Supplementary Table 1. Summary of available studies included in the present meta-analysis

Study	Location	GDM diagnostic criteria	GDM characteristics	Non-GDM characteristics	Neonatal outcome in women with vs. without GDM, %
Capula et al. (2013) [81]	Italy	IADPSG	*n*=171, Age: 30.8 (3.2), BMI: 22.8 (1.9)	*n*=367, Age: 29.3 (3.5), BMI: 21.4 (2.0)	Dystocia: 0 vs. 0.3; Admission to NICU: 6.4 vs. 1.6, RDS: 1.8 vs. 0.5; Macrosomia: 1.2 vs. 1.6; LGA: 8.8 vs. 1.9; SGA: 2.9 vs. 1.6; Hypoglycaemia: 0.6 vs. 0; Hyperbilirubinemia: 2.4 vs. 0.8; Bone fracture: 1.2 vs.0; Preterm delivery: 8.2 vs. 3.5
Karmon et al. (2009) [82]	Israel	CC	*n*=10,227	*n*=174,029	Stillbirth: 0.4 vs. 0.7; Macrosomia: 9.4 vs. 4.5; Preterm delivery: 8.3 vs. 7.7
Moses et al. (1995) [86]	Australia	ADIPS	*n*=138, Age: 29.5 (5.3)	*n*=144, Age: 28.2 (5.4)	Macrosomia: 8 vs. 17.4
Waters et al. (2016) [85]	North America	1) IADPSG 2) CC	1) *n*=878, Age: 31.0 (5.6), BMI: 31.5 (6.4) 2) *n*=261, Age: 32.3 (5.3), BMI: 31.6 (5.8)	*n*=5,020, Age: 30.1 (5.8), BMI: 28.2 (4.9)	1) Birth weight 90th percentile: 15.3 vs. 7.9 NICU admission: 8.1 vs. 6.3; Hyperbilirubinemia: 6.5 vs. 5; Preterm delivery: 7.7 vs. 6; Shoulder dystocia or birth injury: 3 vs. 1.8; Neonatal hypoglycemia: 2.9 vs. 1.3 2) Birth weight 90th percentile: 19.2 vs. 7.9; NICU admission: 9.6 vs. 6.3; Hyperbilirubinemia: 8.5 vs. 5; Preterm delivery: 13.8 vs. 6; Shoulder dystocia or birth injury: 2.3 vs. 1.8; Neonatal hypoglycemia: 3.1 vs. 1.3
Gu et al. (2019) [84]	China	WHO 1999	1) GDM with hypertensive disorders of pregnancy: *n*=91, Age: 33.8 (3.59), Pre-pregnancy BMI: 25.1 (3.64) 2) GDM without hypertensive disorders of pregnancy: *n*=1,172, Age: 33.3 (3.49), Pre-pregnancy BMI: 22.9 (3.24)	Non-GDM with hypertensive disorders of pregnancy: *n*=261, Age: 32.9 (2.68), Pre-pregnancy BMI: 22.2 (3.04) Non-GDM without hypertensive disorders of pregnancy: *n*=261, Age: 32.9 (2.84), Pre-pregnancy BMI: 21.4 (2.96)	1) Macrosomia: 28.6 vs. 7.4 2) Macrosomia: 19.1 vs. 11.2
Shand et al. (2008) [83]	Australia	ADIPS	*n*=16,727	*n*=349,933	Stillborn: 0.3 vs. 0.3; Birth trauma: 3 vs. 2.9; Neonatal hypoglycaemia: 19.1 vs. 1.6; Admission to NICU: 2.4 vs. 1.7; Birth weight percentile <10th centile: 8.5 vs. 9.8; Birth weight percentile >90th centile: 15.9 vs. 10.4
Anderberg et al. (2010) [80]	Sweden	WHO 1999	*n*=306, Age: 32 (18–46)	*n*=329, Age: 31 (20–42)	Born <37 gestational weeks: 8.9 vs. 2.7; LGA: 8.5 vs. 3.9; SGA: 2 vs. 1.5; Neonatal intensive care >1 day: 18.5 vs. 4.2
Avalos et al. (2013) [79]	Ireland	IADPSG	*n*=622, Age: 32.8	*n*=4,225, Age: 31 (4.9)	GDM without risk factor vs. GDM with risk factor vs. Non-GDM LGA: 16 vs. 24 vs. 15; NICU: 23 vs. 27 vs. 9
Wahabi et al. (2017) [78]	Saudi Arabia	WHO 2013	*n*=2,354, Age: 31.5 (5.9)	*n*=6,951, Age: 29.5 (5.7)	Macrosomia ≥4.0 kg: 4.8 vs. 2.5; Stillbirth: 0.9 vs. 0.9; Neonatal admission to NICU: 4.7 vs. 4.1
Meek et al. (2015) [77]	UK	1) IADPSG 2) NICE	1) *n*=387, Age: 32.6, BMI: 27.4 2) *n*=261, Age: 32.1, BMI: 25.5	*n*=2,406, Age: 31.4, BMI: 26	1) LGA: 29.7 vs.16.9; SGA: 6.4 vs. 9.6; Macrosomia: 28.9 vs. 16.8; Stillbirth: 0.3 vs. 0.2; Preterm: 7.5 vs. 5.3; Infant admission to NICU: 5.7 vs. 5.9 2) LGA: 11.5 vs.16.9; SGA: 12.6 vs. 9.6; Macrosomia: 9.2 vs. 16.8; Stillbirth: 0 vs. 0.2; Preterm: 8 vs. 5.3; Infant admission to NICU: 7.3 vs. 5.9
Boghossian et al. (2014) [76]	USA	ICD-9	*n*=1,279, Age:30.3 (4.9); Pre-pregnancy BMI: 28.9 (7.2)	*n*=58,224, Age: 28.1 (4.5), Pre-pregnancy BMI: 24.9 (5.6)	Preterm <37 wk: 11.4 vs. 7.3; SGA: 5.2 vs. 5.8; LGA: 17.1 vs. 9.2; Macrosomia: 11.8 vs. 7.4; Jaundice: 22.1 vs. 19; Shoulder dystocia: 3.1 vs. 2.2; Birth injury: 0.86 vs. 0.84; NICU admission: 12.4 vs. 7.6; Hypoglycemia: 1.6 vs. 1.9; RDS: 4.9 vs. 3.2; Stillbirth/neonatal mortality: 0.47 vs. 0.44

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Supplementary Table 1. Continued

Study	Location	GDM diagnostic criteria	GDM characteristics	Non-GDM characteristics	Neonatal outcome in women with vs. without GDM, %
Kawakita et al. (2017) [75]	USA	ICD-9	*n*=11,327, Age: 30.8 (6.0), BMI: 34.1 (7.5)	*n*=208,355, Age: 27.4 (6.1), BMI: 30.6 (6.1)	RDS:4 vs. 3; Stillbirth: 0.4 vs. 0.4; NICU admission: 17.2 vs. 11.5
Brand et al. (2018) [74]	UK	Modified WHO 1999	White European: *n*=210, Age: 30.2 (5.4), BMI: 28.6 (6.3) South Asian: *n*=622, Age: 30.7 (5.3), BMI: 28.2 (5.8)	White European: *n*=4,537, Age: 26.6 (6.0), BMI: 26.5 (5.9) South Asian: *n*=5,336, Age: 27.7 (5.0), BMI: 25.2 (5.3)	White European SGA (<10th): 4.3 vs. 8.1; LGA (>90th):18.1 vs. 14.8 South Asian SGA (<10th): 11.4 vs. 16.7; LGA (>90th): 10.5 vs. 6.6
Kaul et al. (2015) [73]	Canada	CDA, 2013	GDM only: *n*=7,332, Age: 31.9 (5.5) GDM and overweight: *n*=1,399, Age: 31 (5.2)	*n*=213,765, Age: 28.6 (5.6)	GDM only vs. GDM and overweight vs. No GDM, not overweight LGA: 12.1 vs. 28.7 vs. 8.3; NICU stay: 16 vs. 20.2 vs. 10
Chen et al. (2019) [72]	Canada	ADA, 2003	First nations: *n*=1,828 Non-indigenous: *n*=1045,248	First nations: *n*=219,720 Non-indigenous: *n*=219,720	1) Preterm: 8.4 vs. 6.6; SGA: 1.9 vs. 4; LGA: 44 vs. 21.7 2) Preterm: 8.5 vs. 6.2; SGA: 7.7 vs. 8.7; LGA: 14.7 vs. 9
Feng et al. (2017) [71]	China	IADPSG	*n*=2,927	*n*=11,814	Macrosomia: 9.67 vs. 7.29; LGA: 9.33 vs. 5.87; Preterm birth: 6.29 vs. 4.98; SGA: 3.93 vs. 5.17
Kgosidialwa et al. (2015) [70]	Ireland	IADPSG	*n*=567, Age: 33.4 (4.9), BMI: 30.5 (6.1)	*n*=2,499, Age: 31.5 (5.2), BMI: 26.7 (4.8)	NICU: 15.5 vs. 7.6; LGA: 12.5 vs. 15.7; Macrosomia: 13.6 vs. 20.6; SGA: 4.1 vs. 5.2; Hypoglycemia: 3.2 vs. 0.3; Shoulder dystocia: 1.6 vs. 1.6; Prematurity: 5.5 vs. 3.4
Donovan et al. (2017) [69]	Canada	1) CDA 2) IADPSG	HAPO 1.75: *n*=4,308, Age: 31.2 (5.1) HAPO 2-1: *n*=5,528, Age: 31.6 (5.2) HAPO 2-2: *n*=3,252, Age: 32.1 (5.2)	Normal 50 g screen: *n*=144,191, Age: 28.8 (5.3) Normal 75 g OGTT: *n*=21,248, Age: 30.3 (5.3)	Normal 50 g screen LGA: 8.2; SGA: 9.7; Stillbirth: 0.2; Preterm: 6.3 Normal 75 g OGTT LGA: 10.5; SGA: 9.7; Stillbirth: 0.3; Preterm: 7.6 HAPO 1.75 LGA: 14.2; SGA: 8.3; Stillbirth: 0.3; Preterm: 9.4 HAPO 2-1 LGA: 11.8; SGA: 9.4; Stillbirth: 0.4; Preterm: 10 HAPO 2-2 LGA: 16.5; SGA: 8.5; Stillbirth: 0.2; Preterm: 12.6
Kieffer et al. (1999) [68]	Michigan	NDDG	*n*=19, Age: 29.4 (6.2), BMI: 28.7 (5.7)	*n*=353, Age: 24.79 (4.85), BMI: 25.1 (4.21)	SGA: 5.3 vs. 5.1; LGA: 21.1 vs.13
Ekeroma et al. (2015) [67]	New Zealand	1) NZSSD 2) IADPSG 3) ADIPS	1) *n*=381, Age: 31.7 (5.5), BMI: 31.8 (10.8) 2) *n*=238, Age: 31.4 (5.8), BMI: 32.9 (11.7) 3) *n*=608, Age: 31.5 (5.4), BMI: 30.5 (9.8)	*n*=1,672, Age: 30.0 (5.7), BMI: 30.7 (9.1)	1) Stillbirths: 0 vs. 1; Pre-term: 6 vs. 5; NICU admission: 8 vs. 6 2) Stillbirths: 0 vs. 1; Pre-term: 7 vs. 5; NICU admission: 6 vs. 6 3) Stillbirths: 0 vs. 1; Pre-term: 5 vs. 5; NICU admission: 8 vs. 6
Aung et al. (2015) [66]	Cook Islands	Modified IADPSG	*n*=94, Age: 36 (28–40), BMI: 34 (30–39)	*n*=28, Age: 24.79 (4.85), BMI: 31 (26–36)	Pre-term (n): 2 vs. 6; Admitted NICU (n): 8 vs. 22; Birth weight ≥4,000 g: 21 vs. 14
Erjavec et al. (2016) [65]	Croatia	1) WHO 1999 2) IADPSG	1) *n*=953, Age: 30.88 (5.23), BMI: 25.84 (5.28) 2) *n*=1,829, Age: 31.34 (5.19), BMI: 26.03 (5.64)	1) *n*=41,703, Age: 28.77 (5.23), BMI: 23.38 (3.99) 2) *n*=37,263, Age: 29.49 (5.33), BMI: 23.38 (4.11)	1) Birth weight >4,000 g: 17.2 vs. 11.9 2) Birth weight >4,000 g: 16.8 vs. 11.2

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Supplementary Table 1. Continued

Study	Location	GDM diagnostic criteria	GDM characteristics	Non-GDM characteristics	Neonatal outcome in women with vs. without GDM, %
Gillespie et al. (2013) [64]	Ireland	WHO 2006	*n*=354, Age: 35.4 (6), BMI: 30.8 (7)	*n*=4,018, Age: 34.7 (5), BMI: 26.9 (5)	Neonatal unit admission: 28.7 vs. 10.1
Gortazar et al. (2019) [63]	Spain	NDDG	*n*=35,729, Age: 33.42	*n*=704,148, Age: 31.27	Macrosomia: 8.62 vs. 5.91; LGA: 18.33 vs. 12.71; SGA: 8.07 vs. 8.81; Preterm birth: 15.66 vs. 12.04
Zamstein et al. (2018) [62]	Israel	NDDG	GDM A1: *n*=9,460, Age: 32.1 (5.8) GDM A2: *n*=724, Age: 33.7 (5.6)	*n*=206,013, Age: 28 (5.7)	GDM A1 vs. GDM A2. vs. Normal SGA: 2.3 vs. 4.4 vs. 1.5; LGA: 11 vs. 18 vs. 3.8; Macrosomia: 10 vs. 13.3 vs. 4.4
Hedderson et al. (2003) [61]	California	1) NDDG 2) CC	1) *n*=1,523 2) *n*=840	*n*=38,515	1) SGA: 9.5 vs. 10.4; LGA: 15.4 vs. 9.2; Macrosomia: 16.8 vs. 13.9 2) SGA: 8.1 vs. 10.4; LGA: 19.4 vs. 9.2; Macrosomia: 23.4 vs. 13.9
Hosseini et al. (2018) [101]	Iran	IADPSG	Early-onset GDM: *n*=93, Age: 30.7 (4.6), Pre-pregnancy BMI: 26.5 (4.2) Late-onset GDM: *n*=78, Age: 31.1 (4.9), Pre-pregnancy BMI: 26.2 (4.7)	*n*=758, Age: 28.8 (4.6), Pre-pregnancy BMI: 24.2 (4.1)	Early-onset GDM vs. Late-onset GDM vs. Normal Macrosomia: 6.5 vs. 7.7 vs. 1.5; Preterm birth: 11.8 vs. 9 vs. 7.1; NICU admission: 12.9 vs. 3.8 vs. 4.4; Stillbirth: 0 vs. 0 vs. 0.3; Neonatal respiratory distress: 14 vs. 3.8 vs. 4.9
Hosseini et al. (2018) [101]	Iran	1) IADPSG 2) CC	1) *n*=78, Age: 18–45 2) *n*=35, Age: 18–45	1) *n*=758, Age: 18–45 1) *n*=801, Age: 18–45	1) Macrosomia (OR), 4.9; Preterm delivery (OR), 0.96 2) Macrosomia (OR), 13.3; Preterm delivery (OR), 0.65
Jain et al. (2016) [58]	India	DIPSI	*n*=8,000	*n*=7,641	Stillbirth: 3.2 vs. 1.3; LGA: 9 vs. 0.83; Jaundice: 5 vs. 1
Morikawa et al. (2017) [57]	Japan	IADPSG	*n*=13,037	*n*=223,108	Stillbirth: 46/68 vs. 1,562/2,001
Leybovitz-Haleluya et al. (2018) [56]	Israel	ACOG	GDM A1: *n*=9,460, Age: 32.1 (5.8) GDM A2: *n*=724, Age: 33.7 (5.6)	*n*=206,013, Age: 28 (5.7)	GDM A2 vs. GDM A1 vs. Normal SGA: 1.5 vs. 2.3 vs. 4.4; Macrosomia: 13.3 vs. 10 vs. 4.4; Preterm labor (<37 wk): 14.1 vs. 7.9 vs. 6.2; Non-reassuring fetal heart rate monitoring: 5.4 vs. 5.5 vs. 5
Jacobson et al. (1989) [55]	California	NDDG	*n*=97, Age: 28.8 (0.5), BMI: 27.6 (0.8)	*n*=2,107, Age: 26.3 (0.1), BMI: 22.8 (0.1)	LGA: 32 vs. 17.9; Hypoglycemia: 11.3 vs. 0.7; Hyperbilirubinemia: 10.3 vs. 1.8; Respiratory distress syndrome: 1 vs. 2.1; Stillborn: 0 vs. 1.8; Preterm labor: 6.2 vs. 7.1; Shoulder dystocia: 0 vs. 2
Schwartz et al. (1999) [54]	Washington	1) NDDG 2) CC	1) *n*=284 2) *n*=154	*n*=223,108	1) Stillbirth: 0.4 vs. 0.2; Birth weight ≥4,000: 18.2 vs. 16.5; Preterm birth: 6.3 vs. 4.4 2) Stillbirth: 0.6 vs. 0.2; Birth weight ≥4,000: 24.2 vs. 16.5; Preterm birth: 4.9 vs. 4.4
Pan et al. (2015) [53]	China	1) WHO 1999 2) IADPSG	1) *n*=257, Age: 29 (2.6), Pre-pregnancy BMI: 22.9 (3.5) 2) *n*=429, Age: 28.8 (2.9), Pre-pregnancy BMI: 23.9 (4)	*n*=16,173, Age: 28.4 (2.8), Pre-pregnancy BMI: 22.1 (3.3)	1) Stillbirth: 0.4 vs. 0.7; LGA: 11.6 vs. 9.5; Birth weight ≥40 kg: 8 vs. 8.6 2) Stillbirth: 0.2 vs. 0.7; LGA: 20.5 vs. 9.5; Birth weight ≥40 kg: 17.4 vs.8.6
Son et al. (2015) [52]	Korea	ICD-10	*n*=78,716, Age: 15–49	*n*=1,171,575, Age: 15–49	Preterm delivery: 2.96 vs. 2.04

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Supplementary Table 1. Continued

Study	Location	GDM diagnostic criteria	GDM characteristics	Non-GDM characteristics	Neonatal outcome in women with vs. without GDM, %
von Katterfeld et al. (2012) [51]	Australia	ADIPS	Australian born *n*=4,765 CALD *n*=1,686 Non-CALD *n*=1,273	Australian born: *n*=142,537 CALD: *n*=23,541 Non-CALD: *n*=31,814	Australian born LGA: 14.6 vs. 10.3; Transfer to specialist care: 4 vs. 3.4; Preterm birth: 9.2 vs. 6.1; Shoulder dystocia: 2.5 vs. 1.7 CALD LGA: 13.2 vs. 10.6; Transfer to specialist care: 1.9 vs. 1.7; Preterm birth: 8.2 vs. 6.1; Shoulder dystocia: 2.6 vs. 1.7 Non-CALD LGA: 9.2 vs. 6.9; Transfer to specialist care: 4 vs. 2.9; Preterm birth: 8.3 vs. 6; Shoulder dystocia: 2.4 vs. 1.8
Savona-Ventura et al. (2013) [50]	Mediterranean countries	ADA 2003	*n*=112	*n*=1,139	Premature delivery <36 wk: 15.2 vs. 8.7; Shoulder dystocia: 0 vs. 0.3; Birth weight >4,000: 9.8 vs. 6.6; Respiratory distress syndrome: 7.1 vs. 4.8; Jaundice: 7.1 vs. 10.5; NICU admissions: 7.1 vs. 4; Prepartum death: 0 vs. 0.5
Sacks et al. (2015) [49]	California	IADPSG	1) GDM-1: *n*=771, Age: 30.9 (5.6) 2) GDM-2: *n*=1,121, Age: 31 (5.7)	*n*=7,943, Age: 26.3 (0.1)	GDM-1 vs. GDM-2 vs. Normal LGA: 15.6 vs. 20.2 vs. 9.9; Shoulder dystocia: 2.5 vs. 3.7 vs. 2.2; Respiratory distress: 1.8 vs. 2.5 vs. 1.6; Hyperbilirubinemia: 20.1 vs. 22.2 vs. 19.8; Neonatal hypoglycemia: 0.6 vs. 2.1 vs. 0.5; Preterm delivery: 6.9 vs. 10.8 vs. 6.2
Soliman et al. (2018) [48]	Qatar	IADPSG	*n*=3,027	*n*=8,995	Hypoglycemia: 3 vs. 0.6; Phototherapy: 8.9 vs. 7.2; Preterm: 9 vs. 6.4; Macrosomia: 6.8 vs. 5; NICU: 16 vs. 12.1; Stillborn: 0.3 vs. 0.8
Koivunen et al. (2017) [47]	Finland	Finland national criteria	*n*=6,679, Age: 31.02 (5.45), BMI before pregnancy: 28.2 (6.11)	*n*=52,386, Age: 29.39 (5.27), BMI before pregnancy: 23.8 (4.36)	LGA: 4.1 vs. 1.8; Admitted to neonatal ward: 12.9 vs. 7.9; Hypoglycemia: 22.1 vs. 2.7; Neonatal RDS: 0.2 vs. 0.3; Hyperbilirubinemia: 4.9 vs. 3.4; Fracture of the clavicle: 0.8 vs. 0.7; Erb's or Klumpke's palsy: 0.3 vs. 0.1 Diet 2010 vs. Insulin 2010 LGA: 3.7 vs. 7.1; Hypoglycemia: 20.4 vs.33.3; Neonatal RDS: 0.2 vs. 0.3; Transient tachypnea: 1.8 vs. 1.5; Hyperbilirubinemia: 4.4 vs. 7.7; Fracture of the clavicle: 0.9 vs. 0.3; Erb's or Klumpke's palsy: 0.3 vs. 0.3; Preterm births: 5.2 vs. 4.1
Xiong et al. (2001) [46]	Canada	CDA	*n*=2,755	*n*=108,664	Macrosomia: 9.3 vs. 5.9; SGA: 3.3 vs. 3.5; LGA: 10.3 vs. 3.1; Still birth: 0.3 vs. 0.3; Preterm birth: 10.4 vs. 7.5
Oster et al. (2014) [45]	Canada	CDA	*n*=1,224, Age: 28.8 (6.27)	*n*=26,793, Age: 24.7 (5.8)	High birth weight: 30 vs. 16.7; Stillbirth: 1.7 vs. 1.2; Neonatal intensive care unit admission: 16.1 vs. 8.6; Preterm: 16 vs. 9.2
Sugaya et al. (2000) [44]	Japan	1) JSOG 2) WHO 1998	1) *n*=55, Age: 29.7 (4.3), BMI: 26.2 (3.4) 2) *n*=51, Age: 32.8 (4.3), BMI: 26.5 (4.3)	*n*=281, Age: 30 (4.7), BMI: 25.5 (3.3)	1) HFD, birth weight >90: 14 vs. 7; LFD, birth weight <10:2 vs. 7; respiratory distress: 13 vs. 3; hyperbilirubinemia: 21 vs. 9 2) HFD, birth weight >90: 11 vs. 7; LFD, birth weight <10: 8 vs. 7; respiratory distress: 2 vs. 3; hyperbilirubinemia: 3 vs. 9
Fraser et al. (1994) [43]	Israel	NDDG	1) Jewish: *n*=346, Age: 27.9 (6.1) 2) Bedouin: *n*=96, Age: 33.4 (6.2)	1) Jewish: *n*=504, Age: 28.3 (5.4) 2) Bedouin: *n*=320, Age: 27.9 (6.1)	1) Jaundice: 11 vs. 6.2; Macrosomia: 9.2 vs. 4; Birth trauma: 3.8 vs. 1.2 2) Jaundice: 8.3 vs. 5; Macrosomia: 13.7 vs. 3.2; Birth trauma: 3.1 vs. 1.3
Kieffer et al. (2006) [42]	USA	ADA 2003	*n*=68, Age: 28.6 (0.6), BMI: 25.7 (0.2)	*n*=933, Age: 24.8 (0.2), BMI: 28.4 (0.8)	Still birth: 0 vs. 0.7; weighed 4,000 g: 13.2 vs. 8.8; Preterm birth: 19.1 vs. 5.9

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Supplementary Table 1. Continued

Study	Location	GDM diagnostic criteria	GDM characteristics	Non-GDM characteristics	Neonatal outcome in women with vs. without GDM, %
Mahanta et al. (2014) [41]	India	Indian national criteria or modifies WHO 2006	*n*=28	*n*=749	Still birth: 0 vs. 0.7
Sletner et al. (2017) [40]	Norway	WHO 1999	Europe Mild: *n*=30, Age: 31.2 (29.5), BMI: 25.5 (23.8, 27.2) Moderate/severe: *n*=9, Age: 30.6 (27.6, 33.5), BMI: 30.5 (27.4, 33.6) South Asia Mild: *n*=9, Age: 30.7 (28.3, 33.0), BMI: 25.3 (23.2, 27.5) Moderate/severe: *n*=4,724, Age: 30.4 (28.0, 32.7), BMI: 22.7 (20.6, 24.9)	Europe: *n*=310, Age: 30.6 (30.1, 31.1), BMI: 24.3 (23.8, 24.8) South Asia: *n*=156, Age: 28.4 (27.7, 29.1), BMI: 23.7 (23.0, 24.3)	Europe Mild vs. Moderate/Severe vs. Non-GDM SGA: 13 vs. 0 vs. 8; LGA: 17 vs. 22 vs. 9; Preterm delivery: 13 vs. 11 vs. 4 South Asia Mild vs. Moderate/Severe vs. Non-GDM SGA: 0 vs. 21 vs. 26; LGA: 0 vs. 7 vs. 3; Preterm delivery: 15 vs. 0 vs. 7
Kong et al. (2019) [39]	Finland	ICD-9	*n*=98,568	*n*=542,735	LGA: 5.4 vs. 1.9; Premature offspring: 5.1 vs. 5.3
van Hoorn et al. (2002) [38]	Australia	ADIPS	*n*=51, Age: 30.9 (5.7), BMI: 31.5 (9.1)	*n*=258, Age: 24.9 (6.3), BMI: 25.5 (5.9)	Macrosomia: 7.8 vs. 7
Aberg et al. (2001) [37]	Sweden	Swedish national criteria	*n*=116, Age: 15–49	*n*=12,266, Age: 15–49	Deliveries at <37 wk: 8.4 vs. 5.7; birth weight of ≥4,500: 9.9 vs. 4.5; Stillborn (n): 2 vs. 0
Su et al. (2019) [36]	China	China national criteria	Underweight: *n*=1,466, BMI: 17.55 (0.79) Normal weight: *n*=6,905, BMI: 20.80 (1.21) Overweight: *n*=2,220, BMI: 23.86 (0.57) Obese: *n*=2,252, BMI: 27.21 (2.15)	Underweight: *n*=12,336, BMI: 17.54 (0.79) Normal weight: *n*=36,935, BMI: 20.54 (1.2) Overweight: *n*=6,654, BMI: 23.82 (0.56) Obese: *n*=4,730, BMI: 26.97 (1.97)	Preterm birth (aOR), 1.41 (1.29–1.55); LGA (aOR), 1.36 (1.29–1.44); SGA (aOR), 0.84 (0.75–0.95); Macrosamia (aOR), 1.59 (1.40–1.80)
Metcalfe et al. (2017) [35]	Canada	ICD-10	*n*=149,780	*n*=2,688,231	Preterm birth (<37 wk) (rate per 100 deliveries): 10.51 vs. 6.73
Carr et al. (2011) [34]	USA	ICD-9, 10	*n*=1,314, Age: 32.7 (5.7)	One abnormal: *n*=1,242, Age: 32.3 (5.3) Non abnormal: *n*=3,620, Age: 32 (5.7)	Preterm delivery: 18.6 vs.17.9 vs. 16.9

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Supplementary Table 1. Continued

Study	Location	GDM diagnostic criteria	GDM characteristics	Non-GDM characteristics	Neonatal outcome in women with vs. without GDM, %
Lamminpaa et al. (2016) [33]	Finland	ICD-10	<35 yr: *n*=19,422 >35 yr: *n*=7,732	<35 yr: *n*=210,581 >35 yr: *n*=45,589	Normal glucose tol. vs. Diet-treated vs. Insulin-treated <35 yr Preterm delivery <28: 0.4 vs. 0.1 vs. 0.2; Preterm delivery 28–31: 0.6 vs. 0.4 vs. 0.3; Preterm delivery 32–36: 4.6 vs. 4.6 vs. 7.6; SGA (<5th percentile): 5.1 vs. 3.5 vs. 2.5; Admission to a neonatal unit: 10.7 vs. 14.6 vs. 28.8; Shoulder dystocia: 0.2 vs. 0.5 vs. 0.5; LGA (>95th percentile): 3.7 vs. 8.8 vs. 12.4 >35 yr Preterm delivery <28: 0.6 vs. 0.1 vs. 0.6; Preterm delivery 28–31: 0.8 vs. 0.4 vs. 0.5; Preterm delivery 32–36: 5.4 vs. 5.9 vs. 6.5; SGA (<5th percentile): 4.9 vs. 3.7 vs. 2.9; Admission to a neonatal unit: 12 vs. 15.7 vs. 2.5; Shoulder dystocia: 0.2 vs. 0.5 vs. 0.5; LGA (>95th percentile): 5 vs. 9.4 vs. 12.7
Black et al. (2010) [32]	California	IADPSG	1) Single isolated impaired glucose tolerance (i-IGT1): *n*=391, Age: 32.1 (5.4), Pregravid BMI: 28.1 (5.6) 2) Isolated impaired fasting glucose (i-IFG): *n*=886, Age: 30.4 (5.6), Pregravid BMI: 30.8 (7.1) 3) Double-isolated impaired glucose tolerance (i-IGT2): *n*=83, Age: 32.3 (5.2), Pregravid BMI: 27.5 (4.7) 4) IFG+IGT: *n*=331, Age: 32 (5.1), Pregravid BMI: 31.8 (7)	*n*=7,020, Age: 28.6 (5.9), Pregravid BMI: 26.9 (5.8)	1) LGA: 10 vs. 7.5; Preterm delivery: 12.8 vs. 6.6; Shoulder dystocia/birth injury: 4.6 vs. 3.8; Hyperbilirubinemia: 18.4 vs. 14 2) LGA: 16.7 vs. 7.5; Preterm delivery: 9.1 vs. 6.6; Shoulder dystocia/birth injury: 5.6 vs. 3.8; Hyperbilirubinemia: 14.4 vs. 14 3) LGA: 10.8 vs. 7.5; Preterm delivery: 18.1 vs. 6.6; Shoulder dystocia/birth injury: 6 vs. 3.8; Hyperbilirubinemia: 21.7 vs. 14 4) LGA: 20.5 vs. 7.5; Preterm delivery: 8.2 vs. 6.6; Shoulder dystocia/birth injury: 7 vs. 3.8; Hyperbilirubinemia: 13.6 vs. 14

GDM, gestational diabetes mellitus; IADPSG, International Association of the Diabetes and Pregnancy Study Groups; BMI, body mass index; NICU, neonatal intensive care unit; RDS, respiratory distress syndrome; LGA, large for gestational age; SGA, small for gestational age; CC, Carpenter-Coustan; ADIPS, The Australasian Diabetes in Pregnancy Society; WHO, World Health Organization; NICE, the National Institute for Clinical Excellence; ICD, International Classification of Diseases; CDA, Canadian Diabetes Association; ADA, American Diabetes Association; HAPO, Hyperglycemia and Adverse Pregnancy Outcomes; NDDG, National Diabetes Data Group; NZSSD, New Zealand Society for Study of Diabetes; OR, odds ratio; DIPSI, Diabetes in Pregnancy Study Group India; ACOG, American College of Obstetricians and Gynecologists; CALD, culturally and linguistically diverse; JSOG, Japan Society of Obstetrics and Gynecology; HFD, heavy for gestational date; LFD, light for gestational date; aOR, adjusted odds ratio.