

Supplemental Table 1. Kidney function status of all individuals with a serum creatinine laboratory test available between January 1, 2012, and January 1, 2016.

CKD Status	N (Total=6,106,521) ^a	%
Normal ^b	5,607,287	91.8
CKD ^c	88,273	1.5
RI event with no follow-up lab within 3-12 months ^d	142,104	2.3
RI event with follow-up lab < 60 L/min/1.73m ² within 0-3 months ^d	152,320	2.5
RI event with follow-up lab ≥ 60 L/min/1.73m ^{2d}	116,537	1.9

^aTotal N represents all individuals aged 18-85 years with a serum creatinine laboratory test performed at a government sector hospital or clinic between January 1, 2012, and January 1, 2016.

^bPatients were classified as having 'Normal' CKD status if their first eGFR measure was ≥ 60 mL/min/1.73m².

^cCKD defined as two eGFR measurements <60 mL/min/1.73m² at least 90 days but no more than 12 months apart.

^dRenal Insufficiency (RI) event defined as having an eGFR measure < 60 L/min/1.73m².

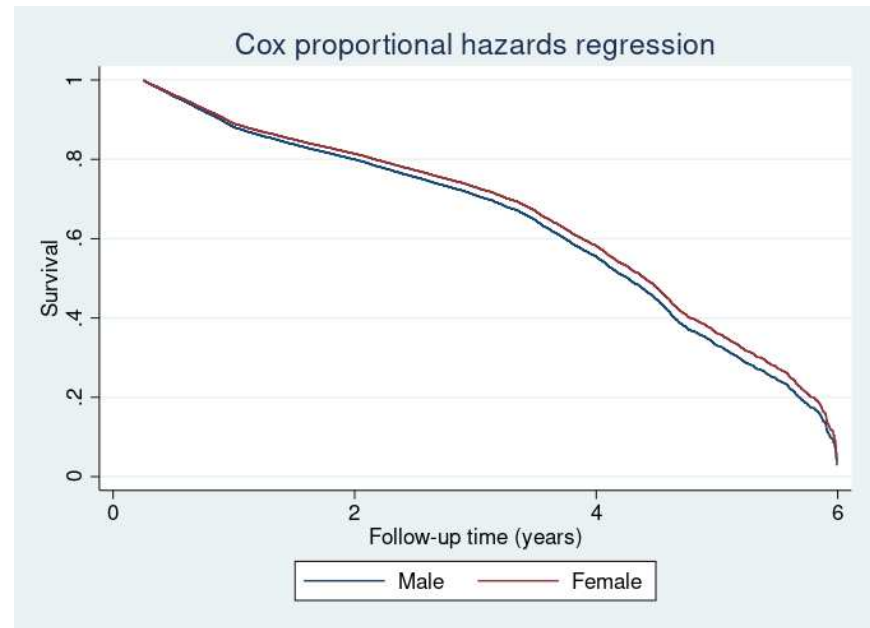
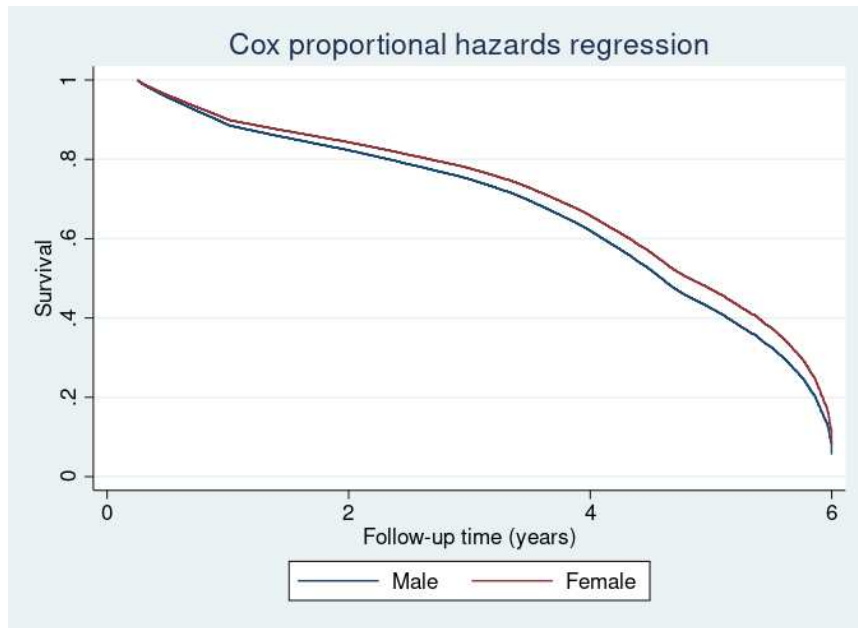
Supplemental Table 2. Time (in months) between first and last CKD lab measure by CKD stage at first lab

CKD stage at first lab	Measure	CKD stage at last lab					
		Stage 1 (eGFR \geq 90)	Stage 2 (eGFR 60-89)	Stage 3a (eGFR 45-59)	Stage 3b (eGFR 30-45)	Stage 4 (eGFR 15-29)	Stage 5 (eGFR $<$ 15)
Stage 3a (eGFR 45-59)	Mean (SD)	13.7 (9.6)	26.5 (14.6%)	32.8 (21.3)	32.9 (22.1)	30.0 (22.4)	26.6 (21.6)
	Median (Q1, Q3)	10.3 (6.2, 21.3)	24.4 (15.8, 33.6)	34.3 (11.2, 48.1)	34.0 (10.6, 48.8)	26.0 (9.0, 47.3)	20.1 (7.8, 42.4)
Stage 3b (eGFR 30-44)	Mean (SD)	11.3 (8.6)	26.7 (16.2)	31.3 (21.6)	30.8 (21.8)	30.1 (22.0)	28.9 (21.1)
	Median (Q1, Q3)	7.3 (5.3, 15.7)	23.9 (13.9, 35.9)	32.0 (10.0, 47.4)	30.4 (9.7, 47.4)	27.2 (9.2, 47.5)	25.2 (9.5, 45.6)
Stage 4 (eGFR 15-29)	Mean (SD)	11.2 (7.8)	25.4 (16.1)	31.6 (22.5)	28.5 (22.2)	25.8 (20.7)	26.1 (19.5)
	Median (Q1, Q3)	8.9 (5.3, 12.7)	22.5 (12.7, 34.6)	32.4 (9.2, 48.0)	24.2 (7.9, 45.8)	18.8 (7.6, 42.6)	21.0 (0.1, 40.6)
Stage 5 (eGFR $<$ 15)	Mean (SD)	11.2 (7.7)	25.5 (15.6)	34.2 (23.6)	30.8 (23.3)	25.5 (22.2)	21.6 (20.3)
	Median (Q1, Q3)	8.3 (4.6, 15.7)	23.9 (12.8, 34.2)	36.2 (9.8, 51.2)	30.0 (8.2, 49.2)	15.9 (6.2, 43.2)	12.1 (6.0, 33.4)

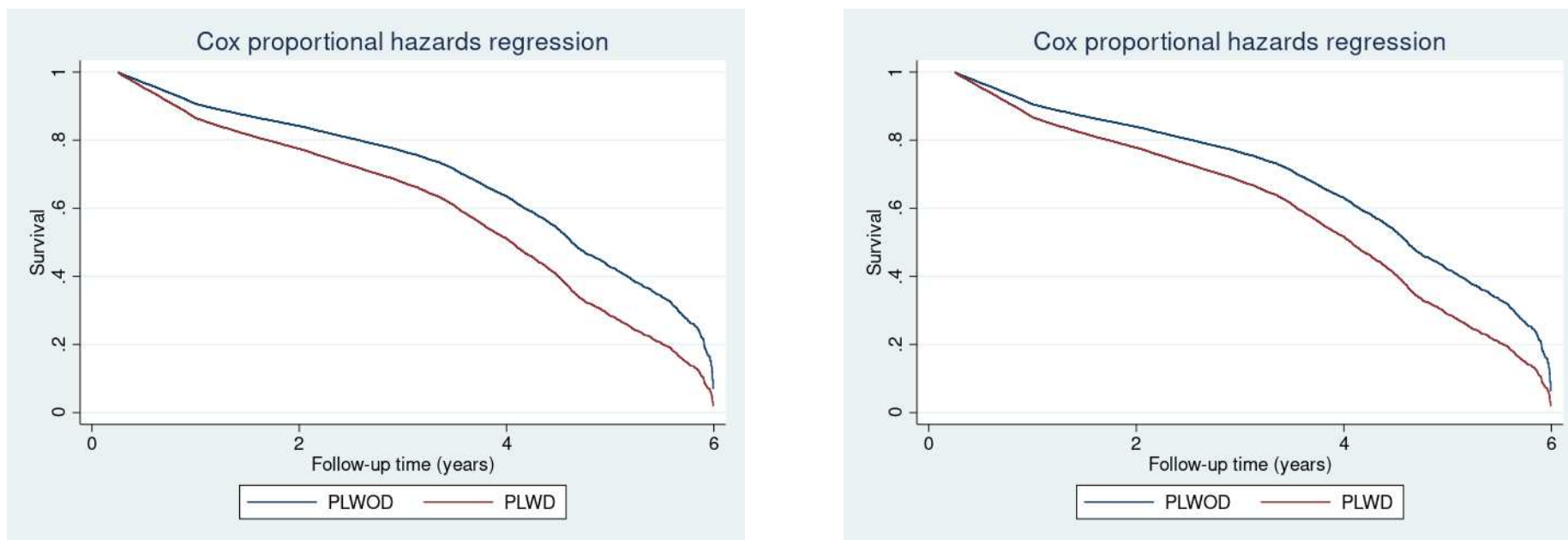
Supplemental Table 3. Transition between CKD stages from first creatine lab measure to last available creatinine lab measure among those with CKD at baseline, overall and by diabetes status.

Overall							
	CKD stage at last lab						
CKD stage at first lab	Stage 1 (eGFR ≥90) (%; 95% CI)	Stage 2 (eGFR 60-89) (%; 95% CI)	Stage 3a (eGFR 45-59) (%; 95% CI)	Stage 3b (eGFR 30-44) (%; 95% CI)	Stage 4 (eGFR 15-29) (%; 95% CI)	Stage 5 (eGFR <15) (%; 95% CI)	Total
Stage 3a (eGFR 45-59)	75 (0.2%; 0.1, 0.2)	7784 (20.1%; 19.7, 20.5)	16,033 (41.4%; 40.9, 41.8)	8124 (21.0%; 20.6, 21.4)	3853 (9.9%; 9.6, 10.2)	2901 (7.5%; 7.2, 7.7)	38,770
Stage 3b (eGFR 30-44)	30 (0.1%; 0.08, 0.2)	2812 (11.0%; 10.7, 11.4)	6753 (26.5%; 26.0, 27.1)	7331 (28.8%; 28.2, 29.4)	5053 (19.9%; 19.4, 20.3)	3483 (13.7%; 13.3, 14.1)	25,462
Stage 4 (eGFR 15-29)	17 (0.2%; 0.07, 0.2)	963 (6.9%; 6.4, 7.3)	1646 (11.7%; 11.2, 12.2)	2398 (17.1%; 16.4, 17.7)	4123 (29.3%; 28.6, 30.1)	4908 (34.9%; 34.1, 35.7)	14,055
Stage 5 (eGFR <15)	12 (0.1%; 0.06, 0.2)	489 (4.9%; 4.5, 5.3)	758 (7.6%; 7.1, 8.1)	725 (7.3%; 6.8, 7.8)	1212 (12.1%; 11.5, 12.8)	6790 (68%; 67.1, 68.9)	9986
People living with Diabetes							
	CKD stage at last lab						
CKD stage at first lab	Stage 1 (eGFR ≥90) (%; 95% CI)	Stage 2 (eGFR 60-89) (%; 95% CI)	Stage 3a (eGFR 45-59) (%; 95% CI)	Stage 3b (eGFR 30-44) (%; 95% CI)	Stage 4 (eGFR 15-29) (%; 95% CI)	Stage 5 (eGFR <15) (%; 95% CI)	Total
Stage 3a (eGFR 45-59)	2 (0.05%; 0.01, 0.2)	413 (9.5%; 8.7, 10.4)	1535 (35.4%; 34.0, 36.9)	1223 (28.2%; 26.9, 29.6)	697 (16.1%; 15.0, 17.2)	462 (10.7%; 9.8, 11.6)	4332
Stage 3b (eGFR 30-44)	1 (0.03%; 0.00, 0.1)	164 (4.4%; 3.8, 5.1)	729 (19.6%; 18.3, 20.8)	1156 (31.0%; 29.5, 32.5)	1055 (28.3%; 26.7, 29.8)	624 (16.7%; 15.6, 18.0)	3729
Stage 4 (eGFR 15-29)	1 (0.04%; 0.00, 0.2)	70 (3.1%; 2.4, 3.8)	172 (7.6%; 6.5, 8.7)	328 (14.5%; 13.1, 15.9)	799 (35.2%; 33.3, 37.2)	899 (39.6%; 37.6, 41.6)	2269
Stage 5 (eGFR <15)	0 (0%; 0.00, 0.3)	24 (2.5%; 1.6, 3.6)	56 (5.8%; 4.4, 7.4)	73 (7.5%; 6.0, 9.3)	140 (14.4%; 12.3, 16.7)	680 (69.9%; 66.9, 72.7)	973
People living without Diabetes							
	CKD stage at last lab						
CKD stage at first lab	Stage 1 (eGFR ≥90) (%; 95% CI)	Stage 2 (eGFR 60-89) (%; 95% CI)	Stage 3a (eGFR 45-59) (%; 95% CI)	Stage 3b (eGFR 30-44) (%; 95% CI)	Stage 4 (eGFR 15-29) (%; 95% CI)	Stage 5 (eGFR <15) (%; 95% CI)	Total
Stage 3a (eGFR 45-59)	4 (0.1%; 0.04, 0.3)	485 (14.4%; 13.2, 15.6)	1442 (42.7%; 41.0, 44.4)	806 (23.9%; 22.4, 25.3)	396 (11.7%; 10.7, 12.8)	245 (7.3%; 6.4, 8.2)	3378
Stage 3b (eGFR 30-44)	2 (0.08%; 0.01, 0.3)	192 (7.3%; 6.4, 8.4)	643 (24.5%; 22.9, 26.2)	855 (32.6%; 30.8, 34.4)	577 (22.0%; 20.5, 23.6)	352 (13.4%; 12.2, 14.8)	2621
Stage 4 (eGFR 15-29)	3 (0.2%; 0.04, 0.4)	69 (3.8%; 3.0, 4.8)	162 (8.9%; 7.7, 10.3)	291 (16.0%; 14.4, 17.8)	561 (30.9%; 28.8, 33.1)	728 (40.1%; 37.9, 42.4)	1814

Stage 5 (eGFR < 15)	1 (0.1%; 0.002, 0.2)	57 (2.6%; 2.0, 3.3)	95 (4.3%; 3.5, 5.2)	100 (4.5%; 3.7, 5.4)	236 (10.6%; 9.4, 11.9)	1733 (78.0%; 76.2, 79.7)	2222
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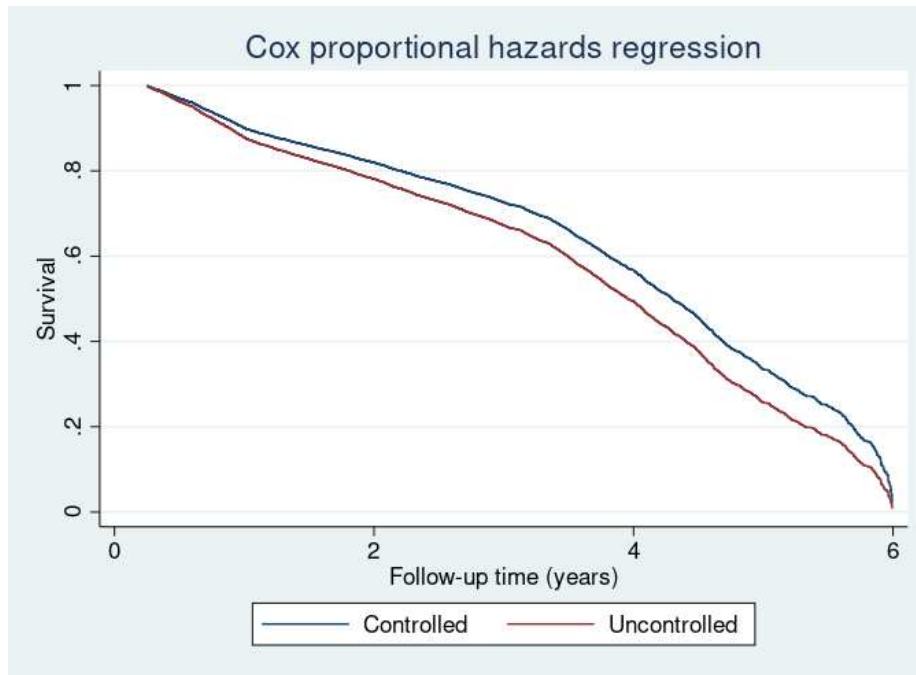


Supplemental Figure 1. Crude and adjusted survival functions for the Cox regression of time to CKD progression by sex. Adjusted estimates are adjusted for age, diabetes status, and HIV/TB status.

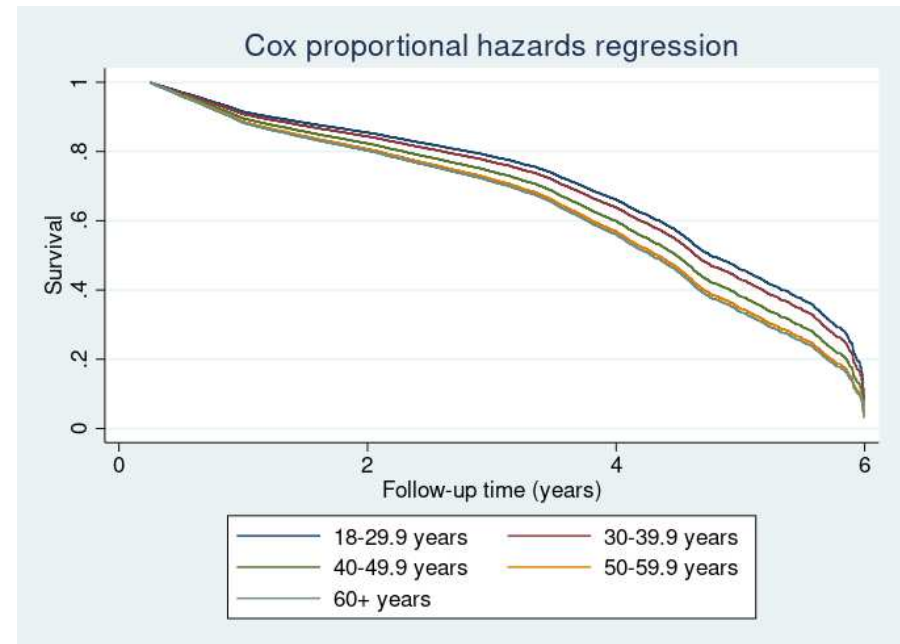
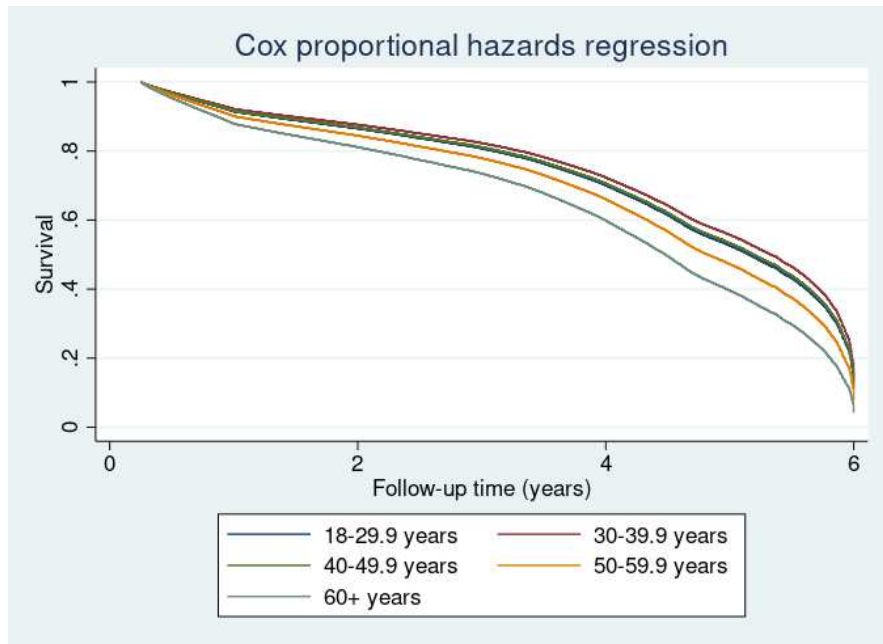


Supplemental Figure 2. Crude and adjusted survival functions for the Cox regression of time to CKD progression by diabetes status. Adjusted estimates are adjusted for sex, age, and HIV/TB status.

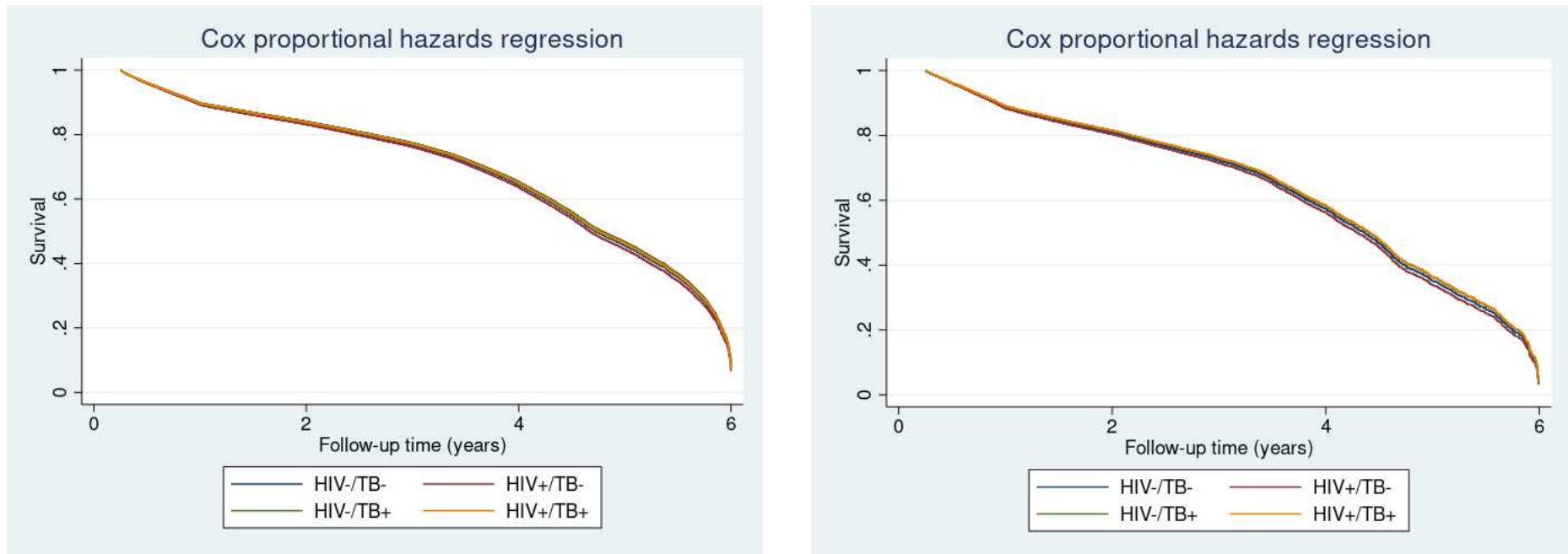
Abbreviations: PLWOD=people living without diabetes, PLWD=people living with diabetes.



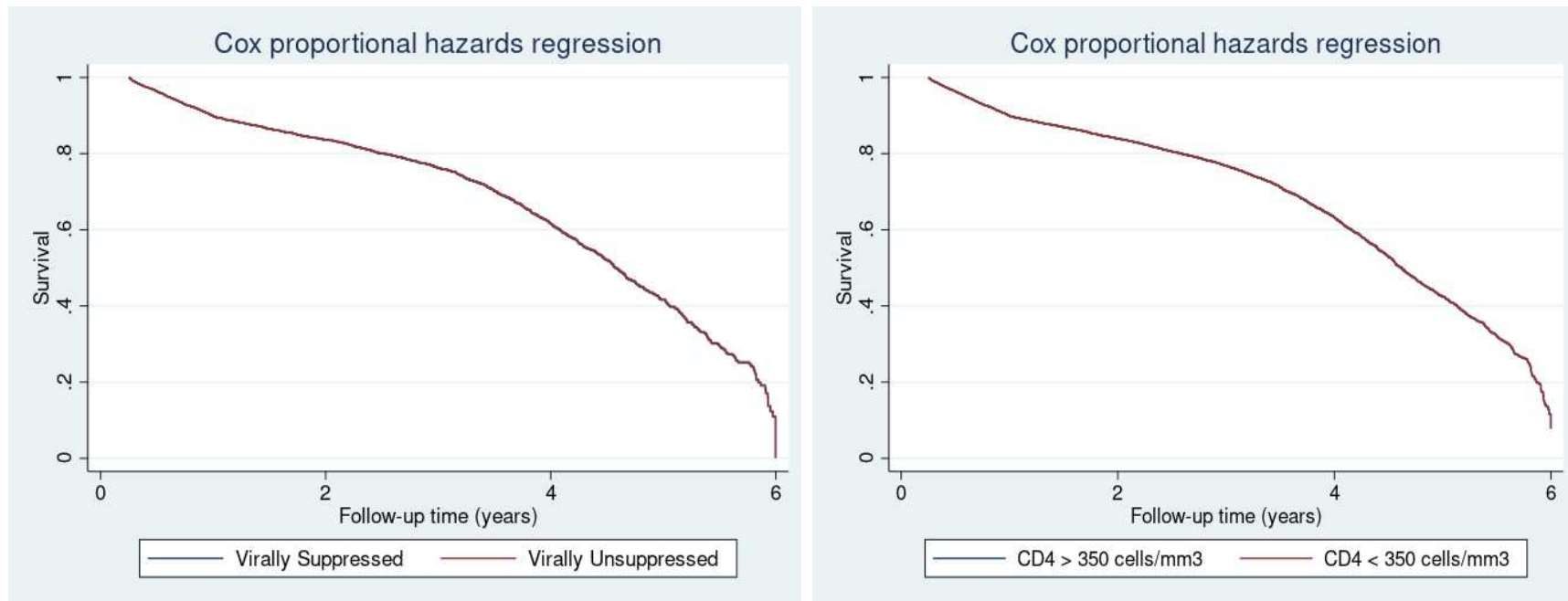
Supplemental Figure 3. Crude survival function for the Cox regression of time to CKD progression among patients with controlled diabetes ($6.5\% \leq \text{HbA1c} \leq 7\%$) versus uncontrolled diabetes ($\text{HbA1c} > 7\%$).



Supplemental Figure 4. Crude and adjusted survival functions for the Cox regression of time to CKD progression by age. Adjusted estimates are adjusted for sex, diabetes status, and HIV/TB status.



Supplemental Figure 5. Crude and adjusted survival functions for the Cox regression of time to CKD progression by HIV/TB status. Adjusted estimates are adjusted for sex, age, and diabetes status.



Supplemental Figure 6. Crude and adjusted survival functions for the Cox regression of time to CKD progression by markers of HIV disease severity.