1.9.1 For women between 22+0 and 23+6 weeks of pregnancy who are in suspected or established preterm labour, are having a planned preterm birth or have P-PROM (see the section on diagnosing P-PROM), discuss with the woman (and her family members or carers, as appropriate) and the multidisciplinary team the use of maternal corticosteroids in the context of her individual circumstances. **[2015, amended 2022]**

1.9.2 Offer maternal corticosteroids to women between 24+0 and 33+6 weeks of pregnancy who are in suspected, diagnosed or established preterm labour, are having a planned preterm birth or have P-PROM. **[2015, amended 2019]**

1.9.3 Consider maternal corticosteroids for women between 34+0 and 35+6 weeks of pregnancy who are in suspected, diagnosed or established preterm labour, are having a planned preterm birth or have P-PROM. **[2015]**

1.9.4 Consider a single repeat course of maternal corticosteroids for women less than 34+0 weeks of pregnancy who:

- have already had a course of corticosteroids when this was more than 7 days ago, **and**
- are at very high risk of giving birth in the next 48 hours.

Where the woman is less than 30+0 weeks pregnant or if there is suspected growth restriction, take into account the possible impact on fetal growth of a repeat course of maternal corticosteroids. **[2022]**

1.9.5 Do not give more than 2 courses of maternal corticosteroids for preterm birth. **[2022]**

1.9.6 When offering or considering maternal corticosteroids, discuss the benefits and risks with the woman (and her family members or carers, as appropriate). **[2015, amended 2022]**

1.9.7 For guidance on the use of corticosteroids in people with diabetes, see NICE's guideline on diabetes in pregnancy. **[2019]**

For a short explanation of why the committee made these recommendations and how they might affect practice, see the rationale and impact section on repeat courses of maternal corticosteroids.

Full details of the evidence and the committee's discussion are in evidence review B: effectiveness of repeat courses of maternal corticosteroids for fetal lung maturation.

1.10 Magnesium sulfate for neuroprotection

In August 2019, the use of intravenous magnesium sulfate in recommendations 1.10.1 to 1.10.3 was off label. See NICE's information on prescribing medicines.

This guideline does not recommend using magnesium sulfate beyond 24 hours. But if uncertainty around exact timing of delivery results in repeat administration, follow the MHRA safety advice on the prolonged or repeated use of magnesium sulfate in pregnancy.

1.10.1 For women between 23+0 and 23+6 weeks of pregnancy who are in established preterm labour or having a planned preterm birth within 24 hours, discuss with the woman (and her family members or carers, as appropriate) the use of intravenous magnesium sulfate for neuroprotection of the baby, in the context of her individual circumstances. **[2019]**

1.10.2 Offer intravenous magnesium sulfate for neuroprotection of the baby to women between 24+0 and 29+6 weeks of pregnancy who are:

- in established preterm labour, **or**
- having a planned preterm birth within 24 hours. **[2015]**

1.10.3 Consider intravenous magnesium sulfate for neuroprotection of the baby for women between 30+0 and 33+6 weeks of pregnancy who are:

- in established preterm labour, **or**

- having a planned preterm birth within 24 hours. **[2015]**

1.10.4 Give a 4 g intravenous bolus of magnesium sulfate over 15 minutes, followed by an intravenous infusion of 1 g per hour until the birth or for 24 hours (whichever is sooner). **[2015]**

1.10.5 For women on magnesium sulfate, monitor for clinical signs of magnesium toxicity at least every 4 hours by recording pulse, blood pressure, respiratory rate and deep tendon (for example, patellar) reflexes. **[2015]**

1.10.6 If a woman has or develops oliguria or other evidence of renal failure:

- monitor more frequently for magnesium toxicity
- reduce or stop the dose of magnesium sulfate. **[2015, amended 2022]**

1.11 Intrapartum antibiotics

1.11.1 For guidance on the use of intrapartum antibiotics in established preterm labour, see NICE's guideline on neonatal infection. **[2019]**

1.12 Fetal monitoring

Monitoring options: cardiotocography and intermittent auscultation

1.12.1 Discuss with women in suspected, diagnosed or established preterm labour (and their family members or carers, as appropriate):

- the purpose of fetal monitoring and what it involves
- the clinical decisions it informs at different gestational ages
- if appropriate, the option not to monitor the fetal heart rate (for example, at the threshold of viability). **[2015]**

1.12.2 Involve a senior obstetrician in discussions about whether and how to monitor the fetal heart rate for women who are between 23+0 and 25+6 weeks pregnant. **[2015]**

1.12.3 Explain the different fetal monitoring options to the woman (and her family members or carers, as appropriate), being aware that:

- there is limited evidence about the usefulness of specific features to suggest hypoxia or acidosis in preterm babies
- the available evidence is broadly consistent with that for babies born at term (see the NICE guideline on fetal monitoring in labour)
- a normal cardiotocography trace is reassuring and indicates that the baby is coping well with labour, but an abnormal trace does not necessarily indicate that fetal hypoxia or acidosis is present. **[2015]**

1.12.4 Explain that there is an absence of evidence that using cardiotocography improves the outcomes of preterm labour for the parent or the baby compared with intermittent auscultation. Include family members or carers in the discussion, as appropriate. **[2015]**

1.12.5 In established preterm labour with no other risk factors (see the NICE guideline on fetal monitoring in labour), offer a choice of fetal heart rate monitoring using either:

- cardiotocography using external ultrasound **or**
- intermittent auscultation. **[2015]**

1.12.6 For guidance on using intermittent auscultation for fetal heart rate monitoring, see the NICE guideline on fetal monitoring in labour. **[2015]**

Fetal scalp electrode

1.12.7 Do not use a fetal scalp electrode for fetal heart rate monitoring if the woman is less than 34+0 weeks pregnant unless all of the following apply:

- it is not possible to monitor the fetal heart rate using either external cardiotocography or intermittent auscultation
- it has been discussed with a senior obstetrician
- the benefits are likely to outweigh the potential risks
- the alternatives (immediate birth, intermittent ultrasound and no monitoring) have been discussed with the woman and are unacceptable to her. **[2015]**

1.12.8 Discuss with the woman (and her family members or carers, as appropriate) the possible use of a fetal scalp electrode between 34+0 and 36+6 weeks of pregnancy if it is not possible to monitor the fetal heart rate using either external cardiotocography or intermittent auscultation. **[2015]**

Fetal blood sampling

1.12.9 Do not carry out fetal blood sampling if the woman is less than 34+0 weeks pregnant. **[2015]**

1.12.10 Discuss with the woman the possible use of fetal blood sampling between 34+0 and 36+6 weeks of pregnancy if the benefits are likely to outweigh the potential risks. **[2015]**

1.12.11 When offering fetal blood sampling, advise the woman that if a blood sample cannot be obtained a caesarean section is likely. Also see the advice on fetal blood sampling in the NICE guidelines on intrapartum care for women with existing medical conditions or obstetric complications and their babies and intrapartum care. **[2015, amended 2020]**

1.13 Mode of birth

1.13.1 Discuss the general benefits and risks of caesarean birth and vaginal birth with women in suspected, diagnosed or established preterm labour and in P-PROM (and their family members or carers, as appropriate). See the section on planning