

Supplementary table II: Reliability and validity of ordinal outcome measures

| Scoring dimension | | Reliability | | | Validity |
|--------------------------------------|-----------------------|-------------|--|---|--|
| | | Test-retest | Intra-rater | Inter-rater | |
| ISNCSCI | Neurological measures | | Upper extremity motor score: ICC=0.98 (n=2; 5 raters) [11] Light touch: ICC=0.99 (n=4; 12 raters) [11] Pin prick: ICC=0.99 (n=4; 12 raters) [11] | Total motor score: ICC=0.99 (n=43) [12] Light touch: ICC=0.997 (n=30) [12] Pin prick: ICC=0.988 (n=30) [12] Total motor score: ICC=0.98 (n=16) [11] Upper extremity motor score: ICC=0.96 (n=16) [11] Lower extremity motor score: ICC=0.98 (n=6) [11] Light touch: ICC=0.96 (n=16) [11] Pin prick: ICC=0.89 (n=16) [11] ICC=0.967 (n=372) [14] | 6MWT: Total motor score: r=0.64 (n=152) [13] LEMS: r=0.70 (n=152) [13] UEMS: r=0.24 (n=152) [13] 10mWT: Total motor score: r=0.63 (n=152) [13] LEMS: r=0.69 (n=152) [13] UEMS: r=0.24 (n=152) [13] BBS: Total motor score: r=0.75 (n=152) [13] LEMS: r=0.79 (n=152) [13] UEMS: r=0.30 (n=152) [13] Rasch infit=0.94 (n=425) [15] Rasch outfit=0.89 (n=425) [15] |
| SCIM III (mobility indoors/outdoors) | ambulatory capacity | | | | |
| FIM (locomotor items) | ambulatory capacity | | | Mobility: r=0.733 (n=40) [16] Locomotion: r=0.454 (n=40) [16] Walk/wheelchair item: r=0.62 (n=57) [17] Stairs item: r=0.32 (n=57) [17] | Walk/wheelchair Rasch infit=1.29 (n=358) [18] Rasch outfit=1.53 (n=358) [18] Stairs Rasch infit=3.56 (n=358) [18] Rasch outfit=4.70 (n=358) [18] |

| Scoring dimension | | Reliability | | | Validity |
|---------------------------------|---|--|--|---|---|
| | | Test-retest | Intra-rater | Inter-rater | |
| WISCI II | dependence/ independence for walking | Self-selected WISCI: ICC=0.994 (n=63) [19] | Self-selected WISCI: ICC=1.00 (n=26) [20] | Self-selected WISCI: ICC=1.00 (n=26) [20] | Self-selected WISCI MMT: $\rho=0.647$ (n=75) [19] |
| | | maximum WISCI: ICC=0.995 (n=63) [19] | maximum WISCI: ICC=1.00. (n=26) [20] | maximum WISCI: ICC=0.98 (n=26) [20] | Speed: $\rho=0.584$ (n=75) [19] |
| | | | | | maximum WISCI MMT: $\rho=0.663$ (n=75) [19] Speed: $\rho=0.693$ (n=75) [19] |
| SCI-FAI | quality of walking assistive devices ambulatory capacity | | ICC=0.850-0.956 (n=22) [21] | ICC=0.703–0.840 (n=22) [21] | Gait speed: $r=-0.70$ - -0.74 (n=22) [21] Self-report walking mobility: $r=0.697$ (n=22) [21] |
| SCI-FAP | ambulatory capacity | Total score ICC = 0.983 (n=32) [22] Individual items ICC=0.952-0.998 (n=32) [22] | | Total score: ICC= 1.000 (n=32) [22] Individual items: ICC=0.994-1.000 (n=32) [22] | Total score (n=32) [22] 10mWT: $r=-0.59$ 6mWT: $r=-0.59$ Self-selected WISCI II: $r=-0.68$ max WISCI II: $r=-0.70$ |
| Berg Balance Scale | balance trunk control | | | ICC = 0.953 (n=40) [23] | 2mWT: $\rho=0.781$ (n=32) [4] 10mWT: $\rho=0.792$ (n=32) [4] TUG: $\rho=-0.815$ (n=32) [4] WISCI II: $\rho=0.816$ (n=32) [4] |
| Neuromuscular recovery scale | pre injury movement pattern | Total score: $\rho=0.99$ (n=69) [24] Individual items: $\rho=0.84-0.99$ (n=69) [24] | | Total score: ICC=0.97 (n=10) [25] Individual items: ICC=0.82-0.98 (n=10) [25] | Individual items: Rasch infit=0.47-1.50 (n=188) [26] Rasch outfit=0.47-1.40 (n=188) [26] |

ρ : Spearman's rank correlation coefficient

r: Pearson correlation coefficient

ICC: intraclass correlation coefficient

ISNCSCI International standards for neurological classification of spinal cord injury, *SCIM III* spinal cord independence measure III, *FIM* functional independence measure, *WISCI II* walking index for spinal cord injury, *SCI-FAI* spinal cord injury functional ambulation inventory, *SCI-FAP* spinal cord injury functional ambulation profile