This information was up to date at the time of release to the Heads of Midwifery.
The editorial board does not accept liability for any errors or omissions following its subsequent publication.
Updating arrangements for the formulary should be decided upon and implemented at a local level.

Ergometrine

Legal status (GSL, P or POM on exemption list, or PGD)	▪ POM - Midwife Exemption - midwife may administer parenterally
Patient group	Women with postpartum haemorrhage (PPH) due to uterine atony
Clinical indication	Emergency treatment of PPH in accordance with the Local Obstetric Haemorrhage Guideline. Progression through the treatment cascade must be taken into account
Pharmacology (Onset and duration of action where appropriate)	Ergometrine is an ergot alkaloid with oxytocic actions. The sustained uterine contractions produced by ergometrine are effective in controlling uterine haemorrhage. Its onset of action is within 7 minutes after IM injection, and 1 minute after IV administration.
Pharmaceutical form, strength, route of administration	Ergometrine maleate BP injection 500micrograms in 1ml. For intramuscular (IM) injection. Intravenous route preferred in emergency. Should be given IV slowly over 60 seconds.
Dose, frequency and maximum number of doses or period of time for administration or supply	500micrograms (1ml) as a single dose. Refer woman to obstetric and anaesthetic team immediately
Writing of medicines by midwives: example	**Write single dose in the "once only" section of the Medicine Chart** **Medicine (Approved Name):** ERGOMETRINE **Dose:** 500 micrograms **Route:** IM **SIGN and PRINT NAME followed by (MW)**
Contra-indications/exclusion criteria	▪ Known hypersensitivity to any component of the medicine ▪ First or second stages of labour ▪ Severe hypertension or pre-eclampsia ▪ Occlusive vascular disorders ▪ Severe cardiac disease, liver or renal impairment. ▪ Severe sepsis with peripheral shut down or requiring intensive care ▪ Impairment of pulmonary function

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Cautions and action that will be taken if a caution applies Caution is required in patients with mild or moderate hypertension, cardiac disorder, or hepatic or renal impairment.	▪ If bleeding is not arrested by the injection, the possibility of a retained placental fragment, or soft tissue injury (cervical or vaginal laceration), or of a clotting defect should be considered and appropriate measures taken before a further injection is given. ▪ Vasoconstriction and rarely acute pulmonary oedema – may occur with use of ergometrine. ▪ Acute porphyria. ▪ Multiple pregnancy - should not be given until after delivery of the last baby. ▪ Raynaud's disease. ▪ Check for and document any allergies. ▪ Check and document past medical and drug history and current medication to ascertain potential for overdose. ▪ If a caution applies consult with a doctor. ▪ Document consultation in women's maternity record.
Medicine interactions and action that will be taken if a patient is taking a medicine that may interact	▪ **Anti-retrovirals** (ritonavir, indinavir, nelfinavir, atazanavir and efavirenz): increased risk of ergotism (symptoms of vasospasm, and ischaemia of extremities resulting in gangrene or convulsions) ▪ **Dopamine and other sympathomimetic agents including oxytocin, beta blockers, sumatriptan:** enhanced vasoconstriction may occur especially during anaesthesia and may lead to severe postpartum hypertension**Prostaglandins and their analogues** eg dinoprostone and carboprost : May potentiate the uterine action ▪ **Glyceryl trinitrate:** Effect may reduce by egometrine ▪ **Beta-blockers** eg labetalol: May enhance the vasoconstrictive action ▪ **Anaesthetics inhalational agents** (halothane, cyclopropane, sevoflurane, desflurane, isoflurane**):** may reduce uterotonic effect ▪ **Strong CYP3A4** inhibitors (such as erythromycin, clarithromycin, ciprofloxacin): increased risk of ergotism (symptoms of gangrene or convulsions). ▪ **Strong CYP3A4 inducers antivial/antibiotics** (such as nevirapine, rifampicin): may reduce the clinical effect of ergometrine. ▪ **Tryptans(anti-migraine eg sumatriptan);** May enhance the vasoconstrictive action ▪ **Medicines that are unlikely to be used during pregnancy and immediate postpartum period:** boceprevir, cimetidine, cobicistat crizotinib, darunavir, fosamprenavir, idelalisib, itraconazole, ketoconazole, lurasidone, reboxetine, rizatriptan, saquinavir, telaprevir, telithromycin, tetracyclines, ticagrelor, voriconazole, zolmitriptan ▪ **Grapefruit juice** ▪ If there is a clinically significant drug interaction, consult with an authorised prescriber or doctor and pharmacist before administration ▪ Document consultation in woman's maternity record. ▪ Refer to current BNF for latest information on interactions.

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Potential adverse reactions and side effects including actions to be taken if adverse medicine reaction is suspected	▪ **on labour** N/A ▪ **on the neonate** accidental administration can be fatal ▪ **on breast feeding** may reduce breast milk secretion ▪ **Gastro-intestinal**: nausea, vomiting, abdominal pain ▪ **Cardiovascular:** transient hypertension, vasoconstriction, cardiac arrhythmias, coronary arteriospasm with very rare reports of myocardial infarction, chest pain, palpitations and bradycardia especially after intravenous administration. ▪ **Respiratory:** dyspnoea, acute pulmonary oedema (rarely). ▪ **Immune system disorders**: anaphylactoid reactions with symptoms of dyspnoea, hypotension, collapse or shock ▪ **CNS**: headache, dizziness. ▪ **Ear, nose and throat:** tinnitus. ▪ **Skin**: rashes. *Healthcare professionals are asked to report any suspected adverse reactions via the Yellow Card Scheme at: www.mhra.gov.uk/yellowcard*.
Overdose	▪ Symptoms include; nausea, vomiting, diarrhoea, extreme thirst, coldness, itching and tingling skin, tachycardia, confusion, convulsions, coma, hypertension, hypotension and angina. ▪ Immediate assessment/treatment is essential - refer to doctor. ▪ Manage in accordance with established treatment guidelines or see BNF overdose section. ▪ For further advice contact National Poisons Centre 0344 892 0111
Action if patient declines	▪ Refer to a doctor. ▪ Document in woman's maternity record.
Additional advice and information	▪ Supply the manufacturer's Patient Information Leaflet if requested.
Patient monitoring arrangements during and after treatment and follow-up required	▪ Additional resuscitative measures should be applied according to the local PPH guideline. ▪ Check full blood count and urea and electrolytes as per guideline. ▪ Refer all women who have received ergometrine for PPH immediately to a doctor.
Particular storage requirements	▪ Protect from light. ▪ Store below 2-8° C. Ergometrine may be stored up to 25°C for 3 months when protected from light, but must then be discarded (mark revised expiry date on box).

References

1. Summary of Product Characteristics (Hameln Pharmaceuticals Ltd) text revision 8.5.2018. Accessed 17.12.2019 http://www.medicines.org.uk.
2. http://www.bnf.org.