## **Effectiveness and tolerability of Vortioxetine in Affective Disorders:** a naturalistic study

B. Grancini<sup>1</sup>, V. De Carlo<sup>1</sup>, M. Vismara<sup>1</sup>, G. Cirnigliaro<sup>1</sup>, L. Degoni<sup>1</sup>, B. Dell'Osso<sup>1</sup>.

<sup>1</sup>Department of Biomedical and Clinical Sciences "Luigi Sacco", University of Milan, Psychiatry Unit, ASST Fatebenefratelli-Sacco, Milan, Italy. <sup>2</sup>Department of Psychiatry and Behavioural Sciences, Stanford Medical School, Stanford University, Stanford, CA, USA. <sup>3</sup>CRC "Aldo Ravelli" for Neurotechnology & Experimental Brain Therapeutics, University of Milan, Milan, Italy.

Introduction. Vortioxetine is a novel antidepressant with multimodal activity [1]. In the last decade, it has been approved worldwide [2;3].

**Objectives**. The present naturalistic study aimed to characterize effectiveness and tolerability of vortioxetine in affective disorders in real clinical practice.

Methods. Study total sample consisted of 48 outpatients, treated with vortioxetine and mainly with a primary diagnosis of Major Depressive Disorder/MDD, Bipolar Disorder/BD, Generalized Anxiety Disorder/GAD, Panic Disorder/PD, Obsessive Compulsive Disorder/OCD, Adjustment Disorder/AD. Collected variables included socio-demographic, clinical and three periodic psychometric evaluations (T0=week 0, T1= week 4 and T2= week 12; including Hamilton Depression Rating Scale (HAMD), Montgomery-Åsberg Depression Rating Scale (MADRS), Hamilton Anxiety Rating Scale (HAMA), Young Mania Rating Scale (YMRS), Clinical Global Impression (CGI)- Efficacy Index, Dosage Record Treatment Emergent Symptom and Treatment Emergent Symptoms Write-In scales). Statistical analyses were performed.

**Table 1.** Main socio-demographic and clinical characteristics of the study sample

N=3 (6.3%)

N=2 (4.2%)

N=3 (6.3%)

N=1 (2.1%)

N=2 (4.2%)

N=25 (52.1%)

**Total Sample** 

N = 48

Male

MDD

BD 1

BD 2

GAD

PD

OCD

Other

AD

No

Yes

 $50.38 \pm 16.69$ 

36.13 ± 16.93

 $12.92 \pm 5.68$ 

Gender

Age at onset

Vortioxetine dosage

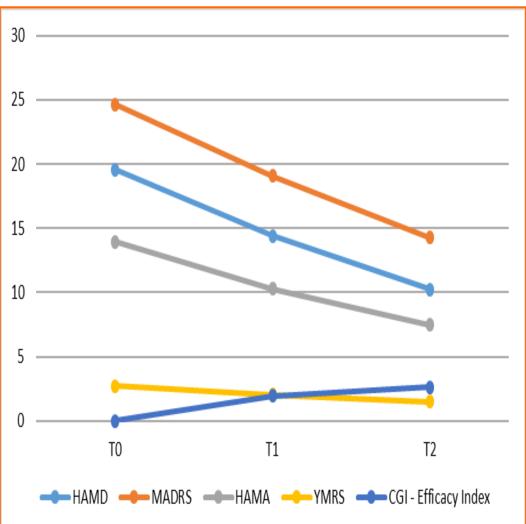
Psychiatric diagnosis

Comorbidities

Age

Yes N=13 (27.1%) Side effects N=35 (72.9%) No N=17 (35.4%) Gastrointestinal N=8 (16,6%) Female | N=31 (64.6%) Type of side | Libido reduction N=1 (2,1%)effects Gastrointestinal + N=4 (8,3%)other N=44 (92%) Any N= 13 (27.1%) N=21 (43.8%) **Antidepressants** Associated N= 5 (10.4%) Stabilizers N=29 (60.4%) therapy Benzodiazepines N=16 (33.3%) N=11 (22.9%) **Antipsychotics** N=27 (56.3%) Yes N=16 (33.3%) Dropout No N=32 (66.7%) Side effects N=6 (37.5%) N=7 (43.8%) Non efficacy Reasons of N=1 (6.2%) Switch maniacale N=23 (47.9%) dropout Others N=2 (12.5%)

**Figure 1.** Psychometric scales across time in the total sample



**Table 2.** Psychometric evaluation across time for the total sample and for two different dosage subgroups

		T0	T1	T2	Р
HAMD	Total sample	19.58 ± 5.29	14.40 ± 5.05	10.23 ± 6.48	0.000
	Vortioxetine ≤ 10 mg	20.37 ± 6.26	14.56 ± 6.16	10.52 ± 7.43	0.584
	Vortioxetine > 10 mg	18.57 ± 3.59	14.19 ± 3.25	9.86 ± 5.16	
MADRS	Total sample	24.67 ± 5.29	19.06 ± 5.50	14.27 ± 7.10	0.000
	Vortioxetine ≤ 10 mg	24.81 ± 6.34	18.37 ± 6.32	13.81 ± 7.67	0.505
	Vortioxetine > 10 mg	24.48 ± 3.64	19.95 ± 4.21	14.86 ± 6.44	
НАМА	Total sample	13.98 ± 4.91	10.31 ± 4.19	7.48 ± 4.86	0.000
	Vortioxetine ≤ 10 mg	14.56 ± 5.48	10.44 ± 4.69	7.85 ± 5.61	0.651
	Vortioxetine > 10 mg	13.24 ± 4.07	10.14 ± 3.55	$7.00 \pm 3.77$	
YMRS	Total sample	2.71 ± 1.54	2.06 ± 1.49	1.52 ± 1.49	0.000
	Vortioxetine ≤ 10 mg	3.00 ± 1.49	2.22 ± 1.45	1.56 ± 1.58	0.273
	Vortioxetine > 10 mg	2.33 ± 1.56	1.86 ± 1.56	1.48 ± 1.40	
CGI – Efficacy Index	Total sample	-	1.96 ± 1.19	2.63 ± 1.54	0.000
	Vortioxetine ≤ 10 mg	-	1.91 ± 1.39	2.57 ± 1.71	0.909
	Vortioxetine > 10 mg	-	2.03 ± 0.89	2.70 ± 1.33	

**Results.** Most common primary diagnoses were MDD (43.8%) and BD (33.3%), with an overall comorbidity rate of 52 %. Associated medications (stable across follow up) were present in 92 % of patients and the mean vortioxetine dosage was 12.92 ± 5.68 mg. Repeated measures ANOVA highlighted a significant improvement of HAM-D, MADRS, HAM-A, YMRS and CGI-efficacy index across time. The 33.3 % of the total sample dropped out, of which mainly because of non efficacy (43.8%) and side effects (37.5%). Of the total sample, 16.6% reported gastrointestinal, 2.1% sexual and 8.3% combined side effects (gastrointestinal + other).

Conclusions. Although limited study sample, the present report highlights vortioxetine good effectiveness on affective symptoms together with partial tolerability and moderate rate of discontinuation. Larger sample and further studies are warranted to better characterize vortioxetine effectiveness and tolerability in clinical practice.

## References

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