

Supplementary Table 1. Input Parameters used in Markov Model

Parameters	Distribution	Base Case	Min	Max	References
Start age of NAFLD screening		50			
Prevalence of NAFLD					
Percentage of F0/F1 in patients with diabetes in patients aged 50		0.627			1, 13
Percentage of F2/F3 in patients with diabetes in patients aged 50		0.130			1, 13
Percentage of F4 in patients with diabetes in patients aged 50		0.032			1, 13
Percentage of patients with no NAFLD with diabetes in patients aged 50		0.211			1
Proportion of F2/F3 in Advanced Fibrosis		0.700			7
Proportion of F4 in Advanced Fibrosis		0.300			7
Cost, USD\$					
<i>Screening</i>					
Once off Ultrasonography	Triangular	100	74	148	Hospital Data
Once off VCTE	Triangular	204	148	259	Hospital Data
Once off FIB-4 Screening	Triangular	37	22	59	Hospital Data
<i>Direct medical cost</i>					
F0-F1 treatment, per annum	Triangular	764	556	928	35
F2-F3 treatment, per annum	Triangular	764	556	928	35
F4 treatment, per annum	Triangular	5,352	3,896	6,494	35
Decompensated liver from 2nd year onwards	Triangular	17,292	12,591	20,985	35
Decompensated liver in 1st year of diagnosis	Triangular	12,741	9,277	15,462	35
HCC in 1st year of diagnosis	Triangular	32,801	23,884	39,806	35

HCC from 2nd year onwards	Triangular	20,077	14,619	24,365	35
Liver transplant in 1st year of diagnosis	Triangular	140,157	102,056	170,093	35
Liver transplant from 2nd year onwards	Triangular	11,376	8,284	13,806	35
Cardiovascular Event	Triangular	6,263	4,440	7,400	14
Transition probability					
Normal liver to F0/F1	Triangular	0.055	0.030	0.070	21
F0/F1 to F2/F3	Triangular	0.043	0.020	0.060	2, 22
F2/F3 to F4	Triangular	0.043	0.020	0.060	2, 22
F4 to Decompensated Liver	Triangular	0.060	0.010	0.080	15, 23
F2/3 to HCC	Triangular	0.010	0.005	0.020	22
F4 to HCC	Triangular	0.020	0.010	0.080	15, 24
Decompensated cirrhosis to HCC	Triangular	0.030	0.010	0.040	15, 16
Decompensated cirrhosis to liver transplant	Triangular	0.023	0.015	0.030	35
HCC to liver transplant	Triangular	0.040	0.000	0.140	35
F0/F1 to CV events	Triangular	0.021	0.010	0.035	17, 18
F2/3 to CV events	Triangular	0.027	0.015	0.040	17, 18
F4 to CV events	Triangular	0.060	0.040	0.080	17, 18
Probability of death in HCC	Triangular	0.430	0.330	0.630	35
Probability of death in Liver Transplant in 1st year	Triangular	0.166	0.060	0.420	35
Probability of death in Liver Transplant in Subsequent years	Triangular	0.044	0.024	0.110	35
Probability of death in CV events	Triangular	0.064	0.056	0.094	14
Probability of death in T2DM population					12
Test performance					
Sensitivity of FIB-4	Triangular	0.220	0.150	0.300	7
Specificity of FIB-4	Triangular	0.969	0.9	0.995	7
Sensitivity of VCTE	Triangular	0.75	0.65	0.85	19, 20
Specificity of VCTE	Triangular	0.816	0.700	0.900	19, 20

Sensitivity of FIB-4 and VCTE, Sequential Test	Triangular	0.277	0.1500	0.400	7
Specificity of FIB-4 and VCTE, Sequential Test	Triangular	0.987	0.900	0.995	7
Sensitivity of FIB-4 and VCTE, Simultaneous Test	Triangular	0.650	0.550	0.750	7
Specificity of FIB-4 and VCTE, Simultaneous Test	Triangular	0.981	0.900	0.995	7
Proportion tested positive, as well as in greyzone in FIB-4		0.201			7
Proportion tested negative, as well as in greyzone in VCTE (For FIB-4 sequential test)		0.189			7

Treatment effect estimates

Fibrosis progression after adopting lifestyle changes upon formal diagnosis of fibrosis in liver (e.g. extensive weight loss)	Triangular	0.191	0.100	0.250	6
Spontaneous fibrosis regression (with no intervention)	Triangular	0.060	0.030	0.090	36-38
Fibrosis regression after adopting lifestyle changes upon formal diagnosis of fibrosis in liver (e.g. extensive weight loss)	Triangular	0.230	0.150	0.300	39
Probability of CV risk reduction after adopting lifestyle changes upon formal diagnosis of fibrosis in liver (e.g. extensive weight loss)	Triangular	0.114	0.100	0.200	40

Utility

Normal Liver in DM patient	Triangular	0.90	0.90	1.00	41
Individual with cardiovascular event	Triangular	0.61	0.50	0.70	14
Individual with decompensated cirrhosis	Triangular	0.57	0.50	0.70	35

F0/F1	Triangular	0.79	0.60	0.80	22
F2/F3	Triangular	0.73	0.60	0.80	22
F4	Triangular	0.71	0.60	0.80	22
HCC	Triangular	0.54	0.45	0.65	35
Liver Transplant	Triangular	0.73	0.60	0.80	35
