## **Supplementary Online Content**

Subramaniam B, Shankar P, Shaefi S, et al. Effect of postoperative intravenous acetaminophen vs placebo combined with propofol or dexmedetomidine on postoperative in-hospital delirium among older patients following cardiac surgery: the DEXACET randomized clinical trial [published February 19, 2019]. *JAMA*. doi:10.1001/jama.2019.0234

eFigure 1. Morphine Equivalents Stratified by Study Group

eFigure 2. Total Sedative Dose Stratified by Study Group

eTable 1. Baseline Function

eTable 2. Clinical Outcomes by Treatment Group

This supplementary material has been provided by the authors to give readers additional information about their work.

## **FIGURES**

## eFigure 1. Morphine Equivalents Stratified by Study Group

This figure depicts the morphine equivalent per kilogram of body weight for participants in each of the four factorial study groups. Boxplots are presented, including the individual data points overlaid on the figure. Each of the grey circles represents patients who did not develop delirium, whereas patients in red depict those who did develop delirium. *Abbreviations: ACET= acetaminophen, DEX= dexmedetomidine, PROP= propofol, PLAC = placebo* 

## eFigure 2. Total Sedative Dose Stratified by Study Group

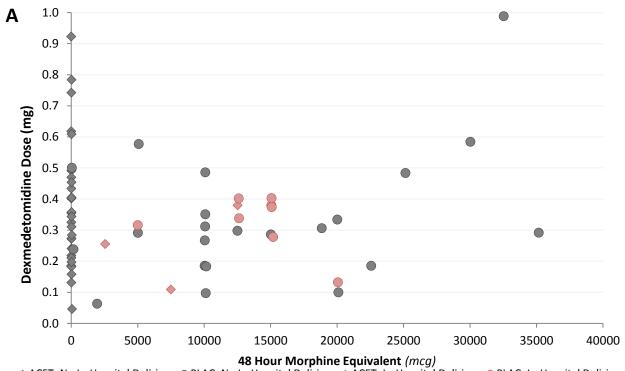
This figure depicts the total dose of (A) dexmedetomidine and (B) propofol administered to study participants. Each of the grey data points represents patients who did not develop delirium, whereas patients in red depict those who did develop delirium. Circles represent patients in the placebo group whereas patients in diamonds represent patients in the acetaminophen group. *Abbreviations: ACET= acetaminophen, PLAC = placebo* 

eFigure 1. Morphine Equivalents Stratified by Study Group 700 48 Hour Morphine Equivalent (mcg/kg) 600 500 0 400 300 200 100 0 PRO/PLAC DEX/ACET DEX/PLAC PRO/ACET Group

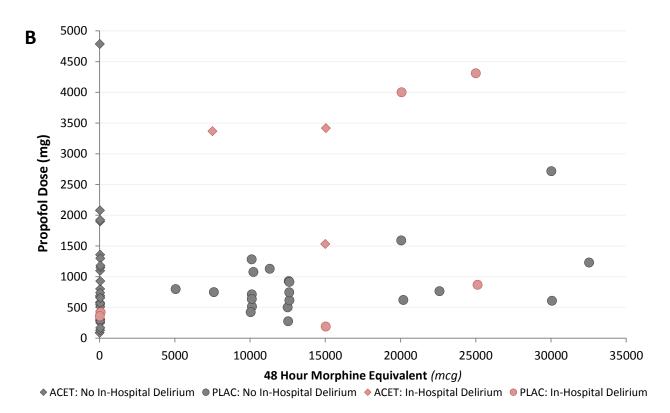
In-Hospital Delirium

No In-Hospital Delirium

eFigure 2. Total Sedative Dose Stratified by Study Group



◆ ACET: No In-Hospital Delirium ● PLAC: No In-Hospital Delirium ◆ ACET: In-Hospital Delirium ● PLAC: In-Hospital Delirium



**eTABLE 1. BASELINE FUNCTION** 

	<b>DEX/ACET</b> <i>N</i> = 29	DEX/PLAC N=30	<b>PROP/ACET</b> <i>N</i> = 31	<b>PROP/PLAC</b> <i>N</i> = 30
Activities of Daily Living* n (0()				
Activities of Daily Living*, n (%) Walking	2 (6.9)	4 (2.2)	0 (0)	0 (0)
•		1 (3.3)	0 (0)	0 (0)
Dressing	1 (3.5)	0 (0)	0 (0)	0 (0)
Instrumental Activities of Daily Living, n (%)	0 (0)	0 (0)	0 (0)	0 (0)
Cooking Housework	0 (0)	0 (0)	0 (0)	0 (0)
	0 (0)	0 (0)	1 (3.2)	2 (6.7)
Finances	0 (0)	0 (0)	1 (3.2)	0 (0)
Medications	1 (3.5)	0 (0)	1 (3.2)	0 (0)
Transportation	1 (3.5)	0 (0)	1 (3.2)	0 (0)
Telephone	0 (0)	1 (3.3)	0 (0)	1 (3.3)
Highest Education Level, n (%) Less than 8 <sup>th</sup> grade	0 (0)	0 (0)	0 (0)	4 (2.2)
•	0 (0)	0 (0)	0 (0)	1 (3.3)
8th grade but less than high school graduate	0 (0)	1 (3.3)	2 (6.5)	2 (6.7)
High school graduate / GED	9 (31.0)	5 (16.7)	8 (25.8)	6 (20.0)
Some college / Associate's degree	7 (24.1)	7 (23.3)	8 (25.8)	11 (36.7)
Bachelor's degree	6 (20.7)	9 (30.0)	7 (22.6)	5 (16.7)
Master's degree	5 (17.2)	8 (26.7)	4 (12.9)	5 (16.7)
Doctoral degree	2 (6.9)	0 (0)	2 (6.5)	0 (0)
Living Situation Prior to Admission, n (%)	25 (22.2)	07 (00 0)	00 (00 0)	00 (00 0)
Home	25 (86.2)	27 (90.0)	30 (96.8)	28 (93.3)
Home with services	1 (3.5)	0 (0)	0 (0)	1 (3.3)
Family's home	2 (6.9)	2 (6.7)	0 (0)	1 (3.3)
Long term care in nursing home	0 (0)	0 (0)	1 (3.2)	0 (0)
Assisted living	0 (0)	1 (3.3)	0 (0)	0 (0)
Other	1 (3.5)	0 (0)	0 (0)	0 (0)
Language Status, n (%)				
Native born English speaker	27 (93.1)	28 (93.3)	28 (90.3)	27 (90.0)
Native born, English is a second language	0 (0)	0 (0)	0 (0)	1 (3.3)
Foreign born, English speaker	1 (3.5)	1 (3.3)	1 (3.2)	0 (0)
Foreign born, English is a second language	1 (3.5)	1 (3.3)	2 (6.5)	2 (6.7)

<sup>\*</sup>Data is not presented for Activities of Daily Living feeding, toileting, bathing or grooming because no patients reported receiving assistance.

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**eTABLE 2. CLINICAL OUTCOMES BY TREATMENT GROUP** 

_	<b>DEX/ACET</b> <i>N</i> = 29	DEX/PLAC N=30	<b>PROP/ACET</b> <i>N</i> = 31	PROP/PLAC N = 30	P-Value
Complications					
Reoperation (Bleeding), n (%)	1 (3.5)	1 (3.3)	0 (0)	0 (0)	0.49
Deep Sternal Infection, n (%)	0 (0)	0 (0)	0 (0)	0 (0)	
Stroke, n (%)	0 (0)	0 (0)	0 (0)	0 (0)	
Pneumonia, n (%)	0 (0)	2 (6.7)	0 (0)	2 (6.7)	0.28
Renal Failure, n (%)	0 (0)	0 (0)	0 (0)	0 (0)	
Atrial Fibrillation, n (%)	6 (20.7)	6 (20.0)	8 (25.8)	7 (23.3)	0.96
Death, <i>n</i> (%)	0 (0)	0 (0)	0 (0)	0 (0)	

Abbreviations: DEX = dexmedetomidine; ACET = acetaminophen; PROP = propofol; PLAC = placebo;