Supplementary Data: Best-worse Analysis for prevalence of possible early inflammatory arthritis symptoms in MSK and non-MSK consulters:

1. MSK missing set to better outcome, non-MSK missing set to worst outcome

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Symptom |  | Symptom duration, n (%) | | Symptom severity, n (%) | | Symptom impact, n (%) | |
| 0-15 days | 16-30 days | None/mild | Moderate  /severe | None  /small | Moderate  /severe |
| Joint pain | MSK  Non MSK | 895 (37.6)  117 (51.5) | 1483 (62.4)  1054 (48.6) | 536 (25.2)  540 (32.6) | 1593 (74.8)  1119 (67.5) | 805 (37.8)  839 (50.6) | 1324 (62.2)  820 (49.4) |
| Joint swelling | MSK  Non MSK | 1798 (75.6)  1580 (72.8) | 580 (24.4)  591 (27.2) | 532 (42.5)  370 (39.4) | 719 (57.5)  569 (60.6) | 559 (44.7)  426 (45.4) | 692 (55.3)  513 (54.6) |
| Joint stiffness | MSK  Non MSK | 1196 (50.3)  1257 (57.9) | 1182 (49.7)  914 (42.1) | 600 (32.0)  536 (37.1) | 1273 (68.0)  908 (62.9) | 813 (43.4)  746 (51.7) | 1060 (56.6)  698 (48.3) |
| Burning in joints | MSK  Non MSK | 1991 (83.7)  1760 (81.1) | 387 (16.3)  411 (18.9) | 463 (44.7)  236 (33.4) | 573 (55.3)  471 (66.6) | 535 (51.6)  285 (40.3) | 501 (48.4)  422 (59.7) |
| Tingling in joints | MSK  Non MSK | 2026 (85.2)  1763 (81.2) | 352 (14.8)  408 (18.8) | 607 (52.7)  432 (48.4) | 545 (47.3)  461 (51.6) | 752 (65.3)  513 (57.5) | 400 (34.7)  380 (42.6) |
| Numbness in joints | MSK  Non MSK | 2054 (86.4)  1729 (79.6) | 324 (13.6)  442 (20.4) | 546 (54.3)  330 (42.8) | 459 (45.7)  441 (57.2) | 615 (61.2)  372 (48.3) | 390 (38.8)  399 (51.8) |
| Skin colour changes | MSK  Non MSK | 2210 (92.9)  1833 (84.4) | 168 (7.1)  338 (15.6) | 411 (69.8)  180 (38.8) | 178 (30.2)  284 (61.2) | 509 (86.4)  236 (50.9) | 80 (13.6)  228 (49.1) |
| Muscle cramps | MSK  Non MSK | 2086 (87.7)  292 (12.3) | 1851 (85.3)  320 (14.7) | 631 (45.0)  536 (45.0) | 771 (55.0)  656 (55.0) | 934 (66.6)  812 (68.1) | 468 (33.4)  380 (31.9) |
| Weakness | MSK  Non MSK | 1536 (54.6)  1447 (66.7) | 842 (35.4)  724 (33.4) | 593 (37.6)  432 (37.3) | 985 (62.4)  726 (62.7) | 648 (41.1)  484 (41.8) | 930 (58.9)  674 (58.2) |
| Fatigue | MSK  Non MSK | 1710 (71.9)  1495 (68.9) | 668 (28.1)  676 (31.1) | 586 (39.5)  442 (34.8) | 898 (60.5)  827 (65.2) | 692 (46.6)  525 (41.4) | 792 (53.4)  744 (58.6) |
| Emotional distress | MSK  Non MSK | 1954 (82.2)  1678 (77.3) | 424 (17.8)  493 (22.7) | 561 (43.2)  390 (35.9) | 737 (56.8)  698 (64.2) | 687 (52.9)  514 (47.2) | 611 (47.1)  574 (52.8) |
| Concentration difficulties | MSK  Non MSK | 2067 (86.9)  1757 (80.9) | 311 (13.1)  414 (19.1) | 558 (52.6)  407 (45.4) | 503 (47.4)  489 (54.6) | 589 (55.5)  411 (45.9) | 472 (44.5)  485 (54.1) |
| Sleep problems | MSK  Non MSK | 1613 (67.8)  1450 (66.8) | 765 (32.2)  721 (33.2) | 539 (33.4)  448 (33.3) | 1074 (66.6)  898 (66.7) | 811 (50.3)  668 (49.6) | 802 (49.7)  678 (50.4) |

Reported symptoms in MSK and non MSK consulters. Note symptom severity and impact are only reported for participants reporting ≥ 1 day of a symptom.

1. Worst-best analysis: MSK missing set to worst outcome, non-MSK missing set to best outcome.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Symptom |  | Symptom duration, n (%) | | Symptom severity, n (%) | | Symptom impact, n (%) | |
| 0-15 days | 16-30 days | None/mild | Moderate  /severe | None  /small | Moderate  /severe |
| Joint pain | MSK  Non MSK | 805 (33.9)  1250 (57.6) | 1573 (66.2)  921 (42.4) | 419 (19.7)  638 (38.5) | 1710 (80.3)  1021 (61.5) | 735 (34.5)  931 (56.1) | 1394 (65.5)  728 (43.9) |
| Joint swelling | MSK  Non MSK | 1618 (68.0)  1786 (82.3) | 760 (32.0)  385 (17.7) | 409 (32.7)  495 (52.7) | 842 (67.3)  444 (47.3) | 438 (35.0)  571 (60.8) | 813 (65.0)  368 (39.2) |
| Joint stiffness | MSK  Non MSK | 1098 (46.2)  1390 (64.0) | 1280 (53.8)  781 (36.0) | 506 (27.0)  646 (44.7) | 1367 (73.0)  798 (55.3) | 744 (39.7)  847 (58.7) | 1129 (60.3)  597 (41.3) |
| Burning in joints | MSK  Non MSK | 1082 (75.8)  1947 (89.7) | 576 (24.2)  224 (10.3) | 314 (30.3)  381 (53.9) | 722 (69.7)  326 (46.1) | 395 (38.1)  440 (62.2) | 641 (61.9)  267 (37.8) |
| Tingling in joints | MSK  Non MSK | 1876 (78.9)  1940 (89.4) | 502 (21.1)  231 (10.6) | 477 (41.4)  553 (61.9) | 675 (58.6)  340 938.1) | 620 (53.8)  564 (73.2) | 532 (46.2)  239 (26.8) |
| Numbness in joints | MSK  Non MSK | 1854 (78.0)  1937 (89.2) | 524 (22.0)  234 (10.8) | 396 (39.4)  476 (61.7) | 609 (60.6)  295 (38.3) | 454 (45.2)  537 (69.7) | 551 (54.8)  234 (30.4) |
| Skin colour changes | MSK  Non MSK | 1992 (83.8)  2035 (93.7) | 386 (16.2)  136 (6.3) | 242 (41.1)  331 (71.3) | 347 (58.9)  133 (28.7) | 320 (54.3)  414 (89.2) | 269 (45.7)  50 (10.8) |
| Muscle cramps | MSK  Non MSK | 1934 (81.3)  2006 (92.4) | 444 (18.7)  165 (7.6) | 508 (36.2)  648 (64.4) | 894 (63.8)  544 (45.6) | 809 (57.7)  939 (78.8) | 593 (42.3)  253 (21.2) |
| Weakness | MSK  Non MSK | 1391 (58.5)  1620 (74.6) | 987 (41.5)  551 (25.4) | 468 (29.7)  565 (48.8) | 110 (70.3)  593 (51.2) | 529 (33.5)  623 (53.8) | 1049 (66.5)  535 (46.2) |
| Fatigue | MSK  Non MSK | 1550 (65.2)  1664 (76.7) | 828 (34.8) 507 (23.4) | 451 (30.4)  586 (46.2) | 1033 (69.6)  683 (53.8) | 547 (36.9)  677 (53.4) | 937 (63.1)  592 (46.7) |
| Emotional distress | MSK  Non MSK | 1801 (76.1)  1833 (84.4) | 568 (23.9)  338 (15.6) | 441 (34.0)  513 (47.2) | 857 (66.0)  575 (52.9) | 573 (44.1)  648 (59.6) | 725 (55.9)  440 (40.4) |
| Concentration difficulties | MSK  Non MSK | 1892 (79.6)  1948 (89.7) | 486 (20.4)  223 (10.3) | 428 (40.3)  540 (60.3) | 633 (59.7)  356 (39.7) | 454 (42.8)  572 (63.8) | 607 (57.2)  324 (36.2) |
| Sleep problems | MSK  Non MSK | 1508 (63.4)  1587 (73.1) | 870 (36.6)  584 (26.9) | 448 (27.8)  547 (40.6) | 1165 (72.2)  799 (59.4) | 717 (44.5)  785 (58.3) | 896 (55.6)  561 (41.7) |

Reported symptoms in MSK and non MSK consulters. Note symptom severity and impact are only reported for participants reporting ≥ 1 day of a symptom.