### Step by step description -Use of Morrison Steerable Needle®

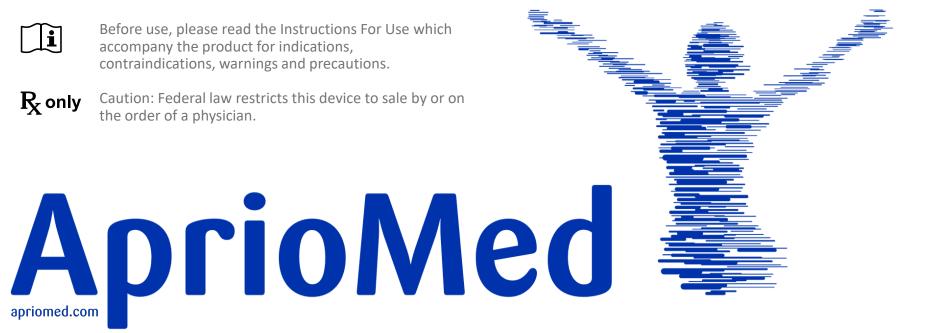
Indication for use: Percutaneous injection and aspiration procedures and tissue sampling in liver, kidney, muscle and subcutaneous tissue.



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.



#### General information



Morrison Steerable Needle® is intended for single use. After use, the product characteristics and performance may degrade, and can cause infection in patient



Do not re-sterilize Morrison Steerable Needle \*. Re-sterilization may have impact on product characteristics and performance



Do not use Morrison Steerable Needle <sup>®</sup> if the package is damaged. Product in damaged package may be contamined and can cause infection in patient

After use, the components may be a potentional biohazard. Handle and dispose of in accordance with accepted medical practice and applicable local, state and federal laws and regulations

Before use together with other equipment, check the compatibility in length and gauge together with Morrison Steerable Needle \*



# Terminology

#### Steerable Stylet



#### 21G Needle





#### Introduction



Morrison Steerable Needle® is a steerable FNA biopsy needle for use under CT, X-ray or ultra-sound guidance.

This step by step guide describes a procedure where Morrsion Steerable Needle® is advanced to target, rounding bone and carefully avoiding neurovascular bundle



Procedural warnings associated with each step are highlighted in blue



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Insert device superficially, aligning the device with the imaging plane

Make a scan using CT, X-ray or ultrasound and identify target and areas to avoid



3 associated warnings, see next page



# Warning – be careful



Verify that the 21G Needle and the Steerable Stylet are used together. Use of Steerable Stylet without 21G Needle may cause stylet breakage



Only use the 21G Needle supplied in the package. Use of a too short needle may cause permanent stylet deformation and harm surrounding tissue. Use of a too long or larger gauge needle may cause incorrect behavior of needle



Do not use Morrison Steerable Needle® in Magnetic Resonance Imaging (MRI) equipment. The device is magnetic and exposure to MRI may cause unintended device movement





Turn lever in direction of target or away from danger

The 21G Needle will remain in position until the device is retracted or advanced







Advance device. Device will curve in the direction of the lever tip, and in the same plane as the lever turns

Monitor device tip position using CT, X-ray or ultra-sound.



3 associated warnings, see next page





# Warning – be careful



Verify the device location using imaging techniques after every device adjustment and before injection or aspiration.

21G Needle adjustments and advancements may vary



Be careful when approaching hard surface. If the 21G Needle kinks, retract both the Steerable Stylet and the 21G Needle together



If the 21G Needle kinks, stop the procedure and retract both the Steerable Stylet and the 21G Needle together. Applying additional force to a kinked needle may cause needle breakage and result in materials remaining in the body





Before making additional adjustments, return lever to its original upright position







To change steering direction, rotate the Steerable Stylet while keeping the 21G Needle in place



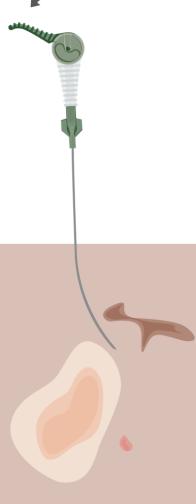
Relax the Steerable Stylet by turning the lever to its original upright position before rotating the Steerable Stylet. Rotating without relaxing the Steerable Stylet may result in change of location of the 21G Needle





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Turn lever to desired degree of deflection





Advance device. Device will curve in the direction of the lever tip, and in the same plane as the lever turns

Monitor device tip position using imaging technique



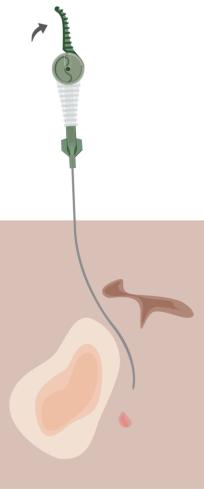
Verify the device location using imaging techniques after every device adjustment and before injection or aspiration. 21G Needle adjustments and advancements may vary







To advance device on a straight path, return lever to its original upright position



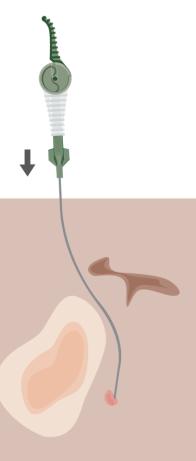
Advance device to target



Monitor device tip position using imaging technique



Verify the device location using imaging techniques after every device adjustment and before injection or aspiration. 21G Needle adjustments and advancements may vary



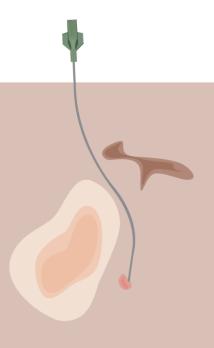
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Remove Steerable Stylet

Injection, aspiration or biopsy can now be performed through the 21G Needle



Relax the Steerable Stylet by turning the lever to its original upright position before retracting the Steerable Stylet or the device. Retracting without relaxing the Steerable Stylet may cause scratching and damage to the surrounding tissue



#### About



**AprioMed** develops, manufactures, markets and sells innovative medical devices and related services within the field of interventional radiology. We aim to deliver, in close collaboration with healthcare practitioners, innovative, quality tools to achieve optimal solutions for radiologists worldwide.

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