

SUPPLEMENTARY DATA

Supplementary Table 1. A) Annual Transition Probabilities for Incidence Module of T2DM and NAFLD patients in the U.S. 2017 for patients aged 50-64 B) Annual Transition Probabilities for Prevalence Module of T2DM and NASH patients in the U.S. for patients aged 50-64

		Annual Transition Probabilities												
		NAFL	F0	F1	F2	F3	CC	DCC	HCC	1yPLT	PLT	LRM	CVM	BM
Incidence Module	NAFL	98.68%	0.28%	0.01%	✗	✗	✗	✗	✗	✗	✗	✗	0.30%	0.73%
	F0	1.00%	86.05%	5.88%	3.04%	1.53%	1.03%	✗	0.04%	✗	✗	0.06%	0.64%	0.73%
	F1	0.50%	2.24%	89.24%	3.96%	2.22%	0.30%	✗	0.04%	✗	✗	0.13%	0.64%	0.73%
	F2	✗	1.34%	4.40%	86.12%	3.15%	2.63%	✗	0.53%	✗	✗	0.10%	1.00%	0.73%
	F3	✗	✗	4.09%	4.09%	77.49%	8.85%	✗	0.53%	✗	✗	1.58%	2.64%	0.73%
	CC	✗	✗	✗	✗	4.36%	79.01%	9.60%	1.35%	✗	✗	2.30%	2.64%	0.73%
	DCC	✗	✗	✗	✗	✗	✗	54.99%	2.60%	12.00%	✗	25.00%	4.68%	0.73%
	HCC	✗	✗	✗	✗	✗	✗	✗	49.00%	15.00%	✗	28.31%	6.96%	0.73%
	1yPLT	✗	✗	✗	✗	✗	✗	✗	✗	✗	89.00%	7.02%	3.25%	0.73%
PLT	✗	✗	✗	✗	✗	✗	✗	✗	✗	90.32%	7.00%	1.95%	0.73%	
		Annual Transition Probabilities												
		F0	F1	F2	F3	CC	DCC	HCC	1yPLT	PLT	LRM	CVM	BM	
Prevalence Module	F0	87.05%	5.88%	3.04%	1.53%	1.03%	✗	0.04%	✗	✗	0.06%	0.64%	0.73%	
	F1	2.24%	89.74%	3.96%	2.22%	0.30%	✗	0.04%	✗	✗	0.13%	0.64%	0.73%	
	F2	1.34%	4.40%	86.12%	3.15%	2.63%	✗	0.53%	✗	✗	0.10%	1.00%	0.73%	
	F3	✗	4.09%	4.09%	77.49%	8.85%	✗	0.53%	✗	✗	1.58%	2.64%	0.73%	
	CC	✗	✗	✗	4.36%	79.01%	9.60%	1.35%	✗	✗	2.30%	2.64%	0.73%	
	DCC	✗	✗	✗	✗	✗	54.99%	2.60%	12.00%	✗	25.00%	4.68%	0.73%	
	HCC	✗	✗	✗	✗	✗	✗	49.00%	15.00%	✗	28.31%	6.96%	0.73%	
	1yPLT	✗	✗	✗	✗	✗	✗	✗	✗	89.00%	7.02%	3.25%	0.73%	
	PLT	✗	✗	✗	✗	✗	✗	✗	✗	✗	90.32%	7.00%	1.95%	0.73%

[†]Transition rates were multiplied by relative risk of 1.48 compared to general population

[§] Transition rates were multiplied by relative risk of 1.20 compared to general population

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Supplementary Table 2. Annual Transition Probabilities for Liver Transplants varied for age

Age	DCC to 1yPLT	HCC to 1yPLT	1yPLT to PLT
18-34	5%	10%	95%
35-49	8%	12%	89%
50-64	12%	15%	89%
65-74	0%	0%	80%
75+	0%	0%	0%

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Supplementary Table 3. Annual Background Mortality by Age Group

Age	5 year TP	1 year rate	1 year TP
15-20	0.23%	0.000452912	0.05%
20-25	0.42%	0.000837551	0.08%
25-30	0.50%	0.000997684	0.10%
30-35	0.59%	0.001174039	0.12%
35-40	0.73%	0.001473011	0.15%
40-45	1.01%	0.002022189	0.20%
45-50	1.54%	0.003105587	0.31%
50-55	2.42%	0.004909570	0.49%
55-60	3.60%	0.007328855	0.73%
60-65	5.05%	0.010370922	1.03%
65-70	7.08%	0.014688408	1.46%
70-75	10.85%	0.022960098	2.27%
75-80	16.83%	0.036853329	3.62%
80-85	26.83%	0.062488691	6.06%
85-90	41.98%	0.108863728	10.31%
90-95	60.82%	0.187384931	17.09%
95-100	78.31%	0.305699183	26.34%
100+	100.00%	2.744040075	93.57%

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Supplementary Table 4. Model Deterministic Inputs and Probabilistic Parameters for Sensitivity Analysis for Patients Aged 50-64

Annual State Costs						
Input	Base Case Deterministic Value (50-64 years old)	Source	Distribution	Alpha	Beta	Standard Error
NAFL	\$121.96	2017 Current Procedural Terminology (CPT) codes, assuming non-facility prices, global service, and no modifiers. Fibrosis costs include annual low-to-medium complexity coded physician consultations, transient elastography, lipid panel, liver profile, complete blood count, and one-time screening per patient for hepatitis B and C. F3 costs include a liver biopsy.	Gamma	9	14	41
F0	\$137.11			9	15	46
F1	\$159.79			9	18	53
F2	\$159.79			9	18	53
F3	\$1,128.43			9	125	376
CC	\$17,969.39	Kaplan, D. E. <i>et al.</i> Healthcare Costs Related to Treatment of Hepatocellular Carcinoma Among Veterans With Cirrhosis in the United States. <i>Clin. Gastroenterol. Hepatol.</i> 16 , 106–114.e5 (2018).		9	1997	5990
DCC	\$41,357.08	Kaplan, D. E. <i>et al.</i> Healthcare Costs Related to Treatment of Hepatocellular Carcinoma Among Veterans With Cirrhosis in the United States. <i>Clin. Gastroenterol. Hepatol.</i> 16 , 106–114.e5 (2018).		9	4595	13786
HCC	\$89,437.40	Kaplan, D. E. <i>et al.</i> Healthcare Costs Related to Treatment of Hepatocellular Carcinoma Among Veterans With Cirrhosis in the United States. <i>Clin. Gastroenterol. Hepatol.</i> 16 , 106–114.e5 (2018).		9	9937	29812
1yPLT	\$403,836.15	HCUP National Inpatient Sample (NIS). Cost-to-Charge Ratio Files (CCR). Healthcare Cost and Utilization Project (HCUP). 2016. Agency for Healthcare Research and Quality, Rockville, MD. www.hcup-us.ahrq.gov/nisoverview.jsp . Bentley, T. S., Phillips, S. J. & Hanson, S. G. 2017 U.S. organ and tissue transplant cost estimates and discussion. 20		9	44871	134612

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		(2017).			
PLT	\$3,836.15	2017 Current Procedural Terminology (CPT) codes, assuming non-facility prices, global service, and no modifiers. Inclusive of annual follow-up visits for transplant related care and anti-rejection medications. We did not include costs of potential transplant-related complications.	9	1426	279
Diabetes	\$7,400.00	Yang W, Dall TM, Beronjia K, Lin J, Semilla AP, Chakrabarti R, et al. Economic costs of diabetes in the U.S. in 2017. <i>Diabetes Care</i> . 2018;41(5):917–28.	4	1850	3700

Demographics of T2DM, NAFL, NASH						
Input	Base Case Deterministic Value (50-64 years old)	Source	Distribution	Lower Bound	Upper Bound	Most Likely Value
Diagnosed T2DM Prevalence	12.4%	Centers for Disease Control and Prevention. National Diabetes Statistics Report, 2017. Atlanta, GA; 2017.	Beta PERT	8.4%	15.4%	12.4%
T2DM-NASH Incidence Factor	3.5	Assumption based on: Mantovani, A., Byrne, C. D., Bonora, E. & Targher, G. Nonalcoholic fatty liver disease and risk of incident type 2 diabetes: A meta-analysis. <i>Diabetes Care</i> 41, 372–382 (2018).		2	5	3.5
NAFL (Non-NASH NAFLD) Prevalence in T2DM	47%	Dai, W. et al. Prevalence of nonalcoholic fatty liver disease in patients with type 2 diabetes mellitus: A meta-analysis. <i>Med. (United States)</i> 96, (2017). Younossi ZM, Golabi P, de Avila L, Minhui Paik J, Srishord M, Fukui N, et al. The Global Epidemiology of NAFLD and NASH in Patients with type 2 diabetes: A Systematic Review and Meta-analysis. <i>J Hepatol</i> [Internet]. 2019; Available from: https://doi.org/10.1016/j.jhep.2019.06.021		27%	57%	42%
NASH Prevalence in T2DM	26%	Younossi ZM, Golabi P, de Avila L, Minhui Paik J, Srishord M, Fukui N, et al. The Global Epidemiology of NAFLD and NASH in Patients with type 2 diabetes: A Systematic Review and		18%	36%	27%

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Meta-analysis. J Hepatol [Internet]. 2019; Available from:
<https://doi.org/10.1016/j.jhep.2019.06.021>

Annual Transition Probabilities							
Input	Deterministic Value	Source	Probabilistic Sensitivity Analysis				
			Distribution	Alpha	Beta	Standard Error	
NAFL							
NAFLNAFL	0.9868	Subtract from 1		131	2	0.0099	
NAFLF0	0.0028	Assumption: 20% of NAFLD incidence rate (Allen AM, Therneau TM, Larson JJ, Coward A, Somers VK, Kamath PS. Nonalcoholic fatty liver disease incidence and impact on metabolic burden and death: A 20 year-community study. <i>Hepatology</i> . 2018;67(5):1726–36.) multiplied by the T2DM-NASH incidence factor (3.5 in base-case analysis)		1	348	0.0028	
NAFLF1	0.0001	Assumption	Dirichlet	1	19997	0.0001	
NAFLBM	0.0073	Arias, E., Heron, M. & Xu, J. <i>United States Life Tables. National Vital Statistics Reports (2017)</i> .		1	166	0.0066	
NAFLCVM	0.0030	Center for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). Plan and Operation of the Third National Health and Nutrition Examination Survey 1988-94. https://wwwn.cdc.gov/nchs/nhanes/nhanes3/datafiles.aspx		1	330	0.0030	
F0							
F0NAFL	0.0100	Assumption	Dirichlet	2	152	0.0080	
F0F0	0.8605	Subtract from 1		1318	200	0.0087	
F0F1	0.0588	Singh, S. <i>et al</i> . Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin</i> .		116	1859	0.0053	

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		<i>Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).			
		Hossain, N. <i>et al.</i> Independent predictors of fibrosis in patients with nonalcoholic fatty liver disease. <i>Clin. Gastroenterol. Hepatol.</i> 7 , 1224-1229 (2009).			
FOF2	0.0304	Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).	24	937	0.0051
FOF3	0.0153	Hossain, N. <i>et al.</i> Independent predictors of fibrosis in patients with nonalcoholic fatty liver disease. <i>Clin. Gastroenterol. Hepatol.</i> 7 , 1224-1229 (2009). Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).	25	1912	0.0025
FOCC	0.0103	Hossain, N. <i>et al.</i> Independent predictors of fibrosis in patients with nonalcoholic fatty liver disease. <i>Clin. Gastroenterol. Hepatol.</i> 7 , 1224-1229 (2009). Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).	25	2368	0.0021
FOHCC	0.0004	Younossi, Z. M. <i>et al.</i> Global epidemiology of nonalcoholic fatty liver disease—Meta-analytic assessment of prevalence, incidence, and outcomes. <i>Hepatology</i> 64 , 73–84 (2016).	1	2497	0.0004
FOLRM	0.0006	Dulai, P. S. <i>et al.</i> Increased risk of mortality by fibrosis stage in nonalcoholic fatty liver disease: Systematic review and meta-analysis. <i>Hepatology</i> 65 , 1557–1565 (2017).	1	1664	0.0006
FOBM	0.0073	Arias, E., Heron, M. & Xu, J. <i>United States Life Tables. National Vital Statistics Reports</i> (2017).	1	134	0.0073

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FOCVM	0.0064	Center for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). Plan and Operation of the Third National Health and Nutrition Examination Survey 1988-94. https://wwwn.cdc.gov/nchs/nhanes/nhanes3/datafiles.aspx		6	963	0.0026
<hr/>						
F1						
F1NAFL	0.0050	Assumption	Dirichlet	2	308	0.004
F1F0	0.0224	Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).		1	52	0.020
F1F1	0.8924	Subtract from 1		155	17	0.023
F1F2	0.0396	Hossain, N. <i>et al.</i> Independent predictors of fibrosis in patients with nonalcoholic fatty liver disease. <i>Clin. Gastroenterol. Hepatol.</i> 7 , 1224-1229 (2009). Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).		3	78	0.020
F1F3	0.0222	Hossain, N. <i>et al.</i> Independent predictors of fibrosis in patients with nonalcoholic fatty liver disease. <i>Clin. Gastroenterol. Hepatol.</i> 7 , 1224-1229 (2009). Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).		3	144	0.011
F1CC	0.0030	Hossain, N. <i>et al.</i> Independent predictors of fibrosis in patients with nonalcoholic fatty liver disease. <i>Clin. Gastroenterol. Hepatol.</i> 7 , 1224-1229 (2009). Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty		2	513	0.002

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		Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).			
F1HCC	0.0004	Younossi, Z. M. <i>et al.</i> Global epidemiology of nonalcoholic fatty liver disease—Meta-analytic assessment of prevalence, incidence, and outcomes. <i>Hepatology</i> 64 , 73–84 (2016).		1	2497 0.000
F1LRM	0.0013	Dulai, P. S. <i>et al.</i> Increased risk of mortality by fibrosis stage in nonalcoholic fatty liver disease: Systematic review and meta-analysis. <i>Hepatology</i> 65 , 1557–1565 (2017).		1	779 0.001
F1BM	0.0073	Arias, E., Heron, M. & Xu, J. <i>United States Life Tables. National Vital Statistics Reports</i> (2017).		1	134 0.007
F1CVM	0.0064	Center for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). Plan and Operation of the Third National Health and Nutrition Examination Survey 1988-94. https://wwwn.cdc.gov/nchs/nhanes/nhanes3/datafiles.aspx		1	153 0.006
F2					
F2F0	0.0134	Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).	Dirichlet	1	72 0.013
F2F1	0.0440	Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).		1	20 0.044
F2F2	0.8612	Subtract from 1		12	2 0.087
F2F3	0.0315	Hossain, N. <i>et al.</i> Independent predictors of fibrosis in patients with nonalcoholic fatty liver disease. <i>Clin. Gastroenterol. Hepatol.</i> 7 , 1224-1229 (2009).		1	35 0.026
		Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty			

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		Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).				
		Hossain, N. <i>et al.</i> Independent predictors of fibrosis in patients with nonalcoholic fatty liver disease. <i>Clin. Gastroenterol. Hepatol.</i> 7 , 1224-1229 (2009).				
F2CC	0.0263	Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).	1	35	0.026	
F2HCC	0.0053	Younossi, Z. M. <i>et al.</i> Global epidemiology of nonalcoholic fatty liver disease—Meta-analytic assessment of prevalence, incidence, and outcomes. <i>Hepatology</i> 64 , 73–84 (2016).	1	187	0.005	
F2LRM	0.0010	Dulai, P. S. <i>et al.</i> Increased risk of mortality by fibrosis stage in nonalcoholic fatty liver disease: Systematic review and meta-analysis. <i>Hepatology</i> 65 , 1557–1565 (2017).	1	997	0.001	
F2BM	0.0073	Arias, E., Heron, M. & Xu, J. <i>United States Life Tables. National Vital Statistics Reports</i> (2017).	1	134	0.007	
F2CVM	0.0100	Center for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). Plan and Operation of the Third National Health and Nutrition Examination Survey 1988-94. https://wwwn.cdc.gov/nchs/nhanes/nhanes3/datafiles.aspx	1	97	0.010	
F3						
F3F1	0.0409	Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).	Dirichlet	1	34	0.033
F3F2	0.0409	Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty		1	22	0.041

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			Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).			
F3F3	0.7749	Subtract from 1		13	3	0.099
			Hossain, N. <i>et al.</i> Independent predictors of fibrosis in patients with nonalcoholic fatty liver disease. <i>Clin. Gastroenterol. Hepatol.</i> 7 , 1224-1229 (2009).			
F3CC	0.0885	Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).		1	14	0.071
F3HCC	0.0053	Younossi, Z. M. <i>et al.</i> Global epidemiology of nonalcoholic fatty liver disease—Meta-analytic assessment of prevalence, incidence, and outcomes. <i>Hepatology.</i> 64 , 73–84 (2016).		1	187	0.005
F3LRM	0.0158	Dulai, P. S. <i>et al.</i> Increased risk of mortality by fibrosis stage in nonalcoholic fatty liver disease: Systematic review and meta-analysis. <i>Hepatology</i> 65 , 1557–1565 (2017).		1	60	0.016
F3BM	0.0073	Arias, E., Heron, M. & Xu, J. <i>United States Life Tables. National Vital Statistics Reports</i> (2017).		1	134	0.007
F3CVM	0.0264	Center for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). Plan and Operation of the Third National Health and Nutrition Examination Survey 1988-94. https://wwwn.cdc.gov/nchs/nhanes/nhanes3/datafiles.aspx		1	73	0.013
CC						
CCF3	0.0436	Singh, S. <i>et al.</i> Fibrosis Progression in Nonalcoholic Fatty Liver vs Nonalcoholic Steatohepatitis: A Systematic Review and Meta-analysis of Paired-Biopsy Studies. <i>Clin. Gastroenterol. Hepatol.</i> 13 , 643–654 (2015).	Dirichlet	1	20	0.044

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CCCC	0.7901	Subtract from 1		19	5	0.080
CCDCC	0.0960	Ekstedt, M. <i>et al.</i> Long-term follow-up of patients with NAFLD and elevated liver enzymes. <i>Hepatology</i> 44 , 865–873 (2006).		1	10	0.086
CCHCC	0.0135	Kanwal, F. <i>et al.</i> Risk of Hepatocellular Cancer in Patients With Non-Alcoholic Fatty Liver Disease. <i>Gastroenterology</i> 155 , 1828–1837.e2 (2018).		1	71	0.014
CCLRM	0.0230	Dulai, P. S. <i>et al.</i> Increased risk of mortality by fibrosis stage in nonalcoholic fatty liver disease: Systematic review and meta-analysis. <i>Hepatology</i> 65 , 1557–1565 (2017).		1	40	0.023
CCBM	0.0073	Arias, E., Heron, M. & Xu, J. <i>United States Life Tables. National Vital Statistics Reports</i> (2017).		1	134	0.007
CCCVM	0.0264	Center for Disease Control and Prevention (CDC). National Center for Health Statistics (NCHS). Plan and Operation of the Third National Health and Nutrition Examination Survey 1988-94. https://wwwn.cdc.gov/nchs/nhanes/nhanes3/datafiles.aspx		1	73	0.013
<hr/>						
DCC						
DCCDCC	0.5499	Subtract from 1	Dirichlet	8	9	0.120
DCCHCC	0.0260	Kanwal, F. <i>et al.</i> Risk of Hepatocellular Cancer in Patients With Non-Alcoholic Fatty Liver Disease. <i>Gastroenterology</i> 155 , 1828–1837.e2 (2018).		1	36	0.026
DCC1yPLT	0.1200	Varied by age and based on: Wong, R. J. <i>et al.</i> Nonalcoholic steatohepatitis is the second leading etiology of liver disease among adults awaiting liver transplantation in the United States. <i>Gastroenterology</i> 148 , 547–555 (2015).		3	7	0.135
DCCLRM	0.2500	Zipprich A, Garcia-Tsao G, Rogowski S, Fleig WE, Seufferlein T, Dollinger MM. Prognostic indicators of survival in patients with compensated and decompensated cirrhosis. <i>Liver Int.</i> 2012;32(9):1407–14.		5	24	0.069

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DCCBM	0.0073	Arias, E., Heron, M. & Xu, J. <i>United States Life Tables. National Vital Statistics Reports</i> (2017).		1	134	0.007
DCCCVM	0.0468	Assumption made from: Zipprich A, Garcia-Tsao G, Rogowski S, Fleig WE, Seufferlein T, Dollinger MM. Prognostic indicators of survival in patients with compensated and decompensated cirrhosis. <i>Liver Int.</i> 2012;32(9):1407–14		1	61	0.016
<hr/>						
HCC						
HCCHCC	0.4900	Golabi, P. <i>et al.</i> Mortality assessment of patients with hepatocellular carcinoma according to underlying disease and treatment modalities. <i>Med. (United States)</i> 96 , (2017).		4	38	0.043
HCC1yPLT	0.1500	Varied by age and based on: Wong, R. J. <i>et al.</i> Nonalcoholic steatohepatitis is the second leading etiology of liver disease among adults awaiting liver transplantation in the United States. <i>Gastroenterology</i> 148 , 547–555 (2015).		15	22	0.080
HCCLRM	0.2831	Subtract from 1	Dirichlet	5	5	0.147
HCCBM	0.0073	Arias, E., Heron, M. & Xu, J. <i>United States Life Tables. National Vital Statistics Reports</i> (2017).		1	134	0.007
HCCCVM	0.0696	Golabi, P. <i>et al.</i> Mortality assessment of patients with hepatocellular carcinoma according to underlying disease and treatment modalities. <i>Med. (United States)</i> 96 , (2017).		1	66	0.016
<hr/>						
1yPLT						
1yPLTPLT	0.8900	Pais, R. <i>et al.</i> NAFLD and liver transplantation: Current burden and expected challenges. <i>J Hepatol</i> 65 , 1245–1257 (2016).	Dirichlet	1448	1499	0.009
1yPLTLRM	0.0702	Subtract from 1		334	348	0.006
1yPLTBM	0.0073	Arias, E., Heron, M. & Xu, J. <i>United States Life Tables. National Vital Statistics Reports</i> (2017).		14	9927	0.000
1yPLTCVM	0.0325	Pais, R. <i>et al.</i> NAFLD and liver transplantation: Current burden and expected challenges. <i>J Hepatol</i> 65 , 1245–1257		145	122	0.001

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(2016).

PLT						
PLTPLT	0.9032	Subtract from 1		13	8	0.091
PLTLRM	0.0700	Sadler, E. M. <i>et al.</i> Liver transplantation for NASH-related hepatocellular carcinoma versus Non-NASH etiologies of hepatocellular carcinoma. <i>Transplantation</i> 102 , 640–647 (2018).		1	1	0.078
PLTBM	0.0073	Arias, E., Heron, M. & Xu, J. <i>United States Life Tables. National Vital Statistics Reports</i> (2017).	Dirichlet	0	1	0.007
PLTCVM	0.0195	Surabhi, M. Is liver transplantation a risk factor for cardiovascular disease? <i>Liver Transplant.</i> 18 , 1140–1146 (2012).		0	1	0.015

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Supplementary Table 5. Average Results from 10,000 Monte Carlo microsimulations in Probabilistic Sensitivity Analysis Compared to Deterministic Results (Base Case 50-64 Years Old)

Incidence Module

Model	Lifetime Costs*	NAFL Costs*	NASH Costs*	NAFL Diabetes Costs*	NASH Diabetes Costs*	LT	LRM	CVM	DCC Person Years	HCC Person Years
Deterministic	\$363,239	\$353,277	\$9,962	\$347,549	\$8,358	155	8,869	203,522	14,155	5,200
Probabilistic	\$346,582	\$333,991	\$12,591	\$328,582	\$10,485	117	5,511	435,797	12,119	2,570

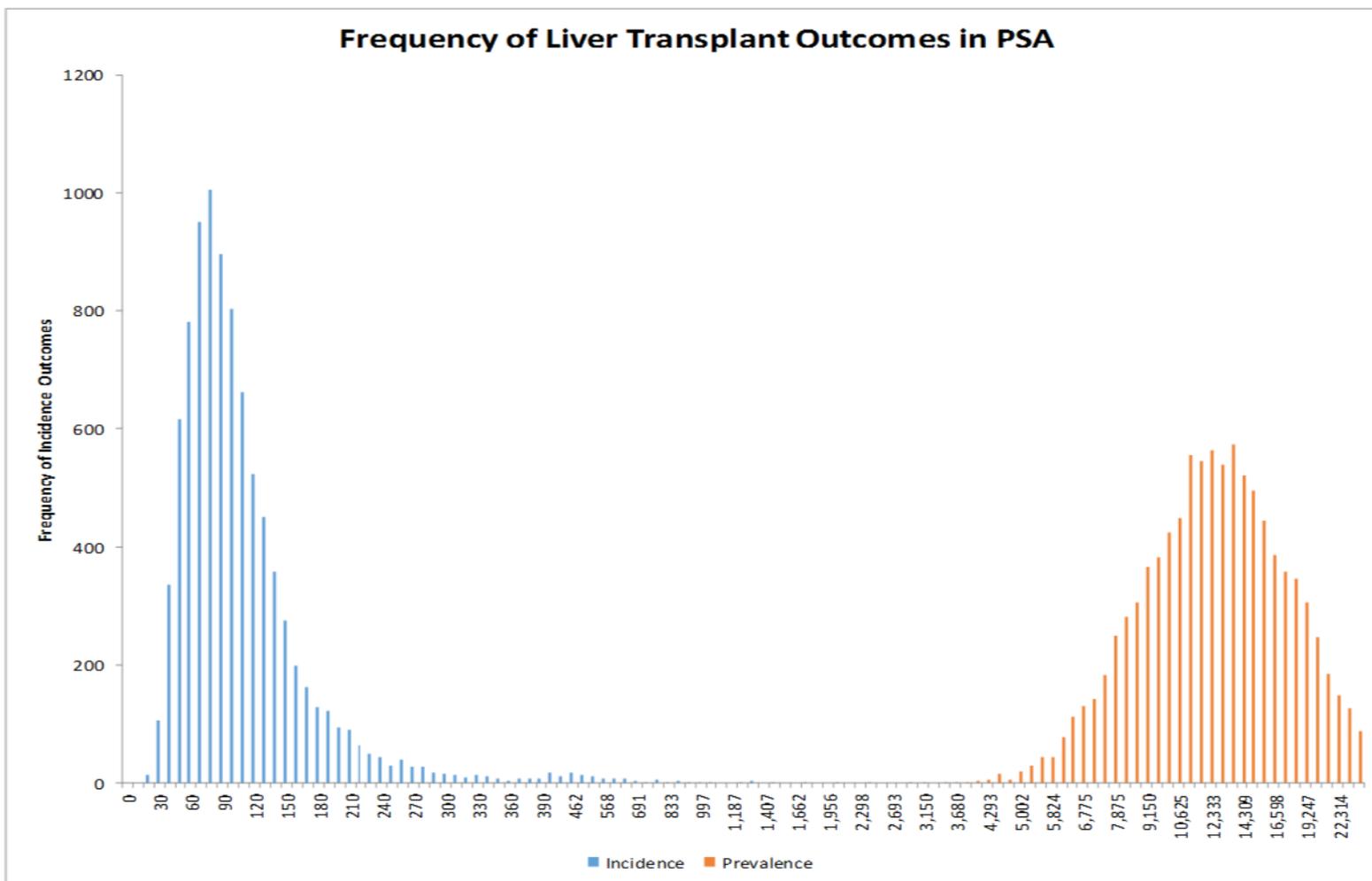
Prevalence Module

Model	Lifetime Cost*	Diabetes Costs*	LT	LRM	CVM	DCC Person Years	HCC Person Years
Deterministic	\$238,878	\$168,019	29,478	352,785	372,621	566,438	198,259
Probabilistic	\$227,797	\$166,698	13,872	127,728	510,993	370,867	58,423

*Costs in millions

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Supplementary Figure 1A



Supplementary Figure 1B

