Data supplement for Dwyer et al., Hormonal Treatments for Major Depressive Disorder: State of the Art. Am J Psychiatry (doi: 10.1176/appi.ajp.2020.19080848)

TABLE S1. Randomized Placebo-controlled Trials of Mifepristone for Depression with Psychotic Features

Study	NCT	N (ITT)	Mifepristone Dose (mg)	Primary Outcome Measure	Positive Primary Outcome	Plasma mifepristone levels considered <i>a</i> <i>priori</i>	Positive Secondary Plasma Level Outcomes
(58)	N/A	30	600	Proportion of participants achieving response (50% reduction of BPRS-PSS at Day 8)	Yes	No	N/A
(59)	N/A	221	600	Proportion of participants achieving response (30% reduction of BPRS on Days 7 and 28)	Yes	No	N/A
(61)	NCT 00130676	258	600	Proportion of participants achieving response (50% reduction of BPRS-PSS on Days 7 and 56)	No	Yes, secondary analysis (prespecified threshold of 1800 ng/ml)	Yes
(182)	NCT 00146523	247	600	Proportion of participants achieving response (50% reduction of BPRS-PSS on Days 7 and 28)	No	Yes, secondary analysis (prespecified threshold of 1660 ng/ml)	No
(183)	NCT 00128479	433	300, 600, 1200	Proportion of participants achieving response (50% reduction of BPRS-PSS on Days 7 and 56)	No	Yes, secondary analysis (prespecified threshold of 1660 ng/ml)	Yes
(184)	NCT 00637494	292	1200	Proportion of participants achieving response (50% reduction of BPRS-PSS on Days 7 and 56)	No	Yes, secondary analysis (prespecified threshold of 1637 ng/mL)	Yes

NCT=ClinicalTrials.gov Identifier Number; ITT=intent to treat; BPRS=Brief Psychiatric Rating Scale; BPRS-PSS=Brief Psychiatric Rating Scale; PSS=positive symptom subscale.

TABLE S2. Randomized Placebo-controlled Trials of Testosterone

	Study	N (randomized)	Intervention	Depression	Baseline Testosterone	Results			
N	Major Depressive Disorder								
1	(170) 8-week	22	1% testosterone gel – 10 g/day Antidepressant continued	Inadequate response to one adequate dose antidepressant trial of 4 weeks duration	low or borderline testosterone levels T levels of 350 ng/dl or less (normal range=270-1070)	Significantly greater improvement in HDRS with testosterone gel compared to placebo. HDRS difference of 6.6 points.			
2	(171) 6-week	26	Injectable testosterone Week 0 – 200 mg Week 2 – 400 mg Week 4 – 400 mg (responders) or 600 mg (non- responders) Antidepressant continued	Partial response or nonresponse to 2 adequate antidepressant trials (at least 6 weeks) during the current episode	Normal testosterone levels mean total testosterone level, 417.5 +/- 197 ng/dL	No significant difference in HDRS scores compared to placebo HDRS score difference: 1.0 point Difference in response rates: 30.7%			

3	(168)	12	(T) gel 1% - 5 g/day	Adequate antidepressant trial	"hypogonadal men"	No significant difference in HDRS scores compared to
	12-week	Men age 50		of 6 weeks	m. 1.1	placebo
		or older	Antidepressant		T levels less than	LIDDS soons differences 1.2
			continued		350 ng/dL to be eligible for study	HDRS score difference: 1.2 points
					eligible for study	points
4	(172)	30	weekly		low and low-	No significant difference in
			intramuscular		normal T levels	HDRS scores compared to
	6-week		injections of T 200		(i.e., total T <or=< td=""><td>placebo</td></or=<>	placebo
			mg		350 ng/dl)	
			_			HDRS score difference: -0.4
			T monotherapy			points (in favor of placebo)
						(primary outcome was self-
						reported sexual functioning)
5	(169)	100	T gel 5 g/day	MDD showing	Medically healthy	No significant difference in
	(10))	100	1 ger 3 grady	partial response or	adult men	HDRS scores compared to
	6-week		Antidepressant	no response to an	low and low-	placebo
	o week		continued	adequate	normal T levels	praeces
				serotonergic	(i.e., total T <or=< td=""><td>HDRS score difference: 1.0</td></or=<>	HDRS score difference: 1.0
				antidepressant trial	350 ng/dl)	points
				(6 weeks) during		
				the current episode		Difference in response rates:
				_		13.5%

Ne	on-Major D	epression				Baseline testosterone levels were not associated with response to testosterone
1	(173) 6-week	23	IM Testosterone 200 mg Q 10 days	Mid-life onset male dysthymic disorder (onset after age 40)	Low or low normal T Total T <350	Significantly greater improvement in HDRS with testosterone compared to placebo
						HDRS score difference: 5.6 points
2	(174) 12-week	Men age 50 or older	T gel 7.5 g/day	subthreshold depression (dysthymia or minor depression, according to DSM- IV)	Total testosterone levels of <or= 280<br="">ng/dL</or=>	Significantly greater improvement in HDRS and higher rate of remission with testosterone compared to placebo HDRS score difference: 1.9
						points Difference in remission rates: 34.1%