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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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*SupraclavicularInfraclavicularAxillary *Local Anaesthetic Type*RopivacaineBupivacaineLevobupivacaineMepivacaine | 4109235441 | 1716005418015024124027020 | 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 < 0.00001P < 0.00001P = 0.0001P < 0.00001P < 0.00001P < 0.00001P = 0.04P = 0.01P < 0.0001 | 93%99%100%9%54%93%100%99%NA |
| **Duration of Motor Block** *Dose of Dexmedetomidine*≤ 50μg> 50μg *Location of Block*SupraclavicularInfraclavicularAxillaryInterscalene *Local Anaesthetic Type*RopivacaineBupivacaineLevobupivacaineMepivacaine | 611102327451 | 2846545958015011336024031820 | 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 < 0.0003P = 0.0007P = 0.004P < 0.00001P < 0.00001P = 0.49P < 0.0001P = 0.03P = 0.54P < 0.0001 | 95%99%100%0%74%74%94%100%100%NA |
| **Onset of Sensory Block** *Dose of Dexmedetomidine*≤ 50μg> 50μg *Location of Block*SupraclavicularInfraclavicularAxillaryInterscalene *Local Anaesthetic Type*RopivacaineBupivacaineLevobupivacaine | 588131544 | 2195204816015048241240258 | -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 = 0.15P < 0.0001P = 0.001P < 0.00001P = 0.0008P = 0.36P = 0.006P = 0.22P = 0.003 | 96%94%96%NA65%NA92%98%80% |
| **Onset of Motor Block** *Dose of Dexmedetomidine*≤ 50μg> 50μg *Location of Block*SupraclavicularInfraclavicularAxillary *Local Anaesthetic Type*RopivacaineBupivacaineLevobupivacaine | 48813543 | 17252048260150242240210 | -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 = 0.12P = 0.0004P = 0.003P < 0.00001P < 0.00001P = 0.008P = 0.33P = 0.002 | 97%95%97%NA0%94%98%69% |
| **Duration of Analgesia** *Dose of Dexmedetomidine*≤ 50μg> 50μg *Location of Block*SupraclavicularInfraclavicularAxillaryInterscalene *Local Anaesthetic Type*RopivacaineBupivacaineLevobupivacaineMepivacaine | 4982214441 | 206514401801206519024027020 | 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 < 0.00001P < 0.00001P = 0.0002P = 0.03P = 0.11P < 0.00001P < 0.0001P = 0.0008P = 0.12P = 0.002 | 92%99%99%96%98%NA95%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 | 6567 | 285284285512 | 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 = 0.24P = 1.00P = 0.41P = 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