## **Supplemental Online Content**

Hara S, Andresen H, Solheim O, et al. Effect of spinal cord burst stimulation vs placebo stimulation on disability in patients with chronic radicular pain after lumbar spine surgery: a randomized clinical trial. *JAMA*. Published October 18, 2022. doi:10.1001/jama.2022.18231

eFigure 1. The concept of spinal cord burst stimulation
eFigure 2. Patient reported outcomes at baseline and following burst spinal cord stimulation for chronic radicular pain after lumbar spine surgery
eTable. Effect of spinal cord burst stimulation on outcomes in the complete case set

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

eFigure 1. The concept of spinal cord burst stimulation



Printed with permission from © Kari C. Toverud





Error bars represent 95% confidence intervals. The Oswestry disability index ranges from 0 to 100, with lower scores representing less disability (between-group minimum clinically important difference [MCID], 10 points). A typical patient with moderate back pain and disability would have a score between 20 and 40. Scores above 40 indicate severe disability. The leg and back pain 11-point numerical pain scales range from 0 to 10 (MCID, 1.0 points), with 0 meaning "no pain" and 10 meaning "the worst pain imaginable". For the EuroQol-5D-3L Dimensions index score, 0 indicates a health status equivalent to death and 1 indicates perfect health. Scores between 0.2 and 0.5 represent a severe to moderate reduction in overall health-related quality of life.

eTable. Effect of spinal cord burst stimulation on outcomes in the complete case set

Outcome, N=42	Baseline (95% CI)	Spinal cord burst stimulation, 84 stimulation periods (95% CI)	Placebo stimulation, 84 stimulation periods (95% CI)	Difference between spinal cord burst stimulation and placebo stimulation (95% CI)	P value for difference between spinal cord burst stimulation and placebo stimulation
Primary					
Oswestry disability	44.3	33.9	35.3	-1.4	0.29
index <sup>a</sup>	(40.7 to 47.8)	(29.7 to 38.2)	(31.1 to 39.6)	(-4.0 to 1.2)	
Secondary					
Leg pain numerical	7.3	5.8	6.0	-0.2	0.37
rating scale <sup>b</sup>	(6.8 to 7.7)	(5.2 to 6.3)	(5.5 to 6.6)	(-0.7 to 0.2)	
Back pain	6.8	5.6	6.0	-0.4	0.07
numerical rating scale <sup>b</sup>	(6.3 to 7.3)	(5.1 to 6.1)	(5.5 to 6.6)	(-0.9 to 0.03)	
EuroQol	0.22	0.49	0.46	0.03	0.43
5Dimensions index score <sup>c</sup>	(0.14 to 0.31)	(0.40 to 0.58)	(0.37 to 0.56)	(-0.04 to 0.10)	
Physical activity					
levels					
Steps per day <sup>d</sup>	6876	7438	7080	358	0.41
	(5659 to 8094)	(6199 to 8676)	(5853 to 8307)	(-497 to 1212)	
Daily hours	3.8	3.9	3.9	-0.02	0.88
spent standing	(3.3 to 4.3)	(3.4 to 4.3)	(3.4  to  4.3)	(-0.4 to 0.3)	
or walking <sup>d</sup>					

<sup>a</sup> The Oswestry disability index ranges from 0 to 100, with lower scores representing less disability (between-group minimum clinically important difference [MCID], 10 points). A typical patient with moderate back pain and disability would have a score between 20 and 40. Scores above 40 indicate severe disability.

<sup>b</sup> Based on an 11-point numerical pain scale ranging from 0 to 10 (MCID, 1.0 points), with 0 meaning "no pain" and 10 meaning "the worst pain imaginable".

<sup>c</sup> For the EuroQol 5 Dimensions index score, 0 indicates a health status equivalent to death and 1 indicates perfect health. Scores between 0.2 and 0.5 represent a severe to moderate reduction in overall health-related quality of life.

<sup>d</sup> Steps per day and time spent standing or walking were measured by use of body-worn ActivPAL accelerometers.