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Appendix

TABLE E-1 Distribution of Scores in the Study Group at 1 and 2-Year Follow-up (N = 294 Hips)

| Patient-Reported Outcome Measure | 1-Year Follow-up* | 2-Year Follow-up* |
|------------------------------------|-------------------|-------------------|
| HOOS (points) | | |
| Pain | 83.43 ± 17.45 | 84.15 ± 16.28 |
| Symptoms | 77.62 ± 18.53 | 77.36 ± 17.86 |
| Activities of daily living | 89.65 ± 14.44 | 89.37 ± 15.62 |
| Sport and recreation | 75.41 ± 23.30 | 76.59 ± 19.87 |
| Quality of life | 65.67 ± 25.79 | 65.82 ± 24.06 |
| Modified Harris hip score (points) | 82.85 ± 16.51 | 82.78 ± 15.32 |
| WOMAC (points) | | |
| Pain | 86.37 ± 16.89 | 85.87 ± 16.07 |
| Stiffness | 79.17 ± 20.80 | 79.73 ± 21.35 |
| Physical | 89.70 ± 14.41 | 88.41 ± 16.07 |
| Total | 88.12 ± 14.81 | 88.34 ± 15.21 |

^{*}The values are given as the mean and the standard deviation.

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TABLE E-2 Internal Consistency (Reliability) of Patient-Reported Outcome Measures for Periacetabular Osteotomy

| Patient-Reported Outcome Measure | Study Group* (N = 294) | Primary Periacetabular Osteotomy Subgroup* (N = 240) |
|------------------------------------|-------------------------|--|
| HOOS (points) | | |
| Pain | 0.937† (0.927 to 0.947) | 0.935‡ (0.927 to 0.946) |
| Symptoms | 0.785† (0.744 to 0.821) | 0.781‡ (0.741 to 0.820) |
| Activities of daily living | 0.966† (0.960 to 0.971) | 0.968‡ (0.962 to 0.973) |
| Sports and recreation | 0.899† (0.879 to 0.917) | 0.896‡ (0.877 to 0.915) |
| Quality of life | 0.841† (0.809 to 0.869) | 0.855‡ (0.827 to 0.878) |
| Modified Harris hip score (points) | | |
| Gait | 0.603 (0.518 to 0.675) | 0.596 (0.516 to 0.671) |
| Activities | 0.333 (0.199 to 0.449) | 0.331 (0.206 to 0.443) |
| WOMAC (points) | | |
| Pain | 0.885† (0.863 to 0.905) | 0.885‡ (0.865 to 0.902) |
| Stiffness | 0.835† (0.793 to 0.869) | 0.846‡ (0.809 to 0.874) |
| Physical | 0.966† (0.960 to 0.971) | 0.968‡ (0.963 to 0.974) |

^{*}The values are given as the Cronbach alpha, with the 95% CI in parentheses. All variables achieved significant correlation with a 2-tailed test. †These were values with an alpha of >0.7.

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TABLE E-3 Validity of Patient-Reported Outcome Measures Compared with the SF-12 Physical Component Summary for Periacetabular Osteotomy

| 1 chacetasara Osteotomy | | |
|------------------------------------|----------------------------|--|
| Patient-Reported Outcome Measure | Study Group* ($N = 294$) | Primary Periacetabular Osteotomy Subgroup* (N = 240) |
| HOOS (points) | | |
| Pain | 0.55† (0.46 to 0.62) | 0.57† (0.49 to 0.64) |
| Symptoms | 0.42† (0.33 to 0.51) | 0.42† (0.33 to 0.52) |
| Activities of daily living | 0.58† (0.49 to 0.65) | 0.54† (0.46 to 0.62) |
| Sports and recreation | 0.62† (0.54 to 0.68) | 0.64† (0.57 to 0.71) |
| Quality of life | 0.57† (0.48 to 0.64) | 0.63† (0.55 to 0.69) |
| Modified Harris hip score (points) | 0.62† (0.54 to 0.68) | 0.61† (0.54 to 0.68) |
| WOMAC (points) | | |
| Pain | 0.53† (0.44 to 0.60) | 0.52† (0.43 to 0.59) |
| Stiffness | 0.38 (0.27 to 0.47) | 0.38 (0.28 to 0.48) |
| Physical | 0.58† (0.49 to 0.65) | 0.53† (0.45 to 0.61) |
| Total | 0.57† (0.49 to 0.65) | 0.53† (0.45 to 0.61) |

^{*}The values are given as the Spearman correlation coefficient (ρ), with the 95% CI in parentheses. All variables achieved significant correlation with a 2-tailed test. †These values have a correlation coefficient ρ of \geq 0.4.

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TABLE E-4 Responsiveness of Patient-Reported Outcome Measures for Periacetabular Osteotomy

| Patient-Reported Outcome Measure | Study Group* ($N = 294$) | Primary Periacetabular Osteotomy Subgroup* (N = 240) |
|------------------------------------|----------------------------|--|
| HOOS (points) | | , |
| Pain | 0.35† (0.25 to 0.45) | 0.33† (0.21 to 0.44) |
| Symptoms | 0.32† (0.21 to 0.42) | 0.32† (0.19 to 0.43) |
| Activities of daily living | 0.34† (0.24 to 0.44) | 0.34† (0.22 to 0.45) |
| Sport and recreation | 0.34† (0.23 to 0.44) | 0.35† (0.23 to 0.46) |
| Quality of life | 0.34† (0.24 to 0.44) | 0.34† (0.22 to 0.45) |
| Modified Harris hip score (points) | 0.36† (0.26 to 0.46) | 0.37† (0.25 to 0.47) |
| WOMAC (points) | | |
| Pain | 0.30 (0.20 to 0.41) | 0.28 (0.16 to 0.39) |
| Stiffness | 0.27 (0.16 to 0.37) | 0.28 (0.16 to 0.39) |
| Physical | 0.34† (0.24 to 0.44) | 0.32† (0.19 to 0.43) |
| Total | 0.35† (0.25 to 0.45) | 0.32† (0.20 to 0.43) |

^{*}The values are given as the Spearman correlation coefficient (ρ) compared with the Global Perceived Effect score, with the 95% CI in parentheses. All variables achieved significant correlation with a 2-tailed test. †These Spearman correlation coefficients (ρ) were >0.3.

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TABLE E-5 Minimal Clinically Important Difference of Patient-Reported Outcome Measures for Periacetabular Osteotomy

| Patient-Reported Outcome Measure | Study Group ($N = 294$) | Primary Periacetabular Osteotomy Subgroup (N = 240) |
|------------------------------------|---------------------------|---|
| HOOS (points) | | |
| Pain | 10.3 | 10.3 |
| Symptoms | 10.2 | 10.1 |
| Activities of daily living | 10.8 | 10.8 |
| Sport and recreation | 12.6 | 12.6 |
| Quality of life | 11.2 | 11.8 |
| Modified Harris hip score (points) | 7.4 | 7.5 |
| WOMAC (points) | | |
| Pain | 10.8 | 10.7 |
| Stiffness | 12.9 | 12.8 |
| Physical | 10.8 | 10.8 |
| Total | 10.4 | 10.4 |