### Additional file 3: Interexaminer reliability—Strict agreement—Pragmatic approach to assess segmental tenderness

| Spinal level | % Agreement | 95% CI | Kappa | 95% CI | PABAK | 95% CI | Indicates          | Kappa max |
|--------------|-------------|--------|-------|--------|-------|--------|---------------------|-----------|
| T1 Left      | 83          | 66, 93 | 0.63  | 0.36, 0.89 | 0.66  | 0.41, 0.91 | Substantial agreement | 0.83      |
| T2 Left      | 86          | 70, 95 | 0.72  | 0.49, 0.94 | 0.71  | 0.48, 0.95 | Substantial agreement | 0.86      |
| T3 Left      | 63          | 45, 79 | 0.28  | 0.01, 0.55 | 0.26  | -0.06, 0.58 | Fair agreement       | 0.50      |
| T4 Left      | 63          | 45, 79 | 0.32  | 0.07, 0.56 | 0.26  | -0.06, 0.58 | Fair agreement       | 0.75      |
| T5 Left      | 74          | 57, 88 | 0.51  | 0.27, 0.75 | 0.49  | 0.20, 0.77 | Moderate agreement   | 1.00      |
| T6 Left      | 71          | 54, 85 | 0.46  | 0.22, 0.70 | 0.43  | 0.13, 0.73 | Moderate agreement   | 1.00      |
| T7 Left      | 77          | 60, 90 | 0.55  | 0.28, 0.82 | 0.54  | 0.26, 0.82 | Moderate agreement   | 0.71      |
| T8 Left      | 80          | 63, 92 | 0.60  | 0.36, 0.86 | 0.60  | 0.33, 0.86 | Moderate agreement   | 0.84      |
| T9 Left      | 60          | 42, 76 | 0.26  | 0.00, 0.52 | 0.20  | -0.12, 0.52 | Slight agreement     | 0.55      |
| T10 Left     | 69          | 51, 83 | 0.41  | 0.16, 0.66 | 0.37  | 0.06, 0.68 | Fair agreement       | 0.79      |
| T11 Left     | 71          | 54, 85 | 0.45  | 0.19, 0.71 | 0.43  | 0.13, 0.73 | Moderate agreement   | 0.80      |
| T12 Left     | 74          | 57, 88 | 0.48  | 0.19, 0.77 | 0.49  | 0.20, 0.77 | Moderate agreement   | 0.51      |
| T1 Right     | 80          | 63, 92 | 0.58  | 0.31, 0.85 | 0.60  | 0.33, 0.86 | Moderate agreement   | 0.71      |
| T2 Right     | 74          | 57, 88 | 0.46  | 0.16, 0.76 | 0.49  | 0.20, 0.77 | Moderate agreement   | 0.49      |
| T3 Right     | 63          | 45, 79 | 0.22  | -0.11, 0.55 | 0.26  | -0.06, 0.58 | Fair agreement       | 0.23      |
| T4 Right     | 74          | 57, 88 | 0.43  | 0.13, 0.73 | 0.48  | 0.20, 0.78 | Moderate agreement   | 0.62      |
| T5 Right     | 83          | 66, 93 | 0.60  | 0.32, 0.89 | 0.66  | 0.41, 0.91 | Substantial agreement | 0.69      |
| T6 Right     | 80          | 63, 92 | 0.49  | 0.17, 0.82 | 0.60  | 0.33, 0.86 | Moderate agreement   | 0.53      |
| T7 Right     | 71          | 54, 85 | 0.34  | 0.01, 0.67 | 0.43  | 0.13, 0.73 | Moderate agreement   | 0.39      |
| T8 Right     | 80          | 63, 92 | 0.55  | 0.25, 0.84 | 0.60  | 0.33, 0.86 | Moderate agreement   | 0.58      |
| T9 Right     | 71          | 54, 85 | 0.43  | 0.14, 0.72 | 0.43  | 0.13, 0.73 | Moderate agreement   | 0.56      |
| T10 Right    | 77          | 60, 90 | 0.53  | 0.25, 0.81 | 0.54  | 0.26, 0.82 | Moderate agreement   | 0.69      |
| T11 Right    | 86          | 70, 95 | 0.70  | 0.46, 0.94 | 0.71  | 0.48, 0.95 | Substantial agreement | 0.85      |
| T12 Right    | 89          | 73, 97 | 0.77  | 0.55, 0.98 | 0.77  | 0.56, 0.98 | Substantial agreement | 0.87      |