Supplementary Table 1. Systematic review of S100B and HMGB1 levels in patients with schizophrenia and healthy controls

Study		N	Sex (M/F)	Age (yr)	S100B concentration (ng/L)±SD	Diagnosis	Location	Assay	Psychopathological state	Sample medication	Sample characteristics	Illness duration (yr)	Control characteristics
S100B													
Chen et al.,[73] (2017)	Sample	62	24/38	35.31±11.61	226±80	DSM-4 (SCID)	Serum	ELISA	PANSS: 83.32±10.17	Drug naïve (N=34), drug free (N=28)	All acute phase patients	3.9	Sex matched from local community
	Control	40	20/20	25.68±6.55	110±30								
Dai et al.,[74] (2020)	Sample	83	45/38	23.65±6.9	127.56±44.36	DSM-4 (SCID)	Serum	ELISA	PANSS: total not reported	All drug naïve	All first episode outpatients	0	Age and sex matched
	Control	60	32/28	24.6±3.6	107.41±29.84								
Gattaz et al.,[97] (2000)	Sample	23	16/7	36.0±9.0	440±270	DSM-4	Plasma	Luminometric assay	BPRS: 25.8±15.4, NSRS: 17.7±13.6	All medicated	All outpatients	17±7	NS
	Control	23	16/7	44±17.0	550±140								
Hendouei et al.,[75] (2016)	Sample	19	13/6	34.05±9.9	21.1±11.1	DSM-4-TR	Serum	ELISA	PANSS: 85.3±24	All medicated clozapine (N=6), risperidone (N=13)	All inpatients.	9.4±9.41	Age, gender, and BMI matched
	Control	25	18/7	34.2±8.30	26.4±16.8								
Hong et al.,[76] (2016)	Sample	41	18/23	37.0±11.30	303.09±34.76	ICD-10	Plasma	ELISA	PANSS: 80.29±29 9.22	All drug free ≥1 week prior to enrolment	All inpatients	11.6±8.93	Age and sex matched staff member and medical students
	Control	33	10/23	35.15±13.72	223±27.53								
Kozłowska et al.,[45] (2021)	Sample	68	45/23	38.5±10.7	308.4± 168.1	DSM-4 & ICD-10	Serum	ELISA	PANSS 65.20±15.80 CDSS: 2.76±3.38	All medicated: CAED: 746.5±642.2	All outpatients with chronic paranoid schizophrenia	NS	Age and sex matched from the local community
	Control	29	19/10	37.6±10.6	232.6±59.0								
Lara et al.,[77] (2001)	Sample	20	13/7	31±8	120±140	DSM-4	Serum	Luminometric assay	PANSS: 107±29	All drug free ≥1 week prior to commencement	Inpatients (N=14), outpatients (N=6)	NS	Age and sex matched
	Control	20	13/7	31±9	67±14								
Ling et al.,[78] (2007)	Sample	57	27/30	33.5±11.3	119±59	DSM-4 & ICD-10	Plasma	ELISA	PANSS: 77.8±13	All drug free ≥2 weeks prior to blood draw.	All inpatients	8.00±9.01	Age and sex matched volunteers from hospital staff
	Control	60	30/30	34.9±6.68	67±22								
Milleit et al.,[79] (2016)	Sample	17	6/11	33.9±9.7	85.8±21.7	DSM-4	Serum	Luminometric assay	PANSS: total NS	Drug naïve (N=10), unmedicated ≥4 days (N=7)	All inpatients	NS	NS
	Control	22	9/13	34.7±10.3	57±23								
Morera-Fumero et al.,[80] (2017)	Sample	65	36/29	36.7 ± 10.2	143.7 ± 210.7	DSM-4	Serum	ELISA	PANSS: total NS	Mostly medicated CAED: 757.7±400.0	All inpatients with acute psychotic relapse	12.3 ±10.0	Age and sex matched from research institute and colleagues.
	Control	65	46/19	39.6 ± 9.8	47.3 ± 23								
O'Connell et al.,[98] (2013)	Sample	97	68/29	45 ± 12.2	79.48 ± 39.8	DSM-4-TR	Serum	ELISA	BPRS: 31±9 SANS: 34±18	All medicated. CAED: 864 mg/d	All inpatients	NS	Age and sex matched from the same demographic
	Control	27	10/17	42.4 ± 10.3	67.78 ± 20.8								
Qi et al.,[81] (2009)	Sample	63	43/20	50.8 ± 6.8	359 ± 116	DSM-4	Serum	ELISA	PANSS: 59.8±13.1	All medicated. CAED:458±529 mg/d	All chronic schizophrenia inpatients	25.4±7.2	Age and gender matched from local community
	Control	50	29/21	49.6 ± 5.5	123 ± 50								
Rothermundt et al.,[82] (2001)	Sample	26	10/16	37.0±12.9	98±76	DSM-4	Serum	Luminometric assay	PANSS: 86.7±17.9	Drug free ≥6 months prior to commencement	All acute stage inpatients	9.96±10.35	Age and sex matched
	Control	26	10/16	37.0±12.9	34±17.5								
Rothermundt et al.,[83] (2004a)	Sample	21	17/4	32.5±13.0	65±31	DSM-4	Serum	Luminometric assay	PANSS: 97.7±25.6	Drug naïve (N=16), unmedicated ≥6 months (N=5)	All Inpatients. Acute episode inpatient (N=4)	NS	Age and sex matched from blood donation centre
	Control	21	17/4	32.2±11.8	38±8								
Rothermundt et al.,[84] (2004b)	Sample	98	56/42	42.1±11.1	73±32	ICD-10	Serum	Luminometric assay	PANSS: 82.5±17.1	Drug free ≥1 week prior to commencement	All chronic schizophrenia patients with primarily negative symptoms	NS.	Age and sex matched
	Control	98	56/42	42.1±11.1	44±15								
Rothermundt et al.,[85] (2007)	Sample	12	11/1	25.33±4.75	85±70	DSM-4 (SCID)	Serum	Luminometric assay	PANSS: 81±19.9	Drug naïve (N=9), Medicated (N=2)	All inpatients.	1.1 ± 1.3	Age and sex matched.
	Control	12	11/1	25.33±4.75	38±8								
Kim et al.,[86] (2007)	Sample	60	NS	37.0±3.5	140±84	DSM-4	Serum	Luminometric assay	PANSS: Total NS	Drug free (N=30) Medicated (N=30)	All inpatients.	15.0 ± 6.7	Age and sex matched.
	Control	30	13/17	37.0±3.5	76±18								
Šakić et al.,[87] (2016)	Sample	65	55/10	41.96±13.2	64.36±28.15	DSM-4-TR	Serum	ELISA	PANSS: 89.35±25.46	Drug naïve (N=12), Drug free ≥ 30 days (N=5), Medicated (N=48)	All inpatients.	1.7 ± 0.65	Age and sex matched
	Control	70	51/18	43.2±12.4	64.52±24.0								
Sarandol et al.,[88] (2007)	Sample	40	18/22	34.9±9.9	467±411	DSM-4	Serum	ELISA	SANS: 53.5±26.6, SAPS: 42.2± 21.3, BPRS: 42.2±21.3	Drug naïve (N=9), medication free ≥3 weeks prior to blood draw (N=31)	Inpatients (N=35) and outpatients (N=5)	6.73±6.3	Age and sex matched from hospital staff
	Control	35	17/18	33.5±9.2	235±152								
Schmitt et al.,[89] (2005)	Sample	41	24/17	63.3±7.0	132±43	DSM-4	Serum	Luminometric assay	SANS: 45.6±22.7, SAPS: 44.3±27.9, BPRS: 46.2±14.9	All medicated. CAED: 708±591.7	All inpatients with chronic schizophrenia	35.3±11.4	Age and sex matched
	Control	23	15/8	64±9.8	61±26								
Schroeter et al.,[90] (2003)	Sample	30	14/16	34.8±12.4	126.55±70.12	DSM-4 & ICD-10	Serum	Luminometric assay	BPRS: 43.5±12.6	Drug free (N=14), medicated (N=16) CAED: 363.1±248.8	All inpatients with chronic schizophrenia	8.9±8.8	Age and sex matched from hospital staff
	Control	15	8/7	34.2±5.6	112.8±31.8								
Schroeter et al.,[52] (2009)	Sample	20	9/11	34.6±12.7	73.4±72.1	DSM-4 & ICD-10	Serum	Luminometric assay	BPRS: 47.6±11.9	Drug free (N=5), medicated (N=15)	All inpatients	8.4±9.6	Age and sex matched from hospital
	Control	19	10/9	37.9±10.2	42.1±69.7								
Steiner et al.,[91] (2006)	Sample	12	7/5	24.0±7.0	90±30	DSM-4	Serum	Luminometric assay	PANSS: 87±15	Medicated (N=12)	All inpatients with first onset paranoid schizophrenia	1.75±0.9	Age and sex matched from cohort experiencing migraine
	Control	17	9/8	25.0±8.0	80±20								
Steiner et al.,[92] (2010)	Sample	26	17/9	34.7±11.3	72±38	DSM-4	Serum	ELISA	PANSS: 84.8±11.2	Medicated (N=15), medication free ≥6 weeks prior to enrolment (N=11)	All inpatients with acute onset schizophrenia	8±9	NS
	Control	32	20/12	34.4±10.8	52±18								
Uzbay et al.,[93] (2013)	Sample	18	11/7	37.4±3.0	7.81±10.6	DSM-4	Plasma	ELISA	PANSS: 87.17±3.13	All drug free ≥26 weeks	All inpatients: first episode inpatients (N=6)	9.83±2.37	NS
	Control	19	11/8	33.9±1.4	6.26±7.8								
Wiesmann et al.,[94] (1999)	Sample	20	8/12	35.7±10.7	165±138	DSM-4 & ICD-10	Plasma	Luminometric assay	PANSS: total NS	All medicated	All inpatients	8.3±1.1	Age and gender matched
	Control	20	NS	35.7±10.7	54±31								
Xiong et al.,[95] (2014)	Sample	278	170/108	34.2±10.5	20.02±9.95	DSM-4-TR	Serum	ELISA	PANSS: 70.6±15.8	Drug naïve (N= 84), medicated (N=194)	Commonest subtypes were paranoid (N=161) & residual (N=60)	1.8±2.1	Age, sex, and BMI matched
	Control	260	170/90	30.6±6.33	18.64±4.98								
Zhang et al.,[96] (2010)	Sample	162	99/63	40.1±8.3	445±164		Serum	ELISA	PANSS: 70.8	Drug naïve (N=80), medicated (N=82)	All inpatients. Early stage (N=80) and chronic, (N=82) disease courses	14.5±8.8	Recruited from local community
	Control	97	59/38	37.9±9.0	122±76	DSM-4 (SCID)							
HMGB1													
Kozłowska et al.,[45] (2021)	Sample	68	45/23	38.5±10.7	225.0±206.9	DSM-4 & ICD-10	Serum	ELISA	PANSS: 65.20±15.80, CDSS: 2.76±3.38	All medicated. CAED: 746.5±642.2	All outpatient with chronic, paranoid schizophrenia.	NS	Age and sex matched from the local community
	Control	29	19/10	37.6±10.6	116.0±83.3								
Mousa et al.,[46] (2021)	Sample	115	78/37	36.3±11.0	20.9±11.3	DSM-4-TR	Serum	ELISA	SANS: 73.1±14.7	All medicated. CAED: 761.0±267.1	55 partial responders to treatment, 60 non responders	NS	Recruited from local community
	Control	43	24/19	33.2±11.1	7.9±7.9								
Yilmaz et al.,[47] (2021)	Sample	59	40/19	38.0±7.7	2.23±0.52	DSM-5	Serum	ELISA	SANS: 19.3±7.9, BPRS: 13.5±7.8	All medicated	30 inpatients, 29 outpatients	10.6±6.0	Age and sex matched healthy controls
	Control	15	9/6	33.3±8.2	1.79±0.44								

This table depicts the patient characteristics, sample source, assays, medication and levels of DAMPs for each study listed. Age, age in years; BPRS, Brief Psychiatric Rating Scale; CAED, Chlorpromazine antipsychotic equivalent dose (mg/day); CDSS, Calagry Depression Scale for Schizophrenia; Control, healthy controls; DSM, Diagnostic and Statistics Manual of Mental Disorders; ELISA, enzyme linked immunosorbent assay; ICD, International Classification of Disease; Location, sample isolated from; NS, not stated; NSRS, Negative Symptom Rating Scale; PANSS, The Positive and Negative Symptom Scale; SANS, Scale for assessment of Negative Symptoms; SAPS, Scale for assessment of Positive Symptoms; SCID, Structured Clinical Interview for DSM; Sample, individuals diagnosed with schizophrenia; Sex M/F, number of males and females; TR, text revision; SD, standard deviation