##### **Supplemental Digital Content 3**

TableS3: GRADE assessment for Epidural Steroid Injections vs. Usual Care

| **Certainty assessment** | | | | | | | **№ of patients** | | **Effect** | | **Certainty** | **Importance** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **№ of studies** | **Study design** | **Risk of bias** | **Inconsistency** | **Indirectness** | **Imprecision** | **Other considerations** | **steroid injections** | **usual care** | **Relative (95% CI)** | **Absolute (95% CI)** |
| **Function Post-treatment (follow up: range 1 days to 7 days; assessed with: HFAQ; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious a | not serious | not serious | very serious b | none | 17 | 19 | - | MD **6.2 HFAQ lower** (16.17 lower to 3.77 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Function Short-term (follow up: range 1 weeks to 3 months; assessed with: HFAQ & ODI & RMDQ)** | | | | | | | | | | | | |
| 5 | randomised trials | very serious c | serious d | not serious | serious e | none | 169 | 163 | - | SMD **0.59 SD lower** (1.26 lower to 0.09 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Function Short-term (Oswestry Disability Index) (follow up: range 1 weeks to 3 months; assessed with: ODI; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 4 | randomised trials | very serious f | serious d | not serious | serious e | none | 146 | 143 | - | MD **10.66 ODI lower** (22.52 lower to 1.2 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Function Medium-term (follow up: range 3 months to 1 years; assessed with: HFAQ & RMDQ)** | | | | | | | | | | | | |
| 2 | randomised trials | very serious g | not serious | not serious | serious e | none | 50 | 49 | - | SMD **0.38 SD lower** (0.78 lower to 0.02 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Function Long-term (follow up: range 1 years to > years; assessed with: RMDQ; Scale from: 0 to 24)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious h | not serious | not serious | serious i | none | 33 | 30 | - | MD **1.8 RMDQ lower** (4.35 lower to 0.75 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Pain Intensity Post-treatment (follow up: range 1 days to 7 days; assessed with: VAS; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious a | not serious | not serious | very serious j | none | 17 | 19 | - | MD **6.3 VAS lower** (18.64 lower to 6.04 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Pain Intensity Short-term (follow up: range 1 weeks to 3 months; assessed with: NRS & VAS; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 5 | randomised trials | very serious k | not serious l | not serious | serious e | none | 136 | 133 | - | MD **11.71 lower** (24.97 lower to 1.56 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Pain Intensity Medium-term (follow up: range 3 months to 1 years; assessed with: NRS & VAS; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 3 | randomised trials | very serious g | not serious | not serious | serious i | none | 75 | 74 | - | MD **4 lower** (9.94 lower to 1.94 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Pain Intensity Long-term (follow up: range 1 years to > years; assessed with: NRS; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious h | not serious | not serious | very serious j | none | 33 | 30 | - | MD **8 NRS lower** (20.72 lower to 4.72 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)** | | | | | | | | | | | | |
| 3 | randomised trials | very serious m | serious d | not serious | serious e | none | 118 | 114 | - | MD **15.03 lower** (41.11 lower to 11.04 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Back Pain Intensity Medium-term (follow up: range 3 months to 1 years; assessed with: NRS; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious h | not serious | not serious | serious i | none | 33 | 30 | - | MD **1 NRS lower** (13.1 lower to 11.1 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Back Pain Intensity Long-term (follow up: range 1 years to > years; assessed with: NRS; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious h | not serious | not serious | very serious j | none | 33 | 30 | - | MD **7 NRS lower** (19.24 lower to 5.24 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Leg Pain Intensity Short-term (follow up: range 1 weeks to 3 months; assessed with: NRS; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 2 | randomised trials | serious n | not serious | not serious | serious i | none | 106 | 102 | - | MD **5.53 NRS lower** (12.94 lower to 1.87 higher) | ⨁⨁◯◯ LOW | CRITICAL |
| **Leg Pain Intensity Short-term (Success Rate) (follow up: range 1 weeks to 3 months; assessed with: A decrease of ≥20 points on the NRS for average leg pain)** | | | | | | | | | | | | |
| 1 | randomised trials | not serious | not serious | serious o | very serious j | none | 27/73 (37.0%) | 21/72 (29.2%) | **RR 1.27** (0.79 to 2.03) | **79 more per 1.000** (from 61 fewer to 300 more) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Leg Pain Intensity Medium-term (follow up: range 3 months to 1 years; assessed with: NRS; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious h | not serious | not serious | very serious j | none | 33 | 30 | - | MD **3 NRS lower** (15.13 lower to 9.13 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Leg Pain Intensity Long-term (follow up: range 1 years to > years; assessed with: NRS; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious h | not serious | not serious | serious i | none | 33 | 30 | - | MD **4 NRS lower** (14.42 lower to 6.42 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Health-Related Quality of Life Short-term (Mental Component Summary) (follow up: range 1 weeks to 3 months; assessed with: SF-36; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious h | not serious | not serious | very serious p | none | 22 | 22 | - | MD **3.8 SF-36 higher** (2.6 lower to 10.2 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Health-Related Quality of Life Medium-term (Mental Component Summary) (follow up: range 3 months to 1 years; assessed with: SF-36; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious h | not serious | not serious | very serious q | none | 22 | 22 | - | MD **3.2 SF-36 higher** (3.4 lower to 9.8 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Health-Related Quality of Life Long-term (Mental Component Summary) (follow up: range 1 years to > years; assessed with: SF-36; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious h | not serious | not serious | very serious r | none | 22 | 22 | - | MD **1.8 SF-36 higher** (4.87 lower to 8.47 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Health-Related Quality of Life Short-term (Physical Component Summary) (follow up: range 1 weeks to 3 months; assessed with: SF-36; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious h | not serious | not serious | very serious s | none | 22 | 22 | - | MD **9.5 SF-36 higher** (2.37 higher to 16.63 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Health-Related Quality of Life Medium-term (Physical Component Summary) (follow up: range 3 months to 1 years; assessed with: SF-36; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious h | not serious | not serious | serious t | none | 22 | 22 | - | MD **14.6 SF-36 higher** (7.34 higher to 21.86 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |
| **Health-Related Quality of Life Long-term (Physical Component Summary) (follow up: range 1 years to > years; Scale from: 0 to 100)** | | | | | | | | | | | | |
| 1 | randomised trials | very serious h | not serious | not serious | very serious u | none | 22 | 22 | - | MD **11.9 SF-36 higher** (4.69 higher to 19.11 higher) | ⨁◯◯◯ VERY LOW | CRITICAL |

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

#### Explanations

a. Unclear selection bias, high performance bias and high detection bias.

b. The SMD (-0.39; 95%CI = -1.05 to 0.27) crosses the clinically relevant boundary and optimal information size is not reached.

c. High performance bias and high detection bias in four studies and either unclear or high selection bias in three studies.

d. Effect size of the only low risk of bias study is in a different direction than the high risk of bias studies.

e. 95%CI crosses the clinically relevant boundary.

f. High performance bias and high detection bias in three studies and either unclear or high selection bias in two studies.

g. High performance bias and high detection bias in all studies and unclear selection bias in one study.

h. High performance bias and high detection bias.

i. Optimal information size is not reached.

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

k. High performance bias and high detection bias in all studies and unclear selection bias in three studies.

l. Explained substantial heterogeneity (I2 = 93%).

m. High performance bias and high detection bias in two studies and high selection bias in one study.

n. High performance bias and high detection bias in one study.

o. Studies defined a minimal important change as ≥20 points on the NRS for leg pain, instead of a ≥30% decrease in leg pain.

p. The SMD (0.34; 95%CI = -0.25 to 0.94) crosses the clinically relevant boundary and optimal information size is not reached.

q. The SMD (0.28; 95%CI = -0.31 to 0.88) crosses the clinically relevant boundaries and optimal information size is not reached.

r. The SMD (0.16; 95%CI = -0.44 to 0.75) crosses the clinically relevant boundaries and optimal information size is not reached.

s. The SMD (0.77; 95%CI = 0.16 to 1.39) crosses the clinically relevant boundary and optimal information size is not reached.

t. Optimal information size is not reached, the SMD (1.17; 95%CI = 0.52 to 1.81) does not cross the clinically relevant boundary.

u. The SMD (0.96; 95%CI = 0.33 to 1.59) crosses the clinically relevant boundary and optimal information size is not reached.