm

Step 7

Carry out the puncture by inserting the puncture needle through the SeeStar[®] needle guide.

Before sample or intervention, verify the needle's position using CT imaging.

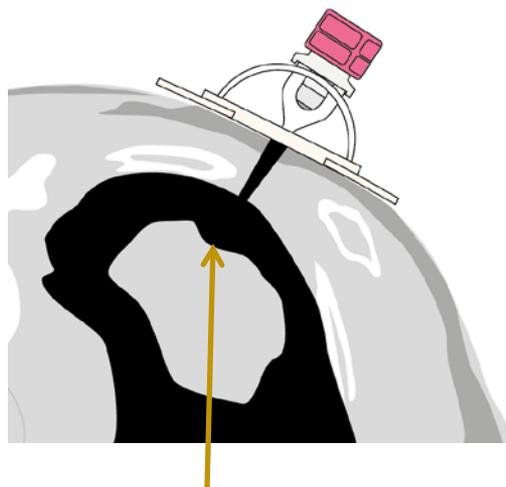


Step 8

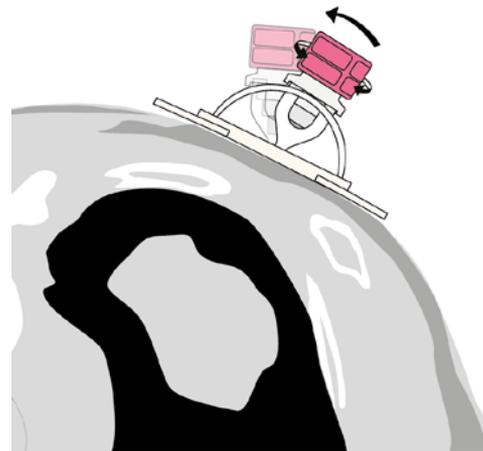
If repeat punctures are required from the same area, SeeStar® can be left in position.

Other areas can be sampled from the same entry point by redirecting the needle guide.

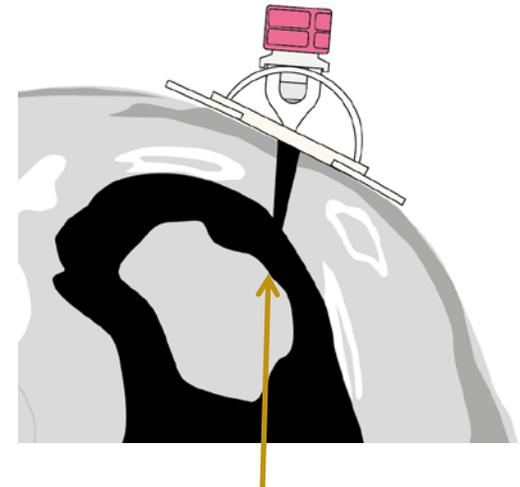
Before each puncture, verify the needle's position using CT imaging.



First puncture site



Leave SeeStar in place and redirect



Second puncture site