

## QR Pharma Receives US Patent 7,625,942 to Treat Down Syndrome

Radnor, Pa, February, 24, 2010: QR Pharma, Inc., a developer of novel drugs to treat Alzheimer's disease (AD), announced today that it was issued U.S. Patent No. 7,625,942, a "Method of Treating Down Syndrome" by the U.S. Patent and Trademark Office. The '942 patent covers use of Posiphen and analogs to treat cognitive impairments associated with Down Syndrome (DS). This patent valuably expands upon the original Posiphen and analog patent that claims composition of matter and use of compounds to lower amyloid- $\beta$  precursor protein (APP) and thereby treat dementia and Alzheimer's disease (AD).

Posiphen, a small orally active compound, has been shown in cell cultures as well as in normal, transgenic (model of AD) and trisomic (model of DS) mice to reduce the synthesis of APP which is cleaved into a number of toxic peptides, including amyloid- $\beta_{42}$  (A $\beta_{42}$ ). These peptides, independent of each other, attack multiple pathways of neuronal cell life inducing dysfunction, neuronal cell death and inflammation and leading to cognitive impairment.

The chromosome triplicated in DS (chromosome 21 in humans) contains the APP gene, and hence levels of APP are 50% elevated in DS compared to healthy normal people. Indeed, individuals with DS start developing degenerative changes that impair cognitive function in their mid thirties compared to normal people where equivalent changes are seen much later, as in the development of AD.

Trisomic mice treated with Posiphen show preservation of specific brain regions that consistently degenerate without treatment. Posiphen can normalize APP levels and preserve neuronal cells which opens a window for hope in DS, a condition for which there is no available treatment.

"The more we learn about Posiphen the more we see how it interferes with a basic pathway that leads to dementia in DS, AD and likely other conditions, such as head trauma and stroke. Posiphen is presently in a clinical trial in AD patients and we are very hopeful to see the results," said Maria Maccicchini, CEO of QR Pharma.

**About QR Pharma, Inc.:** Headquartered in Radnor, Pennsylvania, QR Pharma, Inc. is a clinical-stage specialty pharmaceutical company committed to developing therapeutics with novel approaches for the treatment of cognitive impairment and Alzheimer's disease (AD). QR currently has two product development programs based on oral small-molecule, blood-brain barrier passable therapeutics that target two distinct pathways for the treatment of AD. [www.qrpharma.com](http://www.qrpharma.com)

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