

Supplementary online materials

Supplementary Table 1. Raw data for key efficacy endpoints by time point.

Patients (%) with ACR20 at each time point (ITT-NRI)

| Week | Placebo (N=86) | 50 mg q.d. (N=82) | 100 mg q.d. (N=85) | 200 mg q.d. (N=86) | 25 mg b.i.d. (N=86) | 50 mg b.i.d. (N=85) | 100 mg b.i.d. (N=84) |
|------|----------------|-------------------|--------------------|--------------------|---------------------|---------------------|----------------------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 19 | 21 | 34 | 28 | 17 | 22 | 36 |
| 2 | 28 | 38 | 46 | 49 | 29 | 41 | 52 |
| 4 | 38 | 43 | 52 | 55 | 45 | 44 | 68 |
| 8 | 45 | 54 | 65 | 70 | 59 | 54 | 74 |
| 12 | 44 | 56 | 64 | 69 | 57 | 60 | 79 |
| 16 | 38 | 56 | 65 | 73 | 55 | 65 | 82 |
| 20 | 38 | 57 | 69 | 73 | 52 | 66 | 85 |
| 24 | 42 | 55 | 61 | 73 | 56 | 60 | 80 |

Patients (%) with ACR50 at each time point (ITT-NRI)

| Week | Placebo (N=86) | 50 mg q.d. (N=82) | 100 mg q.d. (N=85) | 200 mg q.d. (N=86) | 25 mg b.i.d. (N=86) | 50 mg b.i.d. (N=85) | 100 mg b.i.d. (N=84) |
|------|----------------|-------------------|--------------------|--------------------|---------------------|---------------------|----------------------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 2 | 5 | 5 | 4 | 7 | 7 |
| 2 | 6 | 7 | 20 | 11 | 7 | 12 | 21 |
| 4 | 7 | 13 | 33 | 17 | 15 | 19 | 35 |
| 8 | 13 | 27 | 35 | 34 | 26 | 34 | 45 |
| 12 | 15 | 33 | 38 | 43 | 28 | 34 | 55 |
| 16 | 20 | 38 | 52 | 49 | 30 | 31 | 62 |

| | | | | | | | |
|----|----|----|----|----|----|----|----|
| 20 | 15 | 39 | 46 | 52 | 38 | 41 | 60 |
| 24 | 16 | 35 | 47 | 50 | 35 | 35 | 55 |

Patients (%) with ACR70 at each time point (ITT-NRI)

| Week | Placebo (N=86) | 50 mg q.d. (N=82) | 100 mg q.d. (N=85) | 200 mg q.d. (N=86) | 25 mg b.i.d. (N=86) | 50 mg b.i.d. (N=85) | 100 mg b.i.d. (N=84) |
|------|----------------|-------------------|--------------------|--------------------|---------------------|---------------------|----------------------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | 1 | 0 | 0 | 0 | 1 | 1 | 2 |
| 2 | 1 | 2 | 7 | 6 | 2 | 6 | 4 |
| 4 | 4 | 7 | 14 | 5 | 6 | 9 | 11 |
| 8 | 7 | 11 | 24 | 19 | 9 | 14 | 27 |
| 12 | 8 | 16 | 21 | 24 | 14 | 19 | 31 |
| 16 | 12 | 18 | 25 | 26 | 10 | 21 | 38 |
| 20 | 9 | 23 | 29 | 23 | 11 | 24 | 37 |
| 24 | 9 | 22 | 33 | 29 | 21 | 24 | 39 |

Mean CDAI score at each time point (ITT-LOCF)

| Week | Placebo (N=86) | 50 mg q.d. (N=82) | 100 mg q.d. (N=85) | 200 mg q.d. (N=86) | 25 mg b.i.d. (N=86) | 50 mg b.i.d. (N=85) | 100 mg b.i.d. (N=84) |
|----------|----------------|-------------------|--------------------|--------------------|---------------------|---------------------|----------------------|
| Baseline | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1 | -8.5 | -7.2 | -11 | -11 | -7.3 | -9 | -12 |
| 2 | -12 | -12 | -17 | -15 | -12 | -14 | -18 |
| 4 | -13 | -15 | -21 | -20 | -17 | -18 | -23 |
| 8 | -16 | -19 | -23 | -24 | -21 | -22 | -27 |
| 12 | -17 | -20 | -24 | -25 | -21 | -23 | -28 |
| 16 | -18 | -21 | -27 | -27 | -22 | -27 | -30 |
| 20 | -17 | -21 | -28 | -30 | -23 | -27 | -31 |
| 24 | -16 | -21 | -29 | -29 | -24 | -27 | -32 |

Mean change from baseline in DAS28 (CRP) (ITT-LOCF)

| Week | Placebo (N=86) | 50 mg q.d. (N=82) | 100 mg q.d. (N=85) | 200 mg q.d. (N=86) | 25 mg b.i.d. (N=86) | 50 mg b.i.d. (N=85) | 100 mg b.i.d. (N=84) |
|----------|----------------|-------------------|--------------------|--------------------|---------------------|---------------------|----------------------|
| Baseline | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | | | | | | | |
|----|-------|-------|------|------|-------|-------|------|
| 1 | -0.57 | -0.65 | -1.0 | -1.2 | -0.68 | -0.84 | -1.3 |
| 2 | -0.8 | -0.94 | -1.5 | -1.5 | -1.1 | -1.2 | -1.8 |
| 4 | -0.97 | -1.3 | -1.9 | -1.9 | -1.5 | -1.6 | -2.2 |
| 8 | -1.2 | -1.7 | -2.1 | -2.3 | -1.8 | -1.9 | -2.7 |
| 12 | -1.2 | -1.8 | -2.2 | -2.5 | -1.9 | -2.1 | -2.8 |
| 16 | -1.4 | -1.9 | -2.5 | -2.7 | -2.0 | -2.4 | -3.1 |
| 20 | -1.3 | -2.0 | -2.7 | -2.9 | -2.1 | -2.4 | -3.0 |
| 24 | -1.2 | -2.0 | -2.7 | -2.8 | -2.2 | -2.4 | -3.2 |

Mean change from baseline in HAQ-DI (ITT-LOCF)

| Week | Placebo (N=86) | 50 mg q.d. (N=82) | 100 mg q.d. (N=85) | 200 mg q.d. (N=86) | 25 mg b.i.d. (N=86) | 50 mg b.i.d. (N=85) | 100 mg b.i.d. (N=84) |
|------|----------------|-------------------|--------------------|--------------------|---------------------|---------------------|----------------------|
| 0 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 1 | -0.20 | -0.23 | -0.32 | -0.27 | -0.21 | -0.22 | -0.35 |
| 2 | -0.23 | -0.33 | -0.41 | -0.45 | -0.30 | -0.36 | -0.48 |
| 4 | -0.34 | -0.39 | -0.52 | -0.55 | -0.45 | -0.43 | -0.58 |
| 8 | -0.41 | -0.50 | -0.64 | -0.67 | -0.59 | -0.52 | -0.72 |
| 12 | -0.38 | -0.58 | -0.65 | -0.75 | -0.59 | -0.58 | -0.84 |
| 16 | -0.40 | -0.66 | -0.71 | -0.78 | -0.58 | -0.65 | -0.90 |
| 20 | -0.40 | -0.64 | -0.78 | -0.79 | -0.58 | -0.65 | -0.95 |
| 24 | -0.37 | -0.63 | -0.78 | -0.82 | -0.62 | -0.66 | -0.90 |

b.i.d., twice daily; CDAI, Clinical Disease Activity Index; CRP, C-reactive protein; DAS, Disease Activity Score; HAQ-DI, Health Assessment Questionnaire-Disability Index; ITT, intent-to-treat; LOCF, last observation carried forward; N, number of subjects per group; NRI, non-responder imputation; q.d., once daily.

Table 2. Efficacy assessments and disease activity assessments at Weeks 12 and 24 in non-responder* patients who switched treatment groups at Week 12.

| | | Non-responders* switching to 100 mg/day at Week 12 | | | | |
|---|------------------|--|---------------------------|-----------------------------|---------------------------|-----|
| | | Placebo to 100 mg q.d. (N=15) | Placebo to 2x50 mg (N=15) | 50 mg to 100 mg q.d. (N=19) | 2x25 mg to 2x50 mg (N=17) | |
| ACR20 ^a | W12 | 7% | 7% | 0% | 0% | |
| | W24 | 53% | 60% | 42% | 41% | |
| ACR50 ^a | W12 | 0% | 0% | 0% | 0% | |
| | W24 | 33% | 40% | 26% | 6% | |
| ACR70 ^a | W12 | 0% | 0% | 0% | 0% | |
| | W24 | 20% | 13% | 5% | 6% | |
| ACR-N ^a | W12, n | 1.5 | 3.5 | 2.9 | 4.1 | |
| | W24, n | 32.0 | 33.3 | 25.8 | 23.9 | |
| DAS28 (CRP) ^a | W12, mean change | -0.4 | -0.1 | -0.1 | -0.5 | |
| | W24, mean change | -2.1 | -2.1 | -1.3 | -1.7 | |
| DAS28 (CRP) remission ^a | W12 | 0% | 0% | 0% | 0% | |
| | W24 | 20% | 20% | 5% | 6% | |
| DAS28 (CRP) remission/LDA ^a | W12 | 0% | 0% | 0% | 0% | |
| | W24 | 27% | 40% | 5% | 24% | |
| DAS28 (CRP) EULAR response ^a | W12 | Moderate | 27% | 13% | 5% | 18% |
| | | Good | 0% | 0% | 0% | 0% |
| | W24 | Moderate | 53% | 33% | 74% | 53% |
| | | Good | 57% | 40% | 5% | 24% |
| ACR / EULAR remission ^b | W12 | 0% | 0% | 0% | 0% | |
| | W24 | 7% | 0% | 5% | 0% | |
| SDAI ^a | W12, mean change | -6.5 | -0.9 | -1.0 | -5.5 | |
| | W24, mean change | -24.5 | -24.0 | -18.5 | -21.6 | |
| SDAI remission ^b | W12 | 0% | 0% | 0% | 0% | |
| | W24 | 13% | 0% | 0% | 0% | |
| CDAI ^a | W12, mean change | -7.1 | -1.0 | 0.7 | -4.2 | |
| | W24, mean change | -23.3 | -22.7 | -16.6 | -20.3 | |

| | | | | | |
|-----------------------------|------------------|-------|-------|-------|-------|
| CDAI remission ^b | W12 | 0% | 0% | 0% | 0% |
| | W24 | 13% | 0% | 0% | 0% |
| HAQ-DI ^a | W12, mean change | -0.28 | 0.10 | -0.30 | -0.28 |
| | W24, mean change | -0.69 | -0.25 | -0.49 | -0.50 |

*Patients who did not achieve a 20% improvement in swollen joint count based on 66 joints and tender joint count based on 68 joints.

^aLOCF (ITT population); ^bNRI (ITT population).

ACR, American College of Rheumatology; ACR-N, ACR N% improvement; b.i.d., twice daily; CDAI, Clinical Disease Activity Index; CRP, C-reactive protein; DAS28, Disease Activity Score based on 28 joints and C-reactive protein; EULAR, European League Against Rheumatism; HAQ-DI, Health Assessment Questionnaire – Disability Index; ITT, intent-to-treat; LDA, Low Disease Activity; LOCF, last observation carried forward; N, number of patients per group; n, number of patients with response/change; NRI, non-responder imputation; q.d., once daily; SDAI, Simplified Disease Activity Index.

Table 3. Change from baseline over time in responder* patients who continued on the same treatment throughout the 24-week study for (A) haemoglobin (g/dL); (B) neutrophils ($\times 10^9/L$); and (C) platelets ($\times 10^9/L$).

| | Time point | Placebo N=86 | Filgotinib q.d. dose groups | | | Filgotinib b.i.d. dose groups | | |
|-------------|--|-----------------|-----------------------------|----------------|----------------|-------------------------------|-----------------|------------------|
| | | | 50 mg N=82 | 100 mg N=85 | 200 mg N=86 | 2x25 mg N=86 | 2x50 mg N=85 | 2x100 mg N=84 |
| Haemoglobin | W12, mean change, g/dL | -0.015 | 0.091 | 0.243 | 0.410 | 0.288 | 0.153 | 0.443 |
| | W24, mean change, g/dL | -0.075 | 0.043 | 0.326 | 0.336 | 0.298 | 0.144 | 0.494 |
| Neutrophils | W12, mean change, $\times 10^9/L$ | -0.08 | -0.98 | -0.57 | -1.06 | -0.55 | -0.79 | -1.60 |
| | W24, mean change, $\times 10^9/L$ | 0.17 | -0.79 | -0.73 | -1.09 | -0.86 | -1.07 | -1.92 |
| Platelets | W12, mean change, $\times 10^9/L$ | 4.17 | -21.05 | -36.66 | -34.51 | -26.95 | -35.39 | -57.77 |
| | W24, mean change, $\times 10^9/L$ | 7.50 | -24.55 | -48.39 | -32.92 | -27.64 | -34.99 | -52.36 |

*Patients who achieved a 20% improvement in swollen joint count based on 66 joints and tender joint count based on 68 joints