

Supplementary Table 1. GDMT adequacy scores

Variable	Score
Adequacy score type 1	
ACEI or ARB	1–3
Beta-blockers (heart rate-based)	1–3
MRA	2
ARNI	3–5
Maximum score of type 1	10
Adequacy score type 2	
ACEI or ARB	1–3
Beta-blockers (dose-based)	1–2
MRA	2
ARNI	3–5
Maximum score of type 2	9
ARB	
Losartan dose (once daily)	
< 50 mg	1
50–99 mg	2
≥ 100 mg	3
Candesartan dose (once daily)	
< 8 mg	1
8–15.9 mg	2
≥ 16 mg	3
Valsartan dose (twice daily)	
< 80 mg	1
80–159 mg	2
≥ 160 mg	3
Fimasartan prescription (once daily)	
Telmisartan prescription (once daily)	1
Olmesartan prescription (once daily)	1
ACEI	
Ramipril dose (twice daily)	
< 5 mg	1
5–9.9 mg	2
≥ 10 mg	3
Enalapril dose (twice daily)	
< 10 mg	1
10–19.9 mg	2
≥ 20 mg	3
Perindopril dose (once daily)	
< 2 mg	1
2–4.9 mg	2

Variable	Score
≥ 5 mg	3
ARNI	
ARNI dose (twice daily)	
< 50 mg	3
50–99.9 mg	4
≥ 100 mg	5
Beta-blockers (heart rate-based for type 1 adequacy score)	
Heart rate/minute (sinus rhythm)	
≥ 80	1
60–79	2
< 60	3
Heart rate/minute (atrial fibrillation)	
≥ 100	1
80–99	2
< 80	3
Beta-blockers (dose-based for type 2 adequacy score)	
Beta-blockers	
None	0
< 50% target dose	1
≥ 50% target dose	2
Bisoprolol	
None	0
< 5 mg once daily	1
≥ 5 mg once daily	2
Carvedilol	
None	0
< 12.5 mg once daily	1
≥ 12.5 mg once daily	2
Nebivolol	
None	0
< 5 mg once daily	1
≥ 5 mg once daily	2

GDMT, guideline-directed medical therapy; ACEI, angiotensin-converting enzyme inhibitor; ARB, angiotensin-receptor blocker; MRA, mineralocorticoid receptor antagonist; ARNI, angiotensin receptor-neprilysin inhibitor.

Modified from initial, median, and target dose based on 2021 ESC guidelines for the diagnosis and treatment of acute and chronic heart failure.