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Supplemental Table 1. Maternofetal outcomes according to midterm eGFR, dividing subgroups by eGFR 15mL/min/1.73 m²

	60≤eGFR<75 (n=0)	75≤eGFR<90 (n=26)	90≤eGFR<105 (n=90)	105≤eGFR<120 (n=444)	120≤eGFR<135 (n=847)	135≤eGFR<150 (n=381)	eGFR≥150 (n=143)	P value
Composite outcome	-	18 (69.2)	33 (36.7)	146 (32.9)	184 (21.7)	104 (27.3)	53 (37.1)	<0.001
Prematurity birth (<37 weeks)	-	16 (61.5)	29 (32.2)	121 (27.3)	142 (16.8)	86 (22.6)	50 (35.0)	<0.001
Gestational age (weeks)	-	36 (34-38)	38 (36-39)	38 (36-39)	38 (37-39)	38 (37-39)	37 (35-39)	<0.001
Low birth weight (<2.5 kg)	-	11 (42.3)	17 (18.9)	89 (20.2)	125 (14.8)	70 (18.4)	39 (27.3)	<0.001
Fetal body weight (kg)	-	2.62 (2.31-3.07)	3.09 (2.65-3.35)	3.05 (2.63-3.39)	3.11 (2.75-3.44)	3.11 (2.69-3.39)	2.96 (2.45-3.28)	<0.001
Preeclampsia	-	8 (30.8)	6 (6.7)	35 (7.9)	38 (4.5)	15 (3.9)	8 (5.6)	<0.001

Data are presented as median (interquartile range) or as n (%). eGFR, estimated glomerular filtration rate
 No mothers had midterm eGFR levels of 60-75 mL/min/1.73m² in our study cohort.

Supplemental Table 2. Risk of adverse pregnancy outcomes in each midterm eGFR subgroup, divided by eGFR range of 15 mL/min/1.73 m².

	OR	95% CI	P value	^a Adjusted OR	95% CI	P value
Composite outcome						
eGFR ≥ 150	2.12	1.45-3.08	< 0.001	2.18	1.47-3.24	< 0.001
135 ≤ eGFR < 150	1.35	1.02-1.78	0.03	1.41	1.05-1.89	0.02
120 ≤ eGFR < 135		Reference			Reference	
105 ≤ eGFR < 120	1.77	1.37-2.28	< 0.001	1.72	1.30-2.26	< 0.001
90 ≤ eGFR < 105	2.09	1.31-3.28	0.001	2.02	1.25-3.27	0.003
75 ≤ eGFR < 90	8.11	3.58-20.03	< 0.001	5.42	2.14-13.73	< 0.001
Prematurity birth						
eGFR ≥ 150	2.67	1.80-3.92	< 0.001	2.80	1.85-4.24	< 0.001
135 ≤ eGFR < 150	1.45	1.07-1.95	0.02	1.56	1.13-2.14	0.006
120 ≤ eGFR < 135		Reference			Reference	
105 ≤ eGFR < 120	1.86	1.41-2.45	< 0.001	1.81	1.35-2.44	< 0.001
90 ≤ eGFR < 105	2.36	1.45-3.77	< 0.001	2.32	1.40-3.85	0.001
75 ≤ eGFR < 90	7.94	3.58-18.47	< 0.001	5.46	2.21-13.49	< 0.001
Low birth weight						
eGFR ≥ 150	2.16	1.42-3.25	< 0.001	2.17	1.39-3.37	< 0.001
135 ≤ eGFR < 150	1.30	1.94-1.79	0.11	1.37	0.98-1.93	0.07
120 ≤ eGFR < 135		Reference			Reference	
105 ≤ eGFR < 120	1.46	1.08-1.97	0.01	1.43	1.03-1.96	0.03
90 ≤ eGFR < 105	1.34	0.74-2.30	0.30	1.32	0.73-2.39	0.36
75 ≤ eGFR < 90	4.23	1.85-9.37	< 0.001	2.69	1.09-6.62	0.03
Preeclampsia						
eGFR ≥ 150	1.26	0.54-2.63	0.55	1.35	0.61-3.01	0.46
135 ≤ eGFR < 150	0.87	0.46-1.57	0.66	0.89	0.48-1.66	0.72
120 ≤ eGFR < 135		Reference			Reference	
105 ≤ eGFR < 120	1.82	1.13-2.93	0.01	1.70	1.05-2.78	0.03
90 ≤ eGFR < 105	1.52	0.56-3.45	0.35	1.45	0.59-3.58	0.42
75 ≤ eGFR < 90	9.46	3.69-22.54	< 0.001	10.66	4.24-26.81	< 0.001

OR, Odds ratio, CI, Confidence interval, eGFR, estimated glomerular filtration rate

^aAdjusted with age, pre-gestational body mass index, gestational weight gain, baseline hypertension, diabetes mellitus and hypertension during pregnancy, previous history of stillbirth/miscarriage, multiparity, and hospitalization status at the time of eGFR measurement. For analysis of preeclampsia risk, hypertension histories were not adjusted as preeclampsia itself is a hypertensive disorder. As substantial number of cases had missing information of baseline body mass index (573 cases) and weight gain (446 cases), missing value imputation by classification and regression trees (CART) method was performed in the multivariate analyses

Supplemental Table 3. Risk of adverse pregnancy outcomes in 1,103 mothers with eGFR measured in outpatient visit more than 4 weeks ago.

	OR	95% CI	P value	^a Adjusted OR	95% CI	P value
Composite outcome						
eGFR \geq 150	2.65	1.60-4.37	< 0.001	3.02	1.77-5.13	< 0.001
120 \leq eGFR < 150		Reference			Reference	
90 \leq eGFR < 120	1.57	1.13-2.18	0.007	1.47	1.03-2.10	0.04
60 \leq eGFR < 90	9.07	3.34-24.60	< 0.001	5.61	1.87-16.87	0.002
Prematurity birth						
eGFR \geq 150	3.58	2.12-6.03	< 0.001	4.25	2.42-7.45	< 0.001
120 \leq eGFR < 150		Reference			Reference	
90 \leq eGFR < 120	1.69	1.17-2.44	0.005	1.52	1.02-2.29	0.04
60 \leq eGFR < 90	8.60	3.31-22.35	< 0.001	5.05	1.70-15.00	0.004
Low birth weight						
eGFR \geq 150	3.31	1.93-5.68	< 0.001	3.69	2.08-6.54	< 0.001
120 \leq eGFR < 150		Reference			Reference	
90 \leq eGFR < 120	1.15	0.76-1.74	0.50	1.04	0.67-1.63	0.85
60 \leq eGFR < 90	6.11	2.34-15.90	< 0.001	3.67	1.24-10.80	0.02
Preeclampsia						
eGFR \geq 150	1.24	0.43-3.62	0.69	1.32	0.45-3.92	0.62
120 \leq eGFR < 150		Reference			Reference	
90 \leq eGFR < 120	1.52	0.83-2.75	0.17	1.42	0.75-2.67	0.28
60 \leq eGFR < 90	11.19	3.94-31.79	< 0.001	13.41	4.56-39.40	< 0.001

OR, Odds ratio, CI, Confidence interval, eGFR, estimated glomerular filtration rate

^aAdjusted with age, pre-gestational body mass index, gestational weight gain, baseline hypertension, diabetes mellitus and hypertension during pregnancy, previous history of stillbirth/miscarriage, multiparity. For analysis of preeclampsia risk, hypertension histories were not adjusted as preeclampsia itself is a hypertensive disorder. As substantial number of cases had missing information of baseline body mass index (573 cases) and weight gain (446 cases), missing value imputation by classification and regression trees (CART) method was performed in the multivariate analyses

Supplemental Table 4. The clinical characteristics of the subset of mothers with known baseline renal function.

	Total population (N=1,931)	Mothers with available baseline renal function (N=610)	P value
Age (years)	33 (30-35)	32 (30-35)	0.66
Body mass index (kg/m ²)	21.0 (19.3-23.2)	20.9 (19.3-23.1)	0.94
Multiparity	985 (51.0)	371 (60.9)	< 0.001
Number of preterm birth history	0 (0-1)	0 (0-1)	0.80
Presence of stillbirth/miscarriage history	876 (45.4)	265 (43.5)	0.45
Previous history of hypertension	252 (13.1)	143 (23.5)	< 0.001
Midterm eGFR (mL/min/1.73 m ²)	127.2 (118.7-136.1)	126.4 (118.1-134.5)	0.06
Weight gain until delivery (kg)	12 (8.8-15.6)	12.0 (9.0-15.0)	0.94
Hypertension during pregnancy	131 (6.8)	70 (11.5)	< 0.001
^a Albuminuria (dipstick)			0.37
(-)	1313 (76.6)	409 (72.9)	
1 ⁺	217 (12.7)	79 (14.1)	
≥2 ⁺	183 (10.7)	73 (13.0)	
Diabetes mellitus during pregnancy	59 (3.1)	23 (3.8)	0.46
Cesarean section	647 (33.5)	205 (33.7)	0.98
Composite outcome	538 (27.9)	150 (24.6)	0.131
Prematurity birth (<37 weeks)	444 (23.0)	116 (19.0)	0.05
Low birth weight (<2.5 kg)	351 (18.2)	93 (15.3)	0.11
Preeclampsia	110 (5.7)	33 (5.7)	> 0.99

Data are presented as median (interquartile range) or as n (%). eGFR, estimated glomerular filtration rate

^aMaximal values during pregnancy by urine dipstick method.

Supplemental material is neither peer-reviewed nor thoroughly edited by CJASN. The authors alone are responsible for the accuracy and presentation of the material.

Supplemental Table 5. The incidences of adverse pregnancy outcomes in 516 mothers without underlying evidences of CKD.

	60≤eGFR<90 (n=11)	90≤eGFR<120 (n=137)	120≤eGFR<150 (n=347)	eGFR≥150 (n=22)	P value
Composite outcome	7 (63.6)	36 (26.3)	67 (19.4)	3 (13.6)	< 0.001
Prematurity birth (<37 weeks)	7 (63.6)	25 (18.2)	49 (14.2)	3 (13.6)	< 0.001
Gestational age (weeks)	36 (34-38)	38 (37-39)	38 (37-39)	38 (37-39)	0.045
Low birth weight (<2.5 kg)	5 (45.5)	24 (17.5)	44 (12.7)	0 (0.0)	0.002
Fetal body weight (kg)	2.6 (2.3-3.0)	3.1 (2.6-3.4)	3.1 (2.8-3.4)	3.2 (2.8-3.4)	0.021
Preeclampsia	2 (18.2)	8 (5.8)	2 (2.9)	0 (0.0)	0.026

Data are presented as median (interquartile range) or as n (%). eGFR, estimated glomerular filtration rate

Supplemental Table 6. The association between an increase in eGFR from baseline or absolute midterm levels and adverse pregnancy outcomes

Variables and outcomes	In all mothers with available baseline renal function (N=610)			In mothers without underlying CKD (N=516)			In mothers with CKD (N=94)		
	^a Adjusted OR	95% CI	P value	^a Adjusted OR	95% CI	P value	^a Adjusted OR	95% CI	P value
Increment of eGFR rise from baseline to midterm (1 mL/min/1.73 m ²)									
Composite	0.99	0.98-1.00	0.11	0.98	0.97-0.99	0.01	1.00	0.97-1.04	0.84
Prematurity birth	0.99	0.98-1.00	0.14	0.98	0.96-0.99	0.01	1.01	0.98-1.04	0.59
Low birth weight	0.99	0.97-1.00	0.13	0.97	0.95-0.99	0.001	1.03	0.99-1.07	0.19
Preeclampsia	0.96	0.94-0.99	0.003	0.97	0.94-1.00	0.05	0.98	0.94-1.02	0.25
Increment of absolute midterm eGFR value (1 mL/min/1.73 m ²)									
Composite	1.00	0.98-1.01	0.64	0.98	0.96-0.99	0.01	1.00	0.97-1.04	0.84
Prematurity birth	1.00	0.98-1.01	0.52	0.97	0.96-0.99	0.02	1.01	0.98-1.04	0.59
Low birth weight	0.99	0.97-1.00	0.08	0.97	0.95-0.99	0.001	1.03	0.99-1.07	0.19
Preeclampsia	0.97	0.94-0.99	0.003	0.97	0.94-1.00	0.05	0.96	0.92-1.01	0.08

CKD, chronic kidney disease, eGFR, estimated glomerular filtration rate, OR, odds ratio, CI, confidence interval

Baseline eGFR levels were defined as the last measured value between the estimated conception date and 3 years before the delivery.

The association between the eGFR increment, and each outcome was analyzed in the table.

^aAdjusted for baseline eGFR.