

Treatment of preterm labor (tocolytic agents)

<i>Drug/Treatment</i>	<i>Effect</i>	<i>Notes</i>
Beta adrenergic agonists, e.g. ritodrine (Yutopar), terbutaline (Brethine), fenoterol	Inhibit uterine contractions; selective beta adrenergic receptors	Effects often short-lived; unpleasant side-effects (cardiovascular-increased heart rate and peripheral vasodilation- and metabolic); produces bronchodilation
Magnesium sulphate	Inhibits myometrial contractility; competes with calcium for entrance to cell	Limited usefulness as a tocolytic agent but useful as cerebroprotective agent; anticonvulsant in pre-eclampsia; respiratory depression and cardiac conduction deficits
Atosiban	Oxytocin antagonist	Clinical trials taking place; potentially useful as oxytocin receptors have limited distribution
Prostaglandin synthase inhibitors, e.g. indomethacin	Inhibits prostaglandin synthesis; inhibit preterm contractions	Adverse effects on fetal renal function, associated with oligohydramnios; serious neonatal complications in infants born <30 weeks; premature closure of ductus; bleeding
Calcium channel blockers, e.g. nifedipine (Procardia)	Decrease intracellular calcium, cause uterine relaxation	May affect placental and uterine blood flow; cardiovascular side effects
Alcohol		Risk of aspiration, intoxication, depression and incontinence

Beta adrenergic stimulation results in uterine relaxation.