**Appendix 1: Search Strategy**

Population

|  |  |
| --- | --- |
|  | Infant, Newborn/ |
|  | (neonat\* or newborn\* or preterm or preemie\* or premie\* or VLBW or LBW or ELBW or birth or baby).tw. |
|  | 1 or 2 |
|  | Resuscitation/ |
|  | Heart Arrest/ |
|  | (resuscita\* or ventilat\* or intubat\* or (chest adj compression) or (cardiac adj arrest) or (cardiopulmonary adj arrest) or (return adj2 circulation)).tw. |
|  | 4 or 5 or 6 |
|  | Asphyxia Neonatorum/ |
|  | ((hypoxic adj2 encephalopathy) or (birth adj asphyxia\*)).tw. |
|  | 8 or 9 |
|  | 7 or 10 |
|  | 3 and 11 |

Interventions/Exposures

|  |  |
| --- | --- |
|  | Blood Glucose/ |
|  | Glucose/ |
|  | (glucose or dextrose).tw |
|  | Hypoglycemia/ |
|  | (hypoglycem\* or hypoglycaem\* or (low adj2 glucose)).tw |
|  | Hyperglycemia/ |
|  | (hyperglycem\* or hyperglycaem\*).tw |
|  | Glucagon/ |
|  | glucagon.tw |
|  | (post-resuscitation or (resuscitation adj care)).tw |
|  | 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 |

Searches for population and interventions/exposures were combined (12 and 11). We hand-search reference lists of included studies.

OVID MEDLINE search on 2023/5/6 resulted in ­­1339 citations

Ovid MEDLINE(R) Epub Ahead of Print, In Process & Other Non-Indexed Citations, Ovid MEDLINE (R) Daily, and Ovid MEDLINE (R) 1946-Present

1 Infant, Newborn/ 666291

2 (neonat\* or newborn\* or preterm or preemie\* or premie\* or VLBW or LBW or ELBW or birth or baby).tw. 743351

3 1 or 2 1095812

4 Resuscitation/ 28360

5 Heart Arrest/ 32235

6 (resuscita\* or ventilat\* or intubat\* or (chest adj compression) or (cardiac adj arrest) or (cardiopulmonary adj arrest) or (return adj2 circulation)).tw. 336038

7 4 or 5 or 6 353861

8 Asphyxia Neonatorum/ 8039

9 ((hypoxic adj2 encephalopathy) or (birth adj asphyxia\*)).tw. 6788

10 8 or 9 13370

11 7 or 10 364954

12 3 and 11 47763

13 Blood Glucose/ 182312

14 Glucose/ 173066

15 (glucose or dextrose).tw. 555406

16 Hypoglycemia/ 30257

17 (hypoglycem\* or hypoglycaem\* or (low adj2 glucose)).tw. 70190

18 Hyperglycemia/ 31682

19 (hyperglycem\* or hyperglycaem\*).tw. 72587

20 Glucagon/ 25980

21 glucagon.tw. 43121

22 (post-resuscitation or (resuscitation adj care)).tw. 1495

23 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 737743

24 12 and 23 1339

EMBASE search 2023/5/8 resulted in 2793 citations

Embase <1980 to 2023 May 05>

1 Infant, Newborn/ 504608

2 (neonat\* or newborn\* or preterm or preemie\* or premie\* or VLBW or LBW or ELBW or birth or baby).tw. 915518

3 1 or 2 1117542

4 Resuscitation/ 128519

5 Heart Arrest/ 83807

6 (resuscita\* or ventilat\* or intubat\* or (chest adj compression) or (cardiac adj arrest) or (cardiopulmonary adj arrest) or (return adj2 circulation)).tw. 489049

7 4 or 5 or 6 564609

8 Asphyxia Neonatorum/ 3714

9 ((hypoxic adj2 encephalopathy) or (birth adj asphyxia\*)).tw. 10069

10 8 or 9 13172

11 7 or 10 575365

12 3 and 11 59653

13 Blood Glucose/ 239838

14 Glucose/ 468291

15 (glucose or dextrose).tw. 715988

16 Hypoglycemia/ 89092

17 (hypoglycem\* or hypoglycaem\* or (low adj2 glucose)).tw. 102821

18 Glucagon/ 33503

19 glucagon.tw. 51434

20 (post-resuscitation or (resuscitation adj care)).tw. 2690

21 Hyperglycemia/ 115961

22 (hyperglycem\* or hyperglycaem\*).tw. 106261

23 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 1013973

24 12 and 23 2793

Repeat search performed from 2023/5/6 to 2024/10/6 prior to review completed with additional records added.

In the final analysis, after combining MEDLINE, EMBASE, registries and hand searching there were 3,306 unique citations.