**Supplementary file**

*Search Strategies for Databases*

1. PubMed search strategy

(((((((“milrinone”\*[Title/Abstract]) OR “WIN 47203”\*[Title/Abstract]) AND (((((((“pediatrics”\*[Title/Abstract]) OR “children”\*[Title/ Abstract]) OR ((“infant”\*[Title/Abstract] OR “newborn”\*[Title/Abstract] OR “new-born\*”[Title/Abstract] OR “neonate”\*[Title/Abstract] OR “neo-nate\*”[Title/Abstract] OR “baby”\*[Title/Abstract] OR “babies”\*[Title/Abstract] OR “premature”\*[Title/Abstract] OR “pre-mature\*”[Title/Abstract] OR “preemie”\*[Title/Abstract] OR “preterm”\*[Title/Abstract] OR “pre-term\*”[Title/Abstract])) (((“hemodynamics”\*[Title/Abstract] AND “systolic blood pressure”\*[Title/Abstract] AND “cardiac output”\*[Title/Abstract] AND “mean arterial blood pressure”\*[Title/Abstract] AND “right ventricle systolic pressure”\*[Title/Abstract] AND “heart rate”\*[Title/Abstract] AND “arterial concentration of oxygen”\*[Title/Abstract] AND “arterial concentration of carbon dioxide”\*[Title/Abstract] AND “lactate”\*[Title/Abstract] AND “pulmonary artery pressure”\* [Title/Abstract] AND “vascular resistance”\*[Title/Abstract] OR “systemic vascular resistance”\*[Title/Abstract] OR “pulmonary vascular AND “systolic blood pressure”\*[Title/Abstract] resistance”\*[Title/Abstract]))))

1. Embase search

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| --- | --- | --- |
|  | Search  | Number of articles retrieved |
| 1 | ‘milrinone’/exp OR milrinone | 733 2 |
| 2 | ‘pediatrics’/exp | 731,891 |
| 3 | ‘children’/exp | 1,811,988 |
| 4 | ‘hemodynamics’/exp | 199,542 |
| 5 | #1 AND #2 AND #3 AND #4 | 60 |
| 6 | ‘blood AND pressure’/exp | 755,337 |
| 7 | ‘mean AND arterial AND blood AND pressure’ | 87,956 |
| 8 | ‘cardiac AND output’/exp | 77,277 |
| 9 | ‘pulmonary AND artery AND pressure’ | 58,616 |
| 10 | ‘right AND ventricle AND systolic AND pressure’ | 23,230 |
| 11 | #1 AND #2 AND #3 AND #6 AND #7 AND #8 AND #9 AND #10 | 6 |
| 12 | ‘lung AND vascular AND resistance’  | 14,640 |
| 13 | ‘systemic AND vascular AND resistance’ | 23,610 |
| 14 | #1 AND #2 AND #3 AND #12 AND #13 | 5 |
| 15 | ‘left AND ventricle AND shortening AND fraction’ | 5,302 |
| 16 | ‘heart AND rate’ | 561,569 |
| 17 | #1 AND #2 AND #3 AND #15 AND #16 | 2 |
| 18 | ‘arterial AND oxygen AND concentration’ | 8,410 |
| 19 | ‘arterial and carbon AND dioxide AND concentration” | 2,842 |
| 20 | ‘fraction AND of AND inspired AND oxygen’ | 3,729 |
| 21 | #1 AND #2 AND #3 AND #18 AND #19 AND #20 | 3 |
| 22 | ‘lactate’ | 191,829 |
| 23 | #1 AND #2 AND #3 AND #21 | 241 |