### Accepted Manuscript

Title: Dopamine, the antipsychotic molecule: a perspective on mechanisms underlying antipsychotic response variability

Authors: Davide Amato, Anthony C. Vernon, Francesco Papaleo

NBR 2956



NEUROSCIENCE & BIOBEHAVIORAL

To appear in:

PII:

DOI: Reference:

Received date:	17-1-2017
Revised date:	20-9-2017
Accepted date:	26-9-2017

Please cite this article as: Amato, Davide, Vernon, Anthony C., Papaleo, Francesco, Dopamine, the antipsychotic molecule: a perspective on mechanisms underlying antipsychotic response variability. Neuroscience and Biobehavioral Reviews https://doi.org/10.1016/j.neubiorev.2017.09.027

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## ACCEPTED MANUSCRIPT

## Dopamine, the antipsychotic molecule: a perspective on

## mechanisms underlying antipsychotic response variability

Running title: Dopamine, the antipsychotic drug

#### Davide Amato<sup>1,2\*</sup>, Anthony C. Vernon<sup>3,4</sup> and Francesco Papaleo<sup>5</sup>

<sup>1</sup>Department of Neurosciences, Medical University of South Carolina, Charleston, SC, USA; <sup>2</sup>Department of Psychiatry and Psychotherapy University Clinic, Friedrich-Alexander University of Erlangen-Nürnberg, Erlangen, Germany; <sup>3</sup>Department of Basic and Clinical Neuroscience, Institute of Psychiatry, Psychology and Neuroscience, King's College London, Maurice Wohl Clinical Neuroscience Institute, London, UK; <sup>4</sup>MRC Centre for Neurodevelopmental Disorders, King's College London, London SE1 1UL, UK; <sup>5</sup>Department of Neuroscience and Brain Technologies, Istituto Italiano di Tecnologia, via Morego 30, 16163 Genova, Italy

*Corresponding author:	Dr. Davide Amato, M.Sc., Ph.D., PD
	Department of Neurosciences
	Medical University of South Carolina
	70 President Street,
	Charleston SC 29425, USA
	Office: 1-843-792-8557
	Fax: 1-843-792-4423
	Email: amatod@musc.edu (or amatodavide@gmail.com)

#### Highlights

- Antipsychotic drugs are first line treatment in schizophrenia
- The dopamine D2 receptor system is a major target of antipsychotic drugs
- The treatment with antipsychotics lead to multiple outcomes, including a diminuished long-term efficacy
- Here putative mechanistic aspects of the antipsychotic treatment outcomes varibility are discussed.

#### Abstract

All antipsychotics bind to the dopamine D2 receptor. An "optimal" level of D2 receptor blockade with antipsychotics is thought to ameliorate the positive symptoms of schizophrenia. However, persistent D2 receptor blockade is associated with a Download English Version:

# https://daneshyari.com/en/article/7302170

Download Persian Version:

https://daneshyari.com/article/7302170

Daneshyari.com