**Appendix D:** Meta-analysis data for all subgroup analyses performed for the primary and secondary outcomes included in the review.

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| --- | --- | --- | --- | --- | --- |
| **Outcome and Subgroup** | **Studies** | **Sample Size of Data Analyzed** | **Overall Mean Difference in Minutes (95% CI)\*** | **P-Value** | **I2** |
| **Duration of Sensory Block**  *Dose of Dexmedetomidine*  ≤ 50μg  > 50μg    *Location of Block*  Supraclavicular  Infraclavicular  Axillary    *Local Anaesthetic Type*  Ropivacaine  Bupivacaine  Levobupivacaine  Mepivacaine | 4  10  9  2  3  5  4  4  1 | 171  600  541  80  150  241  240  270  20 | 425.43 (295.72 – 555.14)  207.41 (126.09 – 288.73)  323.63 (157.66 – 489.60)  58.30 (47.24 – 69.37)  232.04 (187.74 – 276.34)  313.30 (197.26 – 429.35)  337.34 (18.47 – 656.21)  181.30 (39.56 – 322.04)  78.20 (38.61 – 117.79) | P < 0.00001  P < 0.00001  P = 0.0001  P < 0.00001  P < 0.00001  P < 0.00001  P = 0.04  P = 0.01  P < 0.0001 | 93%  99%  100%  9%  54%  93%  100%  99%  NA |
| **Duration of Motor Block**  *Dose of Dexmedetomidine*  ≤ 50μg  > 50μg    *Location of Block*  Supraclavicular  Infraclavicular  Axillary  Interscalene    *Local Anaesthetic Type*  Ropivacaine  Bupivacaine  Levobupivacaine  Mepivacaine | 6  11  10  2  3  2  7  4  5  1 | 284  654  595  80  150  113  360  240  318  20 | 285.68 (131.65 to 439.71)  166.91 (70.95 – 262.87)  267.61 (85.76 – 449.46)  50.77 (42.92 – 58.63)  230.34 (178.82 – 281.86)  -145.59 (-557.09 – 265.91)  236.16 (124.53 to 347.79)  320.52 (24.21 – 616.84)  74.07 (-165.68 – 313.83)  66.20 (33.97 – 98.43) | P < 0.0003  P = 0.0007  P = 0.004  P < 0.00001  P < 0.00001  P = 0.49  P < 0.0001  P = 0.03  P = 0.54  P < 0.0001 | 95%  99%  100%  0%  74%  74%  94%  100%  100%  NA |
| **Onset of Sensory Block**  *Dose of Dexmedetomidine*  ≤ 50μg  > 50μg    *Location of Block*  Supraclavicular  Infraclavicular  Axillary  Interscalene    *Local Anaesthetic Type*  Ropivacaine  Bupivacaine  Levobupivacaine | 5  8  8  1  3  1  5  4  4 | 219  520  481  60  150  48  241  240  258 | -5.07 (-11.93 – 1.78)  -2.61 (-3.93 – -1.30)  -3.20 (-5.13 – -1.27)  -6.20 (-7.45 – -4.95)  -2.23 (-3.53 – -0.93)  -2.50 (-7.85 – 2.85)  -5.75 (-9.87 – -1.63)  -2.38 (-6.20 – 1.44)  -1.58 (-2.60 – -0.55) | P = 0.15  P < 0.0001  P = 0.001  P < 0.00001  P = 0.0008  P = 0.36  P = 0.006  P = 0.22  P = 0.003 | 96%  94%  96%  NA  65%  NA  92%  98%  80% |
| **Onset of Motor Block**  *Dose of Dexmedetomidine*  ≤ 50μg  > 50μg    *Location of Block*  Supraclavicular  Infraclavicular  Axillary  *Local Anaesthetic Type*  Ropivacaine  Bupivacaine  Levobupivacaine | 4  8  8  1  3  5  4  3 | 172  520  482  60  150  242  240  210 | -6.98 (-15.69 – 1.74)  -2.37 (-3.69 – -1.05)  -2.92 (-4.83 – -1.00)  -6.60 (-8.47 – -4.73)  -1.61 (-2.17 – -1.06)  -6.49 (-11.28 – -1.71)  -2.32 (-6.95 – 2.31)  -1.16 (-1.91 – -0.41) | P = 0.12  P = 0.0004  P = 0.003  P < 0.00001  P < 0.00001  P = 0.008  P = 0.33  P = 0.002 | 97%  95%  97%  NA  0%  94%  98%  69% |
| **Duration of Analgesia**  *Dose of Dexmedetomidine*  ≤ 50μg  > 50μg    *Location of Block*  Supraclavicular  Infraclavicular  Axillary  Interscalene  *Local Anaesthetic Type*  Ropivacaine  Bupivacaine  Levobupivacaine  Mepivacaine | 4  9  8  2  2  1  4  4  4  1 | 206  514  401  80  120  65  190  240  270  20 | 433.99 (310.84 to 557.15)  228.75 (128.452 – 329.04)  327.11 (156.52 – 497.70)  118.17 (13.55 – 222.79)  335.06 (-77.67 – 747.79)  252.00 (170.00 – 334.00)  346.88 (184.90 to 508.86)  351.63 (145.68 – 557.58)  226.10. (-55.91 – 508.12)  63.20 (23.88 – 102.52) | P < 0.00001  P < 0.00001  P = 0.0002  P = 0.03  P = 0.11  P < 0.00001  P < 0.0001  P = 0.0008  P = 0.12  P = 0.002 | 92%  99%  99%  96%  98%  NA  95%  99%  99%  NA |
| **Outcome and Subgroup** | **Studies** | **Sample Size of Data Analyzed** | **Overall Risk Difference (95% CI)\*** | **P-Value** | **I2** |
| **Adverse Events:**  **Hypotension**  *Dose of Dexmedetomidine*  ≤ 50μg  > 50μg  **Bradycardia**  *Dose of Dexmedetomidine*  ≤ 50μg  > 50μg | 6  5  6  7 | 285  284  285  512 | 0.05 (-0.03 – 0.13)  0.00 (-0.03 – 0.03)  0.04 (-0.06 – 0.15)  0.07 (0.00 – 0.14) | P = 0.24  P = 1.00  P = 0.41  P = 0.04 | 46%  0%  75%  75% |

\*Positive values suggest an increase in time/events with the addition of *Dexmedetomidine* whereas negative values

suggest a decrease in time/events with the addition *Dexmedetomidine.*

NA *=* Not applicable