

S2D Table. Individual primary study characteristics

Author	Year	Study design	Sample	Age	Male	KF*	Definition on hyperka	Definition on hypogly	Duration of monitor	Pretreatment [K+]	Pretreatment [glucos	Insulin (IU)	Insulin (IU/kg)	Dextrose (g)	[K+] reduction, mM	% Hypoglycaemia
Aljabri (12)	2019	RCS	90	62	48	Yes	>5.0	≤3.9	6	6	7	10	-	25	N/D	22
Aljabri (13)	2021	RCS	521	62	271	Yes	>5.0	≤3.9	6	6	8	10	-	25	N/D	2
Allon (14)	1990	PCOS	10	57	N/D	Yes	>5.0	N/D	1	6	5	10	-	25	-1.21	20
Allon (14)	1990	PCOS	12	57	N/D	Yes	>5.0	N/D	1	6	5	10	-	25	-0.65	75
Apel (9)	2014	RCS	221	51	18	Yes	N/D	<3.3	6	N/D	6	10	-	25	N/D	13
Beltrami-Moreira (15)	2020	PCS	160	68	78	Yes	N/D	≤3.9	12	N/D	N/D	5-10	N/D	N/D	N/D	18
Binz (16)	2020	RCS	1291	62	752	Yes	N/D	≤3.9	N/D	6	8	-	-	25	N/D	18
Blumberg (17)	1988	PCS	10	58	5	Yes	N/D	N/D	N/D	6	5	-	5u/kg/min	5mg/kg/min	-0.90	50
Boughton (18)	2019	RCS	662	71	617	Yes	N/D	≤3.9	N/D	6	6	10	-	20	-0.60	18
Brown (19)	2018	RCS	264	56	168	Yes	>5.0	≤3.9	8	6	9	8	0.1	24	-0.60	7
Brown (19)	2018	RCS	69	57	64	Yes	>5.0	≤3.9	8	6	9	9	-	26	-0.60	16
Chittineni (20)	2019	RCS	61	49	N/D	N/D	N/D	≤3.9	N/D	N/D	N/D	-	-	N/D	N/D	74
Chothia (21)	2014	RCT	10	40	5	Yes	>5.0	<3.0	N/D	6	6	10	-	50	-0.83	20
Coca (10)	2017	RCS	164	72	6	Yes	≥6.0	≤3.9	8	7	6	10	-	50	-1.37	6
Coca (22)	2017	CC	30	76	18	Yes	N/D	N/D	4	7	7	10	-	50	-0.86	10
Coca (22)	2017	CC	30	76	18	Yes	N/D	N/D	4	7	8	10	-	50	-0.82	3

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Crnobrnja (23)	2020	RCS	421	71	60	Yes	≥6.0	≤3.9	6	N/D	7	10	-	25	N/D	21
Diveley (24)	2021	RCS	90	N/D	N/D	Yes	>5.0	≤3.9	N/D	N/D	N/D	10	-	N/D	N/D	17
Diveley (24)	2021	RCS	49	N/D	N/D	No	>5.0	≤3.9	N/D	N/D	N/D	10	-	N/D	N/D	10
Dixon (25)	2016	RCS	57	71	N/D	N/D	N/D	<4.0	N/D	N/D	N/D	-	-	N/D	N/D	30
Dixon (25)	2016	RCS	59	69	N/D	N/D	N/D	<4.0	N/D	N/D	N/D	-	-	N/D	N/D	12
Do (26)	2019	RCS	1156	61	682	Yes	>5.0	≤3.9	N/D	6	7	0.1 lu/kg	0.105	N/D	N/D	18
Driver (27)	2016	RCS	433	N/D	N/D	N/D	>5.3	<2.8	2	N/D	N/D	10	-	34	N/D	8
Farina (28)	2018	RCS	120	60	69	Yes	>5.0	≤3.9	4	7	7	10	-	25	-1.00	16
Farina (28)	2018	RCS	120	62	61	Yes	>5.0	≤3.9	4	6	6	10	-	50	-1.10	8
Garcia (29)	2018	RCS	309	59	219	Yes	≥5.1	≤3.9	6	6	9	10	-	50	-0.90	11
Garcia (29)	2018	RCS	92	62	63	Yes	≥5.1	≤3.9	6	6	8	5	-	19	-0.81	9
Hain (30)	2020	N/D	105	62	N/D	Yes	N/D	≤3.9	3	6	7	10	-	50	-1.10	14
Humphrey (31)	2020	RCS	110	56	N/D	Yes	≥5.5	<4.0	6	6	N/D	-	-	N/D	-0.89	23
Humphrey (32)	2021	RCS	1284	72	804	Yes	≥5.5	<4.0	6	6	8	10	-	25	-0.86	19
Jacob (33)	2019	RCS	172	63	154	Yes	≥5.1	≤3.9	24	7	5	10	0.11	25	-2.10	20
Keeney (34)	2019	RCS	295	60	178	Yes	N/D	≤3.9	6	7	7	10	-	2	-1.13	16

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Keeney (34)	2019	RCS	147	65	76	Yes	N/D	≤3.9	6	7	7	5	-	2	-1.17	6
Kim (35)	1996	PCOS	8	52	6	Yes	>6.1	N/D	1	6	6	50	6	20	-1.10	0
Kocoglu (36)	2002	PCS	14	53	10	No	≥8.0	N/D	N/D	N/D	N/D	25	-	50	-0.08	0
Kocoglu (36)	2002	PCS	22	52	14	No	≥7.0	N/D	N/D	N/D	N/D	50	-	100	-1.78	36
Konowitz (37)	2019	RCS	1307	N/D	N/D	N/D	N/D	≤3.9	N/D	6	N/D	-	-	N/D	N/D	18
LaRue (38)	2017	RCS	542	62	272	Yes	>5.0	≤3.9	5	6	8	10	-	39	-1.00	29
LaRue (38)	2017	RCS	133	60	86	Yes	>5.0	≤3.9	5	6	7	5	-	34	-1.00	20
Lane (40)	1989	PCS	10	61	5	Yes	N/D	N/D	6	7	8	10	-	40	-1.00	20
Lane (40)	1989	PCS	10	62	4	Yes	N/D	N/D	6	7	7	10	-	40	-1.50	0
Lim (41)	2019	RCS	96	N/D	N/D	N/D	≥5.5	≤3.9	12	N/D	N/D	-	-	N/D	N/D	19
Ljutic (42)	1993	PCS	9	N/D	5	Yes	>5.0	<3.0	1	6	6	10	-	25	-0.76	22
Macmaster (43)	2017	N/D	100	N/D	N/D	N/D	≥5.1	≤3.9	6	N/D	N/D	10	-	N/D	N/D	23
Macmaster (44)	2018	N/D	146	N/D	N/D	N/D	≥5.1	≤3.9	6	N/D	N/D	-	-	50	N/D	10
Macmaster (44)	2018	N/D	225	N/D	N/D	N/D	≥5.1	≤3.9	6	N/D	N/D	10	-	25	N/D	21
Mahajan (45)	2001	PCS	15	N/D	N/D	N/D	≥6.0	<3.3	6	7	N/D	-	-	N/D	-0.80	7
Mansour (46)	2019	RCS	142	N/D	N/D	Yes	>5.4	≤3.9	6	N/D	N/D	-	-	N/D	N/D	18

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McNicholas (47)	2017	RCS	63	50	41	Yes	≥6.0	≤3.9	6	7	10	5–10	–	25	N/D	11
McNicholas (47)	2017	RCS	76	56	53	Yes	≥6.0	≤3.9	6	7	7	5–10	–	25	–	29
Meloy (48)	2021	RCS	128	N/D	N/D	Yes	≥5.5	≤3.9	6	N/D	N/D	5–10	–	2	N/D	42
Moussavi (49)	2020	RCS	223	60	115	Yes	>5.0	≤3.9	12	6	6	5	0.07	25	-0.94	11
Moussavi (49)	2020	RCS	477	62	259	Yes	>5.0	≤3.9	12	6	8	10	0.14	25	-1.11	18
Mushtaq (50)	2006	PCS	5	51	N/D	Yes	≥6.0	N/D	6	7	8	10	–	25	-1.10	0
Mushtaq (50)	2006	PCS	5	52	N/D	Yes	≥6.0	N/D	6	7	8	10	–	25	-0.80	0
Ngugi (51)	1997	RCT	10	N/D	N/D	Yes	>5.0	N/D	8	N/D	7	10	–	25	-0.90	0
Ngugi (51)	1997	RCT	10	N/D	N/D	Yes	>5.0	N/D	8	N/D	5	10	–	25	-1.39	20
Ngugi (51)	1997	RCT	10	N/D	N/D	Yes	>5.0	N/D	8	N/D	7	10	–	25	-1.19	0
Peacock (52)	2018	PCS	130	56	124	Yes	≥5.5	N/D	4	6	N/D	–	–	N/D	-1.00	6
Pearson (53)	2021	RCS	182	64	108	Yes	N/D	≤3.9	6	6	8	10	–	25	-0.60	19
Pearson (53)	2021	RCS	204	65	125	Yes	N/D	≤3.9	6	6	8	10	–	25	-0.90	18
Pierce (54)	2015	RCS	78	58	71	Yes	≥6.0	≤3.9	8	6	N/D	10	–	25	-1.08	17
Pierce (54)	2015	RCS	71	62	63	Yes	≥6.0	≤3.9	8	6	N/D	5	–	25	-1.10	20
Rafique (55)	2020	RCT	15	48	7	Yes	≥6.0	≤3.9	N/D	7	6	5	–	N/D	-0.60	20

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Schaefers (56)	2012	RCS	219	53	15	Yes	≥6.0	≤3.9	6	N/D	7	5–10	N/D	0–50	N/D	9
Scott (57)	2018	RCS	409	57	N/D	Yes	>5.3	≤3.9	3	6	6	10	–	40	N/D	17
Szwak (58)	2017	RCS	141	N/D	N/D	Yes	N/D	N/D	N/D	N/D	N/D	–	–	N/D	-0.80	26
Tee (59)	2020	RCS	132	63	19	Yes	(≥6.5 or ≥6.4)	<4.0	6	6	6	10	–	20–25	-0.77	21
Tran (60)	2020	PCS	225	59	147	Yes	≥5.1	≤3.9	6	6	9	10	0.12	25	-0.73	21
Tran (60)	2020	PCS	145	57	85	Yes	≥5.1	≤3.9	6	6	10	7	0.09	25	-0.95	10
Verdier (61)	2021	RCS	87	61	48	Yes	>5.0	≤3.9	6	6	8	5	–	44	-0.80	9
Verdier (61)	2021	RCS	87	63	52	Yes	>5.0	≤3.9	6	6	8	10	–	47	-0.70	20
Wheeler (62)	2016	RCS	66	56	37	Yes	N/D	≤3.9	24	6	9	10	–	50	-1.35	20
Wheeler (62)	2016	RCS	66	62	41	Yes	N/D	≤3.9	24	6	8	7	0.1	50	-1.34	11
Williams (63)	1988	CS	N/D	39	2	Yes	N/D	N/D	N/D	7	N/D	14	–	20	N/D	N/D
Wu (64)	2015	RCS	191	61	16	Yes	N/D	≤3.9	6	N/D	8	10	–	25	N/D	14
Yang (65)	2019	RCS	62	67	40	Yes	≥5.5	≤3.9	24	6	6	10	0.12	50	-0.80	26
Yang (65)	2019	RCS	72	71	46	Yes	≥5.5	≤3.9	24	6	7	10	0.12	25	-0.90	22
Zuern (66)	2020	RCS	90	59	62	Yes	>5.0	≤3.9	4	6	7	10	0.11	25	-0.80	28
Zuern (66)	2020	RCS	75	61	44	Yes	>5.0	≤3.9	4	6	7	9	0.1	25	-0.60	13

*Kidney failure includes acute kidney injury, chronic kidney disease and end-stage kidney disease. †RCS, retrospective cohort study; ‡PCOS, Prospective cross-over study; §PCS, prospective cohort study; ¶RCT, Randomised control trial; ††CC, case-control study; #CS, Case series; **K, Potassium.