

## [133] MITOCONIX - TREATING NEURODEGENERATION BY IMPROVING MITOCHONDRIA HEALTH

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### **Investment Rational**

Mitoconix Bio Ltd is pioneering a novel strategy to improving mitochondrial health as a **disease-modifying therapeutic for neurodegenerative diseases**.

Disruptions of mitochondria fission (fragmentation) and fusion are implicated in many pathological conditions, including neurodegenerative diseases. Therefore, maintaining a proper balance between fission and fusion is a promising therapeutic approach to prevent cell damage and neurodegeneration.

### **Business Strategy**

Mitoconix is developing a therapeutic peptides that are designed to selectively inhibit excess mitochondria fission or fusion for maintaining cellular integrity, thereby conferring neuroprotection and functional benefit

### **Core Technology**

MTC-1203 ,is a disease-modifying therapeutic for neurodegenerative diseases. Its a selective peptide inhibitor of pathological mitochondrial fragmentation (fission) and dysfunction; that maintains neuronal health through improved mitochondrial functions, ATP production and reduced oxidative stress in culture models of HD, PD, ALS. In vivo efficacy in animal models of Huntington's (HD) and Parkinson's diseases (PD) and beneficial activity in patient-derived cells of HD, sporadic and genetic PD, and sporadic and genetic Alzheimer's disease (AD).

### **MTC-1203; A DISEASE-MODIFYING THERAPEUTIC FOR HUNTINGTON'S and FAMILIAL PARKINSON'S DISEASES**

- Demonstrates in vivo efficacy (improves motor and cognitive function, delays progression) in mouse HD and PD models;
- Reduces level of Htt protein aggregates and neuronal loss (causes of the pathology) in a mouse HD model;
- Reduces neuroinflammation (microglia activation and inflammatory cytokine elevation);
- Benefits of treatment associated with a decline in peripheral biomarkers.
- Exerts no discernable adverse effects in normal mice even after 5 months of treatment.
- Restored proper mitochondria function in LRRK2 mutation patients cells
- Significantly reduced mitochondria fragmentation in LRRK2 mutation patients cells

### **What's Next?**

Mitoconix Bio Raised \$20 Million in Series A Funding that will enable the company to initiate the first clinical study by late 2018. It will also enable the company to expand to additional indications with MTC-1203 as well evaluate additional technologies in pre-clinical setting.