

# CHOLESTEROL & *YOUR HEART*

## 1. HIGH CHOLESTEROL → ELEVATES *YOUR* RISK OF VASCULAR DISEASE

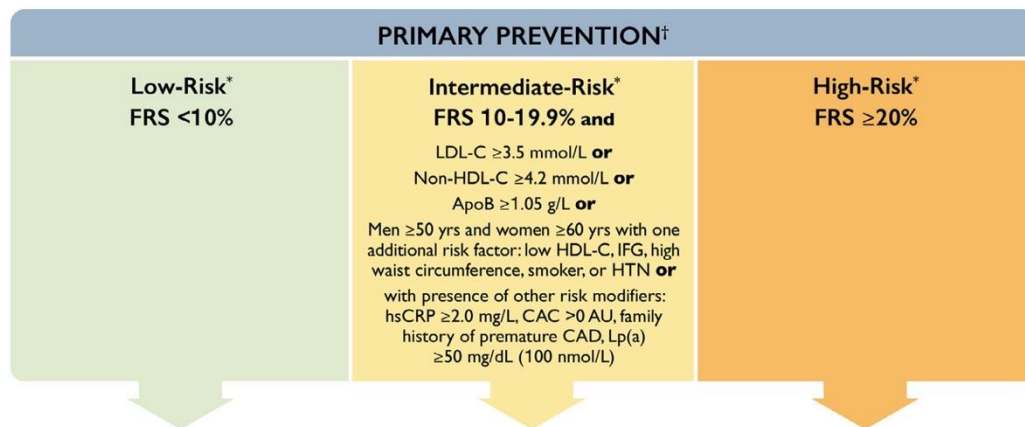
A. >500,000 Albertans suffer with ASCVD (Atherosclerotic Cardiovascular Disease)

- i. Primary prevention refers to all efforts aimed at either populations or individuals to prevent or delay the onset of ASCVD.
- ii. Secondary prevention refers to the efforts to treat known, clinically significant ASCVD (heart attack, stroke/TIA, coronary artery disease, abdominal aneurysm), and to prevent or delay the onset of disease manifestations.

## 2. TREATMENT FOCUSES ON *EVIDENCE BASED* MEDICINE

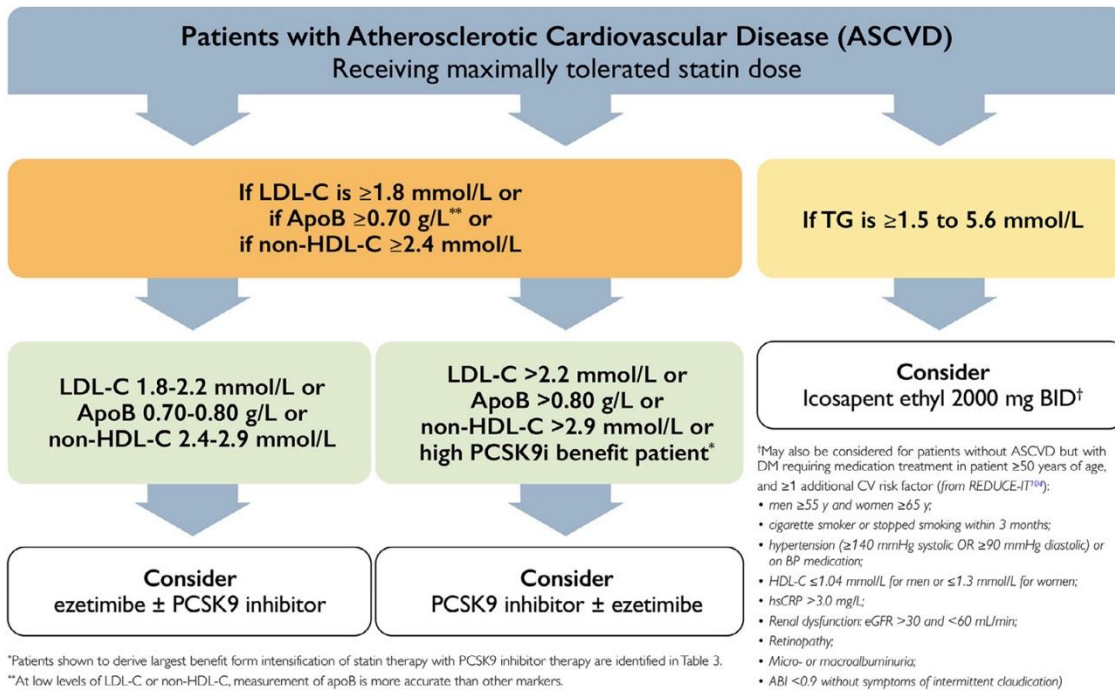
A. In *Primary* prevention we stratify patients using the *Framingham Risk Score (FRS)*. The FRS allows us to calculate your 10-year cardiovascular disease risk (%).

- i. Your risk will be either LOW, INTERMEDIATE or HIGH. Treatment with STATIN medication will often be recommended in INTERMEDIATE and HIGH risk patients and select LOW risk individuals.



- ii. Statin drugs are *PROVEN* to lower cholesterol levels and protect from ASCVD. If you are eligible, your doctor will prescribe an appropriate statin medication: (e.g. Rosuvastatin[Crestor], Atorvastatin [Lipitor], Simvastatin[Zocor]).
- iii. Our targets for cholesterol are **LDL <2.0 mmol/L and non-HDL <2.6 mmol/L**.
- iv. If targets are not achieved we will increase your dose of statin and consider a second-line medication known as EZETIMIBE.
- v. Medication is used in addition to standard health behavior modifications (Diet, Exercise, & Smoking Cessation).

B. In *Secondary* prevention we want to lower your risk of a *REPEAT* event.



- i. Our targets for cholesterol are **LDL  $< 1.8$  mmol/L and non-HDL  $< 2.4$  mmol/L**.
- ii. If targets are not achieved we will increase your dose of statin and consider a second-line medication known as EZETIMIBE and third-line agent known as PCSK9 inhibitors. The body uses the PCSK9 molecule to breakdown available LDL cholesterol receptors. Therefore blocking PCSK9 causes more receptors available to absorb and lower LDL cholesterol. Two types of PCSK9 inhibitors exist, one that directly blocks PCSK9 from attaching to the LDL receptor or as a small interfering RNA which stops the production of PCSK9 inside the cell.
- iii. **INCLISIRAN (Leqvio)** belongs to the small interfering RNA group and provides effective LDL reduction with the minimal number of applications. You will be considered for this treatment ***only*** if your cholesterol targets are not achieved.
- iv. <https://www.leqvio.com/what-is-leqvio>

### 3. LONG TERM FOLLOW UP IS *ESSENTIAL!*

- A. The *Risk Reduction Clinic*, your *Cardiologist* and your *Family Doctor* are essential in ensuring your cholesterol remains at target long-term. The longer you are exposed to a high-cholesterol level, the higher your risk of ASCVD in your lifetime.
- B. Reducing your risk ASCVD is our main priority and we aim to provide you the best care available as of 2023!