

## Appendix A: Search strategies

**Search 1: done on August 14th, 2017, limited to human studies from 2008-2017 (except for hypothermia studies: 2004-2017).**

### Search 1-Embase

1. exp Infant, Newborn/ (528260)
2. exp Term Birth/ (2827)
3. exp Infant, Premature/ (89168)
4. Neonate.mp. (37204)
5. Newborn.mp. (626700)
6. Pre-term.mp. (3512)
7. Preterm.mp. (82320)
8. 1 or 2 or 3 or 4 or 5 or 6 or 7 (698612)
9. exp Seizures/ (129965)
10. exp Epilepsy/ (209656)
11. Seizure\*.mp. (208291)
12. Convulsion\*.mp. (43161)
13. Epilep\*.mp. (214129)
14. 9 or 10 or 11 or 12 or 13 (348072)
15. exp EEG/ (109480)
16. Electroencephalogra\*.mp. (197348)
17. EEG.mp. (101296)
18. aEEG.mp. (596)
19. 15 or 16 or 17 or 18 (218167)
20. 8 and 14 and 19 (3775)
21. limit 20 to yr="2008 -Current" (2016)

### Search 1-Medline

1. exp Infant, Newborn/ (573882)
2. exp Term Birth/ (2439)
3. exp Infant, Premature/ (50159)
4. Neonate.mp. (26366)
5. Newborn.mp. (708797)
6. Pre-term.mp. (2301)
7. Preterm.mp. (61187)
8. 1 or 2 or 3 or 4 or 5 or 6 or 7 (740780)
9. exp Seizures/ (49967)
10. exp Epilepsy/ (150100)
11. Seizure\*.mp. (127947)
12. Convulsion\*.mp. (19342)
13. Epilep\*.mp. (146265)
14. 9 or 10 or 11 or 12 or 13 (215961)
15. exp EEG/ (143156)
16. Electroencephalogra\*.mp. (149519)
17. EEG.mp. (68452)
18. aEEG.mp. (357)
19. 15 or 16 or 17 or 18 (165924)
20. 8 and 14 and 19 (3175)
21. **limit 20 to yr="2008 -Current" (1118)**

### Search 1-Cochrane Central Register of Controlled Trials

1. Infant.mp. (37208)
2. 'Term Birth'.mp. (198)
3. Premature.mp. (10814)
4. Neonate.mp. (745)
5. Newborn.mp. (18894)
6. Pre-term.mp. (154)
7. Preterm.mp. (7687)
8. 1 or 2 or 3 or 4 or 5 or 6 or 7 (47565)
9. Seizure\*.mp. (4741)
10. Convulsion\*.mp. (671)
11. Epilep\*.mp. (5133)
12. 9 or 10 or 11 (7623)
13. Electroencephalogra\*.mp. (6884)
14. EEG.mp. (4230)
15. aEEG.mp. (33)
16. 13 or 14 or 15 (7802)
17. 8 and 12 and 16 (158)

18. limit 17 to yr="2008 -Current" (83)

### Search 2-Embase

1. exp Infant, Newborn/ (528260)
2. exp Term Birth/ (2827)
3. exp Infant, Premature/ (89168)
4. Neonate.mp. (37204)
5. Newborn.mp. (626700)
6. Pre-term.mp. (3512)
7. Preterm.mp. (82320)
8. 1 or 2 or 3 or 4 or 5 or 6 or 7 (698612)
9. exp Seizures/ (129965)
10. exp Epilepsy/ (209656)
11. Seizure\*.mp. (208291)
12. Convulsion\*.mp. (43161)
13. Epilep\*.mp. (214129)
14. 9 or 10 or 11 or 12 or 13 (348072)
15. 'Therapeutic Hypothermia'.mp. (5386)
16. 'Brain Cooling'.mp. (518)
17. ((induced or induction or thera\*) adj3 hypotermi\*).mp. (12)
18. 15 or 16 or 17 (5853)
19. 8 and 14 and 18 (220)
20. limit 19 to yr="2004 -Current" (218)

### Search 2-Medline

1. exp Infant, Newborn/ (573882)
2. exp Term Birth/ (2439)
3. exp Infant, Premature/ (50159)
4. Neonate.mp. (26366)
5. Newborn.mp. (708797)
6. Pre-term.mp. (2301)
7. Preterm.mp. (61187)
8. 1 or 2 or 3 or 4 or 5 or 6 or 7 (740780)
9. exp Seizures/ (49967)
10. exp Epilepsy/ (150100)
11. Seizure\*.mp. (127947)
12. Convulsion\*.mp. (19342)
13. Epilep\*.mp. (146265)
14. 9 or 10 or 11 or 12 or 13 (215961)
15. 'Therapeutic Hypothermia'.mp. (3045)
16. 'Brain Cooling'.mp. (427)

17. ((induced or induction or thera\*) adj3 hypotermi\*).mp. (2)
18. 15 or 16 or 17 (3444)
19. 8 and 14 and 18 (71)
20. limit 19 to yr="2004 -Current" (71)

#### **Search 2-Cochrane Central Register of Controlled Trials**

1. Infant.mp. (37208)
2. 'Term Birth'.mp. (198)
3. Premature.mp. (10814)
4. Neonate.mp. (745)
5. Newborn.mp. (18894)
6. Pre-term.mp. (154)
7. Preterm.mp. (7687)
8. or 2 or 3 or 4 or 5 or 6 or 7 (47565)
9. Seizure\*.mp. (4741)
10. Convulsion\*.mp. (671)
11. Epilep\*.mp. (5133)
12. 9 or 10 or 11 (7623)
13. 'Therapeutic Hypothermia'.mp. (305)
14. 'Brain Cooling'.mp. (17)
15. ((induced or induction or thera\*) adj3 hypotermi\*).mp. (0)
16. 13 or 14 or 15 (317)
17. 8 and 12 and 16 (9)
18. limit 17 to yr="2004 -Current" (9)

## Search 2: done on June 28<sup>th</sup>, 2020, limited to human studies from 2017-2020.

### Search 1-Embase

1. exp Infant, Newborn/ (524695)
2. exp Term Birth/ (3555)
3. exp Infant, Premature/ (101691)
4. Neonate.mp. (42716)
5. Newborn.mp. (628976)
6. Pre-term.mp. (4218)
7. Preterm.mp. (103456)
8. 1 or 2 or 3 or 4 or 5 or 6 or 7 (717497)
9. exp Seizures/ (144611)
10. exp Epilepsy/ (231539)
11. Seizure\*.mp. (237713)
12. Convulsion\*.mp. (44016)
13. Epilep\*.mp. (239349)
14. 9 or 10 or 11 or 12 or 13 (387209)
15. exp EEG/ (129385)
16. Electroencephalogra\*.mp. (205573)
17. EEG.mp. (116678)
18. aEEG.mp. (764)
19. 15 or 16 or 17 or 18 (230558)
20. 8 and 14 and 19 (4191)
21. limit 20 to (human and yr="2017 - 2020") **(749)**

### Search 1-Medline

1. exp Infant, Newborn/ (605709)
2. exp Term Birth/ (2948)
3. exp Infant, Premature/ (55672)
4. Neonate.mp. (29565)
5. Newborn.mp. (746839)
6. Pre-term.mp. (2542)
7. Preterm.mp. (73300)
8. 1 or 2 or 3 or 4 or 5 or 6 or 7 (785192)
9. exp Seizures/ (63022)
10. exp Epilepsy/ (110848)
11. Seizure\*.mp. (141495)
12. Convulsion\*.mp. (19875)
13. Epilep\*.mp. (162767)
14. 9 or 10 or 11 or 12 or 13 (237666)
15. exp EEG/ (153424)

16. Electroencephalogra\*.mp. (161635)
17. EEG.mp. (78113)
18. aEEG.mp. (459)
19. 15 or 16 or 17 or 18 (181276)
20. 8 and 14 and 19 (3324)
21. limit 20 to (humans and yr="2017 - 2020") **(263)**

#### **Search 1-Cochrane Central Register of Controlled Trials**

1. Infant.mp. (50277)
2. 'Term Birth'.mp. (343)
3. Premature.mp. (17073)
4. Neonate.mp. (1514)
5. Newborn.mp. (26507)
6. Pre-term.mp. (323)
7. Preterm.mp. (13429)
8. 1 or 2 or 3 or 4 or 5 or 6 or 7 (70209)
9. Seizure\*.mp. (8810)
10. Convulsion\*.mp. (1215)
11. Epilep\*.mp. (8459)
12. 9 or 10 or 11 (13547)
13. Electroencephalogra\*.mp. (9308)
14. EEG.mp. (7022)
15. aEEG.mp. (66)
16. 13 or 14 or 15 (11535)
17. 8 and 12 and 16 (226)
18. limit 17 to yr="2017 - 2020" **(44)**

#### **Search 2-Embase**

1. exp Infant, Newborn/ (524695)
2. exp Term Birth/ (3555)
3. exp Infant, Premature/ (101691)
4. Neonate.mp. (42716)
5. Newborn.mp. (628976)
6. Pre-term.mp. (4218)
7. Preterm.mp. (103456)
8. 1 or 2 or 3 or 4 or 5 or 6 or 7 (717497)
9. exp Seizures/ (144611)
10. exp Epilepsy/ (231539)
11. Seizure\*.mp. (237713)
12. Convulsion\*.mp. (44016)
13. Epilep\*.mp. (239349)

14. 9 or 10 or 11 or 12 or 13 (387209)
15. 'Therapeutic Hypothermia'.mp. (6689)
16. 'Brain Cooling'.mp. (564)
17. ((induced or induction or thera\*) adj3 hypotermi\*).mp. (13)
18. 15 or 16 or 17 (7189)
19. 8 and 14 and 18 (328)
20. limit 19 to (human and yr="2017 - 2020") (**123**)

### Search 2-Medline

1. exp Infant, Newborn/ (605709)
2. exp Term Birth/ (2948)
3. exp Infant, Premature/ (55672)
4. Neonate.mp. (29565)
5. Newborn.mp. (746839)
6. Pre-term.mp. (2542)
7. Preterm.mp. (73300)
8. 1 or 2 or 3 or 4 or 5 or 6 or 7 (785192)
9. exp Seizures/ (63022)
10. exp Epilepsy/ (110848)
11. Seizure\*.mp. (141495)
12. Convulsion\*.mp. (19875)
13. Epilep\*.mp. (162767)
14. 9 or 10 or 11 or 12 or 13 (237666)
15. 'Therapeutic Hypothermia'.mp. (3762)
16. 'Brain Cooling'.mp. (446)
17. ((induced or induction or thera\*) adj3 hypotermi\*).mp. (4)
18. 15 or 16 or 17 (4174)
19. 8 and 14 and 18 (113)
20. limit 19 to (humans and yr="2017 - 2020") (**39**)

### Search 2-Cochrane Central Register of Controlled Trials

1. Infant.mp. (50277)
2. 'Term Birth'.mp. (343)
3. Premature.mp. (17073)
4. Neonate.mp. (1514)
5. Newborn.mp. (26507)
6. Pre-term.mp. (323)
7. Preterm.mp. (13429)
8. 1 or 2 or 3 or 4 or 5 or 6 or 7 (70209)
9. Seizure\*.mp. (8810)
10. Convulsion\*.mp. (1215)

11. Epilep\*.mp. (8459)
12. 9 or 10 or 11 (13547)
13. 'Therapeutic Hypothermia'.mp. (597)
14. 'Brain Cooling'.mp. (33)
15. ((induced or induction or thera\*) adj3 hypotermi\*).mp. (0)
16. 13 or 14 or 15 (622)
17. 8 and 12 and 16 (17)
18. limit 17 to yr="2017 - 2020" **(5)**