

Supplementary Material

Estimation of liver fibrosis and cirrhosis risk using non-invasive biomarkers in people living with HIV and prediabetes in Tanzania

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Supplementary Table 1. Interrater kappa statistics between FIB-4, MAF-5, NFS, and LiverRisk scores

NFS vs. FIB-4						
		FIB-4			Agreement	59.82%
		Low risk	Indeterminate	High risk	Expected agreement	43.41%
NFS	Low risk	601	89	0	Kappa	0.29
	Indeterminate	474	368	18	SE	0.194
	High risk	14	78	33	Z	14.97
					<i>P</i> -value	0.0000
NFS vs. MAF-5						
		MAF-5			Agreement	24.49%
		Low risk	Indeterminate	High risk	Expected agreement	26.83%
NFS	Low risk	217	158	188	Kappa	0.1047
	Indeterminate	99	178	422	SE	0.0144
	High risk	3	21	74	Z	7.25
					<i>P</i> -value	0.0000
NFS vs. LiverRisk						
		LiverRisk			Agreement	41.27%
		Low risk	Indeterminate	High risk	Expected agreement	41.18%
NFS	Low risk	685	3	1	Kappa	0.0015
	Indeterminate	855	5	0	SE	0.0028

	High risk	123	1	0	Z	0.55
					P-value	0.2921
MAF-5 vs. FIB-4						
		FIB-4			Agreement	31.09%
		Low risk	Indeterminate	High risk	Expected agreement	25.16%
MAF-5	Low risk	275	45	1	Kappa	0.0792
	Indeterminate	241	113	3	SE	0.0127
	High risk	373	277	36	Z	6.25
					P-value	0.0000
LiverRisk vs. MAF-5						
		MAF-5			Agreement	23.44%
		Low risk	Indeterminate	High risk	Expected agreement	23.45%
LiverRisk	Low risk	319	358	677	Kappa	-0.0002
	Indeterminate	0	0	7	SE	0.0018
	High risk	0	0	0	Z	-0.11
					P-value	0.5429
FIB-4 vs. LiverRisk						
		LiverRisk			Agreement	65.16%
		Low risk	Indeterminate	High risk	Expected agreement	64.78%
FIB-4	Low risk	1088	1	0	Kappa	0.0106

	Indeterminate	531	4	1	SE	0.0045
	High risk	48	3	0	Z	2.34
					P-value	0.0096

Supplementary Table 2. FIB-4, MAF-5, NFS, LiverRisk, and CORE scores by sex

	FIB-4 (<i>P</i> < 0.000)		MAF-5 (<i>P</i> = 0.30)		NFS (<i>P</i> = 0.18)		LiverRisk (<i>P</i> = 0.000)		CORE (<i>P</i> = 0.000)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
Minimal risk	N/A	N/A	N/A	N/A	N/A	N/A	959 (76.3%)	124 (29.5%)	N/A	N/A
Low risk	882 (70%)	210 (50%)	252 (24.1%)	69 (21.6%)	515 (41.0%)	175 (41.7%)	297 (23.6%)	288 (68.6%)	1,218 (96%)	373 (88%)
Indeterminate/Medium risk	345 (27%)	192 (46%)	280 (26.8%)	78 (24.4%)	639 (50.9%)	222 (52.9%)	1 (0.08%)	7 (1.7%)	N/A	N/A
High risk	34 (3%)	17 (4%)	513 (49.1%)	173 (54.1%)	102 (8.1%)	23 (5.5%)	0 (0.0%)	1 (0.2%)	48 (4%)	50 (12%)
Total	1,261	419	1,045	320	1,268	423	1,257	420	1,266	423

FIB-4 score (*N* = 1,681) categories are based on clinical cutoffs: < 1.3 = low risk, 1.3-2.67 = indeterminate risk, and > 2.67 = high risk for advanced fibrosis (for individuals under 65 years; for those ≥ 65, a low-risk threshold of < 2.0 is recommended). MAF-5 score (*N* = 1,365) categories are based on the published cutoffs of low fibrosis risk (MAF-5 < 0) and high fibrosis risk (MAF-5 ≥ 1). NFS score (*N* = 1,676)

categories follow validated cutoffs: < -1.455 = low risk, -1.455 to 0.676 = indeterminate, and > 0.676 = high risk of advanced fibrosis. Cutoffs for LiverRisk ($N = 1,677$) are: minimal-risk group (< 6), low-risk group (6 to < 10), medium-risk group (10 to < 15), and high-risk group (≥ 15). N/A “not applicable”. CORE ($N = 1,689$) threshold for high risk of a cirrhosis-related event within 10 years is set to 1%.