Charlson Comorbidity Index

Patient's name: _____ **Date:** _____ mm / dd / yyyy

Age: _____ **Medical record no.:** _____

Completed by: _____ **Setting:** _____

HOW TO USE

The Charlson Comorbidity Index weights 19 conditions by their effect on one-year mortality, then adds an age adjustment. It is widely used to describe case mix and to estimate longer-term survival.

> **Count each condition once**
> Where a condition appears at two severities, score only the higher one. Do not add 1 for uncomplicated diabetes and 2 for diabetes with end-organ damage in the same patient; score 2.

COMORBIDITY SCORING

Points	Condition	Present
1	Myocardial infarction	
1	Congestive heart failure	
1	Peripheral vascular disease	
1	Cerebrovascular disease	
1	Dementia	
1	Chronic pulmonary disease	
1	Connective tissue disease	
1	Peptic ulcer disease	
1	Mild liver disease	
1	Diabetes without end-organ damage	
2	Hemiplegia	
2	Moderate to severe renal disease	
2	Diabetes with end-organ damage	
2	Any solid tumor (not metastatic)	
2	Leukemia	
2	Lymphoma	
3	Moderate or severe liver disease	
6	Metastatic solid tumor	
6	AIDS	

AGE ADJUSTMENT

Age band	Points added
Under 50	0
50 to 59	1
60 to 69	2
70 to 79	3
80 to 89	4
90 to 99	5

Comorbidity points: _____ **Age points:** _____

Total index (i): _____

INTERPRETATION

Total	Burden	Reported one-year mortality in the derivation cohort
0	None	12%
1 to 2	Mild	26%
3 to 4	Moderate	52%
5 or more	Severe	85%

> **Estimating ten-year survival**
> Ten-year survival is estimated as Z = 0.983 raised to the power of Y, where Y = e to the power of (total index x 0.9). Treat the figure as a population estimate, not a prediction for the individual in front of you.

Estimated 10-year survival: _____ **Discussed with patient:** _____

Date: _____ mm / dd / yyyy

How the score is being used (case mix, treatment planning, research)

Sources: Charlson ME, Pompei P, Ales KL, MacKenzie CR. A new method of classifying prognostic comorbidity in longitudinal studies. J Chronic Dis. 1987;40(5):373-383. · Charlson M, Szatrowski TP, Peterson J, Gold J. Validation of a combined comorbidity index. J Clin Epidemiol. 1994;47(11):1245-1251.