PIPADOR REVISION

MRCOG Part 1 Revision Notes

Drugs and Breast Feeding

PHARMACOLOGY • LECTURE 369

VISUAL EXAMINATION REVISION NOTES

2026 Edition

369

MRCOG PART 1 REVISION NOTES | PHARMACOLOGY

Drugs and Breast Feeding

Determinants of milk transfer, compatible and contraindicated drugs, and practical prescribing

Most drugs	RID < 10%	Codeine	UKDILAS
Compatible with breastfeeding	Generally acceptable	Avoid — infant opioid toxicity	Advice service

■ KEY FACTS: Learning objectives

- Describe factors determining drug transfer into breast milk and infant exposure.
- Describe drugs that are compatible, require caution or are contraindicated in breastfeeding.
- Describe practical prescribing advice and resources.

369.1 Determinants

Determinants of drug transfer into breast milk

DRUG FACTORS	INFANT FACTORS
Low MW, lipid-soluble, un-ionised, low protein binding, long t½ → more in milk; WEAK BASES trapped (milk pH ≈ 7.1)	Preterm/neonate (immature clearance), oral bioavailability, volume ingested
RELATIVE INFANT DOSE (RID)	**RESOURCES**
Infant dose (mg/kg) ÷ maternal dose (mg/kg) × 100; < 10% usually acceptable	UKDILAS, LactMed, BNF; time doses after feeds

Figure 369.1 — Determinants of milk transfer

- Drug transfer is highest in the **first few days** (colostrum, open paracellular gaps) but volumes are small.
- Infant factors matter most: **preterm and newborn** infants clear drugs slowly; long half-life drugs can accumulate.
- Drugs given safely to neonates directly (e.g. paracetamol, many antibiotics) are generally safe in milk.

369.2 Drug categories

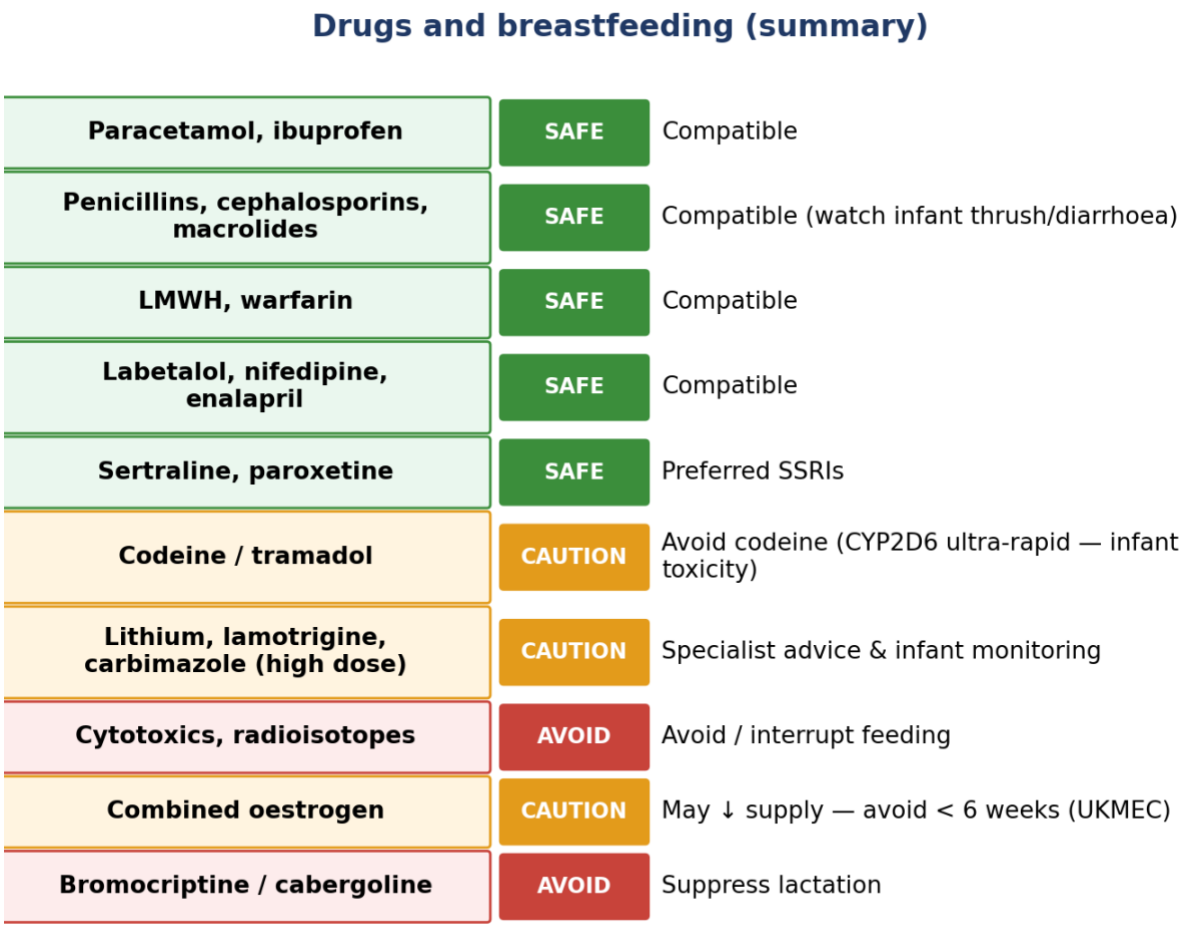


Figure 369.2 — Breastfeeding compatibility

Area	Advice
Analgesia	• Paracetamol, ibuprofen preferred • **Avoid codeine** (MHRA — CYP2D6 ultra-rapid metabolisers; neonatal deaths) • Short-course morphine/oxycodone with monitoring
Contraception	• POP, implant, IUD/IUS any time • **CHC avoid < 6 weeks** (UKMEC 4 < 6 wk if breastfeeding; 2 from 6 wk–6 months)
Psychiatric	• Sertraline/paroxetine • Lithium only with specialist monitoring • Avoid high-dose benzodiazepines
Epilepsy	Most AEDs compatible (lamotrigine — monitor infant)
Hypertension	Labetalol, nifedipine, enalapril, amlodipine
Diabetes	Insulin, metformin compatible
Thyroid	Levothyroxine compatible; PTU/carbimazole lowest effective dose
Contraindicated	• Cytotoxics, radiopharmaceuticals (temporary), retinoids, amiodarone, ergotamine • **Cabergoline/bromocriptine suppress lactation**

369.3 Practical prescribing

- Choose drugs with short half-life, high protein binding, poor oral bioavailability and established safety data
  - Use lowest effective dose and shortest duration.
- Time doses after a feed or before the infant's longest sleep.
- Monitor infant for sedation, poor feeding, rash, diarrhoea; check resources (UKDILAS, LactMed, BNF).
- Avoid unnecessary interruption of breastfeeding — risks of formula feeding are often greater than drug risk.

369.4 Must-know summary

■ EXAM TIP

- Transfer favoured by low MW, lipophilicity, low protein binding, weak bases (ion trapping in milk).
- RID < 10% usually acceptable; preterm infants most vulnerable.
- Avoid codeine; CHC avoided < 6 weeks; cytotoxics contraindicated; dopamine agonists suppress lactation.
- Use UKDILAS/LactMed; time doses after feeds.

■ MNEMONIC / MEMORY AID

Breastfeeding prescribing — 'Lowest dose, Longest gap, Look it up'.