

Table 1 Comparison of baseline demographic factors, clinical and treatment features between mirtazapine and non-mirtazapine groups.

Characteristics †	Mirtazapine (<i>n</i> =88)	Non-mirtazapine (<i>n</i> =132)	<i>t/z/χ</i> ²	<i>P</i>
Age, year	48.6 (15.33)	46.8 (15.18)	0.865	0.388
Male, <i>n</i> (%)	31 (35.2%)	31 (23.5%)	3.597	0.058
Duration of illness ‡, month	12.0 (45.0)	12.00 (68.0)	-1.074	0.283
Drug free at admission, <i>n</i> (%)	51 (58.0%)	73 (55.3%)	0.151	0.698
Interval between two thyroid function tests §, day	36.5 (19.4)	35.0 (24.5)	0.461	0.645
Hospital stay, day	51.95 (25.45)	47.20 (26.52)	1.323	0.187
Baseline value of thyroid function				
TSH, mU/L ‡	1.78 (1.24)	1.66 (1.40)	-1.608	0.285
T4, nmol/L	95.23 (24.58)	94.49 (23.42)	-0.224	0.823
Free T4, pmol/L	16.32 (3.33)	16.09 (3.43)	-0.495	0.621
T3, nmol/L	1.58 (0.51)	1.56 (0.41)	-0.403	0.687
Free T3, pmol/L	4.34 (0.90)	4.23 (0.87)	-0.958	0.339
Antidepressants, <i>n</i> (%)				
NaSSA				
Mirtazapine	88 (100%)	-		
SSRIs				
Setraline	22 (25.0%)	36 (37.3%)	0.327	0.567
Escitalopram	25 (28.4%)	27 (20.5%)		
Fluoxetine	3 (3.4%)	1 (0.8%)		
Fluvoxamine	1 (1.1%)	0 (0.0)		
Paroxetine	7 (8.0%)	20 (15.2%)		
SNRIs				
Venlafaxine	13 (14.8%)	36 (37.3%)	9.885	0.002
Duloxetine	3 (3.4%)	16 (12.1%)		
Milnacipran	1 (1.1%)	3 (2.3%)		
SARIs				
Trazodone	5 (5.7%)	27 (20.5%)	9.270	0.002
TcAs				
Clomipramine	0 (0.0)	3 (2.3%)		
Amitriptyline	0 (0.0)	1 (0.8%)		
Doxepin	0 (0.0)	1 (0.8%)		
Others				
Mianserin	0 (0.0)	1 (0.8%)		
Agomelatine	0 (0.0)	4 (3.0%)		
Bupropion	0 (0.0)	1 (0.8%)		

Maprotiline	0 (0.0)	1 (0.8%)		
Non-antidepressant comedications, <i>n</i> (%)				
Benzodiazepines	61 (69.3%)	89 (67.4%)	0.087	0.768
Anxiolytics	58 (65.9%)	87 (65.9%)	0.000	1.000
Antipsychotics	18 (20.5%)	41 (31.1%)	3.026	0.082

†: Continuous variables were described as mean (SD), except where noted.

‡: Described as median (IQR).

§: Antidepressant exposure time was upon the interval between the two thyroid function tests.

NaSSA: Noradrenergic and Specific Serotonergic Antidepressant, SSRIs: Selective Serotonin Reuptake Inhibitors, SNRIs: Serotonin-Norepinephrine Reuptake Inhibitors, SARIs: Serotonin Antagonist and Reuptake Inhibitors, TCAs: Tricyclic Antidepressants.

Table 2. Comparison of occurrence of hypothyroxinemia between the mirtazapine and non-mirtazapine groups.

Groups	Hypothyroxinemia		Crude		Adjusted †	
	<i>n</i>	%	RR	95% CI	RR	95% CI
Mirtazapine	33	37.5%*	1.89	1.23-2.94	1.64	1.31-1.78
Non-mirtazapine	26	19.7%	Ref.		Ref.	

*: Compared to non-mirtazapine group, $\chi^2=8.527$, $P=0.003$.

†: Crude and adjusted relative risk (RR) and 95% CI were estimated by log-binomial model. Adjusted for age, gender, drug free prior to admission (no prior use of psychiatric medications eg. antipsychotics, mood stabilizers and antidepressants for a minimum 4 months before admission, were defined as drug free. no versus yes), duration of illness, baseline FT4 level, duration of treatment, the use of other kinds of antidepressants and the use of non-antidepressant comedications.

Table 3 Comparison of occurrence of hypothyroidism (subclinical and overt) and the Δ Value₍₂₋₁₎ of thyroid function between the mirtazapine and non-mirtazapine groups.

Thyroid function	Mirtazapine (n=88)	Non-mirtazapine (n=132)	$\chi^2/t/z$	P
Hypothyroidism, n (%)	6 (6.8%)	10 (7.6%)	0.045	0.832
Subclinical	2 (2.3%)	7 (5.3%)		
Overt †	4 (4.5%)	3 (2.3%)		
Δ Value₍₂₋₁₎ of thyroid functions‡,§				
TSH, mU/L ¶	0.28 (1.22)	0.23 (1.19)	-0.009	0.993
T4, nmol/L	-15.63 (24.17)	-6.24 (21.08)	-3.053	0.003
Free T4, pmol/L	-3.22 (3.59)	-1.96 (2.93)	-2.861	0.005

†: The outcome overt hypothyroidism included the laboratorial hypothyroidism, as TSH > 4.2 mU/L and fT4 < 12.00 pmol/L, and with prescriptions: thyroxine (EuthyroxR) for hypothyroidism.

‡: Continuously distributed variables were described as mean (SD), except where noted.

§: Δ Value₍₂₋₁₎ means “value after exposure₍₂₎ – value at baseline₍₁₎”

¶: Described as median (IQR).