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| **Database searched** | **Date searched** | **Results** |
|  MEDLINE (PubMed) | 10/13/2020 | **144** |
| Cochrane Database of Systematic Reviews | 10/13/2020 | **1** |
| Cochrane Central Register of Controlled Trials | 10/13/2020 | **16** |
| Embase (Elsevier)  | 10/13/2020 | **224** |
| CINAHL (Ebsco) | 10/13/2020 | **29** |
| Web of Science (Clarivate) | 10/13/2020 | **143** |
| Total | **559** |
| After de-duplication | **269** |

**Search Methods:**

The review team worked with a research librarian (ABW) to conduct a comprehensive search of the literature to identify records related to the cost of specific shunting techniques in infants with intraventricular hemorrhage. The following databases were searched on October 13th, 2020 from inception to present: PubMed (MEDLINE), Cochrane Library databases (Wiley), Embase (Elsevier), CINAHL (Ebsco), and Web of Science (Clarivate). The searches combined database-specific controlled vocabulary and keyword terms without limits for language, date, or publication type. All records were downloaded and underwent multi-pass deduplication in a citation management software (EndNote). Unique records were uploaded to a screening platform (Rayyan) for initial screening.

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| **Ovid MEDLINE** |
| # | Search | Result |
|  | ("Infant"[Mesh] OR "Intensive Care, Neonatal"[Mesh] OR infant\*[tiab] OR newborn\*[tiab] OR baby[tiab] OR babies[tiab] OR "prematur\*"[tiab] OR "pre-mature\*"[tiab] OR preterm[tiab] OR "pre-term"[tiab] OR preemie\*[tiab] OR neonat\*[tiab] OR nicu[tiab]) AND ("Cerebral Intraventricular Hemorrhage"[Mesh] OR "ventricular dilatation\*"[tiab] OR "ventricular dilation\*"[tiab] OR "Ventricular hemorrhag\*"[tiab] OR "intraventricular hemorrhag\*"[tiab] OR "Intraventricular Haemorrhag\*"[tiab] OR "ventricular haemorrhag\*"[tiab] OR "germinal matrix hemorrhag\*"[tiab] OR "germinal matrix haemorrhag\*"[tiab] OR GMH-IVH[tiab] OR "Posthemorrhagic Hydrocephalus"[tiab] OR "Post-hemorrhagic hydrocephalus"[tiab] OR "Posthaemorrhagic Hydrocephalus"[tiab] OR "Post-haemorrhagic hydrocephalus"[tiab] OR PHH[tiab] OR ventriculomegal\*[tiab]) AND ("Ventricular access device\*"[tiab] OR "intracerebroventricular catheter\*"[tiab] OR ventriculosubgaleal[tiab] OR "subcutaneous shunt\*"[tiab] OR reservoir\*[tiab] OR galeal[tiab] OR ommaya[tiab] OR rickham[tiab] OR VSGS[tiab] OR VAD[tiab] OR VADs[tiab]) | 144 |

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| **Cochrane Library** |
| # | Search | Result |
| #1 | MeSH descriptor: [Infant] explode all trees | 31836 |
| #2 | MeSH descriptor: [Intensive Care, Neonatal] explode all trees | 332 |
| #3 | (infant\* OR newborn\* OR baby OR babies OR premature\* OR pre-mature\* OR preterm OR pre-term OR preemie\* OR neonat\* OR nicu\*):ti,ab,kw | 85609 |
| #4 | #1 OR #2 OR #3 | 85609 |
| #5 | MeSH descriptor: [Cerebral Intraventricular Hemorrhage] explode all trees | 15 |
| #6 | (“ventricular dilatation” OR “ventricular dilatations” OR “ventricular dilation” OR “ventricular dilations” OR “Ventricular hemorrhage” OR “Ventricular hemorrhages” OR “Ventricular hemorrhaging” OR “intraventricular hemorrhage” OR “intraventricular hemorrhages” OR “intraventricular hemorrhaging” OR “Intraventricular Haemorrhage” OR “Intraventricular Haemorrhages” OR “Intraventricular Haemorrhaging” OR “ventricular haemorrhage” OR “ventricular haemorrhages” OR “ventricular haemorrhaging” OR “germinal matrix hemorrhage” OR “germinal matrix hemorrhages” OR “germinal matrix hemorrhaging” OR “germinal matrix haemorrhage” OR “germinal matrix haemorrhages” OR “germinal matrix haemorrhaging” OR GMH-IVH OR “Posthemorrhagic Hydrocephalus” OR “Post-hemorrhagic hydrocephalus” OR “Posthaemorrhagic Hydrocephalus” OR “Post-haemorrhagic hydrocephalus” OR PHH OR ventriculomegal\*):ti,ab,kw | 1638 |
| #7 | #5 OR #6 | 1638 |
| #8 | (“Ventricular access device” OR “Ventricular access devices” OR "intracerebroventricular catheter" OR "intracerebroventricular catheters" OR ventriculosubgaleal OR "subcutaneous shunt" OR "subcutaneous shunts" OR reservoir\* OR galeal OR ommaya OR rickham OR VSGS OR VAD OR VADs) :ti,ab,kw | 2072 |
| #9 | #4 AND #7 AND #8 | **17** |

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| **Embase** |
| # | Search | Result |
| #1  | ('infant'/exp OR 'neonatal intensive care unit'/exp OR infant\*:ti,ab OR newborn\*:ti,ab OR baby:ti,ab OR babies:ti,ab OR 'prematur\*':ti,ab OR 'pre-mature\*':ti,ab OR preterm:ti,ab OR 'pre-term':ti,ab OR preemie\*:ti,ab OR neonat\*:ti,ab OR nicu:ti,ab) AND ('brain ventricle hemorrhage'/exp OR 'ventricular dilatation\*':ti,ab OR 'ventricular dilation\*':ti,ab OR 'Ventricular hemorrhag\*':ti,ab OR 'intraventricular hemorrhag\*':ti,ab OR 'Intraventricular Haemorrhag\*':ti,ab OR 'ventricular haemorrhag\*':ti,ab OR 'germinal matrix hemorrhag\*':ti,ab OR 'germinal matrix haemorrhag\*':ti,ab OR GMH-IVH:ti,ab OR 'Posthemorrhagic Hydrocephalus':ti,ab OR 'Post-hemorrhagic hydrocephalus':ti,ab OR 'Posthaemorrhagic Hydrocephalus':ti,ab OR 'Post-haemorrhagic hydrocephalus':ti,ab OR PHH:ti,ab OR ventriculomegal\*:ti,ab) AND ('intracerebroventricular catheter'/exp OR 'Ventricular access device\*':ti,ab OR 'intracerebroventricular catheter\*':ti,ab OR ventriculosubgaleal:ti,ab OR 'subcutaneous shunt\*':ti,ab OR reservoir\*:ti,ab OR galeal:ti,ab OR ommaya:ti,ab OR rickham:ti,ab OR VSGS:ti,ab OR VAD:ti,ab OR VADs:ti,ab) | **224** |

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| **CINAHL**  |
| # | Search | Result |
| S1 | MH "Infant+" OR MH "Intensive Care Units, Neonatal" OR infant\* OR newborn\* OR baby OR babies OR premature\* OR pre-mature\* OR preterm OR pre-term OR preemie\* OR neonat\* OR nicu\* | 373895 |
| S2 | MH "Cerebral Hemorrhage+" OR "ventricular dilatation\*" OR “ventricular dilation\*” OR "Ventricular hemorrhag\*" OR “intraventricular hemorrhag\*” OR “Intraventricular Haemorrhag\*” OR “ventricular haemorrhag\*” OR "germinal matrix hemorrhage\*" OR "germinal matrix haemorrhage\*" OR GMH-IVH OR "Posthemorrhagic Hydrocephalus" OR "Post-hemorrhagic hydrocephalus" OR "Posthaemorrhagic Hydrocephalus" OR "Post-haemorrhagic hydrocephalus" OR PHH OR ventriculomegal\*  | 9688 |
| S3 | MH "Vascular Access Devices+" OR“Ventricular access device\*” OR "intracerebroventricular catheter\*" OR ventriculosubgaleal OR "subcutaneous shunt\*" OR reservoir\* OR galeal OR ommaya OR rickham OR VSGS OR VAD OR VADs | 14702 |
| S4 | S1 AND S2 AND S3 | **29** |

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| **Web of Science** |
| # | Search | Result |
| #1 | TS=((infant\* OR newborn\* OR baby OR babies OR premature\* OR pre-mature\* OR preterm OR pre-term OR preemie\* OR neonat\* OR nicu\*) AND ("ventricular dilatation\*" OR “ventricular dilation\*” OR "Ventricular hemorrhag\*" OR “intraventricular hemorrhag\*” OR “Intraventricular Haemorrhag\*” OR “ventricular haemorrhag\*” OR "germinal matrix hemorrhage\*" OR "germinal matrix haemorrhage\*" OR GMH-IVH OR "Posthemorrhagic Hydrocephalus" OR "Post-hemorrhagic hydrocephalus" OR "Posthaemorrhagic Hydrocephalus" OR "Post-haemorrhagic hydrocephalus" OR PHH OR ventriculomegal\*) AND (“Ventricular access device\*” OR "intracerebroventricular catheter\*" OR ventriculosubgaleal OR "subcutaneous shunt\*" OR reservoir\* OR galeal OR ommaya OR rickham OR VSGS OR VAD OR VADs)) | **143** |