

# Comparing Long-Acting Antipsychotic Discontinuation Rates Under Ordinary Clinical

## Circumstances: A Survival Analysis from an Observational, Pragmatic Study

*Federico Bertolini<sup>1\*</sup>, Giovanni Ostuzzi<sup>1\*</sup>, Michela Pievani<sup>1</sup>, Andrea Aguglia<sup>2,3</sup>, Francesco Bartoli<sup>4</sup>, Paola Bortolaso<sup>5</sup>, Camilla Callegari<sup>5</sup>, Mariarita Caroleo<sup>6</sup>, Giuseppe Carrà<sup>4,7</sup>, Mariangela Corbo<sup>8</sup>, Armando D'Agostino<sup>9,10</sup>, Pasquale De Fazio<sup>11</sup>, Fabio Magliocco<sup>6</sup>, Giovanni Martinotti<sup>8</sup>, Edoardo Giuseppe Ostinelli<sup>9,10</sup>, Marco Piero Piccinelli<sup>5</sup>, Federico Tedeschi<sup>1</sup>, Corrado Barbui<sup>1</sup>, the STAR*

### *Network Investigators*

<sup>1</sup> WHO Collaborating Centre for Research and Training in Mental Health and Service Evaluation; Department of Neuroscience, Biomedicine and Movement Sciences; Section of Psychiatry, University of Verona, Verona, Italy

<sup>2</sup> Department of Neuroscience, Rehabilitation, Ophthalmology, Genetics, Maternal and Child Health, Section of Psychiatry, University of Genoa, Genoa, Italy,

<sup>3</sup> IRCCS Ospedale Policlinico San Martino, Genoa, Italy

<sup>4</sup> Department of Medicine and Surgery, University of Milano Bicocca, Monza, Italy

<sup>5</sup> Department of Medicine and Surgery, Division of Psychiatry, University of Insubria-ASST Sette Laghi, Varese, Italy

<sup>6</sup> Department of Health Sciences, Psychiatric Unit, University Magna Græcia of Catanzaro, Catanzaro, Italy

<sup>7</sup> Division of Psychiatry, University College of London, London, UK

<sup>8</sup> Department of Neuroscience, Imaging and Clinical Sciences, University "G. d'Annunzio", Chieti, Italy

<sup>9</sup> Department of Health Sciences, Università degli Studi di Milano, Milan, Italy

<sup>10</sup> Department of Mental Health, San Paolo Hospital, Milan, Italy

<sup>11</sup> Azienda Ospedaliera Universitaria Mater Domini, University Magna Græcia of Catanzaro, Catanzaro, Italy

\* Joint first authors

**Corresponding author:** Federico Bertolini, MD; Department of Neuroscience, Biomedicine and Movement Sciences; Section of Psychiatry; University of Verona; Verona, Italy (e-mail: [federico.bertolini@univr.it](mailto:federico.bertolini@univr.it))

**Table S1: LAI Discontinuation rates at 12 months after first prescription**

LAI	Discontinuers (%)	Received LAI at baseline
Paliperidone-LAI	38 (33.9)	112
Aripiprazole-LAI	35 (35.4)	99
Haloperidol-LAI	34 (40.0)	85
Risperidone-LAI	19 (51.4)	37
Fluphenazine-LAI	11 (40.74)	27
Zuclopenthixol-LAI	7 (43.75)	16
Olanzapine-LAI	10 (62.5)	16
Perphenazine-LAI	1 (50.0)	2
All LAIs	155 (39.3)	394

**Table S2: Adverse events leading to LAI discontinuation**

Adverse events leading to LAI discontinuation	N
Muscle stiffness	10
Tremor	6
Slowing of movements	5
Akathisia	5
Sleepiness	5
General Malaise	3
Erectile Dysfunction	3
Weight Gain	3
Involuntary Movement	2
Fatigue	2
Tension	1
Skin Rash	1
Hyperprolactinemia.	1
Flattened Affectivity	1
Depression	1
Missing	2
Total	51

**Table S3: Reasons for discontinuing each LAI over the 12 months after first prescription**

	Paliperidone-LAI	Aripiprazole-LAI	Haloperidol-LAI	Risperidone-LAI	Fluphenazine-LAI	Zuclopenthixol-LAI	Olanzapine-LAI	Perphenazine-LAI
Adverse events	9	8	9	12	6	3	4	0
Participant's refusal	10	8	9	1	0	1	2	1
LAI's not required anymore	10	6	10	2	0	1	2	0
Inefficacy	6	10	2	3	4	0	2	0
Information not available	3	3	4	1	1	2	0	0