Supplementary online Tables and Figures accompanying the article:

**Are all first-generation antipsychotics equally effective in treating schizophrenia?
a meta-analysis of randomized, haloperidol-controlled trials**

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Supplementary online Table 1: List of the phrases used for the systematic electronic literature search

<p>*haloperi* or *R-1625 or *haldol* or *alased* or *aloperidi* or *bioperido* or *buterid* or *ceree* or *dozic* or *duraperido* or *fortuna* or *serena* or *serenel* or *seviu* or *sigaperid* or *sylad* or *zafri*</p>

Supplementary online Table 2: Characteristics of the included randomized controlled trials

Study; country	Study groups / number of participants	Trial duration	Antipsychotic dose (mg/d) (mean dose in case of flexible dose regimes)	Diagnoses / Characteristics of the included participants (as described in the trials)	Study design (setting)	Mean age (years)	Mean duration ill (years)	% Male	comments
Benperidol									
Nedopil and Ruther (1981); Germany	HAL: n=14 BEN: n=19	20 days	HAL: 14 BEN: 7.3	Schizophrenia (ICD-8)	Rater-blind RCT (inpatients)	32	n.i.	48.5	
Bromperidol									
Brannen et al. (1981); USA	HAL: n=24 BROM: n=23	4 weeks	HAL: 30.4 BROM: 39.8	Schizophrenia (DSM-IV, Schneiderian first rank symptoms)	DB-RCT (inpatients)	32.0	n.i.	48.9	
Denijs (1981); Netherlands	HAL: n=17 BROM: n=20	4 weeks	HAL: 12-24 BROM: 9-20	Schizophrenia	DB-RCT (inpatients)	33.3	n.i.	40.5	
Germana and Rapisarda (1990); Italy	HAL: n=18 BROM: n=18	19 days	HAL: 5.3 BROM: 5.5	Schizophrenia	DB-RCT (n.i.)	36	n.i.	66.7	
Itoh (1985); Japan	HAL: n=80 BROM: n=84	12 weeks	HAL: max. 18 BROM: max. 18	Schizophrenia	DB-RCT (n.i.)	n.i.	n.i.	n.i.	
Kodama et al. (1984); Japan	HAL: n=32 BROM: n=34	8 weeks	HAL: 2-30 BROM: 3-30	Schizophrenia	DB-RCT (inpatients and outpatients)		5-15	39.4	
Malfroid et al. (1978); Belgium	HAL: n=12 BROM: n=12	4 weeks	HAL: 6-8 BROM: 4-8	Schizophrenia	DB-RCT (n.i.)	48.6	25.3	100	
Mauri et al. (1994); Italy	HAL: n=20 BROM: n=20	8 weeks	HAL: 10 BROM: 10	Schizophrenia	DB-RCT (inpatients)	33.7	n.i.	57.5	
Poldinger et al. (1977); Switzerland	HAL: n=20 BROM: n=20	4 weeks	HAL: 6.6 BROM: 6.6	Schizophrenia	DB-RCT (n.i.)	49.7	14.35	n.i.	
Spina et al. (1992); Italy	HAL: n=21 BROM: n=21	8 weeks	HAL: 6.7 BROM: 7.1	Schizophrenia (DSM-III-R)	DB-RCT (inpatients)	43	n.i.	73.8	
Chlorpromazine									
Bi (1994); China	HAL: n=17 CPZ: n=20	4 weeks	HAL: 5-100 CPZ: 50-500	Schizophrenia (RDC)	Open RCT (n.i.)	18-45	n.i.	48	
Cosar et al. (1999); Turkey	HAL: n=40 CPZ: n=40	90 days	HAL: 34.75 CPZ: 454	Schizophrenia (DSM-IV)	RCT, blinding unclear (n.i.)	n.i.	n.i.	n.i.	
Clark (1969); USA	HAL: n=14 CPZ: n=14	12 weeks	HAL: 3-15 CPZ: 200-1600	Schizophrenia (clinical diagnosis)	DB-RCT (inpatients)	22-61	n.i.	39.3	
Fox et al. (1964); USA	HAL: n=15 CPZ: n=15	4 weeks	HAL: 13 CPZ: 593	Chronic schizophrenia (clinical diagnosis)	DB-RCT (inpatients)	43.1	n.i.	0	
Gallant et al. (1967); USA	HAL: n=19 CPZ: n=19	4 weeks	HAL: max. 16 CPZ: max. 800	Schizophrenia	DB-RCT (inpatients)	33.4	n.i.	51.7	
Hogan and Awad (1992); Canada	HAL: n=30 CPZ: n=25	3 weeks	HAL: n.i. CPZ: n.i.	Schizophrenia (WHO flexible system, RDC)	RCT, blinding unclear (inpatients)	35	n.i.	60	
Lempérière et al. (1962); France	HAL: n=24 CPZ: n=22	8 weeks	HAL: max. 10 CPZ: max. 400	Paranoid schizophrenia	Open RCT (n.i.)	n.i.	n.i.	0	

Study; country	Study groups / number of participants	Trial duration	Antipsychotic dose (mg/d) (mean dose in case of flexible dose regimes)	Diagnoses / Characteristics of the included participants (as described in the trials)	Study design (setting)	Mean age (years)	Mean duration ill (years)	% Male	comments
McCreadie and MacDonald (1977); United Kingdom	HAL: n=10 CPZ: n=10	12 weeks	HAL:15-100 CPZ:100-600	Schizophrenia (Schneiderian first rank symptoms)	DB-RCT (inpatients)	52	n.i.	100	Treatment-resistant patients
Nishizono (1994); Japan	HAL: n=57 CPZ: n=52	4 weeks	HAL: max. 21 CPZ: max. 450	Schizophrenia (ICD-10)	RCT, blinding unclear (n.i.)	n.i.	n.i.	n.i.	
Rompel and Segal (1978); South Africa	HAL: n=12 CPZ: n=12	8 weeks	HAL: 5-30 CPZ: 50-600	Schizophrenia	DB-RCT (inpatients)	43.3	n.i.	60	
Serafetinides et al. (1972); USA	HAL: n=14 CPZ: n=14	12 weeks	HAL: 12.3 CPZ: 830	Chronic schizophrenia	DB-RCT (inpatients)	41.5	15	43.9	
Teja et al. (1975); USA	HAL: n=13 CPZ: n=	16 weeks	HAL: ~25 CPZ:	Chronic schizophrenia	DB-RCT (inpatients)	38.01	n.i.	45.5	Treatment-resistant patients
Chlorprothixene									
Fux and Belmaker (1991); Israel	HAL: n=10 CHL: n=9	4 weeks	HAL: 40 CHL: 50	Chronic schizophrenia	DB-RCT (n.i.)	44	10	65	Cross-over trial
Marjerrison et al. (1971); Canada	HAL: n=n.i. CHL: n=n.i.	2 weeks	HAL: 9 CHL: 251	Acute schizophrenia	DB-RCT (n.i.)	34	n.i.	n.i.	Cross-over trial
Cloperthixol									
Heikkila et al. (1981); Finland	HAL: n=33 CLO: n=30	12 weeks	HAL: 10 CLO: 40	Schizophrenia	DB-RCT (inpatients)	42.7	n.i.	65.1	
Serafetinides et al. (1972); USA	HAL: n=14 CLO: n=15	12 weeks	HAL: 12.3 CLO: 205	Chronic schizophrenia	DB-RCT (inpatients)	42.2	14	41.4	
Droperidol									
Cocchi et al. (1971); Italy	HAL: n=20 DRO: n=20	30 days	HAL:10 DRO:10	Schizophrenia	DB-RCT (inpatients)	25.4	2.58	60	
Cocito et al. (1970); Italy	HAL: n=23 DRO: n=22	63 days	HAL:6.0 DRO: 6,32	Schizophrenia	DB-RCT (inpatients)	34.5	n.i.	100	
Flupenthixol									
Parent and Toussaint (1983); Belgium	HAL: n=10 FLT: n=11	4 weeks	HAL: 21.1 FLT: 111.3	Schizophrenic psychosis	Open RCT (inpatients)	43.4	n.i.	52.5	
Fluphenazine									
Faretra et al. (1970); USA	HAL: n=30 FLUPH: n=30	8 weeks	HAL: 0.75-3.75 FLUPH: 0.75-3.75	Childhood schizophrenia	DB-RCT (inpatients)	9.9	1.78	73.3	
Hall et al. (1968); USA	HAL: n=25 FLUPH: n=25	12 weeks	HAL: 6.95 FLUPH: 17.86	Chronic schizophrenia	DB-RCT (inpatients)	45	n.i.	100	Treatment-resistant patients
Kinon et al. (1993); USA	HAL: n=13 FLUPH: n= 34	4 weeks	HAL: 20 FLUPH: 50	Schizophrenia, schizoaffective disorder, or schizophrenian disorder (DSM-III-R)	DB-RCT (inpatients)	29.4	n.i.	n.i.	Treatment-resistant patients
Levomepromazine									
Blin et al. (1996); France	HAL: n=20 LEV: n=21	4 weeks	HAL: 7.6 LEV: 100	Acute exacerbation of schizophrenia (DSM-III-R)	DB-RCT (inpatients)	34.05	n.i.	58.5	
Shalev et al. (1993); Israel	HAL: n=18 LEV: n=21	4 weeks	HAL: 29.3 LEV: 379	Schizophrenia (DSM-III)	Rater-blinded RCT (inpatients)	33	4.8	58.3	Cross-over trial, Treatment-resistant patients

Study; country	Study groups / number of participants	Trial duration	Antipsychotic dose (mg/d) (mean dose in case of flexible dose regimes)	Diagnoses / Characteristics of the included participants (as described in the trials)	Study design (setting)	Mean age (years)	Mean duration ill (years)	% Male	comments
Loxapine									
Bueno (1979); International	HAL: n=19 LOX: n=19	6 weeks	HAL: 5.4 LOX: 58.3	Schizophrenia	DB-RCT (inpatients)	28.8	n.i.	71.1	
Mattke and Wisuschil (1976); Germany	HAL: n=18 LOX: n=22	4 weeks	HAL: n.i. LOX: n.i.	Schizophrenic psychosis (ICD-8)	DB-RCT (n.i.)	29	n.i.	42.5	
Paprocki et al. (1976); Brazil	HAL: n=25 LOX: n=25	90 days	HAL: n.i. LOX: n.i.	Acute schizophrenia	DB-RCT (inpatients)	n.i.	n.i.	0	
Pool et al. (1976); USA	HAL: n=25 LOX: n=26	4 weeks	HAL: 9.8 LOX: 87.5	Schizophrenia	DB-RCT (inpatients)	15.7	n.i.	54.9	
Selman et al. (1976); USA	HAL: n=29 LOX: n=29	12 weeks	HAL: 8.8 LOX: 110	Acute schizophrenia	DB-RCT (inpatients)	32.2	n.i.	81	
Tuason (1986); USA	HAL: n=29 LOX: n=25	10 days	HAL: max. 47 LOX: max. 143	Schizophrenia (DSM-III)	DB-RCT (inpatients)	33.9	<1	63.5	
Versiani et al. (1978); Brazil	HAL: n=25 LOX: n=25	4 weeks	HAL: 7.6 LOX: 70.4	Schizophrenia	DB-RCT (inpatients)	16.1	n.i.	96	
Mesoridazine									
White et al. (1981); USA	HAL: n=21 MES: n=18	4 weeks	HAL: 28 MES: 421	Schizophrenia	DB-RCT (inpatients)	28.3	n.i.	46.2	
Methylperidol									
Nishimatu et al. (1975); international	HAL: n=37 MET: n=35	8 weeks	HAL: min. 6 MET: min. 30	Schizophrenia	DB-RCT (inpatients and outpatients)	29.8	n.i.	70.8	
Molindone									
Dufresne et al. (1993); USA	HAL: n=16 MOL: n=14	6 weeks	HAL: max. 40 MOL: max. 200	Chronic schizophrenia (DSM-III)	DB-RCT (n.i.)	34	n.i.	53.3	
Escobar et al. (1985); USA	HAL: n=15 MOL: n=15	4 weeks	HAL: 32.4 MOL: 160	Schizophrenia (DSM-III)	DB-RCT (inpatients)	37	n.i.	91.4	
Fuentenebro et al. (1989); Spain	Total: n=50	2 weeks	HAL: n.i. MOL: n.i.	Schizophrenia (DSM-III)	DB-RCT (n.i.)	n.i.	n.i.	n.i.	
Glazer and Hafez (1990); USA	HAL: n=9 MOL: n=9	2 weeks	HAL: 1.3-34.3 MOL: 75-145	Chronic and subchronic schizophrenia (RDC)	DB-RCT (outpatients)	47	2.58	44.4	
Nemonapride									
Mori et al. (1989); Japan	HAL: n=86 NEM: n=81	8 weeks	HAL: max. 20 NEM: max. 30	Schizophrenia	DB-RCT (inpatients and outpatients)	n.i.	≥10	60.5	
Perazine									
Klimke et al. (1993); Germany	HAL: n=25 PERA: n=25	24 days	HAL: 15 PERA: 300	Acute schizophrenia (ICD-9)	DB-RCT (inpatients)	36.6	6.7	42	
Schmidt et al. (1982); Germany	HAL: n=15 PERA: n=17	4 weeks	HAL: 27.68 PERA: 612	Acute paranoid hallucinatory psychosis (ICD-9)	DB-RCT (inpatients)	31.3	3.8	100	
Perphenazine									
Goldstein et al. (1969);	total: n=250	5 weeks	HAL: 16	Psychosis	DB-RCT	21-65	n.i.	n.i.	

Study; country	Study groups / number of participants	Trial duration	Antipsychotic dose (mg/d) (mean dose in case of flexible dose regimes)	Diagnoses / Characteristics of the included participants (as described in the trials)	Study design (setting)	Mean age (years)	Mean duration ill (years)	% Male	comments
USA			PERPH: 64		(inpatients)				
Kurihara et al. (1983); Japan	HAL: n=94 PERPH: n=95	8 weeks	HAL: 3-12 PERPH: 9-36	Schizophrenia	DB-RCT (inpatients and outpatients)	n.i.	n.i.	55.5	
Shalev et al. (1993); Israel	HAL: n=18 PERPH: n=21	4 weeks	HAL: 29.3 PERPH: 35.8	Schizophrenia (DSM-III)	Rater-blinded RCT (inpatients)	33	n.i.	50	Cross-over trial, treatment-resistant patients
Pimozide									
Gowardman et al. (1973); New Zealand	HAL: n=10 PIM: n=10	12 weeks	HAL: 10.15 PIM: 5.1	Schizophrenia	DB-RCT (inpatients)	48.6	20.6	n.i.	
Haas and Beckmann (1982); Germany	HAL: n=15 PIM: n=15	30 days	HAL: 23.75 PIM: 20.36	Schizophrenia and schizoaffective disorder (ICD-8)	DB-RCT (inpatients)	39	n.i.	43.3	
Silverstone et al. (1984); United Kingdom	HAL: n=12 PIM: n=10	4 weeks	HAL: 22.2 PIM: 21.6	Acute schizophrenia	DB-RCT (inpatients)	38.5	n.i.	50	
Pipotiazine									
Bechelli et al. (1983); Brazil	HAL: n=30 PIP: n=29	27 days	HAL: 11.5 PIP: 21.4	Schizophrenia	DB-RCT (inpatients)	28.9	n.i.	100	
Darondel et al. (1981); France	HAL: n= 23 PIP: n=22	4 weeks	HAL: 15 PIP: 15	Schizophrenia	DB-RCT (inpatients)	40.8	n.i.	75.6	
Giordana and Frenay (1984); France	HAL: n=15 PIP: n=15	3 weeks	HAL: 15 PIP: 15	Schizophrenia	DB-RCT (inpatients and outpatients)	36.8	11	n.i.	
Propericuazine									
Nishikawa et al. (1984); Japan	HAL: n= 3.27 PRO: n= 32.7	Max. 1 year	HAL: 37 PRO: 37	Schizophrenia (DSM-III)	DB-RCT (outpatients)	~ 39	8.7	59.5	
Sulpiride									
Cassano et al. (1975); Italy	HAL: n=36 SUL: n=34	30 days	HAL: 5.0 SUL: 1000	Schizophrenia (paranoid and hebephrenic)	DB-RCT (inpatients)	38	n.i.	n.i.	
Cosar et al. (1999) ¹² ; Turkey	HAL: n=40 SUL: n=40	90 days	HAL: 34.75 SUL: 696	Schizophrenia (DSM-IV)	RCT, blinding unclear (n.i.)	n.i.	n.i.	n.i.	
Gerlach et al. (1985); Denmark	HAL: n=10 SUL: n=10	12 weeks	HAL: 12 SUL: 2000	Schizophrenia (based on the criteria of Feighner)	DB-RCT (inpatients)	34	9	85	Cross-over trial
Okuda et al. (1979); Japan	HAL: n=37 SUL: n=37	8 weeks	HAL: 3-10 SUL: 300-1200	Schizophrenia (acute and chronic)	DB-RCT (inpatients)	14-54	n.i.	56.25	
Rama Rao et al. (1981); United Kingdom	HAL: n=15 SUL: n=15	12 weeks	HAL: n.i. SUL: 1200	Chronic schizophrenia	DB-RCT (inpatients)	60	n.i.	0	
Thiopropazate									
Hollister et al. (1962); USA	HAL: n=52 THP: n=44	12 weeks	HAL: 8 THP: 80	Schizophrenia	DB-RCT (inpatients)	36	7	100	
Thioridazine									
Borison et al. (1989); USA	HAL: n=8 TRZ: n=8	6 weeks	HAL: 15-75 TRZ: 150-750	Schizophrenia (DSM-III)	DB-RCT (n.i.)	18-60	n.i.	n.i.	

Study; country	Study groups / number of participants	Trial duration	Antipsychotic dose (mg/d) (mean dose in case of flexible dose regimes)	Diagnoses / Characteristics of the included participants (as described in the trials)	Study design (setting)	Mean age (years)	Mean duration ill (years)	% Male	comments
Dufresne et al. (1993); USA	HAL: n=16 TRZ: n=14	6 weeks	HAL: 5-40 TRZ: 100-800	Chronic Schizophrenia (DSM-III)	DB-RCT (n.i.)	34	13	33.3	
Prasad and Townley (1966); USA	HAL: n=20 TRZ: n=20	12 weeks	HAL: 16.1 TRZ: 518.6	Schizophrenia	DB-RCT (inpatients)	51.8	15.07	7.5	
Weston et al. (1973); Australia	HAL: n=42 TRZ: n=44	12 weeks	HAL: 5.25 TRZ: 331.08	Chronic Schizophrenia	DB-RCT (inpatients)	49.9	21	52.3	
Thiothixene									
Abuzzahab and Zimmerman (1982); USA	HAL: n=22 THT: n=24	24 weeks	HAL: 17.5 THT: 31.8	Schizophrenia	DB-RCT (outpatients)	35.5	9.0	55.6	
Engelhardt et al. (1978); USA	HAL: n=38 THT: n=42	24 weeks	HAL: 5.7 THT: 16.0	Schizophrenia	DB-RCT (outpatients)	35.3	11.66	61.1	
Howard (1974); USA	HAL: n=17 THT: n=16	12 weeks	HAL: max. 200 THT: max. 200	Schizophrenia	DB-RCT (inpatients)	46	20	0	Treatment-resistant patients
Teja et al. (1975); USA	HAL: n=13 THT: n=14	16 weeks	HAL: ~25 THT: ~50	Chronic schizophrenia	DB-RCT (inpatients)	38.01	n.i.	45.5	Treatment-resistant patients
Tobin and Robinson (1980); USA	HAL: n=25 THT: n=25	12 weeks	HAL: ~4 THT: ~8	Schizophrenia	DB-RCT (outpatients)	32.5	6-42 months	36	
Timiperone									
Kariya et al. (1983); Japan	HAL: n=106 TIM: n=100	12 weeks	HAL: max. 18 TIM: max. 12	Schizophrenia	DB-RCT (inpatients)	n.i.	n.i.	52.9	
Trifluoperazine									
Goldstein and Clyde (1966); USA	HAL: n=8 TPZ: n=10	n.i.	HAL: 10-22 TPZ: 7-20	"Symptoms of acute psychosis"	DB-RCT (inpatients and outpatients)	21-55	n.i.	n.i.	
Luckey and Schiele (1967); USA	HAL: n=13 TPZ: n=13	12 weeks	HAL: max. 15 TPZ: max. 30	Schizophrenia	DB-RCT (outpatients)	n.i.	≥1	n.i.	
O'Brien et al. (1974); USA	HAL: n=15 TPZ: n=15	3 weeks	HAL: max. 20 TPZ: max. 48	Schizophrenia	DB-RCT (inpatients)	29.5	n.i.	91.7	
Rubin (1971); USA	HAL: n=10 TPZ: n=8	Max. 79 days	HAL: 2-20 TPZ: 6-60	Schizophrenia	DB-RCT (inpatients)	37.9	n.i.	100	
Stewart et al. (1969); Canada	HAL: n=25 TPZ: n=25	n.i.	HAL: 10.4 TPZ: 14.3	Chronic schizophrenia	DB-RCT (n.i.)	48.6	21.15	68	Cross-over trial
Teja et al. (1975); USA	HAL: n=13 TPZ: n=15	16 weeks	HAL: ~25 TPZ: ~50	Chronic schizophrenia	DB-RCT (inpatients)	38.01	n.i.	45.5	Treatment-resistant patients
Trifluoperidol									
Gallant et al. (1967); USA	HAL: n=19 TRI: n=20	4 weeks	HAL: max. 16 TRI: max. 4	Schizophrenia	DB-RCT (inpatients)	33.4	n.i.	51.7	
Ulmar et al. (1990); Germany	HAL: n=n.i. TRI: n=n.i.	4 weeks	HAL: n.i. TRI: n.i.	Acute schizophrenia	DB-RCT (n.i.)	18-65	n.i.	n.i.	
Zuclopenthixol									
Baastrup et al. (1993); international	HAL: n=19 ZUC: n=36	6 days	HAL: ZUC:15.0-30.0	Schizophrenia (ICD-9)	Open RCT (inpatients)	37.0	n.i.	63.6	
Heikkilä et al. (1992);	HAL: n=23	8 weeks	HAL: 10.3	Schizophrenia	DB-RCT	36	n.i.	50	

Study; country	Study groups / number of participants	Trial duration	Antipsychotic dose (mg/d) (mean dose in case of flexible dose regimes)	Diagnoses / Characteristics of the included participants (as described in the trials)	Study design (setting)	Mean age (years)	Mean duration ill (years)	% Male	comments
Finland	ZUC: n=26		ZUC: 33.5		(inpatients)				

This table displays the characteristics of the included randomized controlled trials (RCTs) comparing haloperidol with any other first-generation antipsychotic drug (FGA). RCTs that provided comparisons for two FGAs (three or more study arms) are listed twice.

Abbreviations (alphabetical order): BEN = benperidol; BROM = bromperidol; CPZ = chlorpromazine; CHL = chlorprothixene; CLO = clopenthixol; DB = double-blind; DRO = droperidol; DSM-II, DSM-III, DSM-III-R, DSM-IV, DSM-IV-TR = various versions of the Diagnostic and Statistical Manual of Mental Disorders; FLT = flupenthixol; FLUPH = fluphenazine; HAL = haloperidol; ICD-8, ICD-9 = various versions of the International Classification of Diseases; LEV = levomepromazine; LOX = loxapine; MES = mesoridazine; MET = methylperidol; MOL = molindone; N = number of studies; n = number of participants; NEM = nemonapride; n.i. = not indicated; PER = perazine; PERPH = perphenazine; PIM = pimozone; PIP = pipotiazine; PRO = propericuazine; RCT = randomized controlled trial; RDC = Research Diagnostic Criteria; SUL = sulpiride; THP = thiopropazate; TRZ = thioridazine; THT = thiothixene; TIM = timiperone; TPZ = trifluoperazine; TRI = trifluoperidol; ZUC = zuclopenthixol.

Supplementary online Table 3: Effect sizes for the meta-analytic comparisons evaluating the occurrence of adverse effects

	At least one AE	At least one EPS	Akathisia	Dyskinesia	Dystonia	Rigor	Tardive Dyskinesia	Tremor	Use of AM	Hypotension	Sedation	Weight gain
Benperidol												
Bromperidol	N=2, n=204; RR=1.13, CI:0.99-1.28 p=0.06	N=4, n=283; RR=1.05, CI:0.72-1.53 p=0.78	N=6, n=392; RR=1.28, CI:0.94-1.73 p=0.11	N=3, n=141; RR=0.54, CI:0.12-2.46 p=0.42	N=5, n=361; RR=1.73, CI:1.03-2.91 p=0.04	N=3, n=123; RR=0.93, CI:0.61-1.42 p=0.72	N=1, n=40; RR=1.00, CI:0.07-14.9 p=1.0	N=4, n=181; RR=1.59, CI:1.10-2.29 p=0.01	N=6, n=251; RR=1.04, CI:0.84-1.28 p=0.73	N=5, n=228; RR=1.06, CI:0.23-4.97 p=0.94	N=1, n=37; RR=0.39, CI:0.02-8.97 p=0.56	N=2, n=108; RR=1.81, CI:0.45-7.31 p=0.4
Chlorpromazine	N=2, n=56; RR=0.79, CI:0.39-1.62 p=0.52	N=4, n=114; RR=1.81, CI:1.20-2.73 p<0.001	N=2, n=58; RR=1.61, CI:0.15-16.9 p=0.69	N=1, n=28; RR=9.50, CI:0.9-100.4 p=0.06	N=1, n=20; RR=5.00, CI:0.27-92.6 p=0.28				N=3, n=77; RR=1.03, CI:0.58-1.82 p=0.92		N=1, n=22; RR=0.43, CI:0.13-1.46 p=0.18	N=1, n=22; RR=0.4, CI:0.02-7.38 p=0.54
Chlorprothixene												
Clopendixol									N=1, n=66; RR=1.56, CI:0.71-3.43 p=0.27			
Flupenthixol		N=1, n=21; RR=0.61, CI:0.31-1.21 p=0.16							N=1, n=21; RR=0.96, CI:0.56-1.66 p=0.89			
Fluphenazine	N=1, n=60; RR=1.50, CI:0.47-4.78 p=0.49	N=1, n=60; RR=1.50, CI:0.47-4.78 p=0.49	N=1, n=60; RR=0.50, CI:0.10-2.53 p=0.40		N=1, n=60; RR=5.00, CI:0.25-99.9 p=0.29				N=1, n=50; RR=0.95, CI:0.68-1.32 p=0.75			
Levomopromazine								N=1, n=41; RR=8.40, CI:1.15-61.2 p=0.04				
Loxapine	N=1, n=58; RR=0.85, CI:0.57-1.26 p=0.42	N=1, n=51; RR=0.99, CI:0.70-1.38 p=0.93	N=2, n=104; RR=0.62, CI:0.27-1.46 p=0.28	N=1, n=54; RR=0.29, CI:0.01-6.79 p=0.44	N=1, n=54; RR=0.65, CI:0.26-1.61 p=0.35	N=3, n=166; RR=1.04, CI:0.72-1.52 p=0.82		N=3, n=162; RR=1.48, CI:0.12-18.7 p=0.76	N=1, n=50; RR=1.33, CI:0.33-5.36 p=0.69		N=1, n=51; RR=0.64, CI:0.42-0.98 p=0.04	
Mesoridazine		N=1, n=39; RR=2.86,			N=1, n=39; RR=3.43,				N=1, n=39; RR=1.4,			

	At least one AE	At least one EPS	Akathisia	Dyskinesia	Dystonia	Rigor	Tardive Dyskinesia	Tremor	Use of AM	Hypotension	Sedation	Weight gain
		CI:0.93-8.81 p=0.07			CI:0.83-14.1 p=0.09				CI:0.93-2.11 p=0.1			
Methylperidol			N=1, n=72; RR=1.42, CI:0.44-4.61 p=0.56			N=1, n=72; RR=3.31, CI:0.74-14.9 p=0.12						
Molindone			N=1, n=30; RR=1.00, CI:0.51-1.95 p=1.00		N=1, n=30; RR=1.50, CI:0.29-7.73 p=0.63	N=1, n=30; RR=1.33, CI:0.61-2.91 p=0.47		N=1, n=30; RR=0.83, CI:0.32-2.15 p=0.71	N=1, n=22; RR=1.25, CI:0.59-2.65 p=0.56			N=1, n=30; RR=1.75, CI:0.64-4.75 p=0.27
Nemonapride			N=1, n=167; RR=1.18, CI:0.71-1.95 p=0.53		N=1, n=167; RR=0.63, CI:0.23-1.69 p=0.36	N=1, n=167; RR=1.09, CI:0.55-2.14 p=0.81	N=1, n=167; RR=0.19, CI:0.01-3.87 p=0.28	N=1, n=167; RR=0.90, CI:0.54-1.51 p=0.69	N=1, n=167; RR=0.47, CI:0.04-5.09 p=0.54		N=1, n=167; RR=1.88, CI:0.17-20.4 p=0.6	
Perazine	N=1, n=32; RR=3.68, CI:1.53-8.88 p<0.001				N=1, n=32; RR=5.67, CI:1.47-21.9 p=0.01				N=1, n=32; RR=6.8, CI:1.81-25.6 p<0.001			
Perphenazine			N=1, n=189; RR=1.44, CI:0.86-2.40 p=0.17	N=1, n=189; RR=3.03, CI:0.32-28.6 p=0.33	N=1, n=189; RR=2.22, CI:0.80-6.15 p=0.12							
Pimozide	N=1, n=20; RR=9.00, CI:1.39-58.4 p=0.02	N=1, n=20; RR=9.00, CI:1.39-58.4 p=0.02	N=1, n=30; RR=0.50, CI:0.15-1.64 p=0.25	N=1, n=30; RR=0.40, CI:0.09-1.75 p=0.22	N=1, n=22; RR=1.11, CI:0.32-3.84 p=0.87	N=1, n=30; RR=0.75, CI:0.34-1.64 p=0.47		N=2, n=52; RR=0.61, CI:0.26-1.44 p=0.26	N=1, n=30; RR=0.38, CI:0.18-0.81 p=0.01	N=1, n=22; RR=5.92, CI:0.34-103 p=0.22	N=1, n=22; RR=1.04, CI:0.7-1.55 p=0.84	
Pipothiazine		N=1, n=59; RR=0.84, CI:0.49-1.44 p=0.52	N=1, n=45; RR=4.79, CI:0.24-94.5 p=0.3		N=1, n=45; RR=0.96, CI:0.06-14.4 p=0.97			N=1, n=45; RR=1.20, CI:0.37-3.88 p=0.77				N=1, n=45; RR=0.32, CI:0.01-7.45 p=0.48
Propericuazine												
Sulpiride	N=1, n=70; RR=0.99,	N=1, n=70; RR=1.42,	N=2, n=144; RR=1.61,	N=1, n=74; RR=1.00,					N=2, n=100; RR=1.49,			

	At least one AE	At least one EPS	Akathisia	Dyskinesia	Dystonia	Rigor	Tardive Dyskinesia	Tremor	Use of AM	Hypotension	Sedation	Weight gain
	CI:0.67-1.47 p=0.97	CI:0.66-3.04 p=0.37	CI:0.25-10.2 p=0.62	CI:0.15-6.73 p=1.00					CI:0.85-2.64 p=0.17			
Thiopropazate	N=1, n=96; RR=1.00, CI:0.81-1.25 p=0.97		N=1, n=96; RR=0.59, CI:0.28-1.25 p=0.17			N=1, n=96; RR=0.73, CI:0.33-1.59 p=0.43		N=1, n=96; RR=0.39, CI:0.08-1.85 p=0.24		N=1, n=96; RR=0.24, CI:0.01-4.78 p=0.35		
Thioridazine	N=2, n=70; RR=4.49, CI:2.14-9.41 p<0.001		N=2, n=102; RR=1.66, CI:0.32-8.68 p=0.55		N=1, n=16; RR=7.00, CI:0.42-117 p=0.18	N=1, n=16; RR=5.00, CI:0.28-90.2 p=0.28		N=1, n=86; RR=0.78, CI:0.56-1.09 p=0.14	N=1, n=16; RR=13.0, CI:0.85- 198 p=0.06	N=4, n=172; RR=0.32, CI:0.07-1.35 p=0.12	N=1, n=16; RR=0.33, CI:0.02-7.14 p=0.48	N=1, n=40; RR=0.29, CI:0.07-1.21 p=0.09
Thiothixene	N=3, n=187; RR=0.97, CI:0.72-1.31 p=0.84	N=1, n=80; RR=1.04, CI:0.62-1.75 p=0.88	N=2, n=108; RR=0.61, CI:0.16-2.32 p=0.47	N=1, n=50; RR=3.00, CI:0.13-70.3 p=0.49	N=1, n=50; RR=0.33, CI:0.04-2.99 p=0.33	N=2, n=107; RR=0.97, CI:0.41-2.30 p=0.94		N=2, n=107; RR=0.74, CI:0.28-1.96 p=0.55				N=2, n=107; RR=0.2, CI:0.06-0.64 p=0.01
Timiperone		N=1, n=206; RR=1.24, CI:0.92-1.68 p=0.13	N=1, n=206; RR=0.81, CI:0.59-1.10 p=0.18	N=1, n=206; RR=0.75, CI:0.37-1.53 p=0.44		N=1, n=206; RR=2.83, CI:0.12-68.7 p=0.52						
Trifluoperazine	N=1, n=50; RR=1.00, CI:0.66-1.52 p=1.00	N=2, n=76; RR=1.19, CI:0.68-2.08 p=0.54	N=1, n=18; RR=2.08, CI:0.70-6.19 p=0.75						N=2, n=48; RR=1.6, CI:0.77-3.33 p=0.21			
Trifluoperidol										N=1, n=28; RR=0.29, CI:0.02-5.01 p=0.39		
Zuclopenthixol									N=1, n=49; RR=1.47, CI:0.8-2.69 p=0.21			

This table displays the effect sizes (Mantel-Haenszel risk ratios) for the meta-analytic comparisons evaluating the occurrence of the single adverse effects; comparisons: haloperidol versus other first-generation antipsychotics (FGAs). The risk ratios (RRs) are provided with the 95% confidence intervals (CIs) for the pooled comparisons. Numerical values greater than 1 indicate a significant higher occurrence of the investigated adverse effect/use of antiparkinson medication in

the haloperidol group compared to the control group of the other FGAs. Statistical significance can be assumed if the 95% CI does not include the value of 1 and/or the p-value is <0.05. Significant between-group differences are shadowed in grey in order to improve the readability of the table. An empty square indicates the absence of data for this comparison. The correspondent forest plots are displayed in Supplementary online Figures 8 to 19. Abbreviations (alphabetical order): AE = adverse effect; AM = antiparkinson medication; CI = confidence interval; EPS = extrapyramidal symptom; MH = Mantel-Haenszel; N = number of studies; n = number of participants; RR = risk ratio.

Supplementary online Figure 1: The “risk of bias” ratings for all included trials

	Adequate sequence generation	Allocation concealment	Blinding (performance bias)	Blinding (detection bias)	Incomplete outcome data addressed	Loss of selective reporting	Free of other bias
Abuzzahab 1992	+	+	+	+	-	+	+
Beasbup 1993	+	+	-	-	-	-	-
Bechetti 1993	+	+	+	+	+	+	+
Bi 1994	+	+	-	-	-	+	+
Blin 1996	+	+	+	+	+	+	+
Borison 1989	+	+	+	+	-	+	+
Brannen 1981	+	+	+	+	+	+	+
Bueno 1979	+	+	+	+	+	+	+
Cassano 1975	+	+	+	+	+	+	+
Clark 1969	+	+	+	+	+	+	+
Cocchi 1971	+	+	+	+	+	+	+
Cocito 1970	+	+	+	+	+	+	+
Cosar 1998	+	+	+	+	-	+	+
Darondel 1981	+	+	+	+	+	+	+
Demija 1990	+	+	+	+	-	-	-
Dufresne 1993	+	+	+	+	+	+	+
Engelhardt 1970	+	+	+	+	-	-	-
Escobar 1985	+	+	+	+	-	-	-
Farebra 1970	+	+	+	+	+	+	+
Fox 1964	+	+	+	+	-	+	+
Fuentelebro 1989	+	+	+	+	-	+	+
Fux 1991	+	+	+	+	+	+	+
Gallant 1967	+	+	+	+	+	+	+
Gierlach 1995	+	+	+	+	-	-	-
Germann 1990	+	+	+	+	+	+	+
Giordana 1984	+	+	+	+	+	+	+
Glazer 1990	+	+	+	+	-	-	-
Goldslein 1966	+	+	+	+	+	+	+
Goldslein 1969	+	+	+	+	-	+	+
Gowardman 1973	+	+	+	+	+	+	+
Haas 1992	+	+	+	+	-	+	+
Had 1960	+	+	+	+	-	-	-
Heikkila 1991	+	+	+	+	-	+	+
Heikkila 1992	+	+	+	+	-	+	+
Hogan 1992	+	+	+	+	+	+	+
Hollister 1962	+	+	+	+	-	-	-
Howard 1974	+	+	+	+	+	+	+
Ruh 1986	+	+	+	+	-	+	+
Kariya 1993	+	+	+	+	-	-	-
Kinn 1993	+	+	+	+	+	+	+
Kilme 1993	+	+	+	+	-	-	-
Kodama 1984	+	+	+	+	+	+	+
Kurikara 1993	+	+	+	+	-	+	+
Lempriere 1962	+	+	+	+	+	+	+
Luckey 1967	+	+	+	+	-	-	-
Matfoid 1970	+	+	+	+	+	+	+
Marjenson 1971	+	+	+	+	-	-	-
Mathe 1976	+	+	+	+	+	+	+
Mauri 1994	+	+	+	+	+	+	+
McCreddie 1977	+	+	-	-	-	+	+
Mori 1989	+	+	+	+	+	+	+
Nedopli 1991	+	+	-	-	-	+	+
Nishikawa 1994	+	+	+	+	+	+	+
Nishimatu 1975	+	+	+	+	-	+	+
Nishizono 1994	+	+	-	-	-	+	+
O'Brien 1974	+	+	+	+	+	+	+
Okuda 1978	+	+	+	+	-	+	+
Paprocki 1976	+	+	+	+	-	+	+
Parent 1993	+	+	-	-	-	+	+
Pödingner 1977	+	+	+	+	+	+	+
Pool 1976	+	+	+	+	-	-	-
Prasad 1966	+	+	+	+	-	-	-
Rama Rao 1991	+	+	+	+	+	+	+
Rompel 1978	+	+	+	+	-	-	-
Rubin 1971	+	+	+	+	+	+	+
Schmidt 1992	+	+	+	+	+	+	+
Selman 1976	+	+	+	+	-	-	-
Serafinides 1972	+	+	+	+	+	+	+
Shalev 1993	+	+	+	+	-	-	-
Silverstone 1994	+	+	+	+	+	+	+
Spina 1992	+	+	+	+	+	+	+
Stewart 1968	+	+	+	+	-	-	-
Teja 1975	+	+	+	+	-	-	-
Tobin 1980	+	+	+	+	+	+	+
Tuason 1986	+	+	-	-	-	+	+
Umar 1990	+	+	+	+	+	+	+
Versiani 1978	+	+	+	+	-	-	-
Weston 1973	+	+	+	+	+	+	+
White 1991	+	+	+	+	-	-	-

Overview regarding the single judgments for every item of the “risk of bias” tool of the Cochrane Collaboration (Higgins and Green 2011). A plus in a green circle illustrates “low risk of bias”, a question mark in a yellow circle displays “unclear risk of bias”, and a minus in a red circle indicates the rating of “high risk of bias”.

Supplementary online Figure 2: Overview regarding the “risk of bias” judgments

The graph illustrates the judgments for each “risk of bias” item presented as percentages across all included studies. The green part of the vertical-bar graph indicates the rating “low risk of bias”, whereas the yellow part displays the judgment “unclear risk of bias” and the red one “high risk of bias”.

Supplementary online Figure 3: Effect sizes for the primary outcome dichotomous treatment response

The forest plot displays the effect sizes for all individual studies investigating the primary outcome clinically important response to treatment (number of responders to treatment); comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 4: Effect sizes for the mean change in schizophrenic symptom severity

The forest plot displays the effect sizes for all individual studies investigating the secondary outcome mean change in schizophrenic symptom severity measured by psychiatric rating scales (PANSS or BPRS total score); comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the standardized mean differences Hedges's g with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; n = number of participants.

Supplementary online Figure 5: Effect sizes for all-cause discontinuation (dropouts due to any reason)

The forest plot displays the effect sizes for all individual studies investigating all-cause discontinuation (dropouts due to any reason); comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 6: Effect sizes for dropouts due to inefficacy

The forest plot displays the effect sizes for the secondary outcome premature discontinuation (dropouts) due to inefficacy; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 7: Effect sizes for dropouts due to adverse effects

The forest plot displays the effect sizes for the secondary outcome premature discontinuation (dropouts) due to adverse effects; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 8: Effect sizes for the number of participants with at least one adverse effect

The forest plot displays the effect sizes for the secondary outcome number of participants with at least one adverse effect; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): AE = adverse effect; CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 9: Effect sizes for the number of participants with at least one extrapyramidal symptom

The forest plot displays the effect sizes for the secondary outcome number of participants with at least one extrapyramidal symptom (EPS); comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; EPMS = extrapyramidal side effect; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 10: Effect sizes for akathisia

The forest plot displays the effect sizes for the secondary outcome number of participants with akathisia; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 11: Effect sizes for dyskinesia

The forest plot displays the effect sizes for the secondary outcome number of participants with dyskinesia; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 12: Effect sizes for dystonia

The forest plot displays the effect sizes for the secondary outcome number of participants with dystonia; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 13: Effect sizes for rigor

The forest plot displays the effect sizes for the secondary outcome number of participants with rigor; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 14: Effect sizes for tardive dyskinesia

The forest plot displays the effect sizes for the secondary outcome number of participants with tardive dyskinesia (TD); comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants; TD = tardive dyskinesia.

Supplementary online Figure 15: Effect sizes for tremor

The forest plot displays the effect sizes for the secondary outcome number of participants with tremor; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 16: Effect sizes for the use of antiparkinson medication

The forest plot displays the effect sizes for the secondary outcome number of participants with use of antiparkinson medication; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 17: Effect sizes for hypotension

The forest plot displays the effect sizes for the secondary outcome number of participants with hypotension; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 18: Effect sizes for sedation

The forest plot displays the effect sizes for the secondary outcome number of participants with sedation; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 19: Effect sizes for weight gain

The forest plot displays the effect sizes for the secondary outcome number of participants with weight gain; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI). Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; n = number of participants.

Supplementary online Figure 20: Meta-regression investigating the impact of the haloperidol dose on effect sizes

This figure illustrates the unrestricted maximum-likelihood meta-regression with mean haloperidol dose in mg/day as continuous moderator. Investigation of the effects on the primary outcome (response to treatment) measured by the logarithmical binary effect size Mantel-Haenszel risk ratio (N=28, n=1270). Circle size reflects the weight a study obtained in this meta-regression. Slope=-0.00512, 95% CI: -0.00265 to 0.01289; p=0.196. Abbreviations: MH = Mantel-Haenszel.

Supplementary online Figure 21: Sensitivity analysis with application of a fixed-effects model

This forest plot displays the effect sizes for the sensitivity analysis: application of a fixed effects model instead of the random effects model; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI) for the pooled comparisons. Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; N = number of studies; n = number of participants.

Supplementary online Figure 22: Sensitivity analysis with exclusion of the non-blinded studies

This forest plot displays the effect sizes for the sensitivity analysis: exclusion of the studies that were not double-blind or the blinding was unclear (Lempérière et al. 1962; Nedopil and Ruther 1981; Parent and Toussaint 1983; Hogan and Awad 1992; Bastrup et al. 1993; Shalev et al. 1993; Bi 1994; Nishizono 1994; Cosar et al. 1999); comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI) for the pooled comparisons. Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; N = number of studies; n = number of participants.

Supplementary online Figure 23: Sensitivity analysis with exclusion of cross-over studies

This forest plot displays the effect sizes for the sensitivity analysis: exclusion of the studies that used a cross-over study design (Stewart et al. 1969; Marjerrison et al. 1971; Gerlach et al. 1985; Fux and Belmaker 1991; Shalev et al. 1993); comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI) for the pooled comparisons. Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; N = number of studies; n = number of participants.

Supplementary online Figure 24: Sensitivity analysis with exclusion of the studies incorporating mainly children and adolescents

This forest plot displays the effect sizes for the sensitivity analysis: exclusion of the studies that included mainly children (Farettra et al. 1970) and adolescents (Pool et al. 1970; Versiani et al. 1978) defined by mean age <18 years; comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI) for the pooled comparisons. Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; N = number of studies; n = number of participants.

Supplementary online Figure 25: Sensitivity analysis with exclusion of the studies investigating treatment-resistant schizophrenia

This forest plot displays the effect sizes for the sensitivity analysis: exclusion of the studies that included participants with treatment-resistant schizophrenia (Hall et al. 1968; Howard 1974; Teja et al. 1975; McCreadie and MacDonald 1977; Kinon et al. 1993; Shalev et al. 1993); comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI) for the pooled comparisons. Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; N = number of studies; n = number of participants.

Supplementary online Figure 26: Sensitivity analysis with exclusion of the studies with trial duration >3 months

This forest plot displays the effect sizes for the sensitivity analysis: exclusion of the studies with trial duration >3 months or unclear (Teja et al. 1975; Engelhardt et al. 1978; Abuzzahab and Zimmerman 1982; Nishikawa et al. 1984); comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI) for the pooled comparisons. Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; N = number of studies; n = number of participants.

Supplementary online Figure 27: Sensitivity analysis with exclusion of the studies carried out in China

This forest plot displays the effect sizes for the sensitivity analysis: exclusion of the studies carried out in China (Bi 1994); comparison: haloperidol versus other first-generation antipsychotics (FGAs). The forest plot illustrates the Mantel-Haenszel risk ratios with the 95% confidence intervals (CI) for the pooled comparisons. Abbreviations (alphabetical order): CI = confidence interval; FGA = first-generation antipsychotic drug; HAL = haloperidol; MH = Mantel-Haenszel; N = number of studies; n = number of participants.

Supplementary online Figure 28: funnel-plot visualization

In the funnel plot the logarithmical Mantel-Haenszel risk ratios of all included studies are plotted against the standard errors (SEs) (referring to the primary outcome). Based on the largely symmetrical arrangement of the single trials around the pooled effect size as equivalence line, there is no evidence for the presence of publication bias. Additionally, non-significant Egger's regression intercept test ($p=0.22$) suggests symmetry. Abbreviations: MH = Mantel-Haenszel.

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