Ulipristal acetate emergency contraception (UPA EC) is administered as a single 30 mg oral dose within 5 days of unprotected intercourse. The Product Information and some contraceptive guidelines recommend expressing and discarding breastmilk for 7 days after administration. (1, 2) However, other guidelines recommend a 24 hour time frame, based on the rapidly declining levels of UPA excreted in breast milk 24 hours after a 30 mg dose. (3)

**Pharmacokinetics**
UPA is rapidly absorbed with a peak plasma concentration occurring approximately 1 hour following oral administration and a half-life of approximately 32 hours.(1)

**Lactation**
An unpublished study, quoted in international product information, examined the pharmacokinetics of excretion of UPA and its active metabolite monodemethyl-UPA in the breast milk of 12 lactating women, after an oral dose (assumed to be 30 mg). The mean daily total concentrations of active drug in breast milk were 27.19 mcg/L (0-24 hours), 3.58 mcg/L (24-48 hours), 1.84 mcg/L (48-72 hours), 1.21 mcg/L (72-96 hours) and 0.79 mcg/L (96-120 hours) in breast milk. This would equate to a fully breastfed infant receiving about 4.1 mcg/kg of drug plus active metabolite on the first day and a total of 5.2 mcg/kg over 5 days. Assuming a maternal weight of 60 kg, the infant would receive a weight-adjusted dosage of 0.8% of drug plus active metabolite on the first day and a total of 1% of the maternal dose over the 5-day period. (4)

**Studies in infants**
There are no studies in infants on the metabolism of UPA or the effect of UPA in breast milk.

**Other considerations**

**Cessation of breast feeding**
Cessation of breastfeeding for even short periods of time can be distressing to mothers and infants and may contribute to complete cessation of lactation.

**Age of the infant**
Infants aged under 2 months, and particularly those aged under 1 month, are the most susceptible to severe acute drug interactions.(5)

**When ulipristal is the preferred method of EC**
While the copper IUD is the most effective method of emergency contraception and has the advantage of providing ongoing protection from pregnancy, (6, 7) insertion may be unavailable or acceptable. Ulipristal is likely to be more effective than levonorgestrel EC, particularly if unprotected intercourse has occurred between 96 and 120 hours ago, the BMI is >26 kg/m2 or weight is >70 kg. (2, 8-10).

**Use of similar drugs in breastfeeding**
UPA and mifepristone are biologically similar selective progesterone receptor modulators methods of emergency contraception. Mifepristone is used for medical abortion at a much larger dose than the dose used for emergency contraception (200mg versus 30mg). Mifepristone has been shown to be excreted in breast milk in low levels (11) and international guidelines allow for uninterrupted breast feeding in those undergoing a medical abortion. (12)

**Conclusion**
Either insertion of a copper IUD or levonorgestrel 1.5 mg emergency contraceptive pill are the recommended methods of emergency contraception during lactation.

Where on balance UPA EC is considered the best option, breastfeeding can be continued uninterrupted, as the risk to the infant is low. For those wishing to avoid the highest infant exposure breast milk can be expressed and discarded for 24 hours after taking UPA EC.

Note that these recommendations are off-label but are supported by expert national and international opinion and clinical practice. (13)
References

1. EllaOne (ulipristal acetate) Australian approved product information. MS Health Pty Ltd., 01 September 2017.