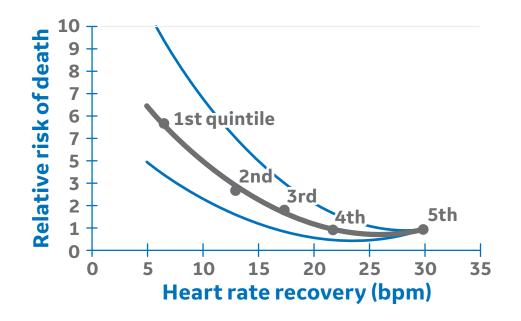
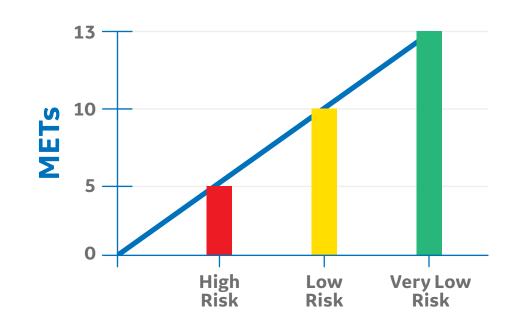
Exercise Test as a Prognostic Tool



HRR (Heart Rate Recovery)



METS (Metabolic equivalents of task)



Modified Mason-Likar Electrode Placement

AHA Label IEC Label Electrode Location

Exercise Test Responses

EXERCISE TEST INTERPRETATION

FACTORS TO CONSIDER

V1 (red)	C1 (red)	Fourth intercostal space at the right sternal border.			RISK	
V2 (yellow)	C2 (yellow)	Fourth intercostal space at the left sternal border.	RA	AS	SESSMEN	Τ
V3 (green)	C3 (green)	Midway between locations V2and V4 (C2 & C4).			HRR	METs
V4 (blue)	C4 (brown)	Mid-clavicular line in the fifth intercostal space.	V1 V2 V3	ST slope/level	METs TWA	HRR RPP
V5 (orange)	C5 (black)	Anterior axillary line on the same horizontal level as V4 (C4).	V4 V5 V6	ST/HR index	Duke	Chronotropic
V6 (purple)	C6 (purple)	Mid-axillary line on the same horizontal level as V4 and V5(C4 & C5).		ST/HR Hysteresis	FVEr	responses
LA (black)	L (yellow)	Just below the clavicle of the left arm.	RL S S LL	ST	F	UNCTIONA
RA (white) LL (red) RL (green)	R (red) F (green) N (black)	Just below the clavicle of the right arm. Lower left abdominal quadrant. Lower right abdominal quadrant.		MEASUREMENT		ASUREMEN
RL (green)	N (black)	Lower right abdominal quadrant.				

Exercise Testing Protocols

FUNCTIONAL CLASS		NICAI ATUS		METS	BICYCLE ERGOMETER	TREADMILL PROTOCOLS					METS	
	ΊTΥ				1 WATT = 6.1 Kpm / min	BRU MOD 3 min 9 MPH	IFIED Stages %GR	3 min MPH	UCE Stages %GR	NAUG	HTON	
	ΑCΤΙVITY					6.0	22	6.0	22			
						5.5	20	5.5	20			
	ON AGE,				FOR 70 KG	5.0	18	5.0	18			
NORMAL	Ó			16	BODY WEIGHT Kpm / min							16
AND	EN			15	-							15
	END I			14 13	1500	4.2	16	4.2	16			14 13
	HEALTHY, DEPENDENT LTHY			12	1350							12
	H≺, I			11	1200	1						11
	ALTI	≥		10	1050	- 3.4	14	3.4	14	•	Stages	10
	H H			9		-				MPH	%GR	9
	HEA			8	900	-				2	17.5	8
	RV			7	750	2.5	12	2.5	12	2	14.0	7
	NTA	SEDENTARY HEALTHY LIMITED		6	600					2	10.5	6
	DE		ATIC	5	450	1.7	10	1.7	10	2	7.0	5
	S	Σ	ΜΟ	4	300			1.1	10	2	3.5	4
			/MPT	3	150	1.7	5			2	0	3
			SYN	2		1.7	0			1	0	2
IV				1							-	1

Bibliography

- Bourque, J.M., et al., Value of Exercise Stress Electrocardiography for Risk Stratification in Patients With Suspected or Known Coronary Artery Disease in the Era of Advanced Imaging Technologies. JACC. Cardiovascular imaging, 2015. 8(11): p. 1309-1321.
- 2. Borjesson, M., et al., *The role of exercise testing in the interventional era*: A shift of focus. Interventional Cardiology (London), 2012. **4**(5): p. 577-583.
- 3. Cole, C.R., et al., *Heart-rate recovery immediately after exercise as a predictor of mortality*. N Engl J Med, 1999. **341**(18): p. 1351-7.
- 4. Fletcher, G.F., et al., *Exercise Standards for Testing and Training: A Scientific Statement From the American Heart Association*. Circulation, 2013. **128**(8): p. 873-934.
- 5. Kligfield, P., et al., *Exercise electrocardiogram testing: beyond the ST segment*. Circulation, 2006. **114**(19): p. 2070-82.
- Leino, J., et al., Combined assessment of heart rate recovery and T-wave alternans during routine exercise testing improves prediction of total and cardiovascular mortality: the Finnish Cardiovascular Study. Heart Rhythm, 2009. 6(12): p. 1765-71.
- 7. Nieminen, T., et al., *T-wave alternans predicts mortality in a population undergoing a clinically indicated exercise test.* Eur Heart J, 2007. **28**(19): p. 2332-7.
- 8. Maddox, T.M., et al., *The prognostic importance of abnormal heart rate recovery and chronotropic response among exercise treadmill test patients*. American Heart Journal, 2008. **156**(4): p. 736-44.
- 9. Peterson, P.N., et al., Association of exercise capacity on treadmill with future cardiac events in patients referred for exercise testing. ACC Cardiosource Review Journal, 2008. **17**(6): p. 49-52.

This poster is intended to assist healthcare professionals and compliment text study and/or classroom instruction. There are many variables to consider in any clinical situation therefore, we believe that interpretations should be left to experienced clinicians.

DOC2015999 / JB50452XX

