

## Prevention of Fractures in Patients with Parkinson's Disease: Economic Considerations

### TRANSPERS Sub-Study:

TRANSPERS, is leading a sub-aim on the generalizability and interpretation of the economic findings from a large clinical trial on prevention of fractures in patients with Parkinson's disease (PD) funded by the National Institute on Aging (NIA).

### Parent Grant Overview

The parent grant is a large, home-based trial testing the hypotheses that among older patients with Parkinson's disease a single treatment of zoledronic acid (ZA) will reduce the risk of 1) nonvertebral fractures, 2) hip fracture, and 3) all-cause mortality. If successful the findings would revolutionize the care of patients with PD, leading to universal home-based ZA treatment of PD patients (as well as other chronic disorders), with substantial reduction in disability and perhaps mortality in this large population. The study is using an innovative home-based approach that could be a model for other trials and clinical care.

### TRANSPERS Contribution:

Parkinson's disease (PD) patients have a 2 to 3-fold higher risk of experiencing fractures and incurring more severe consequences than other patients at risk for fracture. Only 3-6% of PD patients age  $\geq 65$  receive treatment for osteoporosis, with the majority discontinuing treatment due to adherence issues. Zoledronic acid (ZA), an annually administered intravenous bisphosphonate, addresses such issues and may offer increased fracture protection. TRANSPERS is determining how to define and measure the costs and economic outcomes of an infused at home ZA therapy to prevent fracture in PD patients.

### TRANSPERS

*Launched in 2008, the Center for Translational and Policy Research on Precision Medicine (TRANSPERS) at the University of California, San Francisco is a first-of-its-kind research center dedicated to developing evidence-based information for patients, providers, industry, researchers and policymakers to objectively assess how precision medicine can be most beneficial and efficient in improving health outcomes. The TRANSPERS Center is funded by grants from the National Institutes of Health (NIH) and several foundations.*

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