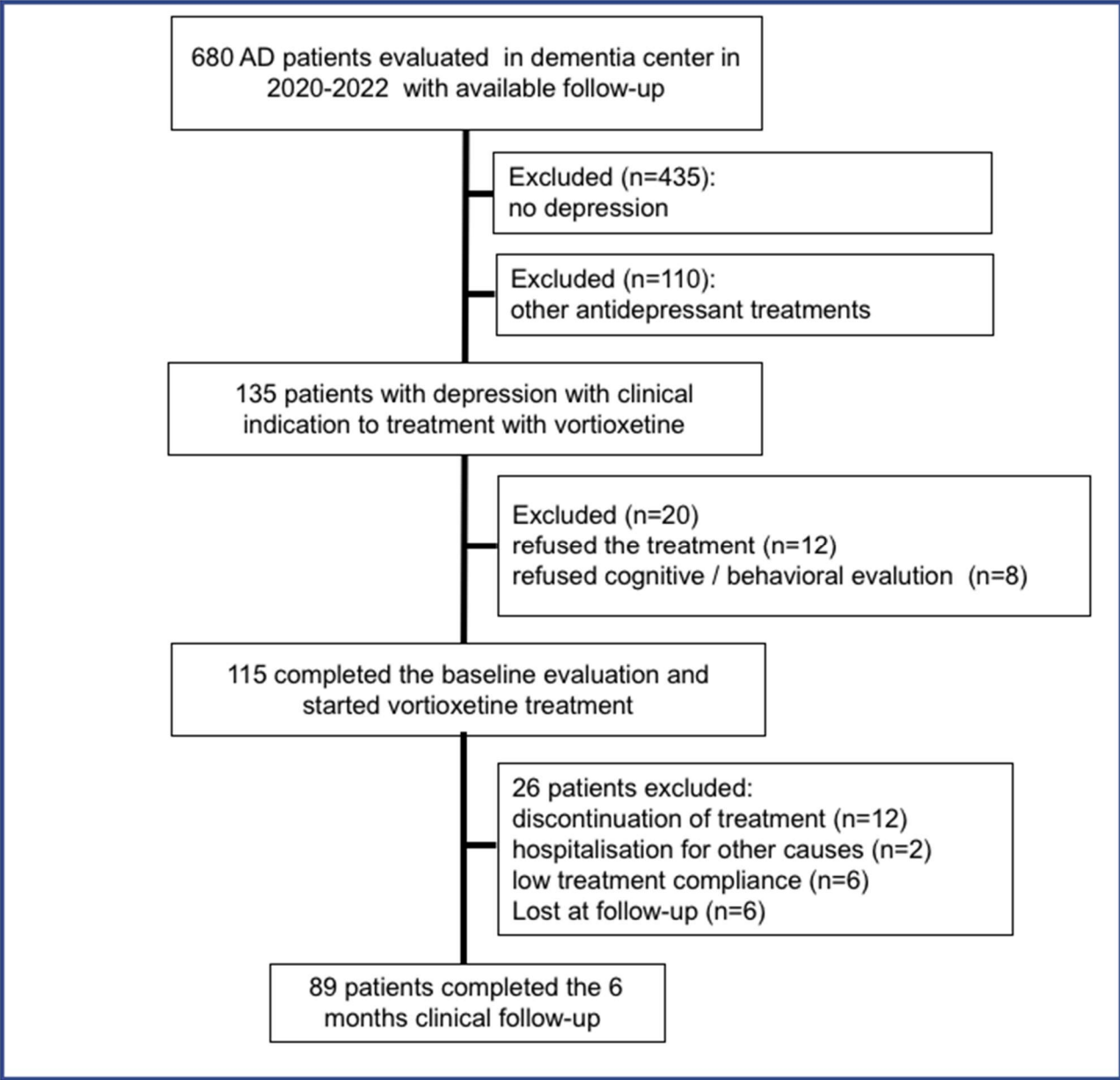


Supplementary figure 1 Flow chart of included patients. Abbreviations: AD; Alzheimer’s disease patients.



Supplementary Table 1 – Effects of treatment and diagnosis on cognitive measures. Results are deemed significant at $p < 0.05$.

<i>Variable</i>		<i>Baseline</i>	<i>Follow-up</i>	<i>Tr</i> <i>p</i>	<i>G x Tr</i> <i>p</i>	<i>G x Tr</i> η^2
GDS Total Score	All	8.21±2.36	5.74-1.81	<0.001	0.173	0.001
	pAD	7.95±2.47	5.13±1.62			
	AD	8.43±2.27	6.24±1.81			
NPI Total Score	All	18.08±6.33	13.29±4.14	<0.001	0.005	0.12
	pAD	13.93±3.89	8.17±3.11			
	AD	21.47±5.92	13.28±4.14			
NPI Depression subscore	All	7.72±2.15	4.21±2.11	<0.001	0.877	0.003
	pAD	7.53±1.97	3.97±1.98			
	AD	7.88±2.29	3.98±2.22			
NPI Anxiety subscore	All	1.20±1.41	0.79±0.92	0.001	0.139	0.02
	pAD	0.65±0.97	0.37±0.63			
	AD	1.65±1.55	1.12±0.99			
NPI Apathy subscore	All	4.09±2.94	2.69±1.92	<0.001	<0.001	0.18
	pAD	1.93±1.94	1.40±1.44			
	AD	5.84±2.41	3.75±1.57			
NPI Night sleep behavior	All	2.30±2.42	1.47±1.62	<0.001	<0.001	0.16
	pAD	1.00±1.18	0.80±0.99			
	AD	3.37±2.65	2.02±1.82			

Abbreviations: AD, mild-to-moderate AD; GDS, geriatric depression scale; NPI, Neuropsychiatric Inventory; pAD, prodromal Alzheimer’s Disease; Tr, treatment (baseline and follow-up differences); G x Tr, interaction between treatment and prodromal vs mild-to-moderate-AD groups

Supplementary Table 2 – Predictors of antidepressant response in AD patients; Linear regression model. Results are deemed significant at $p < 0.05$.

<i>Variable</i>	<i>Beta</i>	<i>SE</i>	<i>t</i>	<i>p</i>
Age	0.07	0.02	0.85	0.40
Sex	-0.14	0.37	0.05	0.07
CIRS	0.02	0.05	0.22	0.83
Baseline GDS	0.66	0.07	8.3	<0.001
Baseline total NPI	-0.005	0.03	0.05	0.95
Baseline MMSE	0.08	0.03	0.05	0.96

Abbreviations: CIRS, cumulative illness rating scale; GDS, geriatric depression scale; MMSE, Mini Mental State Examination; NPI, Neuropsychiatric Inventory; NS, not significant; SE, standard error.