

## **Appendix 2: Suggested Nexplanon insertion procedure**

***NOTE THAT THIS IS BASED ON THE OPINION AND EXPERIENCE OF THE GUIDELINE DEVELOPMENT GROUP AND IS INTENDED AS A GUIDE ONLY.***

- ▶ **NEXPLANON SHOULD ONLY BE INSERTED BY A HEALTHCARE PRACTITIONER WHO HAS UNDERTAKEN APPROPRIATE TRAINING IN THE PROCEDURE AND MAINTAINED UP-TO-DATE SKILLS.**

▶ **Resuscitation equipment**

Ensure resuscitation equipment is available as required by local protocol. There is a small risk of collapse due to vasovagal reaction or anaphylaxis.<sup>218</sup>

▶ **Positioning the patient**

- ▶ Lie the patient flat on their back.
- ▶ Identify the non-dominant arm.
- ▶ Place the patient's arm in the appropriate position:
  - ▶ Abduct the arm to 90°
  - ▶ Bend the arm at the elbow
  - ▶ Put the patient's hand under their head.

▶ **Identifying the insertion point**

See diagrams included in the Nexplanon package insert, diagrams in the SPC for Nexplanon<sup>5</sup> and video (insertion and removal) online at [www.nexplanonvideos.eu](http://www.nexplanonvideos.eu).<sup>163</sup>

- ▶ Identify the sulcal line (the groove between brachialis/biceps anteriorly and triceps posteriorly) by asking the individual to tense the muscles. Consider marking the sulcal line.
- ▶ Measure 8–10 cm along the sulcal line from the medial epicondyle. From this point measure 3–5 cm posteriorly over triceps, perpendicular to the sulcal line. Consider making a mark here to identify the insertion site. A mark may also be made on the sulcal line 5 cm proximal to the insertion site to guide the direction of insertion.
- ▶ **Put on gloves (non-sterile or sterile) and clean the skin at the insertion site using chlorhexidine and alcohol or similar, according to local policy.**<sup>219</sup> The GDG is unable to comment as to whether wipes or solution should be used.
  - ▶ A 'no-touch' technique should be used from this point on to minimise infection risk.
  - ▶ Ensure that the arm remains in the correct insertion position as described above; do not straighten the arm during insertion.
  - ▶ Avoid puncturing the skin through any ink mark to avoid tattooing.
- ▶ **Anaesthetise the insertion site using either lidocaine 1% or ethyl chloride spray**
  - ▶ **Lidocaine 1%** may be used with or without adrenaline 1:200 000 (adrenaline may reduce bleeding). Aspirate prior to injection to avoid accidental intravenous administration. Infiltrate the skin at the point of insertion; some clinicians choose (and the SPC recommends) also to infiltrate along the insertion track, although there are no pain receptors in the subdermal layer. A maximum of 2–3 ml of lidocaine 1% is required.
  - ▶ **Ethyl chloride spray.** Spray the insertion site (avoiding contact with the face) for approximately 5 seconds, until the skin looks visibly white. Insertion must then be immediate, within 45–60 seconds. It is important to avoid over-cooling of the skin.
- ▶ **Nexplanon insertion**

**NOTE THAT THE INSERTION DEVICE MUST NOT BE RELIED UPON TO ENSURE SUPERFICIAL INSERTION.**

  - ▶ Keep the skin taut using the non-inserting hand (avoid putting fingers in front of the needle tip).
  - ▶ Work at eye level to ensure adequate visualisation.
  - ▶ Grip the insertion device on the textured areas just above the needle.

**FSRH**

- ▶ **Puncture the skin at the insertion site with the insertion needle at <math><30^\circ</math> to skin surface.** To avoid tattooing, insertion should be immediately adjacent to any insertion site mark rather than through the ink mark.
- ▶ **Once the skin has been punctured, lower the applicator to a horizontal position** and retract the insertion device slightly until the bevel is just under the skin (this aims to aid superficial subdermal insertion).
- ▶ **Advance the insertion needle proximally in the subdermal layer, parallel to the sulcal line while lifting the skin with the inserter.**
  - ▶ View from the side at eye level so that the applicator does not obstruct your ability to watch the needle advancing under the skin.
  - ▶ Ensure the insertion needle is always parallel to the skin surface.
  - ▶ Do not touch the purple trigger until you have **fully** inserted the needle subdermally as this would retract the needle and prematurely release the implant from the applicator.
- ▶ **Once the full length of the insertion needle is under the skin, lift the applicator and observe from the side to ensure subdermal insertion.**
  - ▶ If at this stage the insertion needle appears too deep, withdraw the applicator with the implant still in place until the bevel is just visible, then reinsert subdermally.
- ▶ **Once subdermal positioning is confirmed, keep the applicator still and pull the purple trigger back fully.**
  - ▶ This releases the implant under the skin and withdraws the insertion needle into the plastic casing. Check the insertion device to ensure that the implant has been inserted before disposing of the insertion device in a sharps bin.
- ▶ **Post-insertion**
  - ▶ Apply local pressure until haemostasis is achieved.
  - ▶ The practitioner must palpate the implant in situ following insertion (palpate both ends).
  - ▶ Apply a sterile pressure dressing for 24–48 hours. Some practitioners also apply a sterile adhesive dressing to the insertion site, underneath the pressure dressing.
  - ▶ Advise patient about infection, bruising and wound care.
  - ▶ Advise patient to feel for implant on removal of the dressing (with clean hands).