

**Supplemental Digital Content 10.** The association of surgical hospitalization with elevated late-life (Visit 5) brain  $\beta$ -amyloid deposition after excluding participants with procedures that are generally performed with sedation alone (such as endoscopy or other minor procedures)

	Surgery Group	Comparison Group	Model 1		Model 2	
	n/N (% Amyloid+)	n/N (% Amyloid+)	OR (95% CI) <sup>a</sup>	<i>p</i>	OR (95% CI) <sup>a</sup>	<i>p</i>
All surgery vs. never hospitalized	81/148 (55%)	45/87 (52%)	1.29 (0.70, 2.39) N=235	.411	1.32 (0.65, 2.68) N=220	.446
All surgery vs. hospitalization without surgery	81/148(55%)	33/78 (42%)	1.87 (0.98, 3.55) N=226	.057	2.20 (1.02, 4.73) N=215	.043
All surgery vs. no surgery <sup>b</sup>	81/148(55%)	78/165 (47%)	1.50 (0.91, 2.47) N=313	.112	1.46 (0.83, 2.57) N=297	.194

Model 1 is adjusted for age, center, race, sex, education, and *APOE*  $\epsilon$ 4 status. Model 2 is additionally adjusted for BMI, total cholesterol, HDL, alcohol use and smoking status, and prevalent hypertension, diabetes, coronary heart disease, heart failure, CKD, and COPD assessed at Visit 5. Eight participants included in the primary analyses were excluded from the current analysis because previous surgical hospitalization involved procedures that used sedation alone (e.g., endoscopy or other minor procedures). Sixteen participants included in model 1 were excluded from model 2 due to missing one or more model 2 covariate.

Abbreviations: n = number of amyloid-positive participants; N = total number of participants

<sup>a</sup> OR represents the adjusted odds for elevated brain amyloid of the surgery group as compared to the no surgery referent group

<sup>b</sup> The reference group is participants without surgery (both hospitalized and non-hospitalized)