Supplemental online content for:

**Associations Between Surrogates’ Decisional Regret Trajectories and Bereavement Outcomes**

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**eAppendix 1:** Identification and Description of the 4 Distinct Decisional-Regret Trajectories

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eAppendix 1. Identification and Description of the 4 Distinct Decisional-Regret Trajectories

Latent-class growth analysis (LCGA) with a continuous latent-trajectory indicator (total Decision Regret Scale [DRS] score) by MPlus (version 8.1) was conducted to identify decisional-regret trajectories in which surrogates comprised a homogenous group sharing a discrete decisional-regret growth pattern from end-of-life (EoL) decision-making through the first 2 bereavement years. Best model solutions with an increasing number of trajectories were decided by model fit indices, including several information criteria (ICs), such as the highest log-likelihood (LL), smallest Akaike’s information criterion (AIC), Bayesian information criterion (BIC), and sample-size adjusted Bayesian information criterion (SABIC), as well as appropriately high entropy (a measure of certainty in class membership assignment, ranging between 0 and 1, with a higher value indicating that surrogates grouped together have more homogenous decisional-regret patterns). These criteria, a smallest trajectory comprising no less than 5% of the total sample, parsimony, and clinical/theoretical meaningfulness of identified latent trajectories were factored in deciding the optimal number of trajectories.

Four distinct decisional-regret trajectories were identified as optimal: resilient, late-emerging, delayed-recovery, and increasing-prolonged. The resilient trajectory showed a generally low decisional-regret level, with mild and transient perturbations around the time of patient death only. For the delayed-recovery group, DRS scores accelerated from 6 to 1 month before loss, thereafter trending slowly downward with an increasing speed since 13 months post loss toward a potentially complete resolution below the cutoff (DRS <25) for heightened decisional regret beyond the second bereavement year. Surrogates in the late-emerging trajectory reported a low decisional-regret level before their loved one’s death, but their decisional regret increased gradually after the loss and never subsided below the cutoff for heightened decisional regret throughout the first 2 bereavement years. The increasing-prolonged trajectory featured a rapid increase in the decisional-regret levels during EoL decision-making, peaking 1 month post loss and thereafter declining steadily but without a complete resolution below the cutoff for heightened decisional regret over the first 2 bereavement years.

References
eAppendix 2. Assessments of Covariates

1. Decision conflict was measured by the 16-item Decision Conflict Scale (DCS) on a Likert scale ranging from 0 (strongly agree) to 4 (strongly disagree). DCS measures surrogates’ uncertainty in making a health care decision, the modifiable factors contributing to uncertainty, and the quality of the decision made. Final scores multiply the average of the 16 items (reversing when appropriate) by 25. Final scores range from 0 to 100; higher scores indicate greater decisional conflict.

2. Surrogates’ prognostic awareness was measured by asking whether they knew their loved one’s prognosis, and if so, whether the disease (1) was curable; (2) might recur in the future, but their loved one’s life was not currently in danger; or (3) could not be cured, or their loved one would probably die soon. Surrogates were recognized as accurately knowing the patient’s prognostic awareness only if they chose option 3; inaccurate prognostic awareness reflected not knowing their loved one’s prognosis or choosing option 1 or 2.

3. Subjective caregiving burden was measured using the 24-item Caregiver Reaction Assessment (CRA). The CRA measures the impact of end-of-life (EoL) caregiving on caregivers’ schedule, health, and finances, as well as caregiver esteem in providing care (rewarding or causing resentment), and lack of family support. Total scores range from 24 to 120; higher scores indicate stronger perceived EoL caregiving burden.

4. Depressive symptoms were measured with the 20-item Center for Epidemiologic Studies Depression Scale (CES-D). Items were scored for frequency during the past week by a 4-point Likert scale ranging from 0 to 3. Total scores range from 0 to 60; higher scores indicate more depressive symptoms.

5. Quality of life during EoL caregiving was measured using the 35-item Caregiver Quality of Life Index–Cancer (CQOLC). The CQOLC measures the effect that the illness and caregiving needs of a patient with cancer have on caregivers’ physical, emotional, social, and family functioning in 4 subscales. CQOLC scores range from 0 to 140; higher scores indicate better QoL.

6. Caregivers’ perceived social support was measured using the 19-item Medical Outcomes Study Social Support Survey (MOS-SSS). The MOS-SSS assesses emotional, informational, tangible, and affectionate support, as well as positive social interaction. Total scores are computed on a scale of 0 to 100; higher scores indicate stronger perceived social support.

7. Patient distress due to common cancer symptoms (eg, pain, dyspnea, anorexia, insomnia) was measured using the 13-item Symptom Distress Scale (SDS). Scores range from 13 to 65; higher scores indicate greater symptom distress.

8. Patient functional dependency was measured by the 10-item Enforced Social Dependency Scale (ESDS). Scores range from 10 to 51; higher scores reflect greater impairment in personal and social functioning.

References