

2022 ESC/ERS 3-Strata Risk Score Calculator

The 2022 ESC/ERS Treatment Guidelines¹ recommend using 3-strata risk stratification at baseline. A clinician's best judgment should be used when scoring the multi-parameter variables. *At least 3 variables are required to generate a risk score.*

Variables (Est. 1 Yr Mortality)	Low Risk (<5%)	Intermediate Risk (5%–20%)	High Risk (>20%)	Score
Point Value Per Variable	1	2	3	
Signs of right HF	Absent	Absent	Present	
Progression of symptoms	No	Slow	Rapid	
Syncope	No	Occasional syncope	Repeated syncope	
WHO-FC	I, II	III	IV	
6MWD	>440 m	165–440 m	<165 m	
CPET	Peak VO ₂ >15 mL/min/kg (>65% pred.) VE/VCO ₂ slope <36	Peak VO ₂ 11–15 mL/min/kg (35–65% pred.) VE/VCO ₂ slope 36–44	Peak VO ₂ <11 mL/min/kg (<35% pred.) VE/VCO ₂ slope >44	
Biomarkers: BNP or NT-proBNP	BNP <50 ng/L NT-proBNP <300 ng/L	BNP 50–800 ng/L NT-proBNP 300–1100 ng/L	BNP >800 ng/L NT-proBNP >1100 ng/L	
Echocardiography	RA area <18 cm ² TAPSE/sPAP >0.32 mm/mmHg No pericardial effusion	RA area 18–26 cm ² TAPSE/sPAP >0.32 mm/mmHg Minimal pericardial effusion	RA area >26 cm ² TAPSE/sPAP >0.32 mm/mmHg Moderate–large pericardial effusion	
cMRI ^e	RVEF >54% SVI >40 mL/m ² RVESVI <42 mL/m ²	RVEF 37–54% SVI 26–40 mL/m ² RVESVI 42–54 mL/m ²	RVEF <37% SVI <26 mL/m ² RVESVI >54 mL/m ²	
Haemodynamics	RAP <8 mm Hg CI ≥2.5 L/min/m ² SVI >38 mL/m ² SvO ₂ >65%	RAP 8–14 mm Hg CI 2–2.4 L/min/m ² SVI >31–38 mL/m ² SvO ₂ 60%–65%	RAP >14 mm Hg CI <2 L/min/m ² SVI <31 mL/m ² SvO ₂ <60%	
Total Risk Score	Divide the sum of all variable scores by the number of variables entered and round to the nearest decimal			

	Low Risk	Intermediate Risk	High Risk	
Risk Score	1 to <1.5	1.5 to <2.5	2.5 to 3	

COMPERA 2.0: 4-Strata Risk Assessment

The 2022 ESC/ERS Treatment Guidelines recommend using 4-strata risk stratification in follow-up visits every 3–6 months. All 3 values are required to calculate score. 1 year transplant-free mortality risk is based on average points assigned.

Variables (1 Yr Survival Rates)	Low Risk (98.5%)	Intermediate — Low Risk (97.2%)	Intermediate — High Risk (91.3%)	High Risk (78%)	Score
Point Value Per Variable	1	2	3	4	
WHO FC	I, II	—	III	IV	
6MWD	>440 m	320–440 m	165–319 m	<165 m	
BNP	<50 ng/L	50–199 ng/L	200–800 ng/L	>800 ng/L	
OR					
NT-proBNP	<300 ng/L	300–649 ng/L	650–1100 ng/L	>1100 ng/L	
Total Risk Score	Divide the sum of all variable scores by 3 and round to the nearest integer				

	Low Risk	Intermediate–Low Risk	Intermediate–High Risk	High Risk	
Risk Score	1 to <1.5	1.5 to <2.5	2.5 to <3.5	3.5 to 4	

REVEAL 2.0 Risk Calculator

Directions: Select all variables that apply. **A minimum of 7 variables** are required to generate a score. Calculation accuracy increases with more selections.

Step 1

Select at least 7 variables.

WHO Group 1 Subgroup	Other	CTD-PAH	Heritable	PoPH	Score
	0	1	2	3	
Demographics - Male age > 60 years	No		Yes		
	0		2		
eGFR < 60 mL/min/1.73m ² or renal insufficiency	No	Yes			
	0	1			
NYHA/WHO Functional Class	I	II	III	IV	
	-1	0	1	2	
Systolic BP (mm Hg)	SBP ≥110	SBP <110			
	0	1			
Heart Rate (BPM)	HR ≤96	HR >96			
	0	1			
All-Cause Hospitalizations ≤ 6 mo	No	Yes			
	0	1			
6-Minute Walk Test (m)	≥440	320 to 440	<320 to 165	<165	
	-2	-1	0	1	
BNP (pg/mL)	50	50 to <200	200 to <800	≥800	
	-2	0	1	2	
OR					
NT-proBNP (pg/mL)	<300	300 to <1100		≥1100	
	-2	0		2	
Pericardial Effusion on Echocardiogram	No	Yes			
	0	1			
% Predicted DLCO ≤ 40	No	Yes			
	0	1			
mRAP > 20 mm Hg Within 1 Year	No	Yes			
	0	1			
PVR < 5 Wood units on right heart catheterization	Yes	No			
	-1	0			
			Step 2	Sum of above (min. 7 variables)	
					+6
			Step 3	Risk score	

	Low Risk	Intermediate Risk	High Risk	
Risk Score	0–6	7–8	≥9	

REVEAL Lite 2 Risk Calculator

Directions: Select all variables that apply. **A minimum of 3 variables** are required to generate a score, where at least 2 are from most predictive values denoted ******.

Step 1

Select at least 2 of the most predictive variables

BNP (pg/mL)**	<50 -2	50 to <200 0	200 to <800 1	≥800 2	Score
OR					
NT-proBNP (pg/mL)**	<300 -2	300 to <1100 0		≥1100 2	
6-Minute Walk Test (m)**	≥440 -2	320 to 440 -1	<320 to 165 0	<165 1	
NYHA/WHO Functional Class**		I -1	II 0	III 1	IV 2

Step 2

Select additional variables.

Systolic BP (mm Hg)		SBP ≥110 0	SBP <110 1	
Heart Rate (BPM)		HR ≤96 0	HR >96 1	
eGFR < 60 mL/min/1.73m ² or renal insufficiency		No 0	Yes 1	
		Step 3 Sum of above (min. 3 variables)		
				+6
			Step 4 Risk score	

	Low Risk	Intermediate Risk	High Risk	
Risk Score	≤5	6–7	≥8	