

## Preterm labour and birth

### Search strategies

*NICE guideline NG25 (update)*

*Combined search strategies*

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*Early submission*

*Developed by the National Guideline Alliance which is a part of the Royal College of Obstetricians and Gynaecologists*



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# Search strategies

## Literature search strategies for review question: What is the effectiveness of repeat courses of maternal corticosteroids for fetal lung maturation in improving preterm neonatal outcomes?

### Review question search strategies

#### Databases: Medline; and Medline In-Process

Date of last search: 27/09/2021

#	Searches
1	exp OBSTETRIC LABOR, PREMATURE/
2	exp INFANT, PREMATURE/
3	exp INFANT, LOW BIRTH WEIGHT/
4	(pre term or preterm or pre matur* or prematur* or premmie? or premie or premies or low birth weight? or low birthweight? or LBW? or VLBW?).ti,ab.
5	or/1-4
6	exp ADRENAL CORTEX HORMONES/
7	(Corticosteroid? or Adrenal Cortex Hormone? or 17-Ketosteroid? or Androstenedione or Androsterone or Dehydroepiandrosterone or Estrone or Etiocholanolone or Glucocorticoid? or Beclomethasone or Betamethasone or Budesonide or Clobetasol or Desoximetasone or Dexamethasone or Diflucortolone or Flumethasone or Flucinolone Acetonide or Flucortolone or Fluorometholone or Fluprednisolone or Flurandrenolone or (Fluticasone adj3 Salmeterol) or Melengestrol Acetate or Methylprednisolone or Paramethasone or Prednisolone or Prednisone or Triamcinolone or Hydroxycorticosteroid? or 11-Hydroxycorticosteroid? or Aldosterone or Corticosterone or Hydrocortisone or 18-Hydroxycorticosterone or Tetrahydrocortisol or 17-Hydroxycorticosteroid? or Cortisone or Cortodoxone or Tetrahydrocortisol or Tetrahydrocortisone or Desoxycorticosterone or 18-Hydroxydesoxycorticosterone or Pregnenolone or 17-alpha-Hydroxypregnenolone).mp.
8	or/6-7
9	exp RESPIRATORY DISTRESS SYNDROME, NEWBORN/
10	((respirat* or breath*) adj3 (distress* or difficult* or problem? or fail* or complication? or morbidit* or support* or care)),ti,ab.
11	RDS.ti,ab.
12	FETAL ORGAN MATURITY/
13	LUNG/em [Embryology]
14	((lung? or pulmonar?) adj3 (matur* or develop*)).ti,ab.
15	or/9-14
16	5 and 8 and 15
17	limit 16 to english language
18	limit 17 to yr="2015 -Current"
19	LETTER/
20	EDITORIAL/
21	NEWS/
22	exp HISTORICAL ARTICLE/
23	ANECDOTES AS TOPIC/
24	COMMENT/
25	CASE REPORT/
26	(letter or comment*).ti.
27	or/19-26
28	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
29	27 not 28
30	ANIMALS/ not HUMANS/
31	exp ANIMALS, LABORATORY/

#	Searches
32	exp ANIMAL EXPERIMENTATION/
33	exp MODELS, ANIMAL/
34	exp RODENTIA/
35	(rat or rats or mouse or mice).ti.
36	or/29-35
37	18 not 36
38	META-ANALYSIS/
39	META-ANALYSIS AS TOPIC/
40	(meta analy* or metanaly* or metaanaly*).ti,ab.
41	((systematic* or evidence*) adj2 (review* or overview*)).ti,ab.
42	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
43	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
44	(search* adj4 literature).ab.
45	(medline or pubmed or cochrane or embase or psychlit or psychlit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
46	cochrane.jw.
47	or/38-46
48	randomized controlled trial.pt.
49	controlled clinical trial.pt.
50	pragmatic clinical trial.pt.
51	randomi#ed.ab.
52	placebo.ab.
53	randomly.ab.
54	CLINICAL TRIALS AS TOPIC/
55	trial.ti.
56	or/48-55
57	37 and 47
58	37 and 56
59	or/57-58

## Databases: Embase; and Embase Classic

Date of last search: 27/09/2021

#	Searches
1	PREMATURE LABOR/
2	PREMATURITY/
3	exp LOW BIRTH WEIGHT/
4	(pre term or preterm or pre matur* or prematur* or premmie? or premie or premies or low birth weight? or low birthweight? or LBW? or VLBW?).ti,ab.
5	or/1-4
6	exp CORTICOSTEROID/
7	(Corticosteroid? or Adrenal Cortex Hormone? or 17-Ketosteroid? or Androstenedione or Androsterone or Dehydroepiandrosterone or Estrone or Etiocholanolone or Glucocorticoid? or Beclomethasone or Betamethasone or Budesonide or Clobetasol or Desoximetasone or Dexamethasone or Diflucortolone or Flumethasone or Fluocinolone Acetonide or Fluocortolone or Fluorometholone or Fluprednisolone or Flurandrenolone or (Fluticasone adj3 Salmeterol) or Melengestrol Acetate or Methylprednisolone or Paramethasone or Prednisolone or Prednisone or Triamcinolone or Hydroxycorticosteroid? or 11-Hydroxycorticosteroid? or Aldosterone or Corticosterone or Hydrocortisone or 18-Hydroxycorticosterone or Tetrahydrocortisol or 17-Hydroxycorticosteroid? or Cortisone or Cortodoxone or Tetrahydrocortisol or Tetrahydrocortisone or Desoxycorticosterone or 18-Hydroxydesoxycorticosterone or Pregnenolone or 17-alpha-Hydroxypregnenolone).mp.
8	or/6-7
9	NEONATAL RESPIRATORY DISTRESS SYNDROME/
10	((respirat* or breath*) adj3 (distress* or difficult* or problem? or fail* or complication? or morbidit* or support* or care)).ti,ab.
11	RDS.ti,ab.
12	FETUS LUNG MATURITY/
13	((lung? or pulmonar?) adj3 (matur* or develop*)).ti,ab.
14	or/9-13
15	5 and 8 and 14
16	limit 15 to english language
17	limit 16 to yr="2015 -Current"

#	Searches
18	letter.pt. or LETTER/
19	note.pt.
20	editorial.pt.
21	CASE REPORT/ or CASE STUDY/
22	(letter or comment*).ti.
23	or/18-22
24	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
25	23 not 24
26	ANIMAL/ not HUMAN/
27	NONHUMAN/
28	exp ANIMAL EXPERIMENT/
29	exp EXPERIMENTAL ANIMAL/
30	ANIMAL MODEL/
31	exp RODENT/
32	(rat or rats or mouse or mice).ti.
33	or/25-32
34	17 not 33
35	SYSTEMATIC REVIEW/
36	META-ANALYSIS/
37	(meta analy* or metanaly* or metaanaly*).ti,ab.
38	((systematic or evidence) adj2 (review* or overview*)).ti,ab.
39	(reference list* or bibliograph* or hand search* or manual search* or relevant journals).ab.
40	(search strategy or search criteria or systematic search or study selection or data extraction).ab.
41	(search* adj4 literature).ab.
42	(medline or pubmed or cochrane or embase or psychlit or psyclit or psychinfo or psycinfo or cinahl or science citation index or bids or cancerlit).ab.
43	((pool* or combined) adj2 (data or trials or studies or results)).ab.
44	cochrane.jw.
45	or/35-44
46	random*.ti,ab.
47	factorial*.ti,ab.
48	(crossover* or cross over*).ti,ab.
49	((doubl* or singl*) adj blind*).ti,ab.
50	(assign* or allocat* or volunteer* or placebo*).ti,ab.
51	CROSSOVER PROCEDURE/
52	SINGLE BLIND PROCEDURE/
53	RANDOMIZED CONTROLLED TRIAL/
54	DOUBLE BLIND PROCEDURE/
55	or/46-54
56	34 and 45
57	34 and 55
58	or/56-57

## Databases: Cochrane Central Register of Controlled Trials; and Cochrane Database of Systematic Reviews

Date of last search: 27/09/2021

#	Searches
#1	MeSH descriptor: [Obstetric Labor, Premature] explode all trees
#2	MeSH descriptor: [Infant, Premature] explode all trees
#3	MeSH descriptor: [Infant, Low Birth Weight] explode all trees
#4	("pre term" or preterm or "pre matur*" or prematur* or premie* or premies or "low birth weight*" or "low birthweight*" or LBW* or VLBW*):ti,ab
#5	#1 or #2 or #3 or #4
#6	MeSH descriptor: [Adrenal Cortex Hormones] explode all trees
#7	(Corticosteroid* or "Adrenal Cortex Hormone*" or "17-Ketosteroid*" or Androstenedione or Androsterone or Dehydroepiandrosterone or Estrone or Etiocholanolone or Glucocorticoid* or Beclomethasone or Betamethasone or Budesonide or Clobetasol or Desoximetasone or Dexamethasone or Diflucortolone or Flumethasone or "Fluocinolone Acetonide" or Fluocortolone or Fluorometholone or Fluprednisolone or Flurandrenolone or "Fluticasone Salmeterol" or "Melengestrol Acetate" or Methylprednisolone or Paramethasone or Prednisolone or Prednisone or Triamcinolone or Hydroxycorticosteroid* or "11-Hydroxycorticosteroid*" or Aldosterone or

#	Searches
	Corticosterone or Hydrocortisone or "18-Hydroxycorticosterone" or Tetrahydrocortisol or "17-Hydroxycorticosteroid*" or Cortisone or Cortodoxone or Tetrahydrocortisol or Tetrahydrocortisone or Desoxycorticosterone or "18-Hydroxydesoxycorticosterone" or Pregnenolone or "17-alpha-Hydroxypregnenolone"):ti,ab
#8	#6 or #7
#9	MeSH descriptor: [Respiratory Distress Syndrome, Newborn] explode all trees
#10	((respirat* or breath*) near/3 (distress* or difficult* or problem* or fail* or complication* or morbidit* or support* or care)):ti,ab
#11	RDS:ti,ab
#12	MeSH descriptor: [Fetal Organ Maturity] this term only
#13	MeSH descriptor: [Lung] this term only and with qualifier(s): [embryology - EM]
#14	((lung* or pulmonar*) near/3 (matur* or develop*)):ti,ab
#15	#9 or #10 or #11 or #12 or #13 or #14
#16	#5 and #8 and #15
#17	#5 and #8 and #15 with Cochrane Library publication date Between Jan 2015 and Sep 2021, in Cochrane Reviews
#18	#5 and #8 and #15 with Publication Year from 2015 to 2021, in Trials

## Databases: International Health Technology Assessment

Date of last search: 27/09/2021

#	Searches
	All: "Respiratory Distress Syndrome, Newborn"[mh]
	OR All: "respiratory distress" or "respiratory complication" or "respiratory morbidity"
	OR All: "Fetal Organ Maturity"[mh]
	OR All: "lung maturity" or "lung development" or "pulmonary maturity" or "pulmonary development"

## Health economics search strategies

### Databases: Medline; and Medline In-Process

Date of last search: 11/10/2021

#	Searches
1	exp OBSTETRIC LABOR, PREMATURE/
2	exp INFANT, PREMATURE/
3	exp INFANT, LOW BIRTH WEIGHT/
4	(pre term or preterm or pre matur* or prematur* or premmie? or premie or premies or low birth weight? or low birthweight? or LBW? or VLBW?).ti,ab.
5	or/1-4
6	exp ADRENAL CORTEX HORMONES/
7	(Corticosteroid? or Adrenal Cortex Hormone? or 17-Ketosteroid? or Androstenedione or Androsterone or Dehydroepiandrosterone or Estrone or Etiocholanolone or Glucocorticoid? or Beclomethasone or Betamethasone or Budesonide or Clobetasol or Desoximetasone or Dexamethasone or Diflucortolone or Flumethasone or Fluocinolone Acetonide or Fluocortolone or Fluorometholone or Fluprednisolone or Flurandrenolone or (Fluticasone adj3 Salmeterol) or Melengestrol Acetate or Methylprednisolone or Paramethasone or Prednisolone or Prednisone or Triamcinolone or Hydroxycorticosteroid? or 11-Hydroxycorticosteroid? or Aldosterone or Corticosterone or Hydrocortisone or 18-Hydroxycorticosterone or Tetrahydrocortisol or 17-Hydroxycorticosteroid? or Cortisone or Cortodoxone or Tetrahydrocortisol or Tetrahydrocortisone or Desoxycorticosterone or 18-Hydroxydesoxycorticosterone or Pregnenolone or 17-alpha-Hydroxypregnenolone).mp.
8	or/6-7
9	exp RESPIRATORY DISTRESS SYNDROME, NEWBORN/
10	((respirat* or breath*) adj3 (distress* or difficult* or problem? or fail* or complication? or morbidit* or support* or care)).ti,ab.
11	RDS.ti,ab.
12	FETAL ORGAN MATURITY/
13	LUNG/em [Embryology]
14	((lung? or pulmonar?) adj3 (matur* or develop*)).ti,ab.
15	or/9-14
16	5 and 8 and 15



#	Searches
17	limit 16 to english language
18	limit 17 to yr="2015 -Current"
19	LETTER/
20	EDITORIAL/
21	NEWS/
22	exp HISTORICAL ARTICLE/
23	ANECDOTES AS TOPIC/
24	COMMENT/
25	CASE REPORT/
26	(letter or comment*).ti.
27	or/19-26
28	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
29	27 not 28
30	ANIMALS/ not HUMANS/
31	exp ANIMALS, LABORATORY/
32	exp ANIMAL EXPERIMENTATION/
33	exp MODELS, ANIMAL/
34	exp RODENTIA/
35	(rat or rats or mouse or mice).ti.
36	or/29-35
37	18 not 36
38	ECONOMICS/
39	VALUE OF LIFE/
40	exp "COSTS AND COST ANALYSIS"/
41	exp ECONOMICS, HOSPITAL/
42	exp ECONOMICS, MEDICAL/
43	exp RESOURCE ALLOCATION/
44	ECONOMICS, NURSING/
45	ECONOMICS, PHARMACEUTICAL/
46	exp "FEES AND CHARGES"/
47	exp BUDGETS/
48	budget*.ti,ab.
49	cost*.ti,ab.
50	(economic* or pharmaco?economic*).ti,ab.
51	(price* or pricing*).ti,ab.
52	(financ* or fee or fees or expenditure* or saving*).ti,ab.
53	(value adj2 (money or monetary)).ti,ab.
54	resourc* allocat*.ti,ab.
55	(fund or funds or funding* or funded).ti,ab.
56	(ration or rations or rationing* or rationed).ti,ab.
57	ec.fs.
58	or/38-57
59	37 and 58

## Databases: Embase; and Embase Classic

Date of last search: 11/10/2021

#	Searches
1	PREMATURE LABOR/
2	PREMATURITY/
3	exp LOW BIRTH WEIGHT/
4	(pre term or preterm or pre matur* or prematur* or premmie? or premie or premies or low birth weight? or low birthweight? or LBW? or VLBW?).ti,ab.
5	or/1-4
6	exp CORTICOSTEROID/
7	(Corticosteroid? or Adrenal Cortex Hormone? or 17-Ketosteroid? or Androstenedione or Androsterone or Dehydroepiandrosterone or Estrone or Etiocholanolone or Glucocorticoid? or Beclomethasone or Betamethasone or Budesonide or Clobetasol or Desoximetasone or Dexamethasone or Diflucortolone or Flumethasone or Flucinolone Acetonide or Fluocortolone or Fluorometholone or Fluprednisolone or Flurandrenolone or (Fluticasone adj3 Salmeterol) or Melengestrol Acetate or Methylprednisolone or Paramethasone or Prednisolone or Prednisone or Triamcinolone or Hydroxycorticosteroid? or 11-Hydroxycorticosteroid? or Aldosterone or Corticosterone or

#	Searches
	Hydrocortisone or 18-Hydroxycorticosterone or Tetrahydrocortisol or 17-Hydroxycorticosteroid? or Cortisone or Cortodoxone or Tetrahydrocortisol or Tetrahydrocortisone or Desoxycorticosterone or 18-Hydroxydesoxycorticosterone or Pregnenolone or 17-alpha-Hydroxypregnenolone).mp.
8	or/6-7
9	NEONATAL RESPIRATORY DISTRESS SYNDROME/
10	((respirat* or breath*) adj3 (distress* or difficult* or problem? or fail* or complication? or morbidit* or support* or care)).ti,ab.
11	RDS.ti,ab.
12	FETUS LUNG MATURITY/
13	((lung? or pulmonar?) adj3 (matur* or develop*)).ti,ab.
14	or/9-13
15	5 and 8 and 14
16	limit 15 to english language
17	limit 16 to yr="2015 -Current"
18	letter.pt. or LETTER/
19	note.pt.
20	editorial.pt.
21	CASE REPORT/ or CASE STUDY/
22	(letter or comment*).ti.
23	or/18-22
24	RANDOMIZED CONTROLLED TRIAL/ or random*.ti,ab.
25	23 not 24
26	ANIMAL/ not HUMAN/
27	NONHUMAN/
28	exp ANIMAL EXPERIMENT/
29	exp EXPERIMENTAL ANIMAL/
30	ANIMAL MODEL/
31	exp RODENT/
32	(rat or rats or mouse or mice).ti.
33	or/25-32
34	17 not 33
35	HEALTH ECONOMICS/
36	exp ECONOMIC EVALUATION/
37	exp HEALTH CARE COST/
38	exp FEE/
39	BUDGET/
40	FUNDING/
41	RESOURCE ALLOCATION/
42	budget*.ti,ab.
43	cost*.ti,ab.
44	(economic* or pharmaco?economic*).ti,ab.
45	(price* or pricing*).ti,ab.
46	(financ* or fee or fees or expenditure* or saving*).ti,ab.
47	(value adj2 (money or monetary)).ti,ab.
48	resourc* allocat*.ti,ab.
49	(fund or funds or funding* or funded).ti,ab.
50	(ration or rations or rationing* or rationed).ti,ab.
51	or/35-50
52	34 and 51

## Database: Cochrane Central Register of Controlled Trials

Date of last search: 11/10/2021

#	Searches
#1	MeSH descriptor: [Obstetric Labor, Premature] explode all trees
#2	MeSH descriptor: [Infant, Premature] explode all trees
#3	MeSH descriptor: [Infant, Low Birth Weight] explode all trees
#4	("pre term" or preterm or "pre matur*" or prematur* or premmie* or premie or premies or "low birth weight*" or "low birthweight*" or LBW* or VLBW*).ti,ab
#5	#1 or #2 or #3 or #4
#6	MeSH descriptor: [Adrenal Cortex Hormones] explode all trees

#	Searches
#7	(Corticosteroid* or "Adrenal Cortex Hormone*" or "17-Ketosteroid*" or Androstenedione or Androsterone or Dehydroepiandrosterone or Estrone or Etiocholanolone or Glucocorticoid* or Beclomethasone or Betamethasone or Budesonide or Clobetasol or Desoximetasone or Dexamethasone or Diflucortolone or Flumethasone or "Fluocinolone Acetonide" or Flucortolone or Fluorometholone or Fluprednisolone or Flurandrenolone or "Fluticasone Salmeterol" or "Melengestrol Acetate" or Methylprednisolone or Paramethasone or Prednisolone or Prednisone or Triamcinolone or Hydroxycorticosteroid* or "11-Hydroxycorticosteroid*" or Aldosterone or Corticosterone or Hydrocortisone or "18-Hydroxycorticosterone" or Tetrahydrocortisol or "17-Hydroxycorticosteroid*" or Cortisone or Cortodoxone or Tetrahydrocortisol or Tetrahydrocortisone or Desoxycorticosterone or "18-Hydroxydesoxycorticosterone" or Pregnenolone or "17-alpha-Hydroxypregnenolone"):ti,ab
#8	#6 or #7
#9	MeSH descriptor: [Respiratory Distress Syndrome, Newborn] explode all trees
#10	((respirat* or breath*) near/3 (distress* or difficult* or problem* or fail* or complication* or morbidit* or support* or care)):ti,ab
#11	RDS:ti,ab
#12	MeSH descriptor: [Fetal Organ Maturity] this term only
#13	MeSH descriptor: [Lung] this term only and with qualifier(s): [embryology - EM]
#14	((lung* or pulmonar*) near/3 (matur* or develop*)):ti,ab
#15	#9 or #10 or #11 or #12 or #13 or #14
#16	#5 and #8 and #15
#17	#5 and #8 and #15 with Publication Year from 2015 to 2021, in Trials
#18	MeSH descriptor: [Economics] this term only
#19	MeSH descriptor: [Value of Life] this term only
#20	MeSH descriptor: [Costs and Cost Analysis] explode all trees
#21	MeSH descriptor: [Economics, Hospital] explode all trees
#22	MeSH descriptor: [Economics, Medical] explode all trees
#23	MeSH descriptor: [Resource Allocation] explode all trees
#24	MeSH descriptor: [Economics, Nursing] this term only
#25	MeSH descriptor: [Economics, Pharmaceutical] this term only
#26	MeSH descriptor: [Fees and Charges] explode all trees
#27	MeSH descriptor: [Budgets] explode all trees
#28	budget*:ti,ab
#29	cost*:ti,ab
#30	(economic* or pharmaco?economic*):ti,ab
#31	(price* or pricing*):ti,ab
#32	(financ* or fee or fees or expenditure* or saving*):ti,ab
#33	(value near/2 (money or monetary)):ti,ab
#34	resourc* allocat*:ti,ab
#35	(fund or funds or funding* or funded):ti,ab
#36	(ration or rations or rationing* or rationed):ti,ab
#37	#18 or #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36
#38	#17 and #37

## Databases: International Health Technology Assessment

Date of last search: 11/10/2021

#	Searches
	All: "Respiratory Distress Syndrome, Newborn"[mh]
	OR All: "respiratory distress" or "respiratory complication" or "respiratory morbidity"
	OR All: "Fetal Organ Maturity"[mh]
	OR All: "lung maturity" or "lung development" or "pulmonary maturity" or "pulmonary development"