



## **TECHNOLOGY AVAILABLE FOR LICENSING**

### **Methods and Materials for the Diagnosis and Treatment of Schizophrenia and Related Disorders**

US Patent #6,080,549

### **Method of Identifying and Determining the Effectiveness of Therapeutic Processes or Agents for the Treatment of Schizophrenia and Related Disorders**

US Patent #6,773,892

Inventors: Richard Deth

#### **Details About the Invention:**

The D4 receptor-mediated PLM assays coupled with conventional D4 receptor ligand binding assays can better screen for psychoactive drugs than ligand binding assays alone. This assay provides critical, disease mechanism-related information on the clinical promise of neurological drugs, greatly decreasing the risk (and cost) of failure in clinical trials. Additionally, D4 receptor-mediated PLM activity using patient samples appears to correlate with disease presence. Under different assay conditions based on an understanding of the D4 receptor - PLM cycle and the enzymes feeding into the D4 receptor-mediated PLM cycle one can use the assay for drug discovery in Schizophrenia and other neurological diseases.

#### **Benefits of the Invention:**

Unique assays derived from a new mechanistic understanding of D4 receptor (D4R) activation of phospholipid methylation (PLM) in cell membranes.

#### **Advantages:**

Faster time to market  
Innovative treatment

#### **Uses:**

Drug discovery  
Therapeutics and Diagnostics for Neurological Diseases

#### **The Bottom Line:**

As a drug screen the D4 receptor-mediated assays show promise for selecting drugs for treatment of Schizophrenia, Autism, ADHD and related disorders and for reducing drug development costs through the reduction of the failure risk. An added plus is the possibility of using the assay as a diagnostic for these diseases.

#### **For More Information:**

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