

**FIGURE S2**

Individual comparisons of months to 40% decline in eGFR as estimated by the standard two-point method (Method 1) and our proposed regression method (Method 2). Each point represents an individual, and individuals are sorted within each panel by increasing event times. Individuals who only have event times under Method 1 (first panel) are separated from those who only have event times under Method 2 (second panel) and those who have event times under both methods (third and fourth panels). Individuals with event times under both methods are connected with dotted gray lines. In both studies, there were many more patients with a Method 1 event time but no Method 2 event time than patients with a Method 2 event time but no Method 1 event time (first and second panels). This partly explains why Method 1 Kaplan-Meier curves would be lower than Method 2 curves. When Method 2 events occurred before Method 1 events (third panel), the event times were similar, but when Method 1 events occurred before Method 2 events (fourth panel), the Method 1 events were much earlier than Method 2 events. This can also explain lower Method 1 Kaplan-Meier curves, particularly in NEPTUNE where the number of patients in the third and fourth panel are similar. In C-PROBE, where there were many more patients in the third panel, there is more overestimation of event times by Method 1, implying higher Method 1 Kaplan-Meier curves. Given that there is both overestimation and underestimation of event times in C-PROBE, it is not surprising that the Kaplan-Meier curves between methods are more similar.