

Table 1: Characteristics of included RCTs.

Author (Year)	Country	Sample size	Study design	Treatment duration	Sex male%	Mean Age (year)	Treatment regimen	Method used to report the adverse event
Findling, RL. et al. ^[34] (1997)	United states	6	Open-Label	8-week	100%	7	Risperidone	Medical records
McDougle, CJ. et al. ^[35] (1997)	United states	18	Open-Label	12-week	83%	10.2 ± 3.7	Risperidone	Medical records
McDougle, CJ. et al. ^[36] (1998)	United states	31	Double-Blind, Placebo-Controlled	12-week	71%	28.1 ± 3.7	Risperidone	Medical records
Nicolson, R. et al. ^[37] (1998)	Canada	10	Open-label	12-week	100%	7.2 ± 2.2	Risperidone	Medical records
Masi, G. et al. ^[38] (2001)	Italy	10	Open-label	16-week	70%	4.5	Risperidone	Parent reported/ medical records
Masi, G. et al. ^[39] (2001)	Italy	24	Open-label	16-week	76%	4.6 ± 8	Risperidone	Parent reported/ medical records
Masi, G. et al. ^[40] (2001)	Italy	25	Open-label	10-week	88%	4.1	Risperidone	Medical records
Remington, G. et al. ^[41] (2001)	Canada	36	Double-Blind, Placebo-Controlled, Crossover Study	7-week	83%	16.3	Haloperidol	Medical records
Kemner, C. et al. ^[42] (2002)	Netherlands	23	Open-Label	12-week	97%	11.2	Olanzapine	Parent reported/ medical records
Malone, RP. et al. ^[43] (2002)	United states	22	Open-label	1-month	82%	7.1	Risperidone	Parent reported/ medical records
McCracken, JT. et al. ^[44] (2002)	United states	101	RCT double blind	8-week	81%	8.8 ± 2.6	Risperidone	Parent or primary caretaker reported

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Gagliano, A. et al. ^[45] (2004)	Italy	20	Open-label	24-week	70%	6 ± 2.4	Risperidone	Parent reported/ medical records
Shea, S. et al. ^[46] (2004)	Canada	79	Randomized, double-blind, parallel-group	8-week	77%	7.5	Risperidone	Parent reported/ medical records
McCracken, et al. ^[47] (2005)	United states	63	Open-label extension	16-week	78%	8.6 ± 2.8	Risperidone	Parent reported/ medical records
Troost, PW. et al. ^[48] (2005)	United states	26,24	Open-label	24-week	92%	9.4	Risperidone	Medical records
Hollander, E. et al. ^[18] (2006)	United states	11	Randomised Double-Blind Placebo-Controlled	8-week	82%	9	Olanzapine	Parent reported/ medical records
Luby, J. et al. ^[49] (2006)	United states	23	Randomized placebo-controlled study	6-month	74%	4	Risperidone	Parent reported
Nagaraj, R. et al. ^[50] (2006)	India	39	Randomized, Placebo-Controlled, Double-Blind Study	6-month	87%	58 month	Risperidone	Parent reported
Anderson, GM. et al. ^[51] (2007)	United states	101	RCT double blind	8-week	81%	8.8 ± 2.6	Risperidone	Medical records
Malone, RP. et al. ^[52] (2007)	United states	12	Open-Label Pilot Study	6-week	80%	14.5 ± 1.8	Ziprasidone	Medical records
Pandina, GJ. et al. ^[17] (2007)	Canada	55	Double-blind, placebo-controlled trial	8-week	49%	7.4 ± 2.4	Risperidone	Parents reported /Medical records
Troost, PW. et al. ^[53] (2007)	Netherlands	25	Placebo-controlled discontinuation study	24-week	92%	8.6 ± 2.2	Risperidone	Medical records

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Capone, GT. et al. ^[54] (2008)	United states	23	Open-label study	14±1-week	87%	7.8 ± 2.6	Risperidone	Telephone follow up with families
Gencer, O. et al. ^[55] (2008)	Turkey	28	Open-label continuation study of RCT	12-week	79%	10.9±2.9 / 10.2±2.8	Haloperidol, Risperidone	Parents reported/Hospital records
Marcus, RN. et al. ^[56] (2009)	United states	218	Randomized, double-blind, placebo-controlled	8-week	89%	9.7	Aripiprazole	Hospital records
Owen, R. et al. ^[57] (2009)	United states	98	Double-blind, randomized, placebo-controlled,	8-week	88%	9.3	Aripiprazole	Hospital records
Stigler, KA. et al. ^[58] (2009)	United states	25	Prospective, open-label	14-week	76%	8.6	Aripiprazole	Caregiver Reported
Hellings, JA. et al. ^[59] (2010)	United states	19	Additional open label study	40–272 weeks	58%	23.7	Risperidone	Medical records
Marcus, RN. et al. ^[60] (2011)	United states	330	Open label	52-week	87%	9.6 ±3	Aripiprazole	Hospital records
Stigler, KA. et al. ^[16] (2012)	United states	25	Open-label study	8-week	84%	15.3	Paliperidone	Caregiver-reported
Kent, JM. et al. ^[61] (2013)	United states	96	Randomized double-blind placebo controlled fixed-dose	6-week	88%	9 ± 3.1	Risperidone	Parents reported/Hospital records
Kent, JM. et al. ^[62] (2013)	United states	79	Open-label extension	26-week	89%	9.2 ± 3.1	Risperidone	Parents reported/Hospital records
Findling, RL. et al. ^[63] (2014)	United states	157	Phase 1: single-blind phase (stabilisation phase)	13-26 weeks	-	NA	Aripiprazole	Patient reported
		85	Phase 2: double-blind (randomisation phase)	16-week	80%	10.4±2.8		

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Ghanizadeh, A. et al. ^[64] (2014)	Iran	59	Randomised double blind clinical trial	2-month	81%	9.6 ± 3.3 9.5 ± 4.6	Aripiprazole vs Risperidone	Medical records
Loebel, A. et al. ^[15] (2016)	United states	150	Randomized, double-blind, fixed-dose, placebo-controlled study	6-week	81%	10.5 ± 3	Lurasidone	Medical records
Scahill, L. et al. ^[65] (2016)	United States	124	Randomized trial of risperidone only versus risperidone plus parent training	24-week	85%	6.9 ± 2.35	Risperidone	Medical records
Vo, LC. et al. ^[66] (2016)	United states	101	RCT double blind	8-week	81%	8.8 ± 2.6	Risperidone	Medical records
Ichikawa, H. et al. ^[14] (2017)	Japan	92	Randomized, double-blind, placebo-controlled	8-week	82%	10.1 ± 3.2	Aripiprazole	Parents reported/medical records
Ichikawa, H. et al. ^[67] (2017)	Japan	86	Open-label extension	99 ± 55 weeks	80%	10 ± 3	Aripiprazole	Parents reported/medical records
Nikvarz, N. et al. ^[68] (2017)	Iran	30	Randomized open-label trial	8-week	77%	6.7 ± 3.2	Risperidone vs Memantine	Patients/parents reported

Abbreviations: NA; not available.

Table 2: Characteristics of included observational studies.

Citation	Country	Sample size	Study design	Length of follow up	Sex male%	Mean Age	Treatment regimen	Method used to report the adverse event
Masi, G. et al. ^[69] (2003)	Italy	53	Prospective observational study	7.9 ± 6.8 months (range, 1-32 months)	85%	4.6 ± 0.7	Risperidone	Medical records
Corson, AH et al. ^[70] (2004)	United states	20	Retrospective observational study	59.8 ± 55.1 weeks (range, 4-180 weeks)	80%	12.1 ± 6.7	Quetiapine	Medical records
Masi, G. et al. ^[71] (2009)	Italy	34	Retrospective observational study	Mean 7.0 ± 3.6 months (range 4–12 months)	68%	10.2 ± 3.3	Aripiprazole	Medical records
Beherec, L. et al. ^[31] (2011)	France	6	Retrospective observational analysis	(Range, 8- 12 months)	33%	23.2 ± 6.9	Clozapine	Medical records
Boon-Yasidhi, V. et al. ^[72] (2014)	Thailand	45	Cross-sectional observational study	36.8 ± 27.8 months	78%	8.1 ± 2.9	Risperidone	Medical records/ parents reported
Wink, LK. et al. ^[32] (2014)	United states	142	Retrospective observational study	Risperidone, 2.37 ± 2.55 years Aripiprazole, 1.47 ± 1.21 years	82%	Risperidone gp 8.4 ± 3.5, Aripiprazole gp 9.7 ± 3.4	Risperidone	Medical records

Citation	Country	Sample size	Study design	Length of follow up	Sex male%	Mean Age	Treatment regimen	Method used to report the adverse event
Aman, M. et al. ^[73] (2015)	United states	84	Prospective observational cohort study	21 month	80%	8.8 ± 2.6	Risperidone	Medical records/ parents reported
Hellings, JA. et al. ^[74] (2015)	United states	34	A prospective cross-sectional/Retrospective chart review	4.2 years (range, 0.8–13 years)	74%	23.4	Loxapine	Medical records
Hongkaew, Y. et al. ^[75] (2015)	Thailand	147	Retrospective cross-sectional observational study	46.06 ±32.23 months	86%	9.5 ±3.7	Risperidone	Medical records
Ngamsamut, N. et al. ^[76] (2016)	Thailand	103	Observational cohort study	48.93 months	87%	9.6 ± 3.7	Risperidone	Medical records
Nuntamool, N. et al. ^[77] (2017)	Thailand	82	Prospective cohort/cross-sectional observational study	67.9 months (IQR: 52.53–90.93)	90%	Median age 11 (9-14)	Risperidone	Medical records
Srisawasdi, P. et al. ^[78] (2017)	Thailand	168	A cross-sectional observational study	60.7 months	89%	10	Risperidone	Medical records
Vanwong, N. et al. ^[79] (2017)	Thailand	203	Observational cohort study	61.27 months.	86%	NA	Risperidone	Medical records
Wink, LK. et al. ^[33] (2017)	United states	61	Retrospective observational study	509± 533 days	87%	15.1 ± 10.9	14 different antipsychotic medications	Medical records/ parents reported

Abbreviations: NA; not available.