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Supplementary Material

Article Title: Early and Delayed Onset of Response to Antidepressants in Individual Trajectories of Change During Treatment of Major Depression

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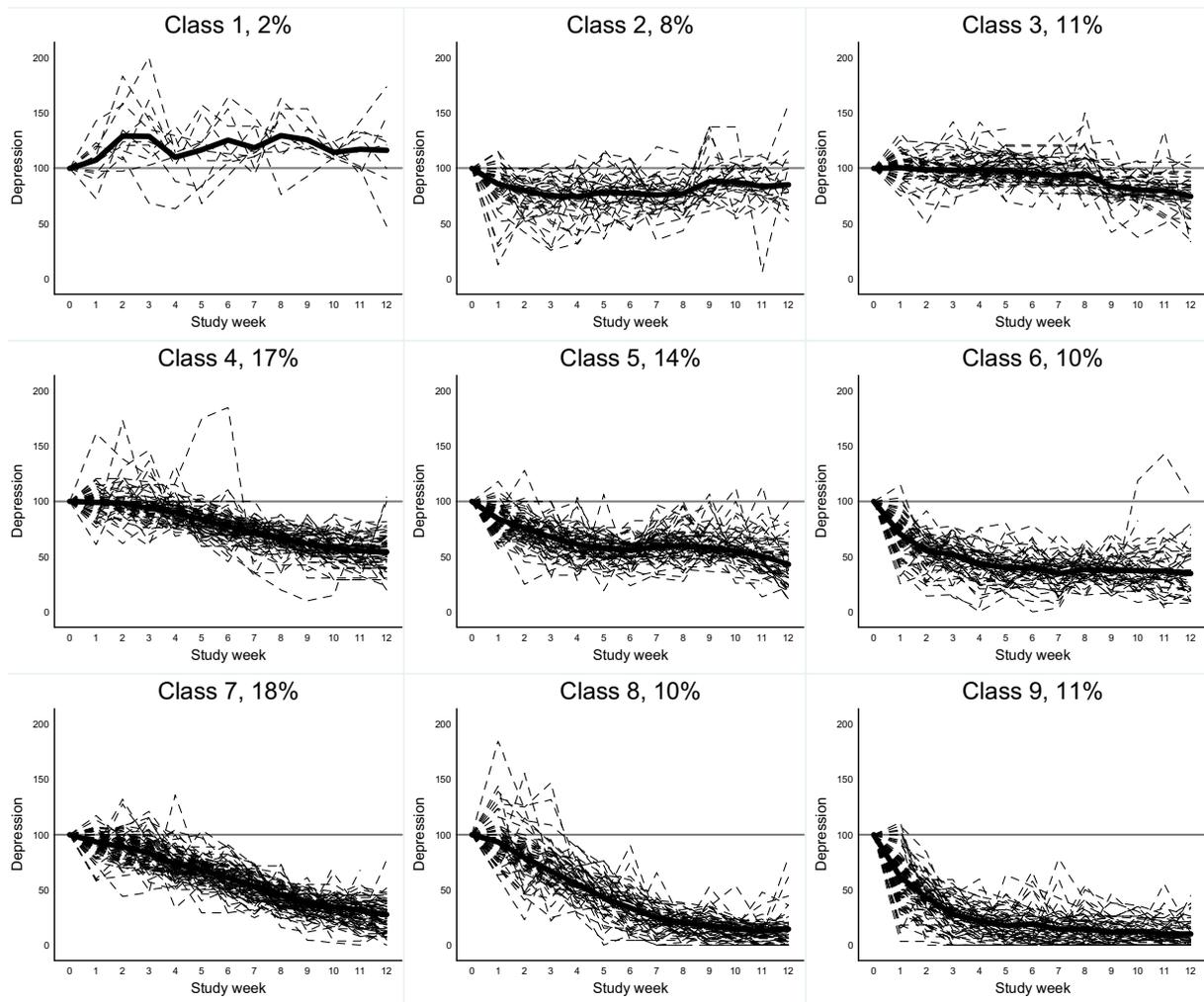
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Figure 1: Individual trajectories and estimated group mean. For each latent trajectory class, estimated class mean is plotted with a bold line and individual trajectories of participants belonging to each class are plotted in thin dash lines.



eFigure 2: Individual outliers. These three subjects had unusual course of change in depression severity during treatment and were detected in models with more than 9 classes as they formed separate classes. The first one had an early remission, but relapsed after a serious life event (sudden break-down of long term relationship) in the tenth week. The second of these subjects had a paradoxical worsening of depression with escitalopram dose increase to 20mg, the improvement continued when dose was reduced back to 10mg daily. The third outlier had a relatively unpredictable course of symptom change, but eventually experienced a remission with escitalopram dose increase to 20mg daily (and this remission persisted on 26-week follow-up, data not shown).

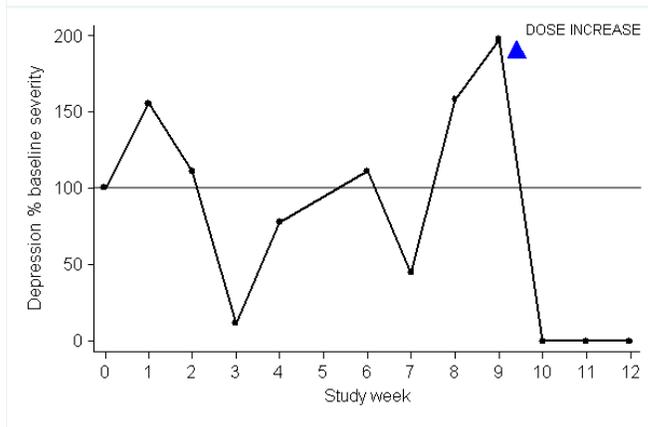
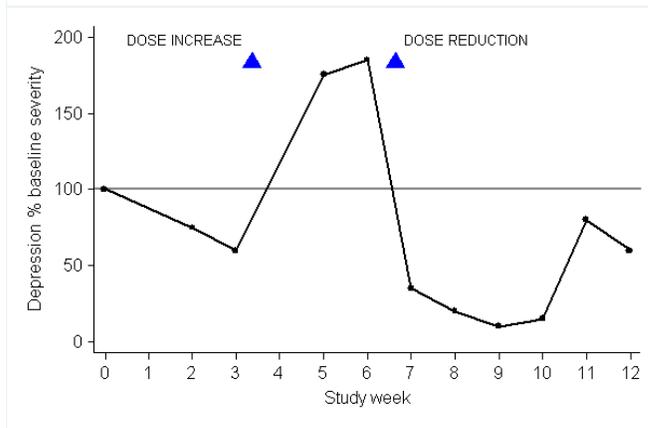


Table 1: Longitudinal latent class model fitting. BIC = Bayesian Information Criterion, Δ BIC = decrement in BIC compared to model with one class less; BLRT = bootstrapped likelihood ratio test comparing each model with a model with one class less; Δ 2LL = 2 times the log-likelihood difference from BLRT; p – the p-value from BLRT (p value smaller than 0.05 indicates that model fits data significantly better than a model with one class less).

Classes	Parameters	Likelihood	BIC	Δ BIC	BLRT		Entropy	Proportion of individuals in each latent class												
					Δ 2LL	p		1	2	3	4	5	6	7	8	9	10			
1	24	-36184	72528					1.00												
2	37	-34579	69405	3123	3210	<0.0001	0.88	0.55	0.45											
3	50	-33928	68190	1216	1303	<0.0001	0.86	0.27	0.45	0.28										
4	63	-33678	67777	413	500	<0.0001	0.84	0.16	0.38	0.31	0.16									
5	76	-33492	67493	284	371	<0.0001	0.86	0.34	0.30	0.21	0.11	0.04								
6	89	-33344	67284	209	296	<0.0001	0.83	0.02	0.16	0.28	0.20	0.19	0.14							
7	102	-33225	67133	151	238	<0.0001	0.81	0.02	0.11	0.24	0.19	0.16	0.15	0.13						
8	115	-33113	66996	137	224	<0.0001	0.82	0.02	0.10	0.23	0.16	0.15	0.13	0.11	0.11					
9	128	-33022	66900	96	183	<0.0001	0.82	0.02	0.08	0.10	0.17	0.14	0.10	0.18	0.10	0.11				
10	141	-32942	66828	73	155	<0.0001	0.83	0.02	0.08	0.10	0.17	0.14	0.10	0.18	0.10	0.10	0.10	0.002		

eTable 2: Antidepressant dose titration and latent class membership. For each drug and latent trajectory class, average doses of medication at week 3, 6 and 12 are given in milligrams. Mean time to reach minimum dose and mid range dose is given in weeks.

Class	Escitalopram (n=464)						Nortriptyline (n=342)					
	n	Mean dose (mg)			Mean number of weeks to reach		n	Mean dose (mg)			Average number of weeks to reach	
		Week 3	Week 6	Week 12	Minimum dose	Mid-range dose		Week 3	Week 6	Week 12	Minimum dose	Mid-range dose
1 Worsening	73	15.71	22.86	20.00	1.14	3.43	4	58.33	66.67	.	2.00	4.00
2 Early minimal improvement	71	15.33	18.45	21.00	1.34	3.23	31	90.71	102.71	106.36	1.85	3.48
3 Minimal late improvement	56	12.07	14.41	14.63	1.26	4.41	30	73.00	91.30	90.00	2.68	5.00
4 Delayed partial response	57	12.36	14.52	16.06	1.28	4.06	62	85.85	96.59	103.03	1.63	2.93
5 Early partial response	61	13.13	16.73	20.73	1.32	4.12	54	84.46	102.56	115.58	2.04	3.54
6 Early marked response	58	12.42	14.46	15.45	1.27	3.71	44	83.54	94.74	109.82	1.79	3.31
7 Delayed marked response	62	13.33	15.63	15.33	1.24	3.51	60	86.60	92.26	98.28	1.77	2.86
8 Delayed complete remission	59	12.71	15.04	15.34	1.25	2.91	21	90.79	106.94	105.36	1.61	2.71
9 Early complete remission	53	11.41	11.81	12.50	1.40	3.79	36	82.58	92.24	92.00	1.39	3.35