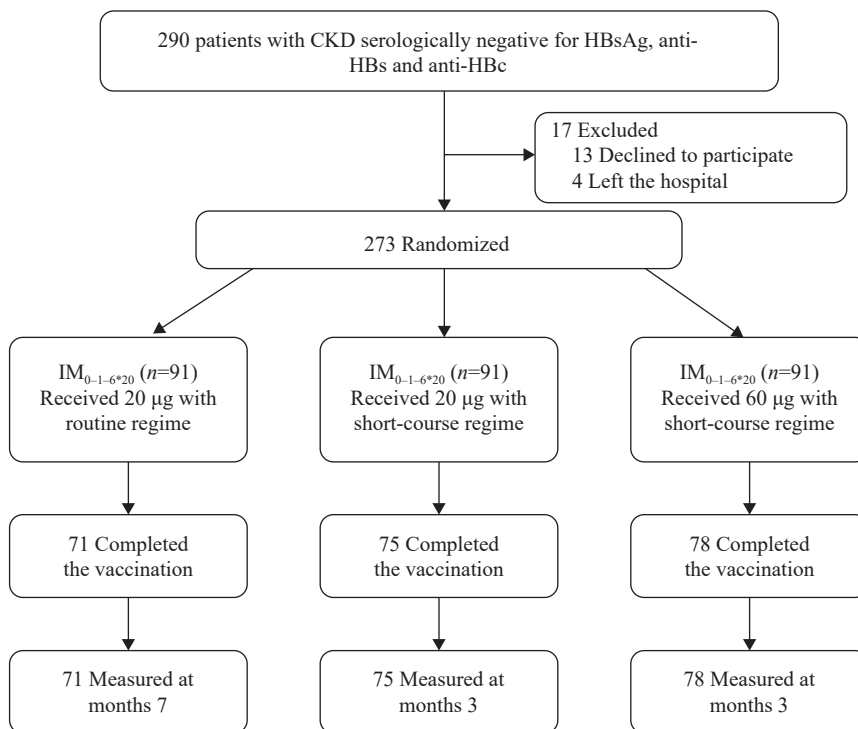


## SUPPLEMENTARY MATERIALS



SUPPLEMENTARY FIGURE S1. Study flow diagram, China, May 2019 to February 2020.

SUPPLEMENTARY TABLE S1. Characteristics of chronic kidney disease patients who completed follow-up compared to those lost to follow-up in China from May 2019 to February 2020.

Variables	N (%)	Patients completed follow-up (N=224) n (%)	Patients lost to follow-up (N=49) n (%)	$\chi^2$	P
Gender					
Male	161 (59.0)	130 (58.0)	31 (63.3)	0.45	0.500
Female	112 (41.0)	94 (42.0)	18 (36.7)		
Age (years)					
<35	30 (11.0)	20 (8.9)	10 (20.4)	5.56	0.062
[35, 55)	144 (52.8)	122 (54.5)	22 (44.9)		
≥55	99 (36.2)	82 (36.6)	17 (34.7)		
BMI (kg/m <sup>2</sup> )					
<18.5	2 (0.7)	2 (0.9)	0 (0.0)	0.44	0.802
[18.5, 24)	94 (34.4)	77 (34.4)	17 (34.7)		
≥24	177 (64.9)	145 (64.7)	32 (65.3)		
Residence					
Urban	70 (25.6)	58 (25.9)	12 (24.5)	0.04	0.839
Rural	203 (74.4)	166 (74.1)	37 (75.5)		
Level of education					
Primary school or lower	47 (17.2)	36 (16.1)	11 (22.5)	2.82	0.244
Junior High School	139 (50.9)	112 (50.0)	27 (55.0)		
Senior high school or higher	87 (31.9)	76 (33.9)	11 (22.5)		
Type of clinical diagnosis					
Nephrotic syndrome	157 (57.5)	129 (57.6)	28 (57.1)	0.16	0.923
Nephritic syndrome	14 (5.1)	12 (5.4)	2 (4.1)		
Others(renal tubular disorders, polycystic kidney, and unclear)	102 (37.4)	83 (37.0)	19 (38.8)		
Duration of chronic kidney disease (years)					
≤3	214 (78.4)	176 (78.6)	38 (77.5)	0.02	0.875
>3	59 (21.6)	48 (21.4)	11 (22.5)		
CKD stage					
Stage 1	99 (36.3)	84 (37.5)	15 (30.6)	7.48	0.112
Stage 2	82 (30.0)	62 (27.7)	20 (40.8)		
Stage 3	32 (11.7)	27 (12.1)	5 (10.2)		
Stage 4	49 (18.0)	44 (19.6)	5 (10.2)		
Stage 5	11 (4.0)	7 (3.1)	4 (8.2)		
History of HepB vaccine					
Yes	23 (8.4)	20 (8.9)	3 (6.1)	2.08	0.354
No	182 (66.7)	152 (67.9)	30 (61.2)		
Unknown	68 (24.9)	52 (23.2)	16 (32.7)		
Taking hormones/immunosuppressants					
Yes	116 (42.5)	94 (42.0)	22 (44.9)	0.14	0.707
No	157 (57.5)	130 (58.0)	27 (55.1)		
Vaccination schedule					
IM <sub>0-1-6</sub> *20	91 (33.3)	71 (31.7)	20 (40.8)	1.84	0.398
IM <sub>0-1-2</sub> *20	91 (33.3)	75 (33.5)	16 (32.7)		
IM <sub>0-1-2</sub> *60	91 (33.4)	78 (34.8)	13 (26.5)		

Note: Chronic kidney disease staging was defined by estimated eGFR as follows: Stage 5: <15 mL/min; Stage 4: 15–29 mL/min; Stage 3: 30–59 mL/min; Stage 2: 60–89 mL/min; Stage 1: ≥90 mL/min.

Abbreviation: CKD=chronic kidney disease; HepB=hepatitis B; eGFR=estimated glomerular filtration rate.

SUPPLEMENTARY TABLE S2. Univariate analysis of factors affecting high anti-HBs response rates after hepatitis B vaccination in chronic kidney disease patients in China from May 2019 to February 2020.

Variables	Non/Low-response, n (%)	High-response, n (%)	$\chi^2$	P
Gender				
Male	61 (46.9)	69 (53.1)	4.38	0.036
Female	31 (33.0)	63 (67.0)		
Age (years)				
<35	5 (25.0)	15 (75.0)	2.42	0.297
[35, 55)	53 (43.4)	69 (56.6)		
≥55	34 (41.5)	48 (58.5)		
BMI (kg/m <sup>2</sup> )				
<18.5	0 (0.0)	2 (100.0)	1.50	0.471
[18.5, 24)	33 (42.9)	44 (57.1)		
≥24	59 (40.7)	86 (59.3)		
Residence				
Urban	17 (29.3)	41 (70.7)	4.47	0.034
Rural	75 (45.2)	91 (54.8)		
Level of education				
Primary school or lower	14 (38.9)	22 (61.1)	1.96	0.376
Junior High School	51 (45.5)	61 (54.5)		
Senior high school or higher	27 (35.5)	49 (64.5)		
CKD stage				
Stage 1	38 (45.2)	46 (54.8)	3.01	0.557
Stage 2	24 (38.7)	38 (61.3)		
Stage 3	8 (29.6)	19 (79.4)		
Stage 4	20 (45.5)	24 (54.5)		
Stage 5	2 (28.6)	5 (71.4)		
Type of clinical diagnosis				
Nephrotic syndrome	60 (46.5)	69 (53.5)	5.36	0.069
Nephritic syndrome	2 (16.7)	10 (83.3)		
Others (renal tubular disorders, polycystic kidney, and unclear)	30 (36.1)	53 (63.9)		
Duration of chronic kidney disease (years)				
≤3	78 (44.3)	98 (55.7)	3.58	0.059
>3	14 (29.2)	34 (70.8)		
History of HepB vaccine				
Yes	7 (33.3)	13 (65.0)	0.38	0.826
No	64 (42.1)	88 (57.9)		
Unknown	21 (40.4)	31 (59.6)		
Taking hormones/immunosuppressants				
Yes	51 (54.3)	43 (45.7)	11.63	<0.001
No	41 (31.5)	89 (68.5)		
Vaccination schedule				
IM <sub>0-1-6</sub> *20	22 (31.0)	49 (69.0)	9.27	0.002
IM <sub>0-1-2</sub> *20	42 (56.0)	33 (44.0)		
IM <sub>0-1-2</sub> *60	28 (35.9)	50 (64.1)		

Note: Chronic kidney disease staging was defined by estimated eGFR as follows: Stage 5: <15 mL/min; Stage 4: 15–29 mL/min; Stage 3: 30–59 mL/min; Stage 2: 60–89 mL/min; Stage 1: ≥90 mL/min.

Abbreviation: CKD=chronic kidney disease; HepB=hepatitis B; eGFR=estimated glomerular filtration rate.

SUPPLEMENTARY TABLE S3. Multifactorial analysis of factors affecting high anti-HBs response rates after hepatitis B vaccination in chronic kidney disease patients in China from May 2019 to February 2020.

Variables		$\beta$	S.E.	Wald $\chi^2$	P	OR (95% CI)	aOR (95% CI)*
b		1.71	0.43	15.77	<0.001		
Taking hormones/ immunosuppressants	Yes					1.00	1.00
	No	0.48	0.16	8.96	0.003	2.54 (1.47, 4.39)	2.59 (1.39, 4.83)
Vaccination Schedule	IM <sub>0-1-6</sub> *20					1.00	1.00
	IM <sub>0-1-2</sub> *20	-1.11	0.38	8.66	0.003	-0.36 (0.19, 0.71)	0.33 (0.15, 0.69)
	IM <sub>0-1-2</sub> *60	-0.11	0.37	0.09	0.871	0.82 (0.42, 1.62)	0.89 (0.43, 1.86)

Abbreviation: CKD=chronic kidney disease; CI=confidence interval; OR=odds ratio; aOR=adjusted odds ratio.

\* Adjusted for gender, age, residence, type of chronic kidney disease, and disease duration.