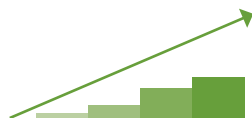


Parkinson's disease (PD) is a complex, neurodegenerative disease<sup>1</sup>



~1.2 million people are predicted to have PD by 2030 in the US<sup>2</sup>



As PD progresses, OFF episodes may emerge and can become **more frequent**<sup>3,4</sup>



~50% of patients after 5 years of oral levodopa treatment will experience OFF episodes<sup>3,4</sup>

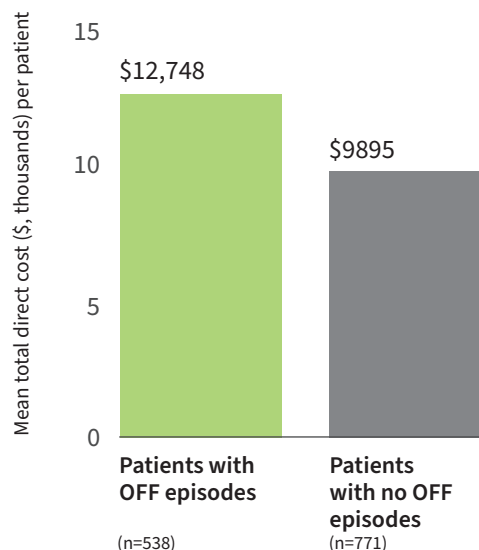
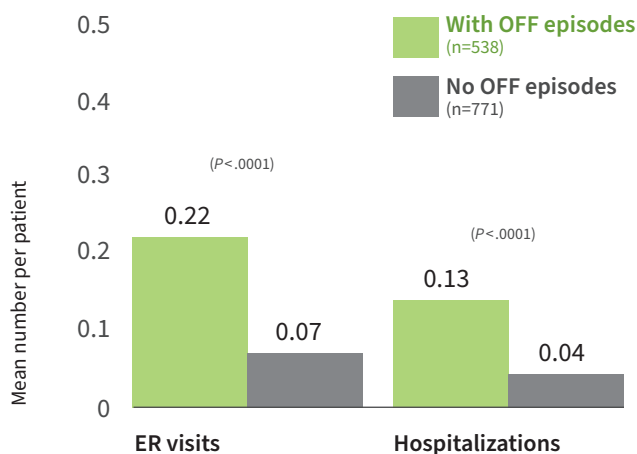


OFF episodes may drive **higher utilization** of health care resources<sup>5</sup>

## Patients with OFF episodes (vs without) had significantly higher health care resource utilization and direct costs<sup>\*5</sup>

Patients with OFF episodes experienced **~3x more ER visits and hospitalizations** than patients with no OFF episodes over 12 months

Patients experiencing OFF episodes had significantly higher total direct costs over 12 months ( $P < .001$ )



**Study description:** In a real-world assessment of OFF episode-related health care resource utilization (HCRU), data were drawn from a survey of neurologists and their consulting patients with PD in the US (N=1309), mean age 68.8 years. Surveys were conducted from May to August 2017 and August to November 2019. Patient history and HCRU information for the preceding 12 months were obtained retrospectively through review of the medical records. Results were confirmed with regression analyses.

**Limitations:** OFF hours were reported by the neurologist based on information gathered through neurologist/patient encounters.

\*Direct costs are those attributable to the medical care of a patient.  
ER, emergency room.

This study was sponsored by Sunovion Pharmaceuticals Inc.

Visit **SunovionHealthInsights.com** for resources to help support population health management



Visit the site to locate provider and patient materials to support your efforts to integrate behavioral and physical health, access disease state information, learn details about upcoming conferences, and more.

#### References:

1. Kowal SL, Dall TM, Chakrabarti R, Storm MV, Jain A. The current and projected economic burden of Parkinson's disease in the United States. *Mov Disord.* 2013;28(3):311-318.
2. Marras C, Beck JC, Bower JH. Prevalence of Parkinson's disease across North America. *NPJ Parkinsons Dis.* 2018;4(21):1-7.
3. Verhagen Metman L. Recognition and treatment of response fluctuations in Parkinson's disease: review article. *Amino Acids.* 2002;23(1-3):141-145.
4. Marsden CD, et al. In: Marsden CD, Fahn S, eds. *Neurology*. Vol 2. Oxford, UK: Butterworth-Heinemann; 1981:96-122.
5. Thach A, Jones E, Pappert E, Pike J, Wright J, Gillespie A. Real-world assessment of "OFF" episode-related healthcare resource utilization among patients with Parkinson's disease in the United States. *J Med Econ.* 2021;24(1):540-549.