Direct Healthcare Professional Communication on the association of Nexplanon – etonogestrel 68 mg, implant for subdermal use - Update to the insertion and removal instructions to minimise the risks of neurovascular injury and implant migration

Dear Healthcare Professional,

Merck Sharp & Dohme Limited, UK in agreement with the Medicine & Healthcare products Regulatory Agency (MHRA) would like to inform you of the following:

Summary
Cases of neurovascular injury and migration of the implant from the insertion site within the arm or in rare cases into the pulmonary artery have been reported and may be related to deep or incorrect insertion of Nexplanon. To further minimise the risk of neurovascular injury and implant migration the instructions on insertion and removal of the implant have been updated as follows:

- **Updated position of the arm**: The woman’s arm should be flexed at the elbow with her hand underneath her head (or as close as possible) during insertion and removal of the implant.

- **Updated implant insertion site**: The implant should be inserted subdermally, just under the skin at the inner side of the non-dominant upper arm. The updated insertion site is overlying the triceps muscle about 8-10 cm from the medial epicondyle of the humerus and 3-5 cm posterior to the sulcus (groove) between the biceps and triceps muscles. There is no need to replace implants inserted in accordance with the previous implant instructions, unless there are concerns.
A URL hosting videos demonstrating the insertion and removal of Nexplanon is available at www.nexplanonvideos.eu.

*Check for the presence of the implant:* You should palpate the implant immediately after insertion and at each check-up visit. It is recommended that the woman returns for a medical check-up three months after insertion of Nexplanon. You should instruct the woman to occasionally gently palpate the implant to ensure that the implant remains in its right location. If the implant is no longer palpable, she should contact her doctor as soon as possible. You are reminded to give the Patient Alert Card (formerly User Card) to the woman in which this information is reflected.

Non-palpable implants should only be removed by a Healthcare Professional experienced in removing deeply placed implants and who is familiar with localising implants and the anatomy of the arm.

The Product Information and Patient Alert Card for Nexplanon etonogestrel implant have been updated accordingly.

**Further information on the safety concern**
Nexplanon is a nonbiodegradable, single-rod, long-acting, hormonal contraceptive implant, inserted subdermally. If the implant is inserted deeper than subdermally (“deep insertion”), neural or vascular injury may occur. Deep or incorrect insertion has been associated with paraesthesia (due to neural injury) and migration of the implant (due to intramuscular or fascial insertion). Worldwide, a total of 107 cases of implant migration to the pulmonary artery or chest were identified since marketing authorisation of Nexplanon (28 August 1998) until 03 September 2019.

Based on advice of experts in the field and a further elucidation of the anatomic region of the arm with the lowest number of vascular/neurological structures, the instructions for the implant insertion site and position of the arm during insertion have been updated to minimise the risk of neurovascular injury following deep insertion. The insertion site should be located in an area overlying the triceps muscle, a location generally free of major blood vessels and nerves. Furthermore, the woman’s arm should be flexed at the elbow with her hand underneath her head (or as close as possible) during insertion and removal of the implant. This increased flexion should deflect the ulnar nerve away from the insertion site, potentially further reducing the risk of ulnar nerve injury during implant insertion and removal.
Further information on recommendations to healthcare professionals

In order to further minimise the risk of deep insertion and its potential consequences, the correct location of the implant (subdermally) should be confirmed by palpation by both the HCP and the woman at the time of insertion. HCPs are recommended to palpate the implant at each check-up visit and to instruct the woman to contact her doctor as soon as possible if she cannot feel the implant at any time between check-ups. You should instruct the woman to show the Patient Alert Card to the HCP at any visits related to the use of the implant. It is recommended that the woman returns for a medical check-up three months after insertion of the implant. Non-palpable implants should only be removed by an HCP experienced in removing deeply placed implants and who is familiar with localising the implant and the anatomy of the arm.

It is strongly recommended that Nexplanon be inserted and removed only by healthcare professionals who have completed training for the use of the Nexplanon applicator and the techniques for insertion and removal of the implant, and, where appropriate, that supervision be requested prior to inserting or removing the implant.

Call for reporting

Please continue to report suspected adverse drug reactions (ADRs) to the MHRA through the Yellow Card Scheme.

Please report:

- All suspected ADRs that are serious or result in harm. Serious reactions are those that are fatal, life-threatening, disabling or incapacitating, those that cause a congenital abnormality or result in hospitalisation, and those that are considered medically significant for any other reason
- All suspected ADRs associated with new drugs and vaccines identified by the black triangle ▼

It is easiest and quickest to report ADRs online via the Yellow Card website: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store.

Alternatively, prepaid Yellow Cards for reporting are available:

- By writing to FREEPOST YELLOW CARD
- By emailing yellowcard@mhra.gov.uk
- At the back of the British National Formulary (BNF)
- By telephoning the Commission on Human Medicines (CHM) free phone line: 0800-731-6789
- By downloading and printing a form from the Yellow Card website (see link above)

When reporting please provide as much information as possible, including information about medical history, any concomitant medication, onset, treatment dates, and product brand name.

Communication information

If you have questions regarding Nexplanon, or would like to organise re-training, please contact:

Merck Sharp & Dohme Limited
Tel: +44 (0) 1992 467272
medicalinformationuk@merck.com
Annexes:

- Annex 1: summary of key SmPC updates
- Summary of product characteristics, patient information leaflet and the risk minimisation materials are available on the eMC website (https://www.medicines.org.uk/emc/).

Yours sincerely,

[Signature]

Dr Dilruwan Herath
Medical Director
## Annex 1 - Summary of the key Summary of Product Characteristics (SmPC) updates

This annex is not a substitution for review of the SmPC. Please rely upon the SmPC to understand the complete update.

### Section 4.2 Posology and method of administration

| Method of administration | Inclusion of a website address for videos demonstrating insertion and removal of the implant  
|                         | Recommendation included for healthcare professionals (HCPs) not to attempt the procedure if they are unfamiliar with the necessary steps for safe implant insertion and/or removal  
| How to use Nexplanon    | Updated instructional text regarding the Patient Alert Card for the HCP to instruct the patient to keep it in a safe place and to show it at any visits to the HCP related to the use of her implant. The Card contains instruction for the patient to "occasionally gently palpate the implant to be sure that she knows its location and contact her doctor as soon as possible if she cannot feel the implant at any time."  
|                         | Updated the implant insertion site, which should be inserted subdermally just under the skin at the inner side of the non-dominant upper arm, overlying the triceps muscle about 8-10 cm from the medial epicondyle of the humerus and 3-5 cm posterior to the sulcus (groove) between the biceps and triceps muscles.  
| How to insert Nexplanon | Updated the implant insertion site (as described in "How to use Nexplanon")  
|                         | Updated positioning for the woman’s arm, which should be flexed at the elbow with her hand underneath her head (or as close as possible)  
|                         | Updated insertion instructions and figures, and added new figures to aid the HCP to perform a subdermal insertion.  
| How to remove Nexplanon | Updated to reinforce that implants should only be removed by HCPs familiar with the removal technique  
|                         | Clarification included on the procedure to be followed in the case of a non-palpable implant  
|                         | Updated positioning for the woman’s arm (as described in "How to insert Nexplanon")  
|                         | Updated instructions and figures for the removal of palpable implants  
|                         | Statement noting that if on pushing down one end of the implant, the opposite end does not create a bulge in the skin, the removal may be more challenging  
|                         | Recommendation to stop the procedure if the implant cannot be grasped  
|                         | Updated recommendation for the removal of non-palpable implants, specifying the implant should be removed by a HCP experienced in removing deeply placed implants and familiar with the anatomy of the arm  
| How to replace Nexplanon| Updated text to reinforce that a new implant may be inserted through the same incision from which the previous implant was removed if the previous insertion site is located in accordance with the updated instructions for insertion.  

### Section 4.4 Special warnings and precautions for use

| Medical examination/consultation | Recommendation for implant palpation to be conducted by the HCP at check up visits, in addition to immediately after insertion, and by the woman. The woman should contact her doctor as soon as possible if the implant cannot be palpated at any time. |