1st January 2015 - New research

CLINICAL TRIALS OF SUBCUTANEOUS L-DOPA

NeuroDerm has announced results of Phase IIa pharmacokinetic Study of ND0612H and ND0612L. They led to clinically-significant plasma levels of L-dopa. ND0612 is a combination of L-dopa and carbidopa in a liquid formula administered continuously sub-cutaneously through a patch pump. ND0612 is designed to provide steady L-dopa blood levels for the reduction of motor complications in Parkinson’s Disease. There is a high dose form ND0612H. For more information go to http://neuroderm.com/nd0650-for-severe-pd/ There is a low dose form of ND0612 called ND0612L. For more information go to http://neuroderm.com/nd0612-for-moderate-pd/

L-dopa plasma levels were found to be proportionate to the dose. ND0612H achieved maximum daytime concentrations of 1,333ng/ml and 1,436ng/ml. With oral entacapone the levels were even higher, at 1,807ng/ml. ND0612L achieved lower maximum daytime concentrations of 528ng/ml and 477ng/ml. With oral entacapone the L-dopa levels were slightly higher, at 596ng/ml. Fluctuations in L-dopa plasma levels were markedly reduced when compared with oral L-dopa. Treatment with ND0612L and ND0612H did not raise safety and tolerability concerns, causing only minimal and transient local reactions at the infusion site.

Due to the short half-life of oral L-dopa, patients are required to take multiple L-dopa doses daily. This results in sharp fluctuations in L-dopa levels which are associated with erratic “off” and “on” periods experienced by many patients. Continuous sub-cutaneous L-dopa administration using ND0612 can overcome this limitation without having to undergo invasive surgical procedure. For more information go to Neuroderm http://neuroderm.com/