Individual cohort results

The figure below shows two heat maps showing responder status over time for patients who met combined response criteria at month 4 on SC abatacept. In both cohorts (Cohort 1, patients aged 6–17 years and cohort 2, patients aged 2–5 years), patients who achieved low disease activity plus minimal pain (LDA+pain-min) (A) and LDA plus Childhood Health Assessment Questionnaire-disability index score of 0 (LDA+CHAQ-DI0) (B) at month 4 tended to maintain this status at month 14 and month 22. Achievement and maintenance of clinical and PRO endpoints were seen in very young (2-5) and older children (6-17).

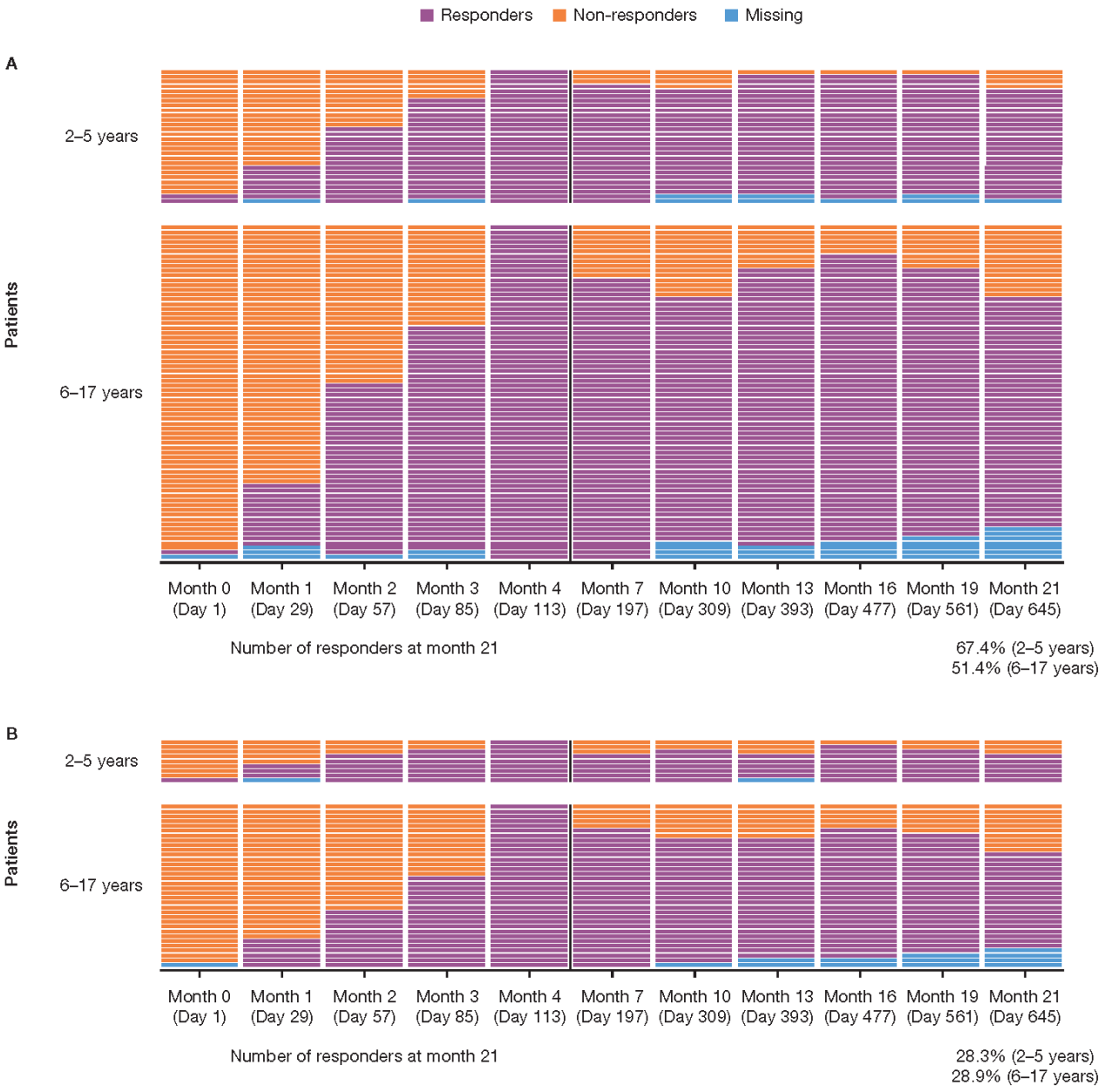
In the results from the two age cohorts, among patients aged 2–5 years, the proportion of patients achieving LDA+pain-min increased from 60.9% at month 4 to 67.4% at month 21, while in patients aged 6–17 years the proportion increased from 40.5% to 51.4%. The proportion of patients aged 2–5 years who achieved LDA+CHAQ-DI0 increased from 19.6% at month 4 to 28.3% at month 21, and in patients aged 6–17 years they increased from 19.7% to 28.9%, respectively (data not shown).

In patients who achieved LDA+pain-min at month 4 (60.9% of patients aged 2–5), 89.3% maintained this status at month 13 and 75.0% at month 21. Among patients aged 6–17, who achieved LDA+pain-min at month 4, 82.9% maintained their status at month 13 and 61.4% at month 21. 50% improvement in Juvenile Idiopathic Arthritis-American College of Rheumatology criteria plus minimal pain (ACR50+pain-min) at month 4 was achieved by 67.4% and 56.6% of patients aged 2–5 and 6–17, respectively; this was maintained by 90.3% and 82.7% at month 13 and 80.6% and 71.4% at month 21, respectively. The median time to achieve LDA was 2.8 months

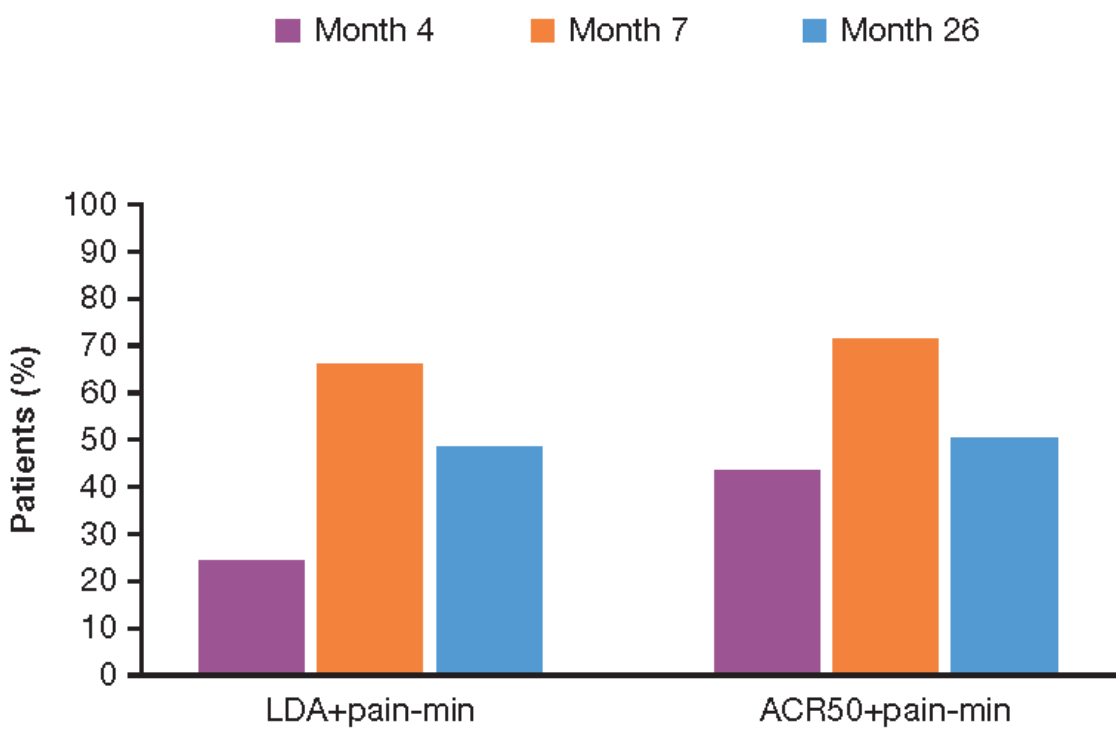
(95% CI: 1.9, 2.9) among patients aged 2–5 years, and 3.8 months (95% CI: 3.7, 6.6) among patients aged 6–17 years (data not shown).

In summary, larger proportions of patients achieved LDA+pain-min at month 4 in the 2–5-year cohort than the 6–17-year cohort; higher response rates in the younger cohort were generally seen across the composite endpoints.

Supplementary Figure 1. Heat maps of individual patients in each cohort treated with SC abatacept who met combined response criteria at month 4: A) LDA+pain-min and B) LDA+CHAQ-DI0



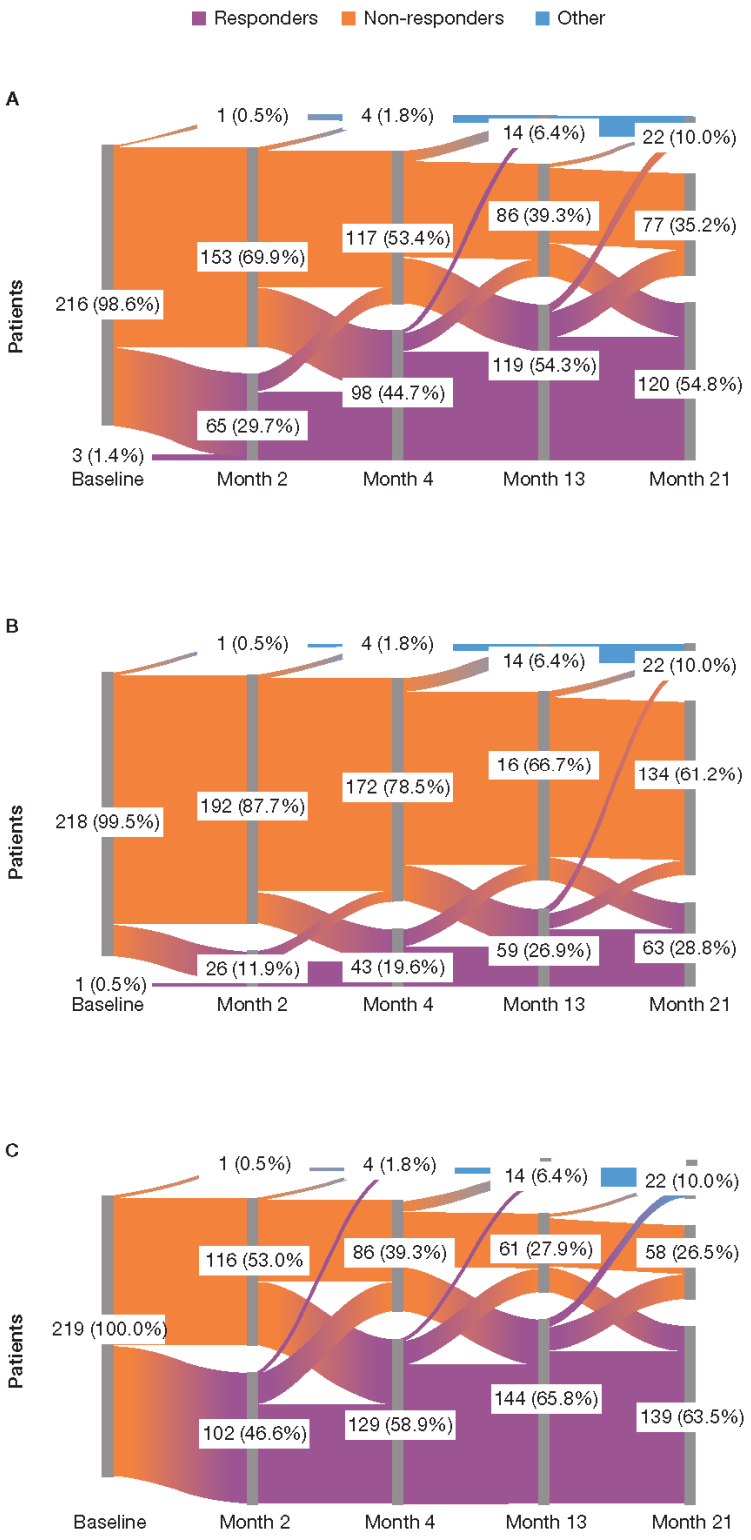
Supplementary Figure 2. Patients treated with IV abatacept meeting composite endpoints LDA+pain-min and ACR50+pain-min



	LDA+pain-min	ACR50+pain-min
Month 4, n/N	47/190 (25%)	81/190 (43%)
Month 7, n/N	31/47 (66%)	57/81 (70%)
Month 26, n/N	23/47 (49%)	42/81 (52%)

Responders are patients who met combined response criteria at month 4 LDA+pain-min and ACR50+pain-min. Patients with missing data are imputed as non-responders (includes patients who discontinued due to lack of efficacy. ACR50+pain-min = 50% improvement in Juvenile Idiopathic Arthritis-American College of Rheumatology criteria plus minimal pain; IV, intravenous; LDA = low disease activity; LDA+pain-min = LDA plus minimal pain; PRO = patient-reported outcome.

Supplementary Figure 3. Patients treated with SC abatacept meeting composite endpoints: A) LDA+pain-min, B) LDA+CHAQ-DI0, or C) ACR50+pain-min



Responders are patients who met composite endpoints at month 4. Patients with missing data are imputed as non-responders (includes patients who discontinued due to lack of efficacy). “Other” includes patients who discontinued due to reasons other than lack of efficacy and patients who have no efficacy data available after the time point of the last efficacy assessment. ACR50+pain-min = 50% improvement in Juvenile Idiopathic Arthritis-American College of Rheumatology criteria plus minimal pain; LDA = low disease activity; LDA+pain-min = LDA plus minimal pain; LDA+CHAQ-DI0 = LDA plus Childhood Health Assessment Questionnaire-disability index score of 0; PRO = patient-reported outcome; SC = subcutaneous.

REFERENCE

1. Ruperto N, Lovell DJ, Quartier P, Paz E, Rubio-Perez N, Silva CA, et al. Abatacept in children with juvenile idiopathic arthritis: a randomised, double-blind, placebo-controlled withdrawal trial. Lancet 2008;372:383–91.