



Appendix B: Framingham 10-year Risk Estimation

Step 1: Calculate the patient's total points using Table 1.

Step 2: Determine the patient's 10-year CVD risk using Table 2. Double risk percentage if there is a history of premature CVD (men < 55 and women < 65) in patient's first-degree relatives.

Step 3: Determine the patient's 10-year CVD risk level using Table 3.

Table 1. Patient's Total Points				
Risk Factor	Risk Points			
	MEN		WOMEN	
Age				
30-34	+0		+0	
35-39	+2		+2	
40-44	+5		+4	
45-49	+6		+5	
50-54	+8		+7	
55-59	+10		+8	
60-64	+11		+9	
65-69	+12		+10	
70-74	+14		+11	
75+	+15		+12	
HDL-C (mmol/L)				
>1.6	-2		-2	
1.3-1.6	-1		-1	
1.2-1.3	+0		+0	
0.9-1.2	+1		+1	
<0.9	+2		+2	
TC				
<4.1	+0		+0	
4.1-5.2	+1		+1	
5.2-6.2	+2		+2	
6.2-7.2	+3		+3	
>7.2	+4		+4	
SBP (mmHG)				
	Not Treated	Treated	Not Treated	Treated
<120	-2	+0	-3	-1
120-129	+0	+2	+0	+2
130-139	+1	+3	+1	+3
140-149	+2	+4	+2	+5
150-159	+2	+4	+4	+6
160+	+3	+5	+5	+7
Diabetic				
YES	+3		+4	
NO	+0		+0	
Smoker				
YES	+4		+3	
NO	+0		+0	

Table 2. Patient's 10-YR FRS Risk		
Total Risk Points	10-YR CVD FRS Risk	
	MEN	WOMEN
≤3	<1.0%	<1.0%
-2	1.1%	<1.0%
-1	1.4%	1.0%
0	1.6%	1.2%
1	1.9%	1.5%
2	2.3%	1.7%
3	2.8%	2.0%
4	3.3%	2.4%
5	3.9%	2.8%
6	4.7%	3.3%
7	5.6%	3.9%
8	6.7%	4.5%
9	7.9%	5.3%
10	9.4%	6.3%
11	11.2%	7.3%
12	13.3%	8.6%
13	15.6%	10.0%
14	18.4%	11.7%
15	21.6%	13.7%
16	25.3%	15.9%
17	29.3%	18.5%
18	>30.0%	21.5%
19	>30.0%	24.8%
20	>30.0%	27.5%
≥21	>30.0%	>30.0%

Table 3. Patient's Risk Level	
Risk Level	10-YR FRS CVD Risk
Low	<10%
Intermediate	10-19%
High	≥20%

The FRS, or any CVD risk assessment tool, is a risk estimation only of a patient's CVD risk. Since these scores are plus or minus several percentage points, it is important to consider modifying the risk estimation based on other known risk factors (e.g., family history, ethnicity) and a practitioner's clinical judgement.

Abbreviations: CVD cardiovascular disease; HDL-C high-density lipoprotein cholesterol; TC total cholesterol; SBP systolic blood pressure; YR year; FRS Framingham Risk Score.

Derived from:

- Anderson TJ, Grégoire J, Hegele RA, et al. 2012 update of the Canadian cardiovascular society guidelines for the diagnosis and treatment of dyslipidemia for the prevention of cardiovascular disease in the adult. *Can J Cardiol.* 2013;29(2):151-67.
- D'Agostino RB, Vasan RS, Pencina MJ, et al. General cardiovascular risk profile for use in primary care: The framingham heart study. *Circulation.* 2008; 117:743-53.