







Supplemental Digital Content 3. The baseline estimated average cumulative log odds for each response category as a function of time are shown in Panel A (when Prob $[R \le m]$ is \ge Prob [R > m]; i.e., the log odds are 0 or positive). As indicated, each line on the graph in Panel A is the solution to one of Equations 1a-1f using the G00 and G10 parameters. The graph shows that the modeled relationship between time and each of the cumulative log odds is linear, and that the threshold difference between 4 and 5 is greater than between other adjacent categories. The estimated cumulative log odds (•mit) in the model are individualized for each of the 41 participants, as indicated by the i subscript. As examples, Panels B-D show the estimated cumulative log odds for three specific cases compared with the average. The differences between adjacent thresholds are the same for the average for each case, but cases vary in the location and slope of the estimated cumulative log odds over time. The intercept is quite similar but the slope is quite different for subject 13 (Panel B), whereas both intercept and slope appear different from the average for subjects 16 and 48 (Panels C and D), implying that onset of pain and course to maximal pain are atypical for these cases compared to a more usual experience.

At 12 weeks, the experimental effect and the effect of treatment-by-time interaction (in logits) are added to individual baselines for the cumulative log odds.