SAN FRANCISCO, Feb. 13, 2017 – TIME Magazine has selected the impact on dementia of a brain training exercise – developed and tested with funding from the National Institutes of Health (NIH) – as one of the 100 New Scientific Discoveries of 2016. That exercise is commercially available only in the BrainHQ brain training platform.

TIME reports on the “most rigorous study” to date on the topic of cognitive training and aging. The study, referred to as the ACTIVE (Advanced Cognitive Training for Independent and Vital Elderly) Study, was independently run by university-based researchers at six institutions, and under grants from the NIH as part of its mission to fund basic research and translational research that can lead to major improvements in the human condition.

The breakthrough results can be traced back to investments made by the NIH during the 1980s into the basic brain science of visual speed and attention, conducted in the laboratories of Drs. Karlene Ball and Daniel Roenker. At the time, this work did not have an obvious link to human health and the onset of dementia. But with persistent work from many researchers and steady support from the NIH, over the next 15 years it became clear that training the brain to be faster and more accurate could improve cognitive and real-world function.

This work culminated in the ACTIVE Study, where the NIH asked for a gold-standard randomized controlled trial to evaluate the long term effects of cognitive training on real-world function. ACTIVE enrolled 2,832 healthy older adults into three different types of cognitive training and into a fourth group that served as a control.

The three types of training reflected three theories of what is most important in cognition and aging – reasoning training, which might help people function better; memory training, which might help people with a key cognitive concern of aging; and speed of processing training, which might help with age-related mental slowing in all activities.

At the beginning of the study the average age of participants was 74, and was 84 at the end of the 10-year study period. Participants in training activities were asked to complete two hours of training per week for five weeks. About half the participants were asked to do an additional four hours of training in the 11th and 35th month.

All participants were measured across a large battery of cognitive and other health and behavioral measures at years 1, 2, 3, 5, and 10. The ACTIVE Study group first reported on its results showing an intervention that lowered the risk of dementia at the Alzheimer's Association International Conference (AAIC) in July 2016. At AAIC, the researchers reported that only the speed processing group showed significantly different dementia incidence compared to the control group. ÂÂ They had 33% less risk of dementia over the period; and the group asked to do booster sessions had 48% lower risk.

This was the first time ever that any intervention was shown to have any significant impact on the risk of dementia.

TIME magazine notes that the brain training technology was acquired by Posit Science, and that its current version is the Double Decision exercise in BrainHQ.

“The TIME magazine award calls out a model story of how public/private partnerships can work to advance human health," said Dr. Henry Mahncke, CEO of Posit Science. "The heroes of this story are the staff at the NIH who had the foresight to make these investments first in basic science and then in gold-standard clinical trials, and the academic scientists who designed and executed the ACTIVE Study.”

As an industry partner at the final stage of translational research, Posit Science put together a team of scientists, artists, and game developers to make this type of brain training fun and engaging, while preserving its effectiveness and dramatically expanding the scope and number of studies showing its efficacy.

"We are honored to be entrusted with further advancing this science, bringing it out of the lab and into the world," added Dr. Mahncke. “We are now pursuing our plan to obtain regulatory clearance to offer brain training to address the risk of cognitive decline associated with dementia. And, this is just the tip of the spear of what this new type of digital therapeutic can do – not only to address a host of brain diseases and cognitive disorders, but also to improve human performance in nearly every aspect of life.”

About Posit Science

Posit Science is the leading provider of clinically proven brain fitness training. Its exercises, available online at www.BrainHQ.com, have been shown to significantly improve brain speed, attention, memory and numerous standard measures of quality of life in multiple studies published in more than 60 peer-reviewed articles in leading science and medical journals. Three public television documentaries as well as numerous stories on news programs, in national magazines, and in major newspapers have featured Posit Science's work. The company's science team is led by renowned neuroscientist Michael Merzenich, PhD.