##### **Supplemental Digital Content 2**

TableS2: GRADE assessment for Epidural Steroid Injections vs. Saline Injections

| **Certainty assessment** | **№ of patients** | **Effect** | **Certainty** | **Importance** |
| --- | --- | --- | --- | --- |
| **№ of studies** | **Study design** | **Risk of bias** | **Inconsistency** | **Indirectness** | **Imprecision** | **Other considerations** | **steroid injections** | **saline injections** | **Relative(95% CI)** | **Absolute(95% CI)** |
| **Function Post-treatment (follow up: range 1 days to 1 weeks; assessed with: ODI & RMDQ)** |
| 2  | randomised trials  | not serious  | serious a | not serious  | serious b | none  | 71  | 70  | -  | SMD **0.18 SD higher**(0.3 lower to 0.65 higher)  | ⨁⨁◯◯LOW  | CRITICAL  |
| **Function Short-term (follow up: range 1 weeks to 3 months; assessed with: ODI & RMDQ)** |
| 5  | randomised trials  | serious c | not serious d | not serious  | serious b | none  | 180  | 182  | -  | SMD **0.29 SD lower**(0.66 lower to 0.07 higher)  | ⨁⨁◯◯LOW  | CRITICAL  |
| **Function Short-term (Oswestry Disability Index) (follow up: range 1 weeks to 3 months; assessed with: ODI; Scale from: 0 to 100)** |
| 7  | randomised trials  | serious c | not serious  | not serious  | not serious  | none  | 413  | 406  | -  | MD **1.59 ODI lower**(3.42 lower to 0.24 higher)  | ⨁⨁⨁◯MODERATE  | CRITICAL  |
| **Function Short-term (Roland-Morris Disability Questionnaire) (follow up: range 1 weeks to 3 months; assessed with: RMDQ; Scale from: 0 to 24)** |
| 2  | randomised trials  | serious e | not serious  | not serious  | serious f | none  | 90  | 88  | -  | MD **1.72 RMDQ lower**(3.16 lower to 0.27 lower)  | ⨁⨁◯◯LOW  | CRITICAL  |
| **Function Medium-term (follow up: range 3 months to 1 years; assessed with: ODI; Scale from: 0 to 100)** |
| 2  | randomised trials  | not serious  | serious g | not serious  | serious f | none  | 198  | 188  | -  | MD **1.85 ODI higher**(5.89 lower to 9.59 higher)  | ⨁⨁◯◯LOW  | CRITICAL  |
| **Function Long-term (follow up: range 1 years to > years; assessed with: ODI; Scale from: 0 to 100)** |
| 2  | randomised trials  | serious h | not serious  | not serious  | serious f | none  | 112  | 112  | -  | MD **1.09 ODI higher**(3.43 lower to 5.61 higher)  | ⨁⨁◯◯LOW  | CRITICAL  |
| **Pain Intensity Post-treatment (follow up: range 1 days to 1 weeks; assessed with: VAS; Scale from: 0 to 100)** |
| 2  | randomised trials  | not serious  | not serious  | not serious  | serious f | none  | 71  | 70  | -  | MD **3.86 VAS lower**(8.4 lower to 0.68 higher)  | ⨁⨁⨁◯MODERATE  | CRITICAL  |
| **Pain Intensity Short-term (follow up: range 1 weeks to 3 months; assessed with: VAS; Scale from: 0 to 100)** |
| 4  | randomised trials  | serious i | not serious j | not serious  | serious f | none  | 128  | 124  | -  | MD **7.63 VAS lower**(14.51 lower to 0.76 lower)  | ⨁⨁◯◯LOW  | CRITICAL  |
| **Pain Intensity Long-term (follow up: range 1 years to > years; assessed with: VAS; Scale from: 0 to 100)** |
| 1  | randomised trials  | very serious k | not serious  | not serious  | very serious l | none  | 12  | 11  | -  | MD **15.38 VAS lower**(43.93 lower to 13.17 higher)  | ⨁◯◯◯VERY LOW  | CRITICAL  |
| **Back Pain Intensity Short-term (follow up: range 1 weeks to 3 months; assessed with: NRS & VAS; Scale from: 0 to 100)** |
| 4  | randomised trials  | not serious h | not serious  | not serious  | not serious  | none  | 261  | 253  | -  | MD **4.14 higher**(1.04 lower to 9.32 higher)  | ⨁⨁⨁⨁HIGH  | CRITICAL  |
| **Back Pain Intensity Medium-term (follow up: range 3 months to 1 years; assessed with: VAS; Scale from: 0 to 100)** |
| 2  | randomised trials  | not serious  | serious m | not serious  | serious b | none  | 198  | 188  | -  | MD **6.69 VAS higher**(5.51 lower to 18.89 higher)  | ⨁⨁◯◯LOW  | CRITICAL  |
| **Back Pain Intensity Long-term (follow up: range 1 years to > years; assessed with: VAS; Scale from: 0 to 100)** |
| 2  | randomised trials  | serious h | not serious  | not serious  | serious f | none  | 112  | 112  | -  | MD **4.23 VAS higher**(3.73 lower to 12.19 higher)  | ⨁⨁◯◯LOW  | CRITICAL  |
| **Leg Pain Intensity Short-term (follow up: range 1 weeks to 3 months; assessed with: NRS & VAS; Scale from: 0 to 100)** |
| 6  | randomised trials  | serious n | not serious o | not serious  | not serious  | none  | 366  | 369  | -  | MD **1.69 lower**(8.77 lower to 5.39 higher)  | ⨁⨁⨁◯MODERATE  | CRITICAL  |
| **Leg Pain Intensity Short-term (Success Rate) (follow up: range 1 weeks to 3 months; assessed with: A ≥50% decrease in leg pain (or complete relief) on the NRS at 1 month follow-up)** |
| 2  | randomised trials  | serious p | serious q | serious r | serious b | none  | 36/56 (64.3%)  | 22/67 (32.8%)  | **RR 1.92**(1.02 to 3.61)  | **302 more per 1.000**(from 7 more to 857 more)  | ⨁◯◯◯VERY LOW  | CRITICAL  |
| **Leg Pain Intensity Medium-term (follow up: range 3 months to 1 years; assessed with: VAS; Scale from: 0 to 100)** |
| 2  | randomised trials  | not serious  | not serious s | not serious  | serious b | none  | 198  | 188  | -  | MD **9.31 VAS higher**(3.62 lower to 22.23 higher)  | ⨁⨁⨁◯MODERATE  | CRITICAL  |
| **Leg Pain Intensity Long-term (follow up: range 1 years to > years; assessed with: VAS; Scale from: 0 to 100)** |
| 2  | randomised trials  | serious h | not serious  | not serious  | serious f | none  | 112  | 112  | -  | MD **2.64 VAS higher**(5.36 lower to 10.64 higher)  | ⨁⨁◯◯LOW  | CRITICAL  |
| **Health-Related Quality of Life Short-term (follow up: range 1 weeks to 3 months; assessed with: EQ-5D & SIP)** |
| 2  | randomised trials  | serious h | not serious  | not serious  | serious b | none  | 111  | 115  | -  | SMD **0.21 SD lower**(0.47 lower to 0.06 higher)  | ⨁⨁◯◯LOW  | CRITICAL  |
| **Health-Related Quality of Life Long-term (follow up: range 1 years to > years; assessed with: EQ-5D; Scale from: -0.594 to 1)** |
| 1  | randomised trials  | serious t | not serious  | not serious  | very serious u | none  | 34  | 32  | -  | MD **0.05 EQ5D lower**(0.17 lower to 0.07 higher)  | ⨁◯◯◯VERY LOW  | CRITICAL  |

**CI:** Confidence interval; **SMD:** Standardised mean difference; **MD:** Mean difference; **RR:** Risk ratio

#### Explanations

a. Unexplained moderate heterogeneity (I2 = 50%).

b. 95%CI crosses the clinically relevant boundary.

c. High selection bias and unclear performance bias in one study and unclear selection bias in another study.

d. Explained moderate heterogeneity (I2 = 66%).

e. High selection bias and unclear performance bias in one study.

f. Optimal information size is not reached.

g. Unexplained moderate heterogeneity (I2 = 66%).

h. Unclear selection bias in one study.

i. High selection bias and unclear performance bias in one study and unclear selection bias, high attrition bias and high other bias in another study.

j. Explained moderate heterogeneity (I2 = 58%).

k. Unclear selection bias, high attrition bias and high other bias.

l. 95%CI crosses the clinically relevant boundary and optimal information size is not reached.

m. Unexplained moderate heterogeneity (I2 = 68%).

n. Unclear selection bias in one study and unclear selection bias and unclear performance bias in another study.

o. Explained moderate heterogeneity (I2 = 54%).

p. Unclear selection bias and unclear performance bias in one study.

q. Unexplained moderate heterogeneity (I2 = 56%).

r. Both studies defined a minimal important change as ≥50% decrease in leg pain 1 month after treatment, instead of a ≥30% decrease in leg pain.

s. Unexplained substantial heterogeneity (I2 = 71%), but effect size of both studies is in the same direction.

t. Unclear selection bias.

u. The SMD (-0.20; 95%CI = -0.68 to 0.29) crosses the clinically relevant boundary and optimal information size is not reached.