

Supplementary Table S1. Baseline characteristics stratified according to baseline BASFI.

| | | ----- BASFI at baseline, cm ----- | | | | | | |
|--|------------|-----------------------------------|------------|------------|------------|------------|------------|------------|
| | Overall* | ≥0.0-≤4.0 | >4.0-≤5.0 | >5.0-≤6.0 | >6.0-≤7.0 | >7.0-≤8.0 | >8.0-≤9.0 | >9.0-≤10.0 |
| Number of patients | 1396 | 437 | 161 | 195 | 173 | 111 | 86 | 37 |
| Age, years | 39 (30-49) | 39 (31-47) | 37 (28-47) | 40 (30-50) | 40 (28-49) | 42 (34-52) | 36 (30-49) | 45 (35-51) |
| Sex (men) | 60% | 65% | 58% | 62% | 60% | 55% | 53% | 49% |
| Ever smoker | 50% | 41% | 52% | 51% | 53% | 65% | 54% | 70% |
| CRP, mg/L | 7 (2-16) | 6 (2-14) | 7 (3-16) | 6 (3-17) | 8 (2-17) | 5 (2-15) | 10 (3-24) | 11 (3-16) |
| HLA-B27 positive | 71% | 74% | 76% | 70% | 71% | 57% | 54% | 69% |
| BMI, kg/m ² | 26 (23-29) | 25 (23-28) | 25 (23-28) | 27 (24-30) | 25 (22-27) | 27 (22-31) | 27 (22-29) | 29 (26-31) |
| Symptom duration, years | 7 (3-14) | 7 (3-13) | 7 (3-14) | 8 (2-18) | 5 (2-12) | 6 (3-13) | 6 (2-15) | 10 (3-18) |
| Disease duration, years | 1 (0-3) | 1 (0-4) | 1 (0-3) | 1 (0-3) | 1 (0-2) | 1 (0-3) | 0 (0-1) | 1 (0-5) |
| Data are as observed, median (IQR) or percentage. *BASFI was missing in 196 (14.0%), smoking status in 80 (5.7%), CRP in 215 (15.4%), HLA-B27 in 470 (33.7%), BMI in 883 (63.3%), symptom duration in 361 (25.9%), disease duration in 146 (10.5%). Abbreviations: BASFI, Bath Ankylosing Spondylitis Functional Index; BMI, body mass index; CRP, C-reactive protein; HLA-B27, human leucocyte antigen B27. | | | | | | | | |

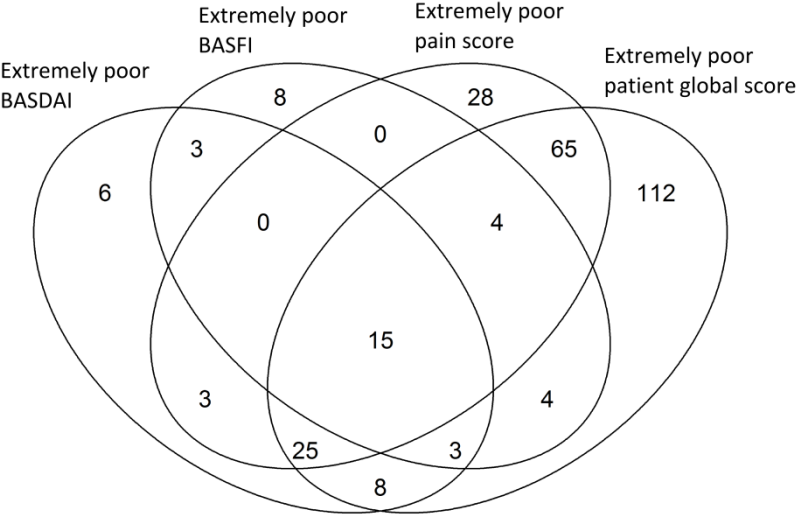
Supplementary Table S2. Baseline characteristics stratified according to baseline pain score.

| | | ----- Pain score at baseline, cm ----- | | | | | | |
|--|------------|--|------------|------------|------------|------------|------------|------------|
| | Overall* | ≥0.0-≤4.0 | >4.0-≤5.0 | >5.0-≤6.0 | >6.0-≤7.0 | >7.0-≤8.0 | >8.0-≤9.0 | >9.0-≤10.0 |
| Number of patients | 1396 | 194 | 107 | 170 | 217 | 242 | 173 | 140 |
| Age, years | 39 (30-49) | 38 (29-49) | 42 (31-55) | 39 (32-48) | 41 (32-49) | 39 (29-50) | 40 (30-49) | 37 (30-47) |
| Sex (men) | 60% | 63% | 66% | 65% | 58% | 60% | 56% | 47% |
| Ever smoker | 50% | 46% | 55% | 48% | 49% | 51% | 49% | 53% |
| CRP, mg/L | 7 (2-16) | 7 (2-16) | 7 (3-18) | 6 (2-14) | 6 (2-13) | 8 (3-18) | 7 (2-21) | 10 (2-21) |
| HLA-B27 positive | 71% | 68% | 71% | 74% | 71% | 71% | 72% | 67% |
| BMI, kg/m ² | 26 (23-29) | 24 (22-27) | 26 (25-29) | 26 (23-29) | 26 (23-29) | 26 (23-29) | 26 (23-29) | 25 (22-29) |
| Symptom duration, years | 7 (3-14) | 7 (3-14) | 4 (2-13) | 8 (2-15) | 6 (3-14) | 7 (3-15) | 7 (3-14) | 5 (2-11) |
| Disease duration, years | 1 (0-3) | 1 (0-5) | 1 (0-4) | 1 (0-3) | 1 (0-4) | 1 (0-3) | 1 (0-3) | 0 (0-2) |
| Data are as observed, median (IQR) or percentage. *Pain score was missing in 153 (11.0%), smoking status in 80 (5.7%), CRP in 215 (15.4%), HLA-B27 in 470 (33.7%), BMI in 883 (63.3%), symptom duration in 361 (25.9%), disease duration in 146 (10.5%). Abbreviations: BMI, body mass index; CRP, C-reactive protein; HLA-B27, human leucocyte antigen B27. | | | | | | | | |

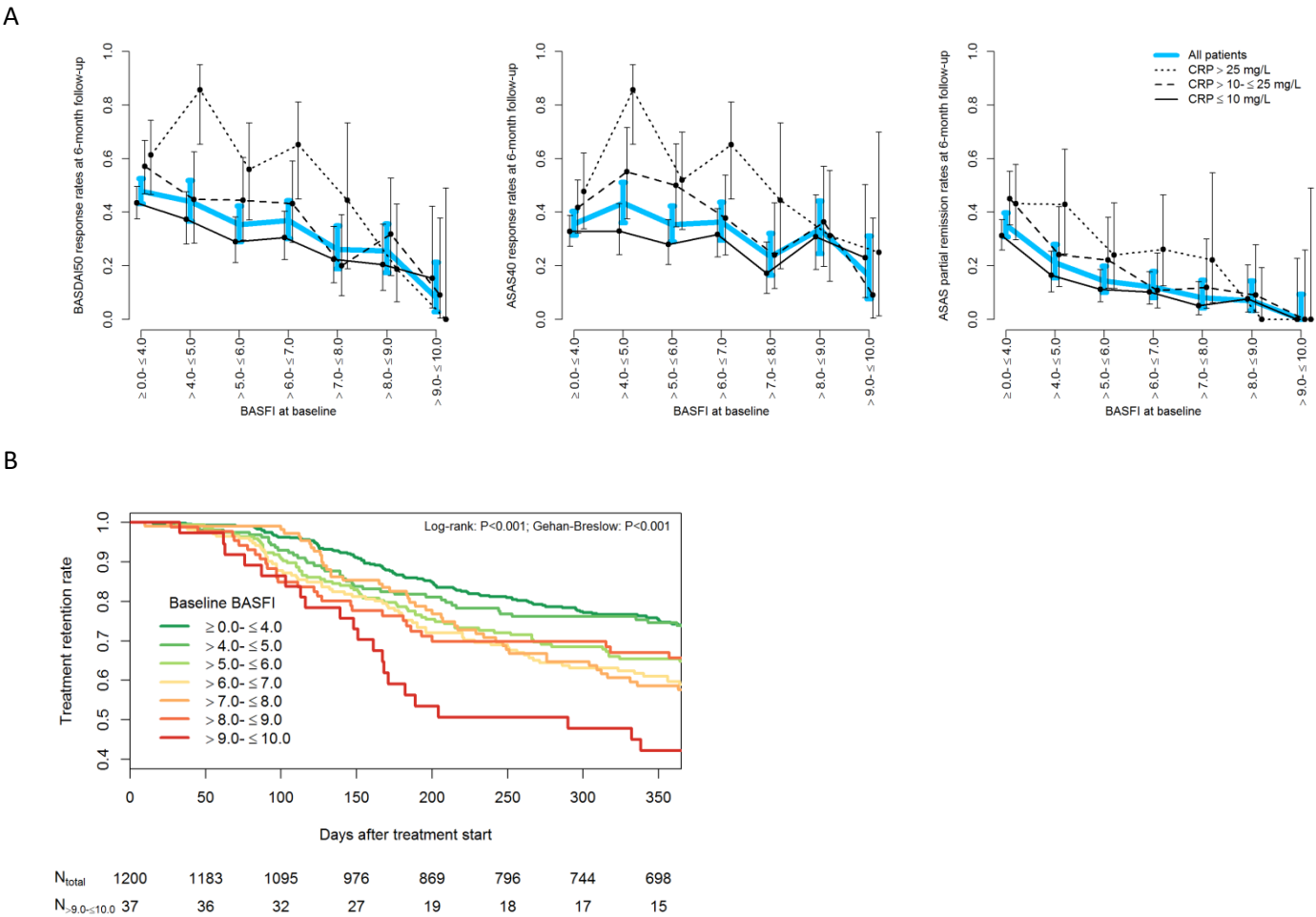
Supplementary Table S3. Baseline characteristics stratified according to baseline patient global score.

| | | ----- Patient global score at baseline, cm ----- | | | | | | |
|--|------------|--|------------|------------|------------|------------|------------|------------|
| | Overall* | ≥0.0-≤4.0 | >4.0-≤5.0 | >5.0-≤6.0 | >6.0-≤7.0 | >7.0-≤8.0 | >8.0-≤9.0 | >9.0-≤10.0 |
| Number of patients | 1396 | 134 | 67 | 122 | 220 | 244 | 224 | 236 |
| Age, years | 39 (30-49) | 37 (28-50) | 42 (34-53) | 43 (34-53) | 40 (30-50) | 39 (30-49) | 40 (31-48) | 37 (27-48) |
| Sex (men) | 60% | 58% | 69% | 64% | 68% | 59% | 54% | 53% |
| Ever smoker | 50% | 50% | 37% | 58% | 45% | 47% | 54% | 52% |
| CRP, mg/L | 7 (2-16) | 6 (2-16) | 6 (2-16) | 5 (2-12) | 7 (3-17) | 6 (2-16) | 7 (3-17) | 8 (2-21) |
| HLA-B27 positive | 71% | 65% | 68% | 71% | 76% | 67% | 71% | 70% |
| BMI, kg/m ² | 26 (23-29) | 24 (22-27) | 25 (22-26) | 26 (23-30) | 27 (24-30) | 25 (23-28) | 26 (23-29) | 25 (22-29) |
| Symptom duration, years | 7 (3-14) | 8 (5-13) | 6 (2-14) | 11 (2-20) | 7 (3-16) | 7 (2-13) | 7 (3-13) | 5 (2-11) |
| Disease duration, years | 1 (0-3) | 2 (0-5) | 1 (0-3) | 1 (0-4) | 1 (0-3) | 1 (0-3) | 1 (0-2) | 1 (0-2) |
| Data are as observed, median (IQR) or percentage. *Patient global score was missing in 149 (10.7%), smoking status in 80 (5.7%), CRP in 215 (15.4%), HLA-B27 in 470 (33.7%), BMI in 883 (63.3%), symptom duration in 361 (25.9%), disease duration in 146 (10.5%). Abbreviations: BMI, body mass index; CRP, C-reactive protein; HLA-B27, human leucocyte antigen B27. | | | | | | | | |

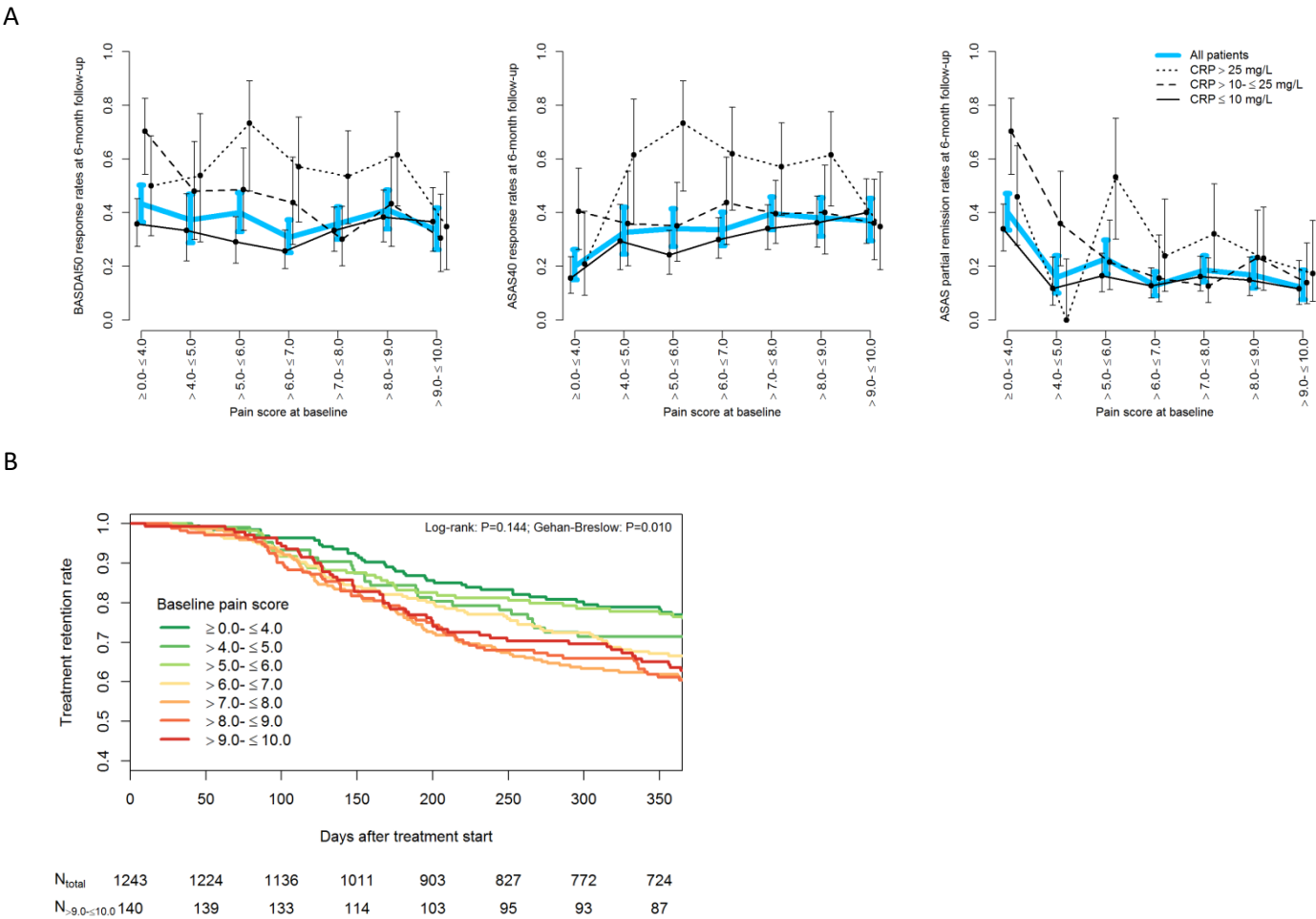
Supplementary Figure S1. Venn diagram of the overlap between patients with extremely poor BASDAI, extremely poor BASFI, extremely poor pain score, and extremely poor global score at baseline. In total, 284 patients had at least one “extremely poor” score among BASDAI, BASFI, pain score and patient global score.



Supplementary Figure S2. A. BASDAI50 response rates, ASAS40 response rates and ASAS partial remission rates at 6-month follow-up, according to baseline BASFI. B. One-year treatment retention stratified by baseline BASFI. N_{total} , number of patients in all BASFI strata with available data; $N_{>9.0-10.0}$, number of patients with extremely poor BASFI with available data.



Supplementary Figure S3. A. BASDAI50 response rates, ASAS40 response rates and ASAS partial remission rates at 6-month follow-up, according to baseline pain score. B. One-year treatment retention stratified by baseline pain score. N_{total}, number of patients in all pain score strata with available data; N_{>9.0-≤10.0}, number of patients with extremely poor pain score with available data.



Supplementary Figure S4. A. BASDAI50 response rates, ASAS40 response rates and ASAS partial remission rates at 6-month follow-up, according to baseline patient global score. B. One-year treatment retention stratified by baseline patient global score. N_{total}, number of patients in all patient global score strata with available data; N_{>9.0-≤10.0}, number of patients with extremely poor patient global score with available data.

