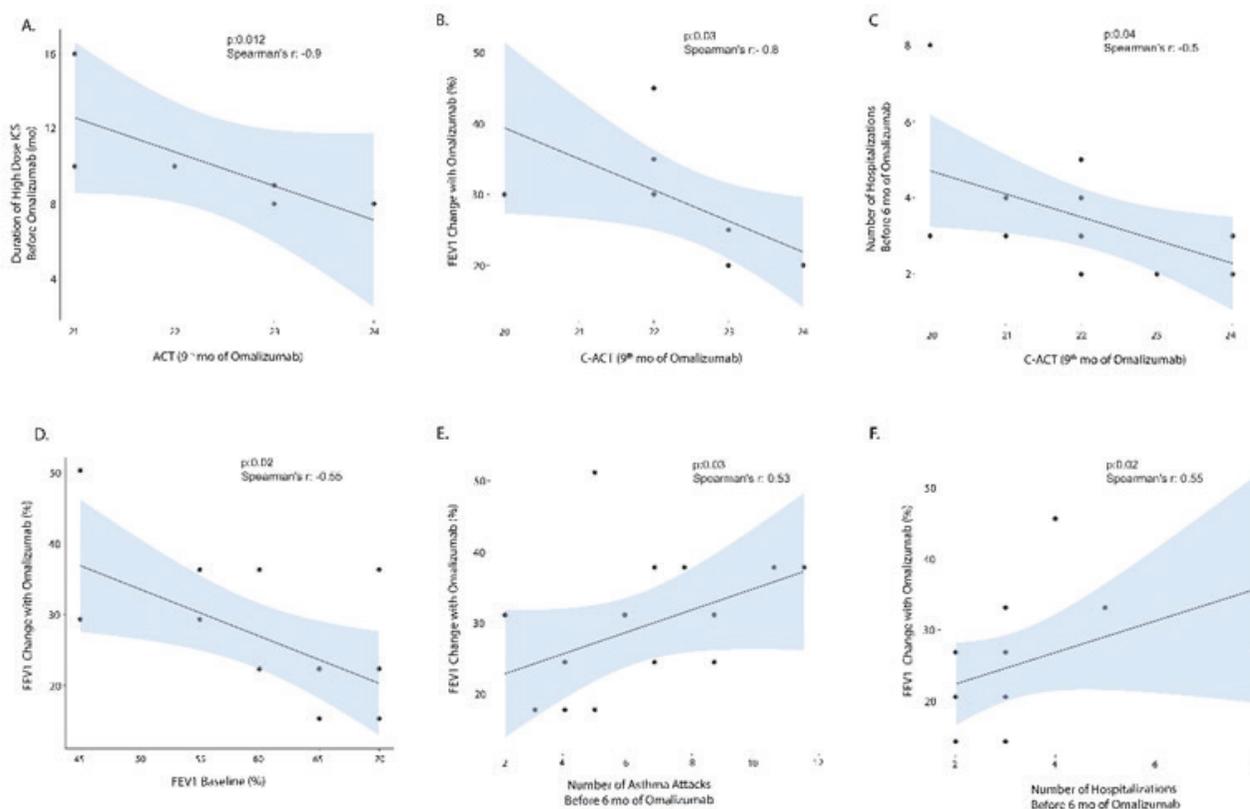**Supplementary Figure 1.** Changes in clinical and spirometric parameters at specific time points after initiation of omalizumab therapy: (A) median forced expiratory volume in 1 second (FEV$_1$, % predicted), (B) median spirometric reversibility (% change), (C) median inhaled corticosteroid (ICS) dosage (µg/day), and (D) median number of asthma attacks over three months, assessed at baseline, 3 months, and 9 months of treatmentError bars indicate interquartile ranges. Asterisks denote statistically significant differences compared to baseline, with the number of asterisks indicating the level of significance: one asterisk (*) for $p < 0.05$, two asterisks (**) for $p < 0.01$, and three asterisks (***) for $p < 0.001$. Statistical analyses were performed using the Friedman test for repeated measures; when significant, pairwise comparisons were conducted using the Durbin–Conover post-hoc test with Bonferroni correction. Abbreviations: FEV1 = forced expiratory volume; ICS = inhaled corticosteroid; mcg = micrograms; mo = month

**Supplementary Figure 2.** Scatter plots illustrating correlations between clinical parameters and asthma control outcomes at 9 months of omalizumab treatment: (A) duration of high-dose inhaled corticosteroid (ICS) use prior to omalizumab initiation versus asthma control test (ACT) score, (B) change in $FEV_1$ (% predicted) versus childhood asthma control test (C-ACT) score, (C) number of asthma-related hospitalizations in the 6 months preceding omalizumab treatment versus C-ACT score, (D) change in $FEV_1$ (% predicted) versus baseline $FEV_1$ (% predicted), (E) number of asthma attacks in the 6 months before omalizumab treatment versus change in $FEV_1$ (% predicted), (F) number of asthma-related hospitalizations in the 6 months prior to omalizumab treatment versus change in $FEV_1$ (% predicted). Spearman's correlation analysis was performed to evaluate associations between variables, with correlation coefficients ($r_s$) ranging from −1 to +1. Statistical significance was defined as $p < 0.05$. The shaded blue region represents the 95% confidence interval around the regression line. Abbreviations: ACT = Asthma Control Test; C-ACT = Childhood Asthma Control Test; FEV1 = forced expiratory volume; mo = month