

**Results of the incomplected clinical trial**

**“Glutamatergic medication in the treatment of obsessive compulsive disorder (OCD) and autism spectrum disorder (ASD)”**

**EudraCT Number: 2014-003080-38**

**SUMMARY**

In total, seven patients were included in the study. N=4 (57.1%) participants were treated with verum (memantine) and n=3 (42.9%) received placebo. No serious adverse events (SAEs) were reported.

**STUDY POPULATION**

**Table 1:** Demographic data of participants

<b>Patient ID</b>	<b>Study site</b>	<b>Diagnosis</b>	<b>Gender</b>	<b>Age</b>	<b>Concomitant medication</b>	<b>Treatment</b>
<b>1</b>	London	OCD	female	14	Sertraline	Verum
<b>2</b>	London	OCD + ASD	male	15	Sertraline, melatonin	Verum
<b>3</b>	Mannheim	OCD	female	17	Sertraline	Verum
<b>4</b>	Mannheim	OCD	female	15	Sertraline	Verum
<b>5</b>	Nijmegen	ASD	male	6	none	Placebo
<b>6</b>	Nijmegen	ASD	male	9	Risperidone, melatonin, methylphenidate	Placebo
<b>7</b>	Nijmegen	OCD	female	14	none	Placebo

No: Number; OCD: obsessive-compulsive disorder; ASD: autism spectrum disorder

## RESULTS

**Table 2.** CY-BOCS scores (total and subscores obsessions and compulsions) for all included participants (receiving memantine or placebo) at all timepoints where CY-BOCS was assessed and score reduction from baseline (visit 3) to end of treatment period (visit 9 or early discontinuation)

Study period			Double-blind treatment					Down-titration		Early termination visit	
Visit number			V3	V4	V5	V6	V8	V9	V10	ETV	Reduction
<b>Memantine</b>	ID1	Total	<b>26</b>	17	26	24	23	<b>21</b>	24	-	<b>19.2 %</b>
		<i>Obs.</i>	<b>12</b>	9	14	12	12	<b>11</b>	11	-	<b>8.4 %</b>
		<i>Comp.</i>	<b>14</b>	8	12	12	11	<b>10</b>	13	-	<b>28.6 %</b>
	ID2	Total	<b>21</b>	20	19	21	16	<b>12</b>	14	-	<b>42.9 %</b>
		<i>Obs.</i>	<b>9</b>	10	10	10	8	<b>6</b>	7	-	<b>33.3 %</b>
		<i>Comp.</i>	<b>12</b>	10	9	11	8	<b>6</b>	7	-	<b>50.0 %</b>
	ID3	Total	<b>30</b>	28	26	25	-	-	-	<b>23</b>	<b>23.3 %</b>
		<i>Obs.</i>	<b>15</b>	14	14	13	-	-	-	<b>12</b>	<b>20.0 %</b>
		<i>Comp.</i>	<b>15</b>	14	12	12	-	-	-	<b>11</b>	<b>26.7 %</b>
	ID4	Total	<b>22</b>	24	22	22	18	<b>17</b>	16	-	<b>22.7 %</b>
		<i>Obs.</i>	<b>11</b>	12	10	11	9	<b>8</b>	8	-	<b>27.3 %</b>
		<i>Comp.</i>	<b>11</b>	12	12	11	9	<b>9</b>	8	-	<b>18.2 %</b>
<b>Placebo</b>	ID5	Total	<b>0</b>	0	0	0	0	<b>0</b>	0	-	<b>0 %</b>
		<i>Obs.</i>	<b>0</b>	0	0	0	0	<b>0</b>	0	-	<b>0 %</b>
		<i>Comp.</i>	<b>0</b>	0	0	0	0	<b>0</b>	0	-	<b>0 %</b>
	ID6	Total	<b>8</b>	8	8	8	7	<b>7</b>	7	-	<b>12.5 %</b>
		<i>Obs.</i>	<b>0</b>	0	0	0	0	<b>0</b>	0	-	<b>0 %</b>
		<i>Comp.</i>	<b>8</b>	8	8	8	7	<b>7</b>	7	-	<b>12.5 %</b>
	ID7	Total	<b>35</b>	35	35	35	35	-	-	<b>30</b>	<b>14.3 %</b>
		<i>Obs.</i>	<b>18</b>	18	18	18	18	-	-	<b>15</b>	<b>16.7 %</b>
		<i>Comp.</i>	<b>17</b>	17	17	17	17	-	-	<b>15</b>	<b>11.8 %</b>

Total = CY-BOCS total score; Obs. = CY-BOCS obsession subscore; Comp. = CY-BOCS compulsion subscore

**Table 3.** Clinical Global Impression-Severity of all included participants (receiving memantine or placebo) at all timepoints where scale was assessed

Study period		Screening	Double-blind treatment						Down-titration		Early termination visit
Visit number		V1	V3	V4	V5	V6	V7	V8	V9	V10	ETV
Memantine	ID1	5	5	5	5	5	4	4	4	4	
	ID2	4	4	4	4	4	4	4	3	3	
	ID3	6	6	6	6	6	-	-	-	-	6
	ID4	5	5	5	5	5	5	4	3	3	
Placebo	ID5	5	5	5	4	4	4	4	4	4	
	ID6	5	5	5	5	5	4	5	4	5	
	ID7	4	5	5	5	5	5	5	-	-	5

3 = mildly ill; 4 = moderately ill; 5 = markedly ill; 6 = severely ill

**Table 4.** Clinical Global Impression-Improvement of all included participants (receiving memantine or placebo) at all timepoints where scale was assessed

Study period		Double-blind treatment					Down-titration		Early termination visit
Visit number		V4	V5	V6	V7	V8	V9	V10	ETV
Memantine	ID1	3	4	4	4	4	5	4	
	ID2	4	4	3	3	3	2	5	
	ID3	4	3	3	-	-	-	-	3
	ID4	4	3	3	3	2	2	2	
Placebo	ID5	4	3	3	3	3	3	4	
	ID6	4	4	3	2	3	3	3	
	ID7	4	4	4	4	4	-	-	4

2 = much improved; 3 = minimally improved; 4 = no change; 5 = minimally worse

**Table 5.** Children's Global Assessment Scale (in percent) of all included participants (receiving memantine or placebo) at all timepoints where scale was assessed

Study period		Double-blind treatment		Down-titration	Early termination visit
Visit number		V3	V6	V9	ETV
<b>Memantine</b>	ID1	44	50	52	
	ID2	56	59	65	
	ID3	38	31-40	-	31-40
	ID4	39	41	63	
<b>Placebo</b>	ID5	50	55	55	
	ID6	40	45	50	
	ID7	50	60	-	50

## ADVERSE EVENTS

**Table 6:** Study drug-related adverse events

	Memantine (N=4)		Placebo (N=3)	
	n	N (%)	n	N (%)
<b>Irritability</b>	0	0	1	1 (33.3)
<b>Cognition</b>	2	1 (25)	0	0
<b>Sedation</b>	6	1 (25)	0	0
<b>Sleep problems</b>	1	1 (25)	2	1 (33.3)
<b>Feeling hungry</b>	0	0	4	1 (33.3)
<b>Dizziness</b>	0	0	2	1 (33.3)
<b>Stomach ache</b>	5	1 (25)	0	0
<b>Constipation</b>	3	1 (25)	0	0
<b>Vomiting</b>	3	1 (25)	0	0
<b>Headache</b>	2	2 (50)	2	1 (33.3)
<b>Total</b>	22	-	11	-

n: number of reported events; N: number of participants

No serious adverse events (SAEs); no early discontinuations due to adverse events.