



Mean difference (MD) = Mean(Remi) - Mean(Dex)

Figure3,

shows the meta-regression analysis of the relationship between patient age and sedation time difference.

The size of each circle represents the precision of the study (inverse of variance), with larger circles indicating more precise estimates.

The red dashed line represents the fitted regression line (coefficient = 0.207, P = 0.011,  $R^2 = 0.831$ ).

The shaded red area represents the 95% confidence interval of the regression line.

Negative MD values indicate faster sedation with remimazolam compared to dexmedetomidine.