

Introduction



Since its introduction Implanon, the single-rod contraceptive implant developed by Organon, has been received positively by physicians and users (*Mascarenhas 2000; Urbanscek 1998*). More than 1,000,000 women worldwide are currently using this method of contraception.

However, a small number of cases have been reported in which the implant has not been inserted in accordance with the insertion procedure as described in the Implanon package insert. This can result in non-palpable implants that necessitate the use of other localization techniques.

This manual is intended as a guide to help physicians insert, and subsequently locate and remove implants. If you require additional information or support, please contact the local Organon affiliate in your country. Telephone numbers of Organon affiliates are included in the final section of this manual.



- 1 obturator
- 2 needle
- 2a enlarged view of needle tip
- 3 plastic body
- 4 needle cover
- 5 Implanon rod

Please note that in order to support appropriate use of Implanon, Organon has established a training program in all countries where this product is available to familiarize physicians and other health care professionals with all aspects of its use. Participants of the training program have the opportunity to practice insertion and removal techniques under professional guidance. Organon strongly recommends all physicians interested in Implanon to take part in this training program. Further details are available from your local Organon affiliate.

Insertion procedure



Organon would like to point out the importance of following the insertion procedure as detailed in the Implanon package insert. Therefore, Implanon should only be inserted by physicians who are familiar with the procedure (*Mascarenhas, 1998*). Organon organizes local training programs to offer physicians the opportunity to practice insertion and removal techniques under professional guidance.

The instructions for the insertion of Implanon, as presented in the international Summary of Product Characteristics (SmPC) text on the package insert, are **included here**. This SmPC-text may deviate from the text that is approved for your country.

For your convenience, we would like to reiterate the following key points:

- Insert Implanon at the correct time in accordance with the information in the package insert.*
- Visually check the presence of the implant inside the needle prior to insertion.
- Keep the applicator upright after removing the cap.
- Always follow the insertion procedure as described in the package insert.
- Check if the needle is empty after insertion.
- **Always** palpate the implant immediately after insertion.

*N.B. Failure to follow advice with regard to correct timing of insertion and correct insertion technique can result in unintended pregnancies.

The correct insertion of Implanon determines the ease of removal. Insertion should therefore be carried out following the insertion procedure as detailed in the Implanon package insert. Implanon should only be inserted by physicians familiar with the insertion and removal technique of Implanon.

For an animated version of the insertion of Implanon, please [click here](#).

For a video of a real-life insertion, please [click here](#).

Reasons for difficult localization



Organon is aware of a small number of reports relating to difficulties with localizing the implant. Difficult localization of the implant can be caused by:

- Incorrect insertion technique; either too deeply and/or an injection* technique was used.
- Insertion in the wrong place; biceps, dominant arm, leg or abdomen.
- Non-insertion; the implant was still in the needle after 'insertion' or had fallen out of the needle before 'insertion'.

Migration of the implant has been reported as a possible reason for difficulties in localizing the implant. Migration of Implanon was reported in the clinical trial program and was associated with repetitive pushing of the rod shortly after insertion. Spontaneous migration of the implant is not likely, since the implant is encapsulated by fibrotic tissue shortly after insertion. However, some movement (1–2 cm) of the rod in a longitudinal direction is possible.

Reasons for difficult localization of Implanon are incorrect insertion technique, insertion in the wrong place and non-insertion. Migration of the rod is not likely to be the cause of a difficult localization.

**Incorrect insertion technique: the obturator is pushed instead of the needle retracted, resulting in a curled and too deeply positioned implant*

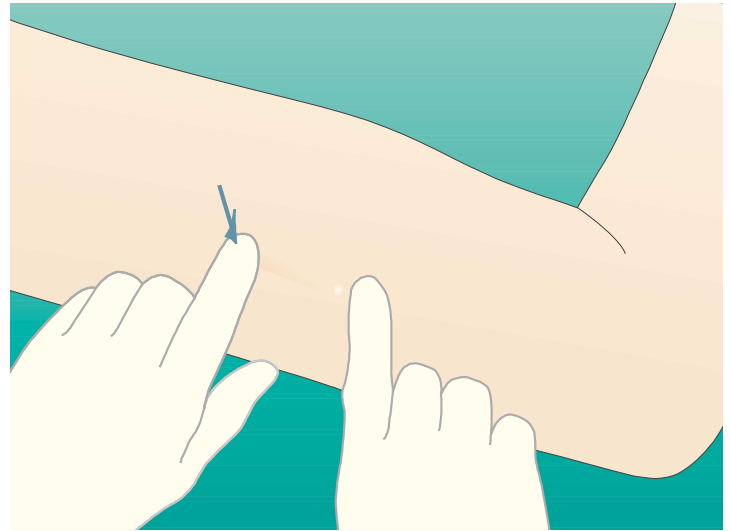
Localization techniques



Palpation

Palpation is an essential verification of the position of an inserted implant. Correctly inserted implants are distinctively and clearly palpable. Palpation is an important part of the insertion procedure and should **always** be carried out.

If initially the implant is not palpable, try to move your fingers from proximal to distal and vice versa to find the tips of the implant (rather than the implant itself). If the implant is not clearly palpable, the presence and position of the implant need to be confirmed by ultrasound examination. In the meantime, women should be advised to use a barrier method for contraception.



Localization techniques

Ultrasound Sonography (USS)

From an earlier study ([Lantz et al. 1997](#)) it is known that a correctly inserted single-rod implant can be located by ultrasound, but since the implant is not radio-opaque it cannot be located by X-ray or CT-scan. Because ultrasound equipment is widely available and the examination is relatively simple, it is the method of choice to localize non-palpable implants.

Implanon can be localized by ultrasound using transducers commonly available in the gynecologist's office. Best results, however, are obtained with high frequency linear array transducers ([Kaptein and Ganpat, 2002](#)). Because of the specific expertise of radiologists in localization techniques and their access to high frequency transducers, co-operation between gynecologist and radiologist is indicated when non-palpable implants need to be visualized. Since identifying Implanon might be difficult to the untrained eye, we produced this website as a guide to help physicians locate and subsequently remove non-palpable implants. If you require additional information or support, please contact the local Organon affiliate in your country.

Ultrasound equipment

Because Implanon has a cross-sectional diameter of only 2 mm, high resolution is important for ultrasound visualization. As can be seen in figures 4 to 13, Implanon can be visualized with all US transducers, high, intermediate and low frequency. However, the best results are obtained with high frequency transducers including a high frequency linear array transducer (12-5 MHz) and a very high frequency linear array transducer (15-7 MHz). When using a low or intermediate frequency transducer, application of a silicone patch or a large amount of gel enhances visibility of the implant.

The HDI ultrasound systems of Philips Medical Systems, in particular the HDI 5000, are well suited for the identification of corpora aliena like the implant (Fig. 1). Philips Medical Systems incorporates the so-called Sono Compound Technique (SonoCT) in its ultrasound systems. This technique produces one compound image of nine different images from nine different angles, compared with a single line of sight with conventional ultrasound.

As can be seen in figures 2A and 2B, the SonoCT produces a distinctive acoustic shadow. Many details of the implant and the surrounding tissue can be visualized. The different beams may also be helpful in the exact positioning of the actual implant, but they are not essential.

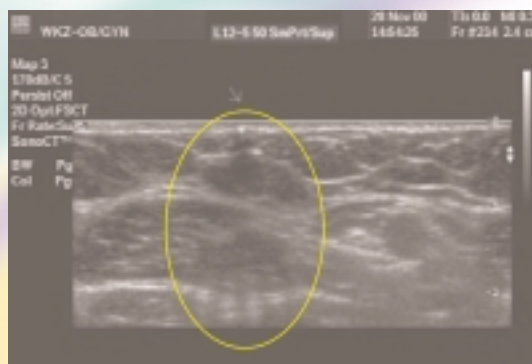


Figure 2a

Acoustic shadow of Implanon using SonoCT Compound technique. Please note that the acoustic shadows indicate the exact position of the implant, which is visible as an echogenic spot.



Figure 1

Locating an Implanon rod with Philips HDI 5000 ultrasound equipment.

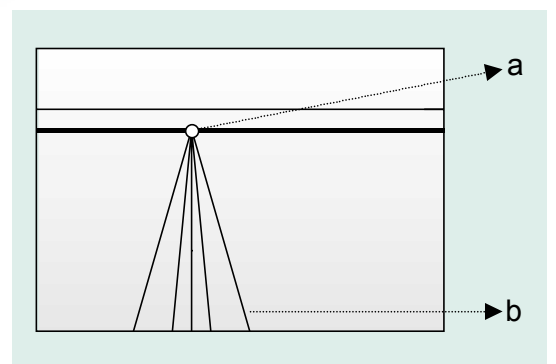


Figure 2b

Schematic representation of figure 2a indicating the position of the acoustic shadow (b) opposite the echogenic spot (a).

Before starting the ultrasound examination

If you did not carry out the insertion yourself, it is important to determine where the implant was (approximately) inserted. Key information can be obtained from the [patient user card](#) and by asking the patient the following questions:

1. How and in which direction was the implant inserted?
2. Was/is a scar visible at the insertion site?

Standard advice is that the implant should be inserted at the inner side of the non-dominant upper arm, in the groove between the biceps and triceps. It should be placed about 6-8 cm above the elbow crease directly under the skin in the subdermal tissue.

Identification of Implanon

Implanon can be identified and located by its **acoustic shadow** (see [figures 2a and 2b](#)). The ultrasound image of the implant is very distinctive and is unlikely to be overlooked in the surrounding tissue.

The acoustic shadow will enable you to identify the exact position of the implant itself, which will be visible as a small but clear **echogenic spot** (see [figures 2a and 2b](#)).

Guidelines for the ultrasound examination

1. Start the ultrasound examination at a 90° angle to the presumed longitudinal direction of the implant.
2. Focus superficially, since it is unlikely that the implant is inserted deeper than 3 cm after an incorrect insertion procedure.
3. When the acoustic shadow of the implant has been identified, look for the actual implant.
4. Turn the transducer 90° to attain a longitudinal view of the implant.
5. Finally, indicate the exact position of the implant on the skin.

Note: An example of an ultrasound examination where the transducer is turned 90° to obtain a longitudinal view of the implant, is shown in [video clip 1](#).

Correctly inserted implant

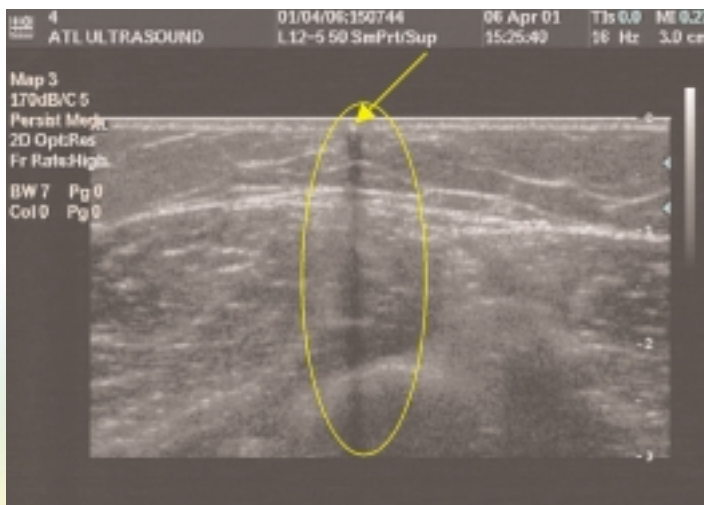


Figure 3

Transversal ultrasound image without SonoCT of a correctly inserted implant using a 12-5 MHz transducer. Please note the superficial position of the implant, indicated by the arrow and the clear acoustic shadow indicated by the circle.

Incorrectly inserted implants

Intramuscular insertion

The ultrasound images numbered 4 to 13 show an implant inserted in the musculus biceps. With this series of images of the same patient we would like to show that Implanon can be localized with low, intermediate and high frequency transducers. As can be seen in figures 4 to 13 the best results are obtained with the high frequency transducers.



Figure 4

Transversal ultrasound image of an implant inserted in the m. biceps, using a 15-7 MHz transducer. Please note that the arrow indicates the actual implant and the circle indicates the acoustic shadow.

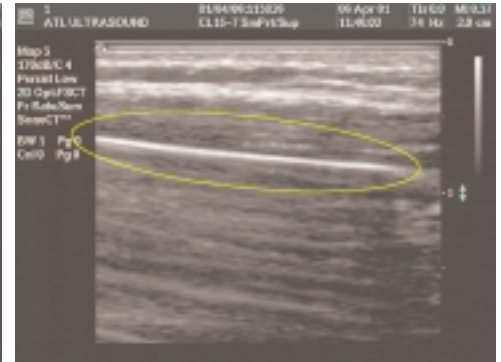


Figure 5

Longitudinal ultrasound image of the full length of an implant inserted in the m. biceps, using a 15-7 MHz transducer. The circle indicates the actual implant.



Figure 6

Transversal ultrasound image of an implant inserted in the m. biceps, using a 12-5 MHz transducer. The arrow indicates the actual implant and the circle indicates the acoustic shadow.



Figure 7

Longitudinal ultrasound image of the full length of an implant inserted in the m. biceps, using a 12-5 MHz transducer. The circle indicates the actual implant.



Figure 8

Transversal ultrasound image of an implant inserted in the m. biceps, using an 8-4 MHz vaginal transducer. The arrow indicates the actual implant and the circle indicates the acoustic shadow.

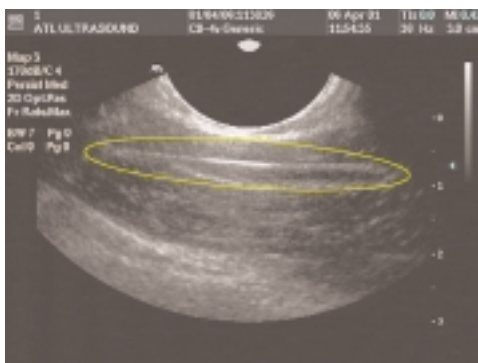


Figure 9

Longitudinal ultrasound image of the full length of an implant inserted in the m. biceps, using an 8-4 MHz vaginal transducer. The circle indicates the position of the actual implant.



Figure 10

Transversal ultrasound image of an implant inserted in the m. biceps, using a 7-4 MHz transducer. The arrow indicates the actual implant and the circle indicates the acoustic shadow.



Figure 11

Longitudinal ultrasound image of the full length of an implant inserted in the m. biceps, using a 7-4 MHz transducer. The circle indicates the position of the actual implant.



Figure 12

Transversal ultrasound image of an implant inserted in the m. biceps, using a 5-2 MHz transducer. The arrow indicates the actual implant and the circle indicates its acoustic shadow.

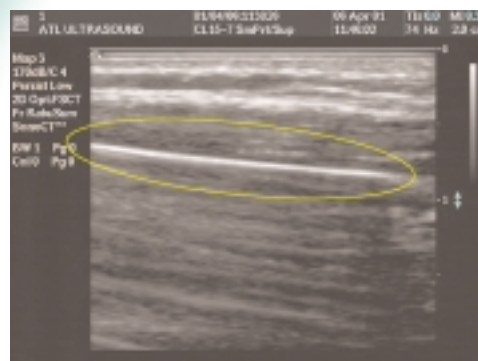


Figure 13

Longitudinal ultrasound image of the full length of an implant inserted in the m. biceps, using a 5-2 MHz transducer. The circle indicates the position of the actual implant.

Injection technique

The ultrasound images of figures 14 and 15 show an implant that was difficult to palpate. It was found that the proximal tip was localized deeper than the distal tip, moreover the implant was slightly curled indicating the use of an incorrect "injection" technique. Since the implant was curled it was not possible to obtain a proper longitudinal view of the implant.



Figure 14

Transversal ultrasound image of the distal tip of an implant inserted with the "injection" technique, using a 15-7 MHz transducer. The arrow indicates the actual implant and the circle indicates its acoustic shadow.



Figure 15

Transversal ultrasound image of the proximal tip of an implant inserted with the "injection" technique, using a 15-7 MHz transducer. The arrow indicates the actual implant and the circle indicates its acoustic shadow.

Note: [Video clip 2](#) shows the position of the proximal and distal tip of the implant, indicating the "injection" technique.

Subfascial insertion

The ultrasound images of figures 16 to 18 show an implant that was inserted erroneously on top of the upper arm instead of the inner side. The layer of connective tissue is much thinner at this place and combined with an incorrectly performed insertion technique this resulted in an implant inserted just underneath the fascia brachii of the musculus biceps, which made it impossible to palpate.

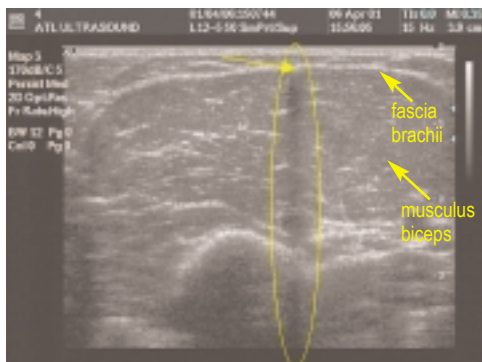


Figure 16

Transversal ultrasound image of an implant inserted just underneath the fascia brachii of the musculus biceps using a 12-5 MHz transducer. The arrow indicates the actual implant and the circle indicates the acoustic shadow.



Figure 17

Transversal detailed ultrasound image of the subfascial position of an implant using a 15-7 MHz transducer. The arrow indicates the actual implant and the circle indicates the acoustic shadow.



Figure 18

Longitudinal ultrasound image of the full length of an implant inserted just underneath the fascia brachii of the musculus biceps using a 12-5 MHz transducer.

Localization techniques



Magnetic Resonance Imaging (MRI)

Because of the low cost, the wide availability and high success rate of USS localization, it should be the first imaging modality applied when localizing Implanon. However, it might not always be successful. The next option is Magnetic Resonance Imaging, which is the best method for unequivocal localization of non-palpable, ultrasonographically not detectable Implanon rods (Merki-Feld et al. 2001).

MRI techniques

Implanon produces a so-called 'signal void' in MRI. This means that Implanon has a low/no signal return and can be identified as a black structure against adjacent structures.

In order to image the implant, it is important that a sequence is chosen which renders the structures around the implant as bright as possible. The implant itself is then visible as a black structure. When the implant is inserted in the subcutaneous fat, fat saturation is not desirable since it makes the low signal implant more difficult to see against the low signal background.

The most satisfactory sequence so far, as can be seen in figures 19a and 19b, is a 3D-gradient echo weighed sequence. This sequence generally renders muscles, tendons and fat with intermediate to high signals.

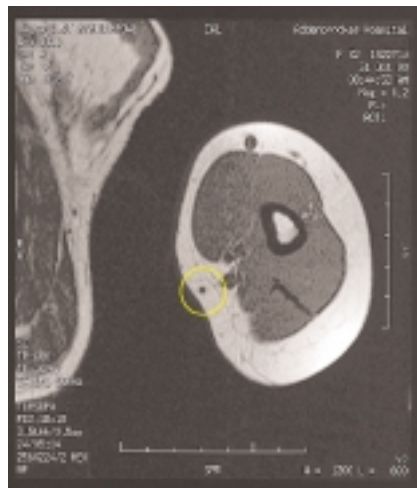


Figure 19a
MR image of Implanon inserted subdermally in the sulcus bicipitalis of the upper arm in the transversal plane. The circle indicates the actual implant.

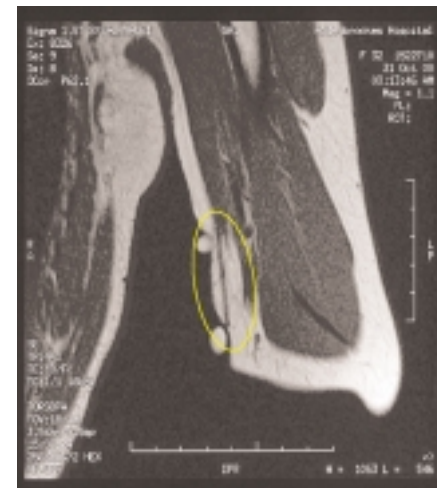


Figure 19b
MR image of Implanon inserted subdermally in the sulcus bicipitalis of the upper arm in the longitudinal plane. The circle indicates the actual implant.

Figure 20 shows an implant inserted intramuscularly. In addition, vessels containing flowing blood render high signals as well; this prevents vessels accidentally being identified as the implant. Intravenous administration of Gadolinium (Schering AG) increases the signals of vessels and can allow a clearer discrimination from the implant (Merki-Feld et al. 2001).



Figure 20
MR image in the longitudinal plane of Implanon inserted just underneath the fascia brachii of the musculus biceps. The circle indicates the actual implant.



Removal procedure

Easy and quick removal of Implanon depends mainly on a correct insertion procedure, but also on knowledge about and some experience with the removal procedure. Therefore, Implanon should only be removed by physicians who are familiar with the removal procedure. Organon would like to point out the importance of following the removal procedure as detailed in the Implanon package insert.

In case of non-palpable implants, localization (USS or MRI) prior to removal is essential. Clinical experience to date has shown that exploratory surgery without exact knowledge of the location of the implant is unsuccessful and will cause avoidable scarring. If non-palpable implants are located under the fascia of the musculus biceps (either subfascially or intramuscularly), removal under ultrasound guidance in cooperation with a radiologist is indicated. In specific cases cooperation with a (plastic) surgeon can be indicated.

The instructions for the removal of Implanon, as presented in the international SmPC text, are also [included here](#). This SmPC-text may deviate from the text that is approved for your country.

For your convenience, we would like to reiterate the following key points:

- Localize the implant prior to removal.
- Non-palpable implants should always first be localized by USS (or MRI).
- After anaesthetizing the incision site, make a small longitudinal incision.
- Push the implant out or grasp it with forceps.
- Close the incision with butterfly closure and apply a pressure bandage.
- Exploratory surgery is explicitly contraindicated.

For an animated version of the removal of Implanon, please [click here](#).

For a video of a real-life removal, please [click here](#).

Determination of serum etonogestrel levels



If the implant cannot be localized by palpation, USS or MRI it should be verified whether the Implanon rod is actually present in the arm. Presence of an Implanon rod can be unequivocally verified by determining etonogestrel (ENG) levels in the serum of the woman. The determination of serum ENG levels is a service provided by your Organon affiliate. Therefore they should be contacted in case you consider an ENG determination necessary.

Below you will find the correct procedures for sampling, processing, labeling, storage and shipment of human serum for ENG determination.

Procedures for sampling, processing, labeling, storage and shipment of human serum for etonogestrel determination

Blood sampling

- Collect 10 ml blood into a full blood coagulation tube, or directly into a glass or hard plastic centrifuge tube.*

**N.B. The use of soft plastic tubes should be avoided, because of the possible release of impurities.*

Processing

- Store the blood samples in the centrifuge tubes for about 30 minutes at ambient temperature to allow coagulation. If a longer period between sampling and processing cannot be avoided, place the samples at 0–4 °C after 30 minutes, to reduce haemolysis. Any delay should always be as short as possible.
- Centrifuge the samples for 15 minutes at 2000 g.
- Divide the serum into 4 tubes of 1.2 ml each.
- Fill the tubes no higher than 75%, in order to prevent the risk of fracture during deep freezing at approximately –20 °C.

Labeling

- Use a typewriter or ballpoint pen to write on the labels.
- The adhesive labels should contain at least the following information: subject identification (initials), date of birth, date of blood collection.
- Label tubes before freezing.

Storage

- In case the serum samples cannot be shipped immediately by courier, they should be stored after preparation in a deep-freezer at approximately –20 °C.

Shipment

- Please contact your local Organon affiliate for further courier, shipment and address details.
- After shipment, a letter confirming the arrival of the sample and the date of the ENG determination will be sent to you.

How to contact us



Local Organon Affiliates

Name	Country	Telephone number
Organon Argentina SAQI yC.	Argentina	(+54) 11 4789 7500
Organon Australia Pty Ltd	Australia	(+61) 2 9428 9411
Organon GmbH	Austria	(+43) 1 546 030
Organon België nv/sa	Belgium	(+32) 2 6635400
Akzo Nobel Ltda – Organon do Brasil	Brasil	(+55) 11 3882 4500
Hormoquimica de Chile Ltda	Chile	(+56) 2 2772278
Organon AS	Denmark	(+45) 44 84 6800
Organon	Egypt	(+20) 2 6360 851/853/854
Oy Organon AB	Finland	(+358) 9 72 57 9500
Organon SA	France	(+33) 1 55 23 5000
Organon GmbH	Germany	(+49) 89 31 56 201
Organon Hungary Trading Ltd	Hungary	(+36) 1 339 9400
PT Organon Indonesia	Indonesia	(+62) 21 73 59 988
Organon Italia SpA	Italy	(+39) 06 701 921
Organon Korea Ltd	Korea	(+82) 2 96 53 222
Organon Malaysia Sdn Bhd	Malaysia	(+60) 3 72 40 532
Organon Mexicana SA de CV	Mexico	(+52) 5 354 1000
Organon Philippines Inc	Philippines	(+63) 2 81 77 638
Organon Portuguesa-Produtos Quimicos e Farmaceuticos Ltda	Portugal	(+351) 21 313 3737
Organon Agencies bv	Slovak Republic	(+421) 2 55 56 8071
Organon (Espanola) SA	Spain	(+34) 93 47 51 000
Organon AB	Sweden	(+46) 31 72 06 500
Organon AG	Switzerland	(+41) 55 41 51 911
Organon Thailand Ltd	Thailand	(+66) 2 65 67 955
Organon Nederland bv	The Netherlands	(+31) 412 66 6922
Organon Ilaclari AS	Turkey	(+90) 216 495 6490
Organon Laboratories Ltd	United Kingdom	(+44) 1223 43 2700
Organon Venezuela SA	Venezuela	(+58) 212 753 2511
Organon nv	Vietnam	(+84) 8 824 5072

**Visit our Implanon localization web-site:
www.organon.com/implanonlocalization**

References



Kaptein MCJ and Ganpat R. Localization of non-palpable single-rod contraceptive implants using ultrasound sonography. Presented at the 7th Congress of the European Society of Contraception. Genova, Italy, 2002.

Lantz A, Noshier JL, Pasquale S, Siegel RL. Ultrasound characteristics of subdermally implanted Implanon contraceptive rods. *Contraception* 1997; 56: 323–7.

Mascarenhas L. Insertion and removal of Implanon. *Contraception* 1998; 58(Suppl): 79S–83S.

Mascarenhas L. Insertion and removal of Implanon: practical considerations. *Eur J Contracept Reprod Health Care* 2000; 5(Suppl 2): 29–34.

Merki-Feld GS, Brekenfeld C, Migge B, Keller PJ. Nonpalpable ultrasonographically not detectable Implanon rods can be localized by magnetic resonance imaging. *Contraception* 2001; 63: 325–8.

Urbancsek J. An integrated analysis of nonmenstrual adverse events with Implanon. *Contraception* 1998; 58(Suppl): 109S–15S.

How to Insert Implanon®



- Insertion of Implanon should be performed under aseptic conditions, and only by a physician who is familiar with the procedure.
- Insertion of Implanon is performed with the specially designed applicator. The use of this applicator differs substantially from that of a classical syringe. A drawing of a dismantled applicator and its individual components (e.g. cannula, obturator and needle with double-angled bevel) is shown in this leaflet to clarify their specific functions.
- The procedure used for insertion of Implanon **is opposite to giving an injection**. When inserting Implanon the **obturator** must remain fixed while the **cannula** (needle) is retracted from the arm. For normal injections the **plunger** is pushed and the **body** of the syringe remains fixed.
- Allow the subject to lie on her back with her non-dominant arm (the arm, which the woman does not use for writing) turned outwards and bent at the elbow.
- Implanon should be inserted at the inner side of the upper arm (non-dominant arm), about 6-8 cm above the elbow crease in the groove between the biceps and the triceps (sulcus bicipitalis medialis).
- Mark the insertion site.
- Clean the insertion site with a disinfectant.
- Anaesthetize with an anaesthetic spray, or with 2 ml of lidocaine (1%) applied just under the skin along the 'insertion canal'.
- Remove the sterile disposable applicator carrying Implanon, from its blister and remove the needle shield.
- Always hold the applicator in the upward position (i.e. with the needle pointed upwards) until the time of insertion. This to prevent the implant from dropping out.
- Visually verify the presence of the implant inside the metal part of the cannula (the needle). The implant can be seen as a white tip inside the needle. If the implant protrudes from the needle, return it to its original position by tapping against the plastic part of the cannula. Keep the needle and the implant sterile. If contamination occurs, a new package with a new sterile applicator must be used.

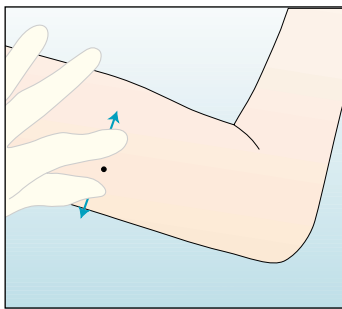


Figure 1

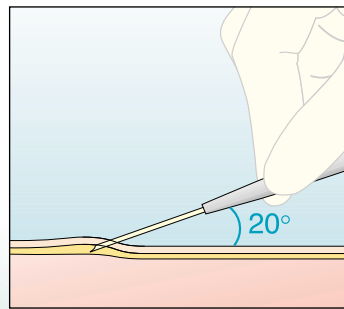


Figure 2

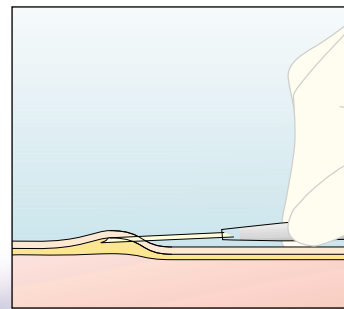


Figure 3

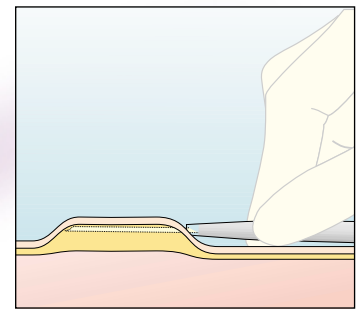


Figure 4

- Stretch the skin around the insertion site with thumb and index finger (Figure 1).
- Insert only the tip of the needle, slightly angled ($\sim 20^\circ$) (Figure 2).
- Release the skin.
- Lower the applicator to a horizontal position (Figure 3).
- Lift the skin with the tip of the needle, but keep the needle in the subdermal connective tissue (Figure 4).
- Gently insert, while lifting the skin, the needle to its full length without using force.
- Keep the applicator parallel to the surface of the skin.
- **When the implant is placed too deeply the removal can be hampered later on.**

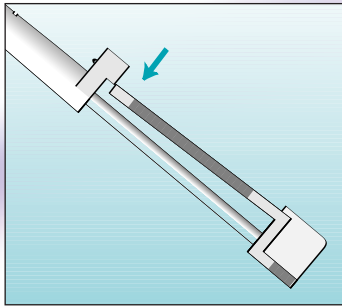


Figure 5

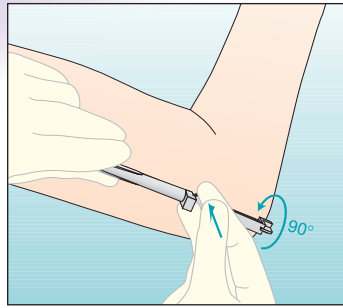


Figure 6

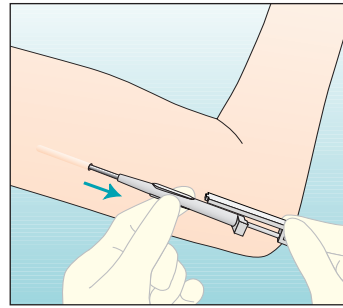


Figure 7

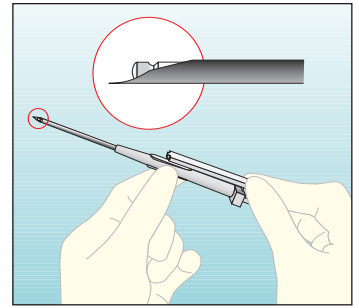
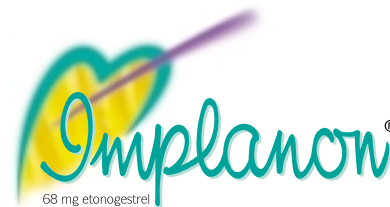


Figure 8

- Break the seal of the applicator (Figure 5).
- Turn the **obturator** 90° (Figure 6).
- Fix the obturator with one hand against the arm and with the other hand slowly retract the cannula (needle) out of the arm (Figure 7).
- **Never push against the obturator.**
- Check the needle for the absence of the implant. After retraction of the cannula, the grooved tip of the obturator should be visible (Figure 8).
- **Always verify the presence of the implant by palpation.**
- In case the implant can not be palpated or when the presence of the implant is doubtful, other methods must be applied to confirm its presence. Suitable methods to locate the implant are first of all ultrasound (USS) and secondly magnetic resonance imaging (MRI). Prior to the application of USS or MRI for the localization of Implanon, it is recommended to consult Organon for instructions. In case these imaging methods fail, it is advised to verify the presence of the implant by measuring the etonogestrel level in a blood sample of the subject. In this case Organon will also provide the appropriate procedure.
- **Until the presence of Implanon has been confirmed a contraceptive barrier method must be used.**
- Apply sterile gauze with a pressure bandage to prevent bruising.
- Fill out the User Card and hand it over to the subject to facilitate removal of the implant later on.
- The applicator is for single use only and must be adequately disposed of, in accordance with local regulations for the handling of biohazardous waste.

When to Insert Implanon®



No preceding hormonal contraceptive use

Implanon should be inserted between Day 1-5, but at the latest on Day 5 of the woman's natural cycle (Day 1 is the first day of her menstrual bleeding).

Changing from a combined oral contraceptive (COC)

Implanon should be inserted preferably on the day after the last active tablet (the last tablet containing the active substances) of her previous COC, but at the latest on the day following the usual tablet-free interval or following the last placebo tablet of her previous COC.

Changing from a progestogen-only-method (minipill, injectable, a different implant)

Implanon may be inserted any day when the woman is switching from a minipill (from another implant on the day of its removal, from an injectable when the next injection would be due).

Following first-trimester abortion

Implanon should be inserted immediately.

Following childbirth or a second-trimester abortion

(For breastfeeding women see 'Use during pregnancy and lactation'.)

Implanon, should be inserted on day 21-28 after delivery or second-trimester abortion. When the implant is inserted later, the woman should be advised to additionally use a barrier method on the first 7 days after the insertion. However, if intercourse has already occurred, pregnancy should be excluded or the woman's first natural period should be awaited before the actual insertion of the implant.

How to Remove Implanon®



- The precise location of the implant is indicated on the USER CARD.
- Locate the implant by palpation and mark the distal end. In case Implanon can not be palpated, it is strongly advised to locate the implant by either ultrasound (USS) or magnetic resonance imaging (MRI). Prior to the application of USS and MRI for the localization of Implanon, it is recommended to consult Organon for the proper instructions (Figure a).
- A non-palpable implant should always first be localized by USS (or MRI) and subsequently be removed under the guidance of USS.
- Wash the area and apply a disinfectant.
- Anaesthetize the arm with 0.5-1 ml lidocaine (1%) at the site of incision, which is just below the distal end of the implant (Figure b).

Note: Apply the anaesthetic **under** the implant. Application **above** the implant makes the skin swell, which may cause difficulties in locating the implant.

- Make an incision of 2 mm in length in the longitudinal direction of the arm at the distal end of the implant (Figure c).

- Gently push the implant towards the incision until the tip is visible. Grasp the implant with forceps (preferably 'mosquito' forceps) and remove it (Figure d).

- If the implant is encapsulated, an incision into the tissue sheath should be made and the implant can then be removed with forceps (Figures e and f).

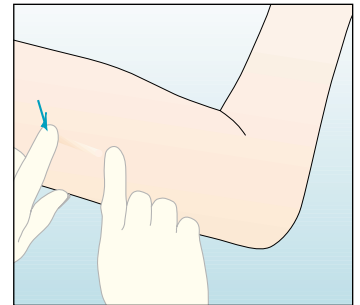


Figure a

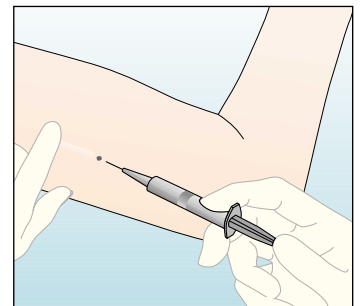


Figure b

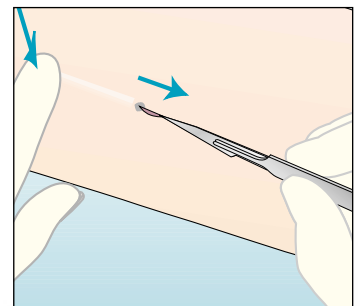


Figure c

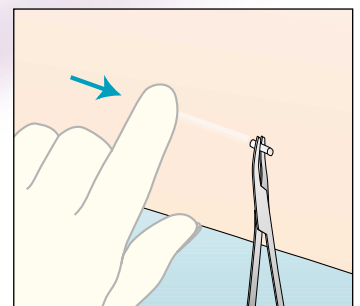


Figure d

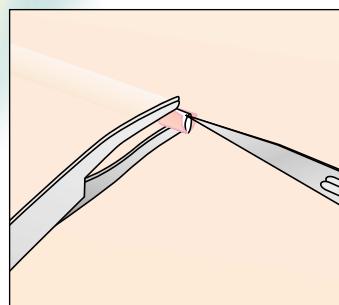


Figure e

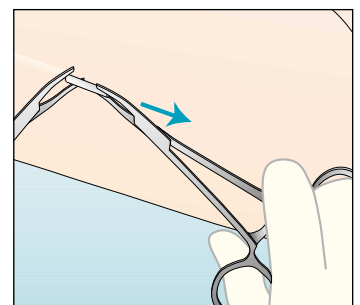


Figure f

- If the tip of the implant is not visible, gently insert a forceps into the incision and grasp the implant (Figures g and h).

With a second forceps carefully dissect the tissue around the implant.

The implant can then be removed (Figure i).

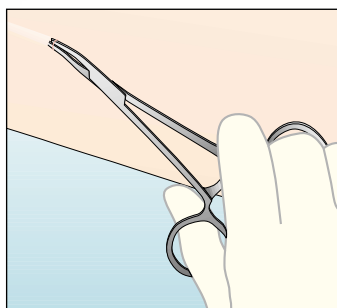


Figure g

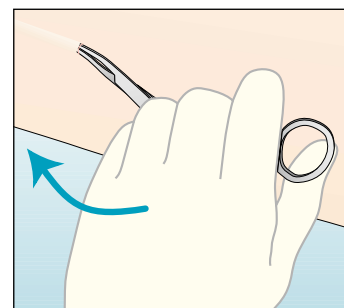


Figure h

- Close the incision with a butterfly closure.

- Apply sterile gauze with a pressure bandage to prevent bruising.

- There have been occasional reports of displacement of the implant; usually this involves minor movement relative to the original position. This may somewhat complicate removal.

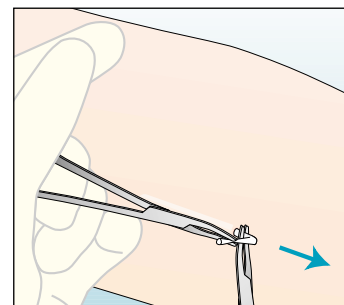


Figure i