

## PHARMACEUTICAL SCIENCE

### Advanced Edit

Parkinson's disease (PD) is a progressive extrapyramidal motor disorder. This disease is characterized by selective ~~dopamergic-dopaminergic~~ (DAergic) neuronal ~~degradation-degeneration~~ in the substantia nigra. ~~To correct~~ Correction of dopamine (DA) deficiency in PD with levodopa (L-dopa) significantly ~~releases~~ ~~attenuates~~ motor symptoms. ~~Nowadays,~~ DA receptor agonists are ~~currently~~ ~~considered~~ useful medication ~~for PD and~~ even regarded as ~~the~~ first ~~preference~~ ~~line of treatment~~ to delay ~~starting the initiation~~ of L-dopa therapy. In ~~the~~ advanced stages of PD, they are also used as adjunct therapy ~~together with to L-~~ L-dopa. DA receptor agonists act by stimulation of presynaptic and postsynaptic DA receptors. ~~Despite the usefulness~~ ~~However,~~ they ~~could be causative for~~ ~~may cause~~ valvulopathy and nonmotor complications such as DA dysregulation syndrome (DDS). In this paper, ~~we discuss the~~ physiological characteristics of ~~the~~ DA receptor family ~~are discussed. We also discuss and the~~ validity, benefits, and specific adverse effects of pharmaceutical DA receptor agonists.

**Comment [A1]:** Is this what you mean?

**Comment [A2]:** I have made these changes to avoid repetition (of "discuss").