

## Appendix 1: Database Search Strategies

### Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations and Ovid MEDLINE(R) 1946 to Present

Date Searched: 17 September 2014

Date Updated: 29 October 2015

1. exp Pulmonary Surfactant-Associated Proteins/
2. Pulmonary Surfactants/
3. Surface-Active Agents/
4. beractant\*.tw,nm.
5. calfactant\*.tw,nm.
6. poractant\*.tw,nm.
7. surfactant\*.tw,nm.
8. or/1-7
9. Catheterization/
10. Catheterization, Peripheral/
11. Continuous Positive Airway Pressure/
12. Intubation, Intratracheal/
13. Laryngoscopes/
14. Laryngoscopy/
15. administration & dosage.fs.
16. ((avoid\* or brief\* or without) adj2 (intubat\* or ventilat\*)).tw.
17. catheter\*.tw.
18. continuous positive airway pressure\*.tw.
19. CPAP\*.tw.
20. (feed\* adj tube\*).tw.
21. ((intra trachea\* or intratrachea\* or trachea\*) adj2 (administ\* or appl\* or install\*)).tw.
22. (larynx\* adj2 (administ\* or appl\* or install\*)).tw.
23. laryngoscop\*.tw.
24. less invasive\*.tw.
25. LISA technique\*.tw.
26. minimal\* invasive\*.tw.
27. nCPAP\*.tw.
28. (non invasive\* or noninvasive\*).tw.
29. spontaneous\* breathing.tw.
30. or/9-29
31. 8 and 30
32. exp Infant/
33. Infant Mortality/
34. Infant, Premature, Diseases/
35. Intensive Care, Neonatal/
36. Intense Care Units, Neonatal/
37. Respiratory Distress Syndrome, Newborn/
38. (baby\* or babies or infant\* or infancy or neonat\* or newborn\* or new born\* or postmatur\* or post matur\* or prematur\* or pre matur\* or preterm\* or pre term\*).mp.
39. or/32-38
40. 31 and 39
41. randomized controlled trial.pt.
42. controlled clinical trial.pt.
43. randomi?ed.ab.
44. placebo.ab.
45. drug therapy.fs.
46. randomly.ab.
47. trial.ab.
48. groups.ab.
49. or/41-48
50. exp animals/ not humans.sh.
51. 49 not 50
52. 40 and 51
53. limit 52 to yr="1980 -Current"

## Appendix 1: Database Search Strategies

Ovid EMBASE 1980 to 2014 Week 37 ; Update conducted in Ovid Embase 1996 to 2015 Week 43

Date Searched: 17 September 2014

Date Updated: 29 October 2015

1. Lung surfactant/
2. Surfactant associated protein/
3. Surfactant/
4. beractant\*.tw.
5. calfactant\*.tw.
6. poractant\*.tw.
7. surfactant\*.tw.
8. or/1-7
9. Catheterization/
10. Endotracheal intubation/
11. Laryngoscope/
12. Laryngoscopy/
13. Positive end expiratory pressure/
14. ad.fs. [drug administration]
15. br.fs. [intra bronchial drug administration]
16. po.fs. [oral drug administration]
17. pl.fs. [intrapleural drug administration]
18. tr.fs. [intratracheal drug administration]
19. ((avoid\* or brief\* or without) adj2 (intubat\* or ventilat\*)).tw.
20. catheter\*.tw.
21. continuous positive airway pressure\*.tw.
22. CPAP\*.tw.
23. (feed\* adj tube\*).tw.
24. ((intra trachea\* or intratrachea\* or trachea\*) adj2 (administ\* or appl\* or install\*)).tw.
25. (larynx\* adj2 (administ\* or appl\* or install\*)).tw.
26. laryngoscop\*.tw.
27. less invasive\*.tw.
28. LISA technique\*.tw.
29. minimal\* invasive\*.tw.
30. nCPAP\*.tw.
31. (non invasive\* or noninvasive\*).tw.
32. spontaneous\* breathing.tw.
33. or/9-32
34. 8 and 33
35. exp Infant/
36. Infant Mortality/
37. Prematurity
38. Neonatal respiratory distress syndrome/
39. Newborn intensive care/
40. (baby\* or babies or infant\* or infancy or neonat\* or newborn\* or new born\* or postmatur\* or post matur\* or prematur\* or pre matur\* or preterm\* or pre term\*).mp.
41. or/35-40
42. 34 and 41
43. crossover procedure/
44. double blind procedure/
45. randomized controlled trial/
46. single blind procedure/
47. allocat\*.tw.
48. assign\*.tw.
49. cross over\*.tw.
50. crossover\*.tw.
51. doubl\* adj blind\*.tw.
52. factorial\*.tw.
53. placebo\*.tw.
54. random\*.tw.
55. singl\* adj blind\*.tw.
56. volunteer\*.tw.
57. or/43-56
58. animals/ not (animals/ and humans/)
59. 57 not 58
60. 42 and 59
61. limit 60 to embase

## Appendix 1: Database Search Strategies

### CENTRAL via Wiley Cochrane Library

Date Searched: 17 September 2014

Date Updated: 29 October 2015

1. [mh "Pulmonary Surfactant-Associated Proteins"]
2. [mh ^"Pulmonary Surfactants"]
3. [mh ^"Surface-Active Agents"]
4. beractant\*:ti,ab,kw
5. calfactant\*:ti,ab,kw
6. poractant\*:ti,ab,kw
7. surfactant\*:ti,ab,kw
8. {OR #1-#7}
9. [mh ^Catheterization]
10. [mh ^"Catheterization, Peripheral"]
11. [mh ^"Continuous Positive Airway Pressure"]
12. [mh ^"Intubation, Intratracheal"]
13. [mh ^laryngoscopes]
14. [mh ^laryngoscopy]
15. [mh /AD]
16. ((avoid\* or brief\* or without) near/2 (intubat\* or ventilat\*)):ti,ab,kw
17. catheter\*: ti,ab,kw
18. ("continuous positive airway" next pressure\*):ti,ab,kw
19. CPAP\*:ti,ab,kw
20. (feed\* next tube\*):ti,ab,kw
21. (((intra next trachea\* or intratrachea\* or trachea\*) near/2 (administ\* or appl\* or install\*)):ti,ab,kw
22. (larynx\* near/2 (administ\* or appl\* or install\*)):ti,ab,kw
23. laryngoscop\*:ti,ab,kw
24. (less next invasive\*):ti,ab,kw
25. (LISA next technique\*):ti,ab,kw
26. (minimal\* next invasive\*):ti,ab,kw
27. nCPAP\*:ti,ab,kw
28. (non invasive\* or noninvasive\*):ti,ab,kw
29. (spontaneous\* next breathing):ti,ab,kw
30. {OR #9-#29}
31. #8 and #30
32. [mh Infant]
33. [mh ^"Infant Mortality"]
34. [mh ^"Infant, Premature, Diseases"]
35. [mh ^"Intensive Care, Neonatal"]
36. [mh ^"Intensive Care Units, Neonatal"]
37. [mh ^"Respiratory Distress Syndrome, Newborn"]
38. ((baby\* or babies or infant\* or infancy or neonat\* or newborn\* or (new next born\*) or postmatur\* or (post next matur\*) or prematur\* or (pre next matur\*) or preterm\* or (pre next term\*)):ti,ab,kw
39. {OR #32-#38}
40. #31 and #39
41. #31 and #39 – Publication Year from 1980 to 2014, in Trials

## Appendix 1: Database Search Strategies

### PubMed via NCBI Entrez

Date Searched: 18 September 2014

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((("Pulmonary Surfactant-Associated Proteins"[Mesh]) OR ("Pulmonary Surfactants"[Mesh]) OR ("pulmonary surfactants"[Pharmacological Action]) OR ("Surface-Active Agents"[Mesh:noexp]) OR (beractant[TW] OR beractants[TW]) OR (calfactant[TW] OR calfactants[TW]) OR (poractant[TW]) OR (surfactant[TW] OR surfactants[TW])) AND (("Catheterization"[Mesh:noexp]) OR ("Catheterization, Peripheral"[Mesh:noexp]) OR ("Continuous Positive Airway Pressure"[Mesh]) OR ("Intubation, Intratracheal"[Mesh:noexp]) OR ("Laryngoscopes"[Mesh]) OR ("Laryngoscopy"[Mesh]) OR ("administration and dosage"[MeSH Subheading]) OR ((avoid[TIAB] OR avoids[TIAB] OR avoided[TIAB] OR avoiding[TIAB] OR avoidance[TIAB] OR brief[TIAB] OR briefly[TIAB] OR without[TIAB]) AND (intubate[TIAB] OR intubates[TIAB] OR intubated[TIAB] OR intubating[TIAB] OR intubation[TIAB] OR ventilate[TIAB] OR ventilates[TIAB] OR ventilated[TIAB] OR ventilating[TIAB] OR ventilation[TIAB])) OR (catheter[TIAB] OR catheters[TIAB] OR catheterization[TIAB]) OR ("continuous positive airway pressure"[TIAB]) OR (CPAP[TIAB]) OR ("feeding tube"[TIAB] OR "feeding tubes"[TIAB]) OR (("intra tracheal"[TIAB] OR intratracheal[TIAB] OR trachea[TIAB] OR tracheal[TIAB]) AND (administer[TIAB] OR administers[TIAB] OR administered[TIAB] OR administering[TIAB] OR administration[TIAB] OR administrations[TIAB] OR apply[TIAB] OR applies[TIAB] OR applied[TIAB] OR applying[TIAB] OR application[TIAB] OR applications[TIAB] OR install[TIAB] OR installs[TIAB] OR installed[TIAB] OR installing[TIAB] OR installation[TIAB] OR installations[TIAB])) OR ((larynx[TIAB] OR laryngeal[TIAB] OR larynges[TIAB]) AND (administer[TIAB] OR administers[TIAB] OR administered[TIAB] OR administering[TIAB] OR administration[TIAB] OR administrations[TIAB] OR apply[TIAB] OR applies[TIAB] OR applied[TIAB] OR applying[TIAB] OR application[TIAB] OR applications[TIAB] OR install[TIAB] OR installs[TIAB] OR installed[TIAB] OR installing[TIAB] OR installation[TIAB] OR installations[TIAB])) OR (laryngoscope[TIAB] OR laryngoscopes[TIAB] OR laryngoscopy[TIAB] OR laryngoscopic[TIAB]) OR ("less invasive"[TIAB] OR "less invasively"[TIAB]) OR ("LISA technique"[TIAB] OR "LISA techniques"[TIAB]) OR ("minimally invasive"[TIAB]) OR (nCPAP[TIAB]) OR ("non invasive"[TIAB] OR noninvasive[TIAB] OR "non invasively"[TIAB] OR noninvasively[TIAB]) OR ("spontaneous breathing"[TIAB] OR "spontaneously breathing"[TIAB])) AND (("Infant"[Mesh]) OR ("Infant Mortality"[Mesh]) OR ("Infant, Premature, Diseases"[Mesh:noexp]) OR ("Intensive Care, Neonatal"[Mesh]) OR ("Intensive Care Units, Neonatal"[Mesh]) OR ("Respiratory Distress Syndrome, Newborn"[Mesh:noexp]) OR (baby[TW] OR babies[TW] OR infant[TW] OR infants[TW] OR infancy[TW] OR neonate[TW] OR neonates[TW] OR neonatal[TW] OR newborn[TW] OR newborns[TW] OR "new born"[TW] OR "new borns"[TW] OR postmature[TW] OR postmaturity[TW] OR "post mature"[TW] OR "post maturity"[TW] OR premature[TW] OR prematures[TW] OR premie[TW] OR premies[TW] OR prematurity[TW] OR "pre mature"[TW] OR "pre matures"[TW] OR "pre maturity"[TW] OR preterm[TIAB] OR "pre term"[TIAB])) AND (((randomized controlled trial[pt]) OR (controlled clinical trial[pt]) OR (randomized[tiab] OR randomised[tiab]) OR (placebo[tiab]) OR (drug therapy[sh]) OR (randomly[tiab]) OR (trial[tiab]) OR (groups[tiab])) NOT (animals[mh] NOT humans[mh]))
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