

**Supplementary Table 1.**

Cohen-Mansfield Agitation Inventory (CMAI) and Neurobehavioral Rating Scale, Agitation Scale (NBRS-A) Adjusted Odds Ratios (ORs) by Sex

Scale	Adjusted 1*		Adjusted 2*	
	Women vs. Men		Women vs. Men	
	OR (95% CI)	P Value*	OR (95% CI)	P Value*
<i>Cohen-Mansfield Agitation Inventory**</i> , n (%)				
Physically non-aggressive behaviors <sup>1</sup>	0.9 (0.4, 2.1)	0.81	0.9 (0.4, 1.8)	0.71
Physically aggressive behaviors <sup>2</sup>	1.7 (0.8, 3.9)	0.19	2.0 (1.0, 4.2)	0.06
Verbally non-aggressive behaviors <sup>3</sup>	1.8 (0.8, 4.0)	0.16	2.5 (1.2, 5.2)	0.02
Verbally aggressive behaviors <sup>4</sup>	1.1 (0.5, 2.3)	0.90	1.0 (0.5, 1.9)	0.97
<i>Neurobehavioral Rating Scale-A***</i> , n (%)				
Disinhibition	1.2 (0.5, 2.8)	0.61	1.2 (0.6, 2.5)	0.56
Agitation - motor manifestations	1.5 (0.6, 3.8)	0.37	1.2 (0.6, 2.5)	0.59
Hostility	1.2 (0.5, 2.9)	0.60	1.4 (0.7, 2.7)	0.34

\*Test for significance is a Wald  $\chi^2$ . Adjusted 1 models include race, age, marital status, sex of caregiver, MMSE and NPI distress. Adjusted 2 models include covariates from Table 1 (excluding duration of dementia) selected using stepwise selection. The Odds Ratio (OR) is for women versus men.  
 \*\*Outcome defined as a symptom score higher than the median and modeled by logistic regression.  
 \*\*\*Outcome defined as rating of 'moderate,' 'moderately severe,' 'severe,' or 'extremely severe.'  
<sup>1</sup> General restlessness, repetitious mannerisms, pacing, trying to get to a different place, handling things inappropriately, hiding, and inappropriate dressing or undressing  
<sup>2</sup> Hitting, pushing, scratching, grabbing things, and grabbing people (kicking, biting)  
<sup>3</sup> Negativism, doesn't like anything, constant requests for attention, verbal bossiness, complaining or whining, relevant interruptions, irrelevant interruptions, and repeating sentences  
<sup>4</sup> Screaming, cursing, temper outbursts, and making strange noises

**Supplementary Table 2.** Neuropsychiatric Inventory (NPI) Adjusted Odds Ratios (ORs) by Sex

NPI** Domain, No.(%)	Adjusted 1*		Adjusted 2*	
	Women vs. Men		Women vs. Men	
	OR (95% CI)	P Value*	OR (95% CI)	P Value*
Delusions	2.2 (0.9-5.1)	0.07	2.1 (1.1-4.2)	0.03
Hallucinations	1.2 (0.4-3.3)	0.75	1.4 (0.6-3.4)	0.41
Agitation/Aggression <sup>1</sup>	--	--	--	--
Depression/Dysphoria	0.7 (0.3-1.7)	0.44	0.8 (0.4-1.7)	0.55
Anxiety	2.3 (1.0-5.3)	0.05	2.0 (1.0-3.9)	0.04
Elation/Euphoria <sup>2</sup>	--	--	--	--
Apathy/Indifference	0.7 (0.3-1.7)	0.48	0.7 (0.4-1.5)	0.41
Disinhibition	1.1 (0.5-2.8)	0.77	1.1 (0.5-2.2)	0.87
Irritability/Lability	4.4 (1.4-14.1)	0.01	3.2 (1.2-8.9)	0.02
Motor Disturbance	1.2 (0.5-2.9)	0.64	1.0 (0.5-1.9)	0.92
Nighttime Behaviors	0.7 (0.3-1.7)	0.48	0.8 (0.4-1.6)	0.54
Appetite/Eating	0.6 (0.2-1.4)	0.23	0.7 (0.3-1.5)	0.36
<p>* Presence/absence of symptom modeled by logistic regression, test for significance is a Wald <math>\chi^2</math>. Adjusted 1 models include race, age, marital status, sex of caregiver, MMSE and NPI distress. Adjusted 2 models include covariates from Table 1 (excluding duration of dementia) selected using stepwise selection;</p> <p>** NPI = Neuropsychiatric Inventory; 1. All participants had NPI agitation at baseline due to eligibility criteria; 2. Adjusted model not calculated due to small number of events.</p>				