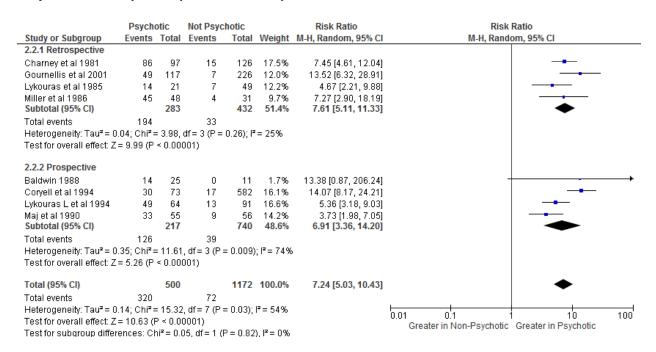
Data Supplement for Nelson et al., Risk of Psychosis in Recurrent Episodes of Psychotic and Nonpsychotic Major Depressive Disorder: A Systematic Review and Meta-Analysis. Am J Psychiatry (doi: 10.1176/appi.ajp.2018.17101138)

Study	Reason for exclusion
Helms PM and Smith RE. 1983 ¹⁷	No non-psychotic comparison group
Aronson TA, et al. 1988 ¹⁸	No non-psychotic comparison group
Frangos E, et al. 1983 ¹⁹	No non-psychotic comparison group
Goldberg JF, and Harrow M 2004 ²⁰	Concordance data reported but actual numbers not available
Kettering RL et al. 1987 ²¹	Not new episodes
Kessing LV. 2008 ²²	Tracked group data, not course within subjects
Thakur M, et al. 1999 ²³	Included bipolar patients
Leyton M et al. 1995 ²⁴	Diagnosed patients as psychotic if any episode was psychotic
Parker G, et al. 1991 ²⁵	Diagnosis from an informal interview

TABLE S1. Studies of the course of psychotic depression that were excluded

FIGURE S1. Meta-Analysis of Risk of Psychosis in All Episodes in Index Psychotic and Non-Psychotic Subjects; Nested by Retrospective and Prospective Studies



The risk ratios are not significantly different in the two groups, 7.61 vs 6.91, $X^2 = 0.05$, p = 0.82. The actual pooled risk of psychosis in all episodes as follows:

	1 7 1				
	Index Diagnosis				
	Psychotic Depression	Non-Psychotic Depression			
Retrospective studies	68.6%	7.6%			
Prospective studies	58.1%	5.3%			

FIGURE S2. Meta-Analysis of Risk of Psychosis in All Episodes in Index Psychotic and Non-Psychotic Subjects; nested by date of publication, before 1990 and 1990 or later

	Psycho	tic	Not Psyc	hotic		Risk Ratio		Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	Year	M-H, Random, 95% Cl
2.1.1 Before 1990								
Charney et al 1981	86	97	15	126	17.5%	7.45 [4.61, 12.04]	1981	
Lykouras et al 1985	14	21	7	49	12.2%	4.67 [2.21, 9.88]	1985	_
Miller et al 1986	45	48	4	31	9.7%	7.27 [2.90, 18.19]	1986	
Baldwin 1988 Subtotal (95% Cl)	14	25 191	0	11 217	1.7% 41.0%	13.38 [0.87, 206.24] 6.70 [4.65, 9.67]	1988	•
Total events	159		26					
Heterogeneity: Tau ² = 0.	.00; Chi ^z =	1.44,	df = 3 (P =	0.70); Iř	= 0%			
Test for overall effect: Z	= 10.17 (F	° < 0.00	0001)					
2.1.2 1990 or after								
Maj et al 1990	33	55	9	56	14.2%	3.73 [1.98, 7.05]	1990	
Coryell et al 1994	30	73	17	582	16.1%	14.07 [8.17, 24.21]	1994	
Lykouras L et al 1994	49	64	13	91	16.6%	5.36 [3.18, 9.03]	1994	
Gournellis et al 2001	49	117	7	226	12.0%	13.52 [6.32, 28.91]	2001	
Subtotal (95% CI)		309		955	59.0%	7.77 [4.07, 14.86]		•
Total events	161		46					
Heterogeneity: Tau ² = 0.	.34; Chi =	13.71	, df = 3 (P =	= 0.003)	; I ² = 78%			
Test for overall effect: Z	= 6.21 (P	< 0.000	001)					
Total (95% CI)		500		1172	100.0%	7.24 [5.03, 10.43]		•
Total events	320		72					
Heterogeneity: Tau ² = 0.	.14; Chi =	15.32	, df = 7 (P =	= 0.03);	I² = 54%			0.01 0.1 1 10 100
Test for overall effect: Z:	= 10.63 (F	× 0.00	0001)					0.01 0.1 1 10 100 Greater in Non-Psychotic Greater in Psychotic
Test for subaroup differ	onooo: Oh	$\mathbf{z} = 0.4$			17 000			Greater in Non-Esycholic Greater in Esycholic

Risk Ratios of 6.70 and 7.77 are not significantly different.

Heterogeneity is low in the early studies, $I^2 = 0$.

The actual pooled risk of psychosis in all episodes as follows:

	Index Diagnosis				
	Psychotic Depression Non-Psychotic Depressi				
Early studies < 1990	83.2%	12.0%			
Later studies ≥ 1990	52.1%	4.8%			

FIGURE S3. Meta-Analysis of Risk of Psychosis in All Episodes in Index Psychotic and Non-Psychotic Subjects; nested by studies limited to patients over 60 vs. mixed aged studies

	Psycho	otic	Not Psyc	hotic		Risk Ratio		Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI	Year	M-H, Random, 95% Cl
2.6.1 Mixed age studies	S							
Charney et al 1981	86	97	15	126	17.5%	7.45 [4.61, 12.04]	1981	
Lykouras et al 1985	14	21	7	49	12.2%	4.67 [2.21, 9.88]	1985	
Miller et al 1986	45	48	4	31	9.7%	7.27 [2.90, 18.19]	1986	
Maj et al 1990	33	55	9	56	14.2%	3.73 [1.98, 7.05]	1990	
Coryell et al 1994	30	73	17	582	16.1%	14.07 [8.17, 24.21]	1994	
Lykouras L et al 1994 Subtotal (95% CI)	49	64 358	13	91 935	16.6% <mark>86.3%</mark>	5.36 [3.18, 9.03] 6.56 [4.42, 9.73]	1994	•
Total events	257		65					
Heterogeneity: Tau² = 0. Test for overall effect: Z	•		• •	= 0.03);	I² = 59%			
2.6.2 Older Adult Studie	es							
Baldwin 1988	14	25	0	11	1.7%	13.38 [0.87, 206.24]	1988	· · · · · · · · · · · · · · · · · · ·
Gournellis et al 2001 Subtotal (95% CI)	49	117 142	7	226 237	12.0% 13.7%	13.52 [6.32, 28.91] 13.51 [6.50, 28.10]	2001	•
Total events	63		7					
Heterogeneity: Tau² = 0. Test for overall effect: Z	•			0.99); l²	²= 0%			
Total (95% CI)		500		1172	100.0%	7.24 [5.03, 10.43]		•
Total events	320		72					
Heterogeneity: Tau ² = 0. Test for overall effect: Z Test for subgroup differ	= 10.63 (F	P < 0.00	0001)			5%		0.01 0.1 1 10 100 Higher in Non_Psychotic Higher in Psychotic

Although the risk ratios for the two subgroups were not significantly different, there was a trend for higher RRs in the older samples. RR = 13.51 vs. 6.56, p=.09.

Heterogeneity is low in the older patient studies, $I^2 = 0$.

The higher risk ratio appears related to low rates of psychosis in the non-PD older patients.

The actual pooled risk of psychosis in all episodes as follows:

	Index Diagnosis				
	Psychotic Depression Non-Psychotic Depression				
Mixed age studies	71.8%	7.0%			
Over 60 studies	44.4%	3.0%			

FIGURE S4. Meta-Analysis of Risk of Psychosis in All Episodes in Index Psychotic and Non-Psychotic Subjects; nested by studies limited to mood congruent (MC) PD subjects vs studies including mood congruent and mood incongruent (MI) PD subjects

	Psycho	tic	Not Psyc	hotic		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl
2.4.1 Mood Congruent I	Psychosis	;					
Charney et al 1981	86	97	15	126	17.5%	7.45 [4.61, 12.04]	
Lykouras et al 1985	14	21	7	49	12.2%	4.67 [2.21, 9.88]	
Lykouras L et al 1994	49	64	13	91	16.6%	5.36 [3.18, 9.03]	
Maj et al 1990	33	55	9	56	14.2%	3.73 [1.98, 7.05]	
Miller et al 1986 Subtotal (95% CI)	45	48 285	4	31 353	9.7% 70.2%	7.27 [2.90, 18.19] 5.62 [4.28, 7.39]	•
Total events	227		48				
Heterogeneity: Tau ² = 0.		3.54		0 47) [,] I ²	= 0%		
Test for overall effect: Z:				0.117/1			
	,		·				
2.4.2 Mood Congruent a	and Incon	gruent	Psychosi	s			
Baldwin 1988	14	25	0	11	1.7%	13.38 [0.87, 206.24]	
Coryell et al 1994	30	73	17	582	16.1%	14.07 [8.17, 24.21]	
Gournellis et al 2001	49	117	7	226	12.0%	13.52 [6.32, 28.91]	
Subtotal (95% CI)		215		819	29.8%	13.87 [8.97, 21.45]	◆
Total events	93		24				
Heterogeneity: Tau ² = 0.	.00; Chi ^z =	0.01, 1	df = 2 (P =	1.00); I ²	= 0%		
Test for overall effect: Z	= 11.82 (P	< 0.00	0001)				
Total (95% CI)		500		1172	100.0%	7.24 [5.03, 10.43]	•
Total events	320		72				
Heterogeneity: Tau ² = 0.	.14: Chi ² =	15.32	.df=7(P=	= 0.03);	l² = 54%		
Test for overall effect: Z:							0.01 0.1 1 10 10
Test for subaroup differ							Greater in Non-Psychotic Greater in Psychotic

Risk Ratios of 5.62 and 13.87, are significantly different, $X^2 = 11.83$, p = 0.0006. Heterogeneity is not significant and $I^2 = 0\%$ in both the MC and MC+MI subgroups.

The actual pooled risk of psychosis in all episodes as follows:

	Index Diagnosis			
	Psychotic Depression	Non-Psychotic Depression		
Mood congruent patients only	71.8%	7.0%		
Mood congruent and incongruent patients	44.4%	3.0%		