# **Breastfeeding and Medication**



### Liraglutide and Breastfeeding

There are no studies into the passage of liraglutide into breastmilk. However, the limited oral bioavailability makes it unlikely that it would be absorbed from breastmilk. This is supported by all expert sources as listed below (accessed January 2023)

Liraglutide binds to, and activates, the GLP-1 (glucagon-like peptide-1) receptor to increase insulin secretion, suppress glucagon secretion, and slow gastric emptying.

Saxenda<sup>™</sup> is given as an adjunct in weight management [in conjunction with dietary measures and increased physical activity in individuals with a body mass index (BMI) of 30 kg/m2 or more, or in individuals with a BMI of 27 kg/m2 or more in the presence of at least one weight-related co-morbidity] by self-administered subcutaneous injection (BNF).

Victoza<sup>™</sup> is given for Type 2 diabetes mellitus as monotherapy (if metformin inappropriate or not tolerated), or in combination with other antidiabetic drugs, (including insulin) if existing treatment fails to achieve adequate glycaemic control (BNF).

#### Compatibility with breastfeeding

- It is currently not known if liraglutide is excreted in human milk. The molecular weight of
  this medication means that it would have great difficulty entering breast milk. It is described
  as having zero oral bioavailability which is why it is given subcutaneously as a drug. In
  consequence very little of this medication would be absorbed by the infant orally even if
  found in breast milk. The risk of this in a breastfed infant would be expected to be very low
  (Hale and Krutsch).
- The manufacturer advises it is avoided in lactation due to lack of studies so its use in a lactating mother would be outside of the product licence. However, animal studies suggest that transfer into milk is low, but excretion into human milk not known (a tertiary source confirms lack of information in human lactation, but also states that risk to infants appears to be negligible. Blood glucose monitoring of the infant should be considered) (BNF)

# ©Dr Wendy Jones MBE Pharmacist Breastfeeding and Medication <u>www.breastfeeding-and-medication.co.uk</u>

January 2023 The information on this sheet is based upon my professional experience as a pharmacist with a specialised interest in the safety of drugs in breastmilk, supported by evidence from expert sources. However, I cannot take responsibility for the prescription of medication which remains with the healthcare professionals involved. I am happy to discuss the evidence by email wendy@breastfeeding-and-medication.co.uk

- No information is available on the excretion of liraglutide int milk or its clinical use during breastfeeding. Because liraglutide is a large peptide molecule with a molecular weight of 3751 daltons, the amount in milk is likely to be very low and absorption is unlikely because it is probably destroyed in the infant's gastrointestinal tract. Until more data become available, liraglutide should be used with caution during breastfeeding, especially while nursing a newborn or preterm infant. (<u>https://www.ncbi.nlm.nih.gov/books/NBK500977/</u>)
- Elactancia cites liraglutide as of very low risk in lactation (<u>https://www.e-lactancia.org/breastfeeding/liraglutide/product/</u>). Due to its protein nature, it deteriorates in the gastrointestinal tract, not being absorbed. Its pharmacokinetic data (high molecular weight and high percentage of plasma protein binding) make it very unlikely that significant amounts will pass into breast milk except in preterm infants and in the immediate neonatal period when there may be increased permeability.

#### Common or very common side effects

Appetite decreased; asthenia; burping; constipation; diarrhoea; dizziness; dry mouth; gallbladder disorders; gastrointestinal discomfort; gastrointestinal disorders; headache; increased risk of infection; insomnia; nausea; skin reactions; taste altered; toothache; vomiting (BNF).

#### Monitoring of nursling for side effects

Although adverse effects have not been noted the baby should be monitored for Vomiting, diarrhoea and signs of hypoglycaemia- drowsiness, lethargy, pallor, sweating, tremor (Hale and Krutsch)

#### Can my GP prescribe Saxenda<sup>™</sup> in the UK for weight loss?

Saxenda<sup>™</sup> is approved for use within the NHS in the UK. However, your GP or family doctor is unlikely to be able to prescribe it to you and it is usually only available but only through a specialist weight management service or privately.

#### References

Drugs and Lactation Database (LactMed) https://www.ncbi.nlm.nih.gov/books/NBK501922/

Hale TW and Krutsch K Hale's Medications & Mothers' Milk<sup>™</sup> 2023: A Manual of Lactational Pharmacology (online access HalesMeds.com January 2023)

Joint Formulary Committee (2022) British National Formulary. [Online]. London: British Medical Association and Royal Pharmaceutical Society of Great Britain. Available at: Medicines Complete Database, [Accessed January 2023].

Elactancia Is it compatible with breastfeeding? https://www.e-lactancia.org/

## ©Dr Wendy Jones MBE Pharmacist Breastfeeding and Medication www.breastfeeding-and-medication.co.uk

January 2023 The information on this sheet is based upon my professional experience as a pharmacist with a specialised interest in the safety of drugs in breastmilk, supported by evidence from expert sources. However, I cannot take responsibility for the prescription of medication which remains with the healthcare professionals involved. I am happy to discuss the evidence by email <u>wendy@breastfeeding-and-medication.co.uk</u>