

Supplementary Table 1 CHEERS 2022 Checklists [1]

Section/topic	Item no.	Guidance for reporting	Reported in section (Page no.)
Title Title	1	Identify the study as an economic evaluation and specify the interventions being compared	1
Abstract Abstract	2	Provide a structured summary that highlights context, key methods, results, and alternative analyses	3-4
Introduction			
Background and objectives	3	Give the context for the study, the study question, and its practical relevance for decision making in policy or practice	4-6
Methods			
Health economic analysis plan	4	Indicate whether a health economic analysis plan was developed and where available	6, Figure 1
Study population	5	Describe characteristics of the study population (such as age range, demographics, socioeconomic, or clinical characteristics)	7
Setting and location	6	Provide relevant contextual information that may influence findings	6, 8-9
Comparators	7	Describe the interventions or strategies being compared and why chosen	7
Perspective	8	State the perspective(s) adopted by the study and why chosen	6
Time horizon	9	State the time horizon for the study and why appropriate	7
Discount rate	10	Report the discount rate(s) and reason chosen	6
Selection of outcomes	11	Describe what outcomes were used as the measure(s) of benefit(s) and harm(s)	9
Measurement of outcomes	12	Describe how outcomes used to capture benefit(s) and harm(s) were measured	8-9
Valuation of outcomes	13	Describe the population and methods used to measure and value	9

		outcomes	
Measurement and valuation of resources and costs	14	Describe how costs were valued	8-9
Currency, price date, and conversion	15	Report the dates of the estimated resource quantities and unit costs, plus the currency and year of conversion	9
Rationale and description of model	16	If modelling is used, describe in detail and why used. Report if the model is publicly available and where it can be accessed	7-8
Analytics and assumptions	17	Describe any methods for analysing or statistically transforming data, any extrapolation methods, and approaches for validating any model used	9-10
Characterizing heterogeneity	18	Describe any methods used for estimating how the results of the study vary for subgroups	NA
Characterizing distributional effects	19	Describe how impacts are distributed across different individuals or adjustments made to reflect priority populations	NA
Characterizing uncertainty	20	Describe methods to characterise any sources of uncertainty in the analysis	9-10
Approach to engagement with patients and others affected by the study	21	Describe any approaches to engage patients or service recipients, the general public, communities, or stakeholders (such as clinicians or payers) in the design of the study	NA
Results			
Study parameters	22	Report all analytic inputs (such as values, ranges, references) including uncertainty or distributional assumptions	8-10, Table 1-3
Summary of main results	23	Report the mean values for the main categories of costs and outcomes of interest and summarise them in the most appropriate overall measure	11, Table 4
Effect of uncertainty	24	Describe how uncertainty about analytic judgments, inputs, or projections affect findings. Report the effect of choice of discount rate and time horizon, if applicable	10-11, Figure 2-3

Effect of engagement with patients and others affected by the study	25	Report on any difference patient/service recipient, general public, community, or stakeholder involvement made to the approach or findings of the study	NA
Discussion			
Study findings, limitations, generalizability, and current knowledge	26	Report key findings, limitations, ethical or equity considerations not captured, and how these could affect patients, policy, or practice	12-14
Other relevant information			
Source of funding	27	Describe how the study was funded and any role of the funder in the identification, design, conduct, and reporting of the analysis	This research has no funding.
Conflict of interest	28	Report authors conflicts of interest according to journal or International Committee of Medical Journal Editors requirements	21

Abbreviations: NA, not applicable; no., number

References

1 **Husereau D**, Drummond M, Augustovski F, Briggs AH, Carswell C, Caulley L, Chaiyakunapruk N, de Bekker-Grob E, Greenberg D, Loder E, Mauskopf J, Mullins CD, Petrou S, Pwu RF, Staniszewska S; CHEERS 2022 ISPOR Good Research Practices Task Force. Consolidated Health Economic Evaluation Reporting Standards 2022 (CHEERS 2022) statement: updated reporting guidance for health economic evaluations. *BJOG* 2022; **129**: 336-344 [PMID: 35014160 DOI: 10.1111/1471-0528.17012]

The age-specific mortality rates were derived from the World Health Organization Life Table [26] and Thailand's Registration Administration Office [33] (**Supplementary Table 2**).

Supplementary Table 2 Age-specific mortality rate for the Thai population

Age (years old)	ASMR	Age (years old)	ASMR
18	0.00087	52	0.00505
19	0.00087	53	0.00505
20	0.00119	54	0.00505
21	0.00119	55	0.00669
22	0.00119	56	0.00669
23	0.00119	57	0.00669
24	0.00119	58	0.00669
25	0.00161	59	0.00669
26	0.00161	60	0.00986
27	0.00161	61	0.00986
28	0.00161	62	0.00986
29	0.00161	63	0.00986
30	0.00209	64	0.00986
31	0.00209	65	0.01509
32	0.00209	66	0.01509
33	0.00209	67	0.01509
34	0.00209	68	0.01509
35	0.00256	69	0.01509
36	0.00256	70	0.02323
37	0.00256	71	0.02323
38	0.00256	72	0.02323
39	0.00256	73	0.02323
40	0.00310	74	0.02323
41	0.00310	75	0.03644
42	0.00310	76	0.03644
43	0.00310	77	0.03644
44	0.00310	78	0.03644
45	0.00384	79	0.03644
46	0.00384	80	0.05821
47	0.00384	81	0.05821
48	0.00384	82	0.05821
49	0.00384	83	0.05821
50	0.00505	84	0.05821
51	0.00505	≥85	0.12460

ASMR, Age-specific mortality rate

Cause-specific mortality rates were estimated by combining age-specific mortality rates for the Thai general population with cause-specific mortality rates for T2DM and hazard ratios for each MASLD fibrosis stage (**Supplementary Table 3** and **4**). The proportion of deaths attributable to cardiovascular diseases among all-cause mortality is presented in **Supplementary Table 5**.

Supplementary Table 3 Baseline value of cause-specific annual mortality rate in Fibrosis Stage 0

Causes of death	Mortality rate	Source
All-cause mortality of T2DM patients	0.00118	[27]
Liver-related mortality	0.00093	[30]
Death from CVDs	0.00026	[27]

Abbreviations: T2DM, Type 2 diabetes mellitus; CVDs, Cardiovascular diseases

Supplementary Table 4 Comparative mortality rate according to fibrosis stage

Fibrosis Stage	Hazard ratio	Source
All-cause mortality		
F1 <i>vs</i> F0	1.24	[28]
F2 <i>vs</i> F0	1.46	[28]
F3 <i>vs</i> F0	1.96	[28]
F4 <i>vs</i> F0	3.66	[28]
Liver-related mortality		
F1 <i>vs</i> F0	1.69	[28]
F2 <i>vs</i> F0	4.07	[28]
F3 <i>vs</i> F0	7.59	[28]
F4 <i>vs</i> F0	15.1	[28]

F, Fibrosis stage

Supplementary Table 5 Death from cardiovascular diseases

Fibrosis Stage	% of death from CVDs from all-cause mortality	Source
F0	30%	[29]
F1	30%	[29]
F2	30%	[29]
F3	29%	[29]
F4	20%	[29]

CVDs, Cardiovascular diseases; F, Fibrosis stage

References

26. Life Tables by Country: Thailand [Internet]. 2019 [cited 20 March 2024]. Available from: <https://data.who.int/countries/764>.
27. **Ng CH**, Chan KE, Chin YH, Zeng RW, Tsai PC, Lim WH, Tan DJH, Khoo CM, Goh LH, Ling ZJ, Kulkarni A, Mak LL, Huang DQ, Chan M, Chew NW, Siddiqui MS, Sanyal AJ, Muthiah M. The effect of diabetes and prediabetes on the prevalence, complications and mortality in nonalcoholic fatty liver disease. *Clin Mol Hepatol* 2022; **28**: 565-574 [PMID: 35585687 DOI: 10.3350/cmh.2022.0096]
28. **Ng CH**, Lim WH, Hui Lim GE, Hao Tan DJ, Syn N, Muthiah MD, Huang DQ, Loomba R. Mortality Outcomes by Fibrosis Stage in Nonalcoholic Fatty Liver Disease: A Systematic Review and Meta-analysis. *Clin Gastroenterol Hepatol* 2023; **21**: 931-939.e5 [PMID: 35513235 DOI: 10.1016/j.cgh.2022.04.014]
29. **Tampi RP**, Wong VW, Wong GL, Shu SS, Chan HL, Fung J, Stepanova M, Younossi ZM. Modelling the economic and clinical burden of non-alcoholic steatohepatitis in East Asia: Data from Hong Kong. *Hepatol Res* 2020; **50**: 1024-1031 [PMID: 32537840 DOI: 10.1111/hepr.13535]
30. **Taylor RS**, Taylor RJ, Bayliss S, Hagström H, Nasr P, Schattenberg JM, Ishigami M, Toyoda H, Wai-Sun Wong V, Peleg N, Shlomai A, Sebastiani G, Seko Y, Bhala N, Younossi ZM, Anstee QM, McPherson S, Newsome PN. Association Between Fibrosis Stage and Outcomes of Patients With Nonalcoholic Fatty Liver Disease: A Systematic Review and Meta-Analysis. *Gastroenterology* 2020; **158**: 1611-1625.e12 [PMID: 32027911 DOI: 10.1053/j.gastro.2020.01.043]
33. Population statistics for population registration (monthly) [Internet]. [cited 20 March 2024]. Available from: <https://stat.bora.dopa.go.th/stat/statnew/statMONTH/statmonth/#/mainpage>.