## Ready Reckoner 30 – Cardiovascular Function

Table 23.265 CAD, and Hypertensive Heart Disease – Whole Person Impairment

Impairment Class and Severity of cardiovascular symptoms	Echocardiographic evidence of systolic and/or diastolic	METS aerobic capacity	Maximum impairment 75%
	function		
Class 1: Person experiences	Minimal left ventricular	≥3 METS to ≤6	15%
fatigue, angina, and dyspnea	systolic dysfunction or	METS	
during moderate-vigorous-	diastolic dysfunction		
physical exertion	(EF ≥45%-<55% or E=A)		
Class 2: Person experiences	Minimal left ventricular	≥3 METS to	25%
fatigue, angina, and dyspnea	systolic dysfunction and	≤6 METS	
during moderate-vigorous-	diastolic dysfunction		
physical exertion	(EF ≥45%-<55% and E=A	.)	
Class 3: Person experiences	Moderate left ventricular	<3 METS to	37%
fatigue, angina, and dyspnea	systolic dysfunction or	≥1.5 METS	
during moderate physical	diastolic dysfunction		
exertion	(EF ≥30%-<45% or E=A)		
Class 4: Person experiences	Moderate systolic and	<3 METS to	50%
fatigue, angina, and dyspnea	diastolic left ventricular	≥1.5 METS	
during moderate physical	dysfunction		
exertion	(EF ≥30%-<45% and E=A	۸)	

Class 5: Person experiences	Severe systolic and	<1.5 METS	75%
fatigue, angina, and dyspnea	diastolic left ventricular		
during minimal physical	dysfunction		
exertion and/or at rest	(EF <30% and E <a)< td=""><td></td><td></td></a)<>		

Table 23.266 Cardiomyopathy - Whole Person Impairment - 75%

Impairment Class and Severity of Cardiovascular Symptoms	Nature of Intervention	Echocardiographic evidence of systolic and/or diastolic function	Maximum Impairment 75%
Class 1: Asymptomatic	Isolated dysrhythmia	Normal left	5%
	controlled under	ventricular function	
	Guideline-Directed	and diastolic function	
	Medical Therapy -	LVEF ≥55%-<70% or	
	GDMT	E>A	
Class 2: Palpitation	Isolated dysrhythmia	Normal left	10%
	requiring or	ventricular function	
	underwent	and diastolic function	
	implantation of	LVEF ≥55%-<70% or	
	pacemaker and/or	E>A	
	AICD		

Class 3: Person experiences	Dysrhythmia	Minimal left	15%
fatigue, angina, and dyspnea	requiring or	ventricular systolic	
during moderate-vigorous-	underwent	dysfunction or	
physical exertion, palpitation,	implantation of	diastolic dysfunction	
missing of heartbeat, dizziness,	pacemaker and/or	LVEF ≥45%-<55% or	
sweating, anxiety	AICD	E=A	
Class 4: Person experiences	Dysrhythmia	Minimal left	25%
fatigue, angina, and dyspnea	requiring or	ventricular systolic	
during moderate-vigorous-	underwent	dysfunction and	
physical exertion, Palpitation,	implantation of	diastolic dysfunction	
missing of heartbeat, dizziness,	pacemaker and/or	LVEF ≥45%-<55%	
sweating, anxiety	AICD	and E=A	
Class 5: Person experiences	Dysrhythmia	Moderate left	37%
fatigue, angina, and dyspnea	requiring or	ventricular systolic	
during moderate physical	underwent	dysfunction or	
exertion, palpitation, missing of	implantation of	diastolic dysfunction	
heartbeat, dizziness, sweating,	pacemaker and/or	(EF ≥30%-<45% or	
anxiety, dyspnea, chest pain,	AICD	E=A)	
syncope			
Class 6: Person experiences	Dysrhythmia	Moderate systolic	50%
fatigue, angina, and dyspnea	requiring or	and diastolic left	
during moderate physical	underwent	ventricular	
exertion, palpitation, missing of	implantation of	dysfunction	
heartbeat, dizziness, sweating,	pacemaker and/or	(EF ≥30%-<45% and	
	AICD	E = A)	

anxiety, dyspnea, chest pain,

syncope

Class 7: Person experiences Dysrhythmia Severe systolic and 75% fatigue, angina, and dyspnea requiring or diastolic left

during minimal physical exertion underwent ventricular

and/or at rest, palpitation, implantation of dysfunction

missing of heartbeat, dizziness, pacemaker and/or (EF < 30% and E< A)

sweating, anxiety, dyspnea, AICD

chest pain, syncope

## Table 23.267 Dysrhythmias – Whole Person Impairment 75%

Impairment Class and Severity of Cardiovascular Symptoms	Nature of Intervention	Echocardiographic evidence of systolic and/or diastolic function	Maximum Impairment 75%
Class 1: Asymptomatic	Isolated dysrhythmia controlled under Guideline-Directed Medical Therapy - GDMT	Normal left ventricular function and diastolic function  LVEF ≥55%-<70% or  E>A	5%
Class 2: Palpitation	Isolated dysrhythmia requiring or underwent	Normal left ventricular function and diastolic	10%

	implantation of	function	
	pacemaker and/or AICD	LVEF ≥55%-<70% or	
		E>A	
Class 3: Palpitation,	Dysrhythmia requiring or	Minimal left ventricular	15%
missing of heartbeat,	underwent implantation	systolic dysfunction or	
dizziness, sweating,	of pacemaker and/or	diastolic dysfunction	
anxiety	AICD	LVEF ≥45%-<55% or	
		E=A	
Class 4: Palpitation,	Dysrhythmia requiring or	Minimal left ventricular	25%
missing of heartbeat,	underwent implantation	systolic dysfunction	
dizziness, sweating,	of pacemaker and/or	and diastolic	
anxiety	AICD	dysfunction	
		LVEF ≥45%-<55% and	
		E=A	
Class 5: Palpitation,	Dysrhythmia requiring or	Moderate left	37%
missing of heartbeat,	underwent implantation	ventricular systolic	
dizziness, sweating,	of pacemaker and/or	dysfunction or diastolic	
anxiety, dyspnea, chest	AICD	dysfunction	
pain, syncope		(EF ≥30%-<45% or	
		E=A)	
Class 6: Palpitation,	Dysrhythmia requiring or	Moderate systolic and	50%
missing of heartbeat,	underwent implantation	diastolic left ventricular	
dizziness, sweating,	of pacemaker and/or	dysfunction	
anxiety, dyspnea, chest	AICD	(EF ≥30%-<45% and	
pain, syncope		E = A)	

Class 7: Palpitation,	Dysrhythmia requiring or	Severe systolic and	75%
missing of heartbeat,	underwent implantation	diastolic left ventricular	
dizziness, sweating,	of pacemaker and/or	dysfunction	
anxiety, dyspnea, chest	AICD	(EF < 30% and E< A)	
pain, syncope			

Table 23.268 Valvular Heart Diseases - Whole Person Impairment - 75%

Impairment	Size of Atrium/	Systolic and Diastolic	Impairment
Class Symptoms	Ventricle	Ventricular Function	Score
Cymptoms			
Class 1:	Normal size of	(1) Left ventricular systolic and	5%
Asymptomatic	atrium/ventricle	diastolic function - Normal:	
valvular heart		EF: 55%-70% and E>A	
disease		(2) Normal pulmonary artery	
		pressure: 8-20 mm of Hg at rest,	
		and normal right ventricular	
		function	
Class 2:	Mild enlargement of	(1) Minimal left ventricular systolic	15%
Symptomatic	atrium/ventricle	dysfunction	
valvular heart		EF: ≥45-<55% or minimal diastolic	
		dysfunction: E=A	

disease -		and/or	
syncope		(2) Increased pulmonary artery	
		pressure: >20 - ≤30 mm of Hg with	
		normal right ventricular function	
Class 3:	Mild enlargement of	(1) Minimal left ventricular systolic	25%
Symptomatic	atrium/ventricle	dysfunction	
valvular heart		EF: ≥45-<55% and minimal	
disease -syncope		diastolic dysfunction: E=A	
		and/or	
		(2) Pulmonary hypertension: > 30 -	
		≤ 50 mm of Hg with normal right	
		ventricular function	
Class 4:	Moderate	(1) Moderate left ventricular systolic	37%
Symptomatic	enlargement of	dysfunction	
valvular heart	atrium/ventricle	EF: ≥30%-<45% or	
disease -		diastolic dysfunction: E=A	
syncope, angina,		and/or	
dyspnea		(2) Pulmonary hypertension:	
		> 30 - ≤ 50 mm of Hg with minimal	
		right ventricular dysfunction	
Class 5:	Moderate	(1) Moderate left ventricular systolic	50%
Symptomatic	enlargement of	dysfunction	
valvular heart	atrium/ventricle	EF: ≥30%-<45% and diastolic	
disease -		dysfunction: E=A and/or	
		(2) Pulmonary hypertension: >30 -	

syncope, angina, ≤50 mm of Hg with moderate right

dyspnea ventricular dysfunction

Class 6: Severe enlargement (1) Severe left ventricular systolic 75%

Symptomatic of atrium/ventricle dysfunction

valvular heart EF: <30% and diastolic

disease - dysfunction: E<A

syncope, angina, and/or

dyspnea, (2) Pulmonary hypertension: >50

decreased mm of Hg with severe right

exercise ventricular dysfunction

tolerance

Table 23.269 Peripheral Arterial Disease Upper/Lower Extremities – Whole Person Impairment 10%

Impairment Class	Clinical Symptoms and/or Signs	Clinical Tools	Maximum Impairment 10%	
Class 1	Asymptomatic	Ankle-brachial index:	0%	
Class 2	Raynaud's Phenomena:	0.71 - ≤0.90		
Olass Z	Triphasic colour changes,			
	triggered by exposure to	-	5%	
	cold etc.			

Class 2	Elicits claudication pain on	Ankle-brachial index:	
	6 minutes' walk test, and	0.71 - ≤0.90	5%
	refractory to medical		3%
	management		
Class 3	Resting pain due to acute	Ankle-brachial index:	
	limb ischemia	0.41 - ≤0.70	
	Contraindication for		
	endovascular interventions		10%
	and revascularization		
	surgery due to medical		
	reasons		
Class 4	Gangrene & amputation	Ankle-brachial index: ≤0.40	According to
			level of
			amputation

Table 23.270 Varicose Veins - Upper/Lower Extremities - Whole Person Impairment 5%

Impairment	Clinical	Clinical Tools	Maximum
Class	Symptoms and/or Signs		Impairment
			10%
Class 1	Asymptomatic varicose	Doppler ultrasound -	0%
	veins	Incompetent superficial	
		veins	

Class 2	Varicose veins with pain,	Doppler ultrasound -	1%
	heaviness of the leg, muscle	Incompetent superficial and	
	cramps, oedema	deep veins	
Class 3	Varicose veins with pain,	Doppler ultrasound -	2.5%
	heaviness of the leg, muscle	Incompetent superficial,	
	cramps, oedema and	deep and perforator veins	
	pigmentation with irritation of		
	the skin		
Class 4	Varicose veins with chronic	Doppler ultrasound -	5%
	venous insufficiency and	Incompetent superficial,	
	pain, heaviness of the leg,	deep, and perforator veins	
	muscle cramps, oedema,		
	pigmentation with irritation of		
	the skin,		
	lipodermatosclerosis, trophic		
	changes, venous ulcer, and		
	venous thrombosis		

Table 23.271 Lymphedema - Upper/Lower Extremities - Whole Person Impairment 5%

Impairment C	Class Clinical Symptoms and/or Signs	Maximum Impairment	
Class 1	Swelling of arm and/or leg	1%	

Aching of swollen arm and/or leg

Class 2 Swelling of arm and/or leg with disfigurement 1%

Aching of swollen arm and/or leg +

Fibrosis of skin Impairment score

Limitation of ROM of joint according to

limitation of ROM of

affected joint

Class 3 Swelling of arm and/or leg with disfigurement 2.5%

Aching of swollen arm and/or leg +

Fibrosis of skin Impairment score

Limitation of ROM of joint according to

Recurrent cellulitis/lymphangitis limitation of ROM of

affected joint

Class 4 Swelling of arm and/or leg with disfigurement 5%

Aching of swollen arm and/or leg +

Fibrosis of skin Impairment score

Limitation of ROM of joint according to

Recurrent cellulitis/lymphangitis limitation of ROM of

Chronic fissuring and ulceration affected joint

Amyloidosis +

Lymphangiosarcoma Impairment score

according to level of

amputation if

deemed necessary