### Appendix 3: First line pharmacological agents for the prevention and/or treatment of primary PPH

<table>
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<th>Drug</th>
<th>Dose and Route</th>
<th>Side effects</th>
<th>Contraindications</th>
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</table>
| **Syntocinon®** (synthetic oxytocin) | Prior to the delivery of the placenta: 5 Units *slow* IV injection (over 1-2 minutes) OR 5-10 units IM  
(May repeat IV dose after 5 minutes, up to a total of 10 units)  
**ALERT:** Rapid IV administration of oxytocin (i.e. <30 seconds) or a single dose >5 units IV may be associated with transient adverse maternal haemodynamic changes (e.g. hypotension, ischaemic electrocardiograph changes) particularly after caesarean section operation  
If Syntocinon has been given and the placenta is out, start two IV infusions (14-16G cannulae)  
A) 40 units Syntocinone in 1 litre of w*armed* Hartmanns’ solution. Infuse at 250 mls/hr.  
B) *w*armed IV Hartmanns’ solution 1 litre  
**NB. Do not administer Syntocinon IV in a dextrose solution.** | *painful contractions*  
• nausea, vomiting  
• transient vasodilatation & hypotension if undiluted IV doses  
• high doses or prolonged administration in electrolyte-free fluids can cause water intoxication | Hypersensitivity to drug |
| **Syntometrine®** (ergometrine maleate 0.5mg oxytocin 5IU per mL) | IM Syntometrine 1 mL following expulsion of placenta, or when bleeding occurs  
Repeat dose of 1 mL after no less than two hours if necessary  
**The total dose given in 24 hours should not exceed 3 mL** | *nausea, vomiting*  
• uterine hypertonicity & abdominal pain  
• headache, dizziness  
• skin rashes  
• hypertension  
• bradycardia  
• cardiac arrhythmia  
• chest pain  
• anaphylactoid reactions  
• any suspicion of retained placenta  
• exclude twin pregnancy  
• hypersensitivity to ergometrine, other ergot alkaloids or any ingredients in the preparation  
• history of hypertension, eclampsia, pre-eclampsia or current diastolic equal to or greater than 90mmHg  
• severe or persistent sepsis  
• heart disease  
• peripheral vascular disease  
• impaired hepatic or renal function | |
| **Ergometrine maleate** | Ergometrine 250 micrograms IM  
OR  
Ergometrine 250 micrograms IV. (This should be *injected slowly* over one minute or *diluted* to a volume of 5 mL with sodium chloride 0.9% before administration to prevent serious side effects.)  
Do not add ergometrine to IV flasks containing other drugs. | *nausea, vomiting*  
• abdominal pain  
• headache  
• dizziness  
• rash  
• peripheral vasoconstriction  
• hypertension  
• cardiac arrhythmias  
• chest pain  
• anaphylactoid reactions  
• any suspicion of retained placenta  
• exclude twin pregnancy  
• hypersensitivity to ergometrine, other ergot alkaloids or any ingredients in the preparation  
• history of hypertension, eclampsia, pre-eclampsia or current diastolic equal to or greater than 90mmHg  
• severe or persistent sepsis  
• heart disease  
• peripheral vascular disease  
• impaired hepatic or renal function | |
| **Duratocin®** (Carbetocin) | 1ml (100micrograms) by slow injection over 1 minute. | For use following an elective caesarean section. This should only be administered in theatre by an anaesthetist and not used in any other context | |