

**Keeping an Eye on Trials Important to the Parkinson's Disease Patient
What's Hot in Parkinson's Disease June 2009**

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Each year as we move into summer, the Movement Disorders Society holds their annual International Congress where thousands of investigators from all over the world converge in a central location to present the latest research. Each year we keep our eyes open and our ears primed for news on the latest Parkinson's disease therapies. This year several projects caught our attention.

First, a combined group of investigators from Norway and London led by Dag Aarsland put a compounds aimed at the treatment of cognitive dysfunction in Parkinson's disease dementia and dementia with Lewy bodies to the test. They performed a prospective blinded randomized controlled clinical trial of memantine (a drug that works on a brain chemical called glutamate). The results were significant and encouraging with 56 patients completing the trial and the group receiving the drug (rather than the placebo) improving 1.9 points on a cognitive (thinking scale) known as the mini-mental status examination. Though the amount of improvement was small, it is good news that a new class of drugs may prove useful for thinking/processing problems in Parkinson's disease. The patients in this particular study were extremely impaired cognitively at baseline, and it will be interesting to see how a less impaired and more representative group of Parkinson's disease patients performs on this drug.

Another promising double blind placebo controlled multicenter study was performed on a drug known as Safinamide. Safinamide also works on glutamate, but unlike in the memantine trial, the aim of this study was reduction in dyskinesia. Over 600 patients took part in the study, and the results were impressive with both on and off time improvements without worsening in dyskinesia. Interestingly, safinamide, like memantine, is a compound of interest for the treatment of cognitive dysfunction. We will keep our eyes on this medication as it progresses through the pipeline.

The results of a major trial referred to as STRIDE-PD were announced. The idea of this study was to see if a more continuous dopaminergic stimulation with Stalevo (carbidopa/levodopa/comtan given four times a day) would be superior in decreasing the frequency of dyskinesia, as well as in trying to delaying its onset. This study was negative, and those in the Stalevo group actually experienced a decrease in the time of development of dyskinesia as well as more dyskinesia overall. This result highlights the importance of placebo controlled randomized clinical trials, as this was not what was expected. The results shoot a bit of a hole in the continuous dopaminergic stimulation fan club, but we should keep in mind that it is easier to achieve continuous dopaminergic stimulation by pump and other

technologies. We will keep our eyes on the scientists studying this phenomenon, but at this time there does not appear to be an advantage (and there may be a disadvantage) to being on Stalevo early in the Parkinson's disease course.

Finally, the results of the failed CERE-120 gene therapy trial were discussed in more detail. Interestingly, when monkey models of Parkinson's disease were given CERE-120 (the nutritive brain factor known also as neurturin) into an area of the brain called the striatum, they transported neurturin to a damaged area called the substantia nigra. Preliminarily in a few human brains that have become available through autopsy, there seemed to be a failure in transporting CERE-120 into the substantia nigra. There has therefore been a great deal of recent thought given to the possibility of retrying the therapy with direct substantia nigra injections. At this time, the results of the double blind trial are being reported as negative, and we will keep you posted for future activity on neurturin.

Remember to stay well hydrated for the upcoming summer months and we will keep you informed of all of the exciting clinical trials results as they come in. Remember, even if a clinical trial is negative we still learn important information that often provides the needed momentum to propel us toward better therapies. Keep logging in to our website and NPF will keep an eye on things for you.