# Supplement 8

Sensitivity to diagnosis PsA vs PsO or PsO vs OA according to DCE-MRI flow outcomes and ultrasound flow and scaled measurement outcomes.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |   | AUC (CI 95%) | Cut-off value | Above cut-off  | Above cut-off  | AUC (CI 95%) | Cut-off value | Above cut-off  | Above cut-off  |
|  |   | PsA vs. PsO | Full group | PsA | PsO | PsA vs OA | Full group | PsA | OA |
|   |   |  | (n=244) | (n=200) | (n=44) | (n=252) | (n=252) | (n=200) | (n=52) |
| DCE-MRI | Flow ME\*nVOXEL | 0.59 (0.47 to 0.68) | 426.65 | 168 (86 %)^ | 33 (69 %) | 0.55 (0.47 to 0.63) | 1034.55 | 84 (43 %)^ | 11 (21 %) |
| Flow IRE\*nVOXEL | 0.41 (0.29 to 0.52) | 2.56 | 146 (83 %)\* | 27 (77 %)§ | 0.65 (0.56 to 0.74) | 3.93 | 127 (72 %)\* | 19 (40 %)# |
| Ultrasound | Extensor tendon thickness (mm) | 0.49 (0.39 to 0.58) | 0.55 | 172 (86 %) | 35 (73 %) | 0.48 (0.39 to 0.56) | 0.85 | 23 (12 %) | 4 (8%) |
| Flexor tendon thickness (mm) | 0.46 (0.38 to 0.54) | 0.95 | 60 (30 %) | 10 (23 %) | 0.44 (0.36 to 0.53) | 1.45 | 5 (3 %) | 0 |
| Nail bed thickness (mm) | 0.40 (0.31 to 0.49) | 2.15 | 37 (19 %) | 8 (18 %) | 0.52 (0.43 to 0.61) | 1.25 | 175 (88 %) | 40 (77 %) |
| Nail matrix thickness (mm) | 0.52 (0.43 to 0.62) | 1.65 | 154 (77 %) | 30 (68 %) | 0.44 (0.36 to 0.53) | 2.75 | 22 (11 %) | 1 (2 %) |
| Nail thickness (mm) | 0.53 (0.42 to 0.63) | 0.65 | 67 (34 %) | 12 (27 %) | 0.53 (0.44 to 0.61) | 0.65 | 67 (34 %) | 13 (25 %) |
| Doppler max ratio | 0.42 (0.33 to 0.52) | 0.837 | 3 (2 %)¤ | 0 | 0.50 (0.41 to 0.60) | 0.106 | 160 (83 %)¤ | 39 (75 %) |
| Doppler min ratio | 0.42 (0.32 to 0.51) | 0.488 | 7 (4 %)¤ | 1 (2 %) | 0.57 (0.48 to 0.66) | 0.022 | 132 (68 %)¤ | 25 (48 %) |

Abbreviations: DCE-MRI: Dynamic contrast-enhanced magnetic resonance imaging. ME: Maximum enhancement. IRE: Initial rate of enhancement. AUC: Area under the curve. PsA: psoriatic arthritis. PsO: psoriasis. OA: Hand osteoarthritis. Missing: ^: n=4. \*: n=24. §: n=9. #: n=4. ¤: n=6.

Table 3: Indeholder table 7 fra SAP

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | PsA (n=200\*) | PsO (n=44\*) | OA (n=52\*) | Healthy (n=124\*) |  |
| US-synovitis. n (%) |  |  |  |  |  |
| 0 | 119 (59.5%) | 31 (64.6 %) | 20 (39.5 %) | 96 (77.4 %) |  |
| 1 | 71 (35.5 %) | 11 (22.9 %) | 16 (30.8 %) | 28 (22.6 %) |  |
| 2 | 10 (5 %) | 1 (2.1 %) | 14 (26.9 %) | 0 |  |
| 3 | 0 | 1 (2.1 %) | 2 (3.8 %) | 0 |  |
| US-Doppler. n (%) |  |  |  |  |  |
| 0 | 196 (98.0 %) | 44 (100.0 %) | 48 (92.3 %) | 124 (100.0 %) |  |
| 1 | 2 (1.0 %) | 0 | 3 (5.8 %) | 0 |  |
| 2 | 2 (1.0 %) | 0 | 1 (1.9 %) | 0 |  |
| 3 | 0 | 0 | 0 | 0 |  |
| US-Erosions. n (%) |  |  |  |  |  |
| 0 | 178 (89.0 %) | 42 (95.5 %) | 47 (90.4 %) | 124 (100.0 %) |  |
| 1 | 16 (8.0 %) | 2 (4.5 %) | 3 (5.8 %) | 0 |  |
| 2 | 5 (2.5 %) | 0 | 1 (1.9 %) | 0 |  |
| 3 | 1 (0.5 %) | 0 | 1 (1.9 %) | 0 |  |
| US-Osteophytes. n (%) |  |  |  |  |  |
| 0 | 114 (57 %) | 31 (70.5 %) | 6 (11.5 %) | 119 (96 %) |  |
| 1 | 72 (36.9 %) | 12 (27.3 %) | 21 (40.4 %) | 5 (4.0 %) |  |
| 2 | 11 (5.5 %) | 1 (2.2 %) | 20 (38.5 %) | 0 |  |
| 3 | 3 (1.5 %) | 0 | 5 (9.6 %) | 0 |  |
| US-AJS score. n (%) |  |  |  |  |  |
| 0 | 118 (59.0 %) | 31 (70.4 %) | 19 (36.5 %) | 96 (77.4 %) |  |
| 1 | 69 (34.5 %) | 11 (25.0 %) | 16 (30.8 %) | 28 (22.6 %) |  |
| 2 | 12 (6.0 %) | 1 (2.3 %) | 13 (25.0 %) | 0 |  |
| 3 | 0 | 1 (2.3 %) | 3 (5.8 %) | 0 |  |
| 4 | 1 (0.5 %) | 0 | 1 (1.9 %) | 0 |  |
| 5 | 0 | 0 | 0 | 0 |  |
| 6 | 0 | 0 | 0 | 0 |  |
| US-CJS score. n (%) |  |  |  |  |  |
| 0 | 109 (54.5 %) | 30 (68.2 %) | 6 (11.5 %) | 119 (96.0 %) |  |
| 1 | 68 (34.0 %) | 12 (27.3 %) | 18 (34.6 %) | 5 (4.0 %) |  |
| 2 | 11 (5.5 %) | 2 (4.5 %) | 20 (38.6 %) | 0 |  |
| 3 | 8 (4.0 %) | 0 | 6 (11.5 %) | 0 |  |
| 4 | 3 (1.5 %) | 0 | 2 (3.8 %) | 0 |  |
| 5 | 0 | 0 | 0 | 0 |  |
| 6 | 1 (0.5 %) | 0 | 0 | 0 |  |
| \*number of joints – 4 per participant |  |

Table 3a

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | PsA mean (SE) | Diagnosis | Mean (SE) | Mean difference, mm | CI 95 % | P-value |
| US Ext. tendon thickness, mm | 0,669 (0,013) | OA | 0,673 (0,025) | -0,004 | -0,059 to 0,051 | 0,88 |
| PsO | 0,682 (0,027) | -0,013 | -0,072 to 0,056 | 0,67 |
| Healthy | 0,567 (0,016) | 0,102 | 0,062 to 0,142 | <0,001 |
| US Flex. Tendon thickness, mm | 0,846 (0,022) | OA | 0,888 (0,043) | -0,042 | -0,138 to 0,054 | 0,39 |
| PsO | 0,871 (0,047) | -0,025 | -0,128 to 0,079 | 0,64 |
| Healthy | 0,746 (0,029) | 0,101 | 0,029 to 0,173 | 0,007 |
| US nail matrix thickness, mm | 2,061 (0,055) | OA | 2,119 (0,107) | -0,058 | -0,297 to 0,181 | 0,630 |
| PsO | 2,016 (0,117) | 0,045 | -0,211 to 0,301 | 0,727 |
| Healthy | 1,871 (0,070) | 0,190 | 0,014 to 0,366 | 0,034 |
| US nail bed thickness, mm | 1,769 (0,051) | OA | 1,704 (0,1) | 0,065 | -0,157 to 0,287 | 0,565 |
| PsO | 1,964 (0,108) | -0,195 | -0,432 to 0,042 | 0,106 |
| Healthy | 1,723 (0,065) | 0,045 | -0,118 to 0,208 | 0,584 |
| US nail thickness, mm | 0,631 (0,014) | OA | 0,612 (0,027) | 0,019 | -0,041 to 0,080 | 0,523 |
| PsO | 0,673 (0,029) | -0,042 | -0,106 to 0,023 | 0,202 |
| Healthy | 0,521 (0,018) | 0,110 | 0,066 to 0,154 | <0,001 |
| US flow Max ratio | 0,329 (0,024) | OA | 0,338 (0,047) | -0,009 | -0,113 to 0,095 | 0,863 |
| PsO | 0,389 (0,051) | -0,060 | -0,172 to 0,051 | 0,287 |
| Healthy | 0,325 (0,03) | 0,004 | -0,073 to 0,081 | 0,917 |
| US flow Min ratio | 0,148 (0,017) | OA | 0,121 (0,034) | 0,027 | -0,048 to 0,102 | 0,481 |
| PsO | 0,196 (0,037) | -0,049 | -0,129 to 0,032 | 0,231 |
| Healthy | 0,147 (0,022) | 0,00 | -0,055 to 0,056 | 0,987 |