

**Technology**

Method of using dopamine D3 receptor antagonists for psychosis therapy

**Inventor**

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**Key Features**

- May have a favorable impact in the prodromal stage of psychotic diseases
- Drug target for therapeutic agents that could potentially have a higher safety profile
- Could be used for multiple psychotic disorders including schizophrenia, bipolar disorder, and depression

**Stage of Development**

Reduced to practice with successful demonstration in animal models and clinical studies

**Keywords**

- Therapeutic
- Psychosis
  - Behavioral sensitization
  - Dopamine D3 receptor
  - Schizophrenia
  - Drug targets

**Patent Status**

None

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## Modulation of D3 Dopamine Receptor Function to Prevent Psychosis (VA Reference No. 00-006)

*Novel method of using dopamine D3 receptor antagonists for the preventative treatment of individuals at risk of psychosis*

**Technology**

The Department of Veterans Affairs has developed a method of using dopamine D3 receptor antagonists for the preventative treatment of individuals at risk of psychosis, including brief reactive psychosis.

**Description**

The method developed by the VA specifically targets D3 receptor inhibition. Over expression of the D3 receptor is thought to account for part of the psychotic symptomatology of schizophrenia and, presumably, of psychosis in general. The most effective treatment may be a combination therapy that targets both the D3 receptor and ideally a 'fast-on/fast-off' antagonist of the D2 receptor, to minimize the extra-pyramidal syndrome (a set of motor system manifestations) of current antipsychotics.

**Competitive Advantage**

The subject technology is targeted specifically at D3 receptor inhibition, and although a treatment this specific may not address all the symptoms of schizophrenia and other psychoses, it may have a favorable effect in the prodromal stages, as opposed to fully developed psychotic disease.

This invention:

- May be a target for antipsychotic drugs without producing the endocrinal and neurological adverse effects seen in other traditional, and some atypical, antipsychotic drugs.
- Could also be used to arrest progression to psychosis in post-operative and ICU psychoses, bipolar disorder and major depression.

**Status**

The Department of Veterans Affairs is looking for a partner for further development and commercialization of this technology through a license, and the VA inventors are available to collaborate with interested companies through a Cooperative Research and Development Agreement (CRADA).