Table 2. Psychostimulants as adjunctive therapy

Psychostimulants as adjunctive treatment			
16-week randomized double-blind placebo-controlled trial for geriatric depression in 143 older outpatients diagnosed with major depression	three treatment groups: methylphenidate plus placebo (N=48), citalopram plus placebo (N=48), and citalopram plus methylphenidate (N=47). Daily doses ranged from 20 mg to 60 mg for citalopram (mean=32 mg) and from 5 mg to 40 mg for methylphenidate (mean=16 mg).	All groups showed significant improvement in depression severity and in cognitive performance.	(Lavretsky et al. 2015)
4-week, randomized, double-blind, placebo-controlled study (60 patients)	treatment-resistant depression; pts taking antidepressants	extended-release MPH (Concerta) (18-54 mg/d) was added to unchanged antidepressant dose; no difference between placebo and MPH on HAM-D or BDI scores, although the proportion of responders was significantly higher with MPH cf placebo.	(Patkar et al. 2006)
10-week double-blind, randomized, placebo-controlled trial (16 elderly outpatients with major depression)	patients received either citalopram plus MPH or citalopram plus placebo. Doses titrated up to 20 mg/day MPH, 40 mg/day citalopram	citalopram plus MPH had a faster and better improvement compared to citalopram plus placebo	(Lavretsky et al. 2006)
open study of MPH in bipolar patients (14) with depression	MPH added to a stable mood stabilizing regimen	HAM-D scores dropped from 16.9 +/- 1.79 SD at baseline to 9.4 +/- 9.73 on week 12 ($p = 0.12$, $t = 1.84$, $df= 6$)	(El-Mallakh 2000)
case series (8 patients, 5 with bipolar I disorder, 3 with bipolar II)	residual depression and medication-induced sedation	moderate clinical improvement in their target symptoms and substantial improvement of overall bipolar illness (mean change in CGI-BP overall score 2.9).	(Carlson et al. 2004)
case series (7 patients with major depressive disorder suboptimally responsive to 2nd-gen antidepressants	augmentation with psychostimulant	marked improvement in clinical symptoms of depression was noted in all cases, with particular improvement in apathy and feelings of fatigue	(Masand et al. 1998)
case series (5 consecutive cases of DSM-IIIR major depression)	open-label trial to augment SSRI treatment	Self-reported symptom reduction was achieved rapidly in all cases, with MPH dosages ranging from 10 to 40 mg/day	(Stoll et al. 1996)
case report (1 patient in his 6th episode of bipolar depression	had failed adjunctive repetitive transcranial magnetic stimulation and electro-convulsive therapy (24 treatments); was taking fluoxetine 80 mg/day, duloxetine 360 mg/day, mirtazapine 60 mg/day, and sodium valproate 1,000 mg/day, with no improvement.	10 mg/day early morning MPH led to mild improvement after 1 week; then 20 mg/day extended-release MPH gave significant improvement, stable over one year	(Adida and Azorin 2014)
case report (1 patient)	partial response to 60 mg/day of fluoxetine	10 and then 20 mg/day of MPH added to Rx improved apathy but not HAM-D scores	(Padala et al. 2005)
case report (1 patient with multiple medical conditions)	bipolar pt, in ICU for respiratory failure.	sertraline 50 mg begun; MPH 5 mg started 5 days later; same-day response. Worsened when MPH stopped. Responded when MPH restarted. Response maintained for over 9 months.	(Ayache and Junior 2001)