

■ Items 18-23

A 56-year-old man underwent percutaneous coronary intervention (PTCA) and stenting of the left anterior descending coronary artery 2 years previously, and currently has no symptoms. He does not smoke, rarely uses alcohol, and exercises by walking 1 mile twice a week. His primary care provider stopped lovastatin because his creatine phosphokinase (CK) level was 451 U/L. Currently his clinical laboratory profile shows:

Weight	244 lbs.
Height	5' 10"
Cholesterol	217 mg/dL
Triglyceride	250 mg/dL
LDL-C	135 mg/dL
HDL-C	32 mg/dL
Lipoprotein(a)	72 mg/dL (70th percentile at 30 mg/dL)

18. Which *one* of the following proposed medication regimens in this man is *LEAST* supported by clinical trial evidence?
- (A) Cholestyramine, 12 grams b.i.d.
 - (B) Lovastatin, 40 mg qpm with food.
 - (C) Gemfibrozil, 600 mg b.i.d.
 - (D) Niacin (Immediate-Release), 1000 mg t.i.d.

■ Items 19-22

For *each* proposed numbered medication regimen (monotherapy) (19-22) in this patient, select the *one* MOST likely lettered lipid panel (A, B, C, D) associated with it. Each lettered lipid panel may be selected *only once*.

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|-----------------|-----------|-----------------|-----------|
| (A) Cholesterol | 171 mg/dL | (B) Cholesterol | 190 mg/dL |
| Triglyceride | 180 mg/dL | Triglyceride | 150 mg/dL |
| LDL-C | 100 mg/dL | LDL-C | 120 mg/dL |
| HDL-C | 35 mg/dL | HDL-C | 40 mg/dL |
| (C) Cholesterol | 216 mg/dL | (D) Cholesterol | 193 mg/dL |
| Triglyceride | 135 mg/dL | Triglyceride | 330 mg/dL |
| LDL-C | 145 mg/dL | LDL-C | 105 mg/dL |
| HDLC | 37 mg/dL | HDLC | 32 mg/dL |

19. Cholestyramine, 12 grams b.i.d.
20. Lovastatin, 40 mg qpm with food.
21. Gemfibrozil, 600 mg b.i.d.
22. Niacin (Immediate-Release), 1000 mg t.i.d.
23. Patient and physician make a decision to pursue intensive correction of his dyslipidemia to prevent coronary progression. Which *one* of the following proposed combination regimens in this patient is *LEAST* supported by clinical trial evidence?
- (A) Lovastatin, 40 mg qpm and cholestyramine, 12 grams b.i.d.
 - (B) Lovastatin, 20 mg qpm and niacin, 1000 mg t.i.d.
 - (C) Lovastatin, 40 mg qpm and fenofibrate, 160 mg qam.
 - (D) Niacin, 1000 mg t.i.d. and cholestyramine, 8 grams b.i.d.
 - (E) Niacin, 1000 mg b.i.d. and gemfibrozil, 600 mg b.i.d.

■ Items 24-29

For *each* numbered side effect (24-29), select the *one* lettered medication (A, B, C, D) MOST often associated with it. Each lettered medication may be selected once, more than once, or not at all.

- (A) Niacin.
 - (B) Fenofibrate.
 - (C) Gemfibrozil.
 - (D) None of the above.
24. Transaminase elevation greater than 3 times the upper limit of normal in 5% of patients.
25. Dyspepsia in 5-10% of patients.
26. Exacerbation of migraine headaches.
27. Increased serum uric acid levels.
28. Increased serum creatinine levels.
29. Increased peripheral blood levels of a concomitantly administered statin.

The Heart Protection Study (HPS) demonstrated the benefits of simvastatin, 40 mg compared to placebo in reducing CHD events significantly in a large cohort of high-risk patients. Post-hoc subgroup analysis demonstrated similar relative risk reduction in previously under-represented study populations such as the elderly, women, and diabetics. There were several high-risk subgroups that had a much higher absolute risk of CHD events even on statin therapy. These higher risk groups included those patients with low HDL (<35 mg/dL) (Figure 1) and diabetics with hypertension, HbA1c ≥ 7.0 and documented clinical CHD (Figure 2). However, the highest risk subgroup were patients with elevated creatinine (≥ 1.2 mg/dL for women and ≥ 1.5 mg/dL for men, but < 2.3 mg/dL for both) (Figure 3). Even the simvastatin-allocated patients with elevated creatinine had a very high residual risk of CHD events greater than the other higher risk groups on placebo or the diabetics with documented CHD also allocated to simvastatin.

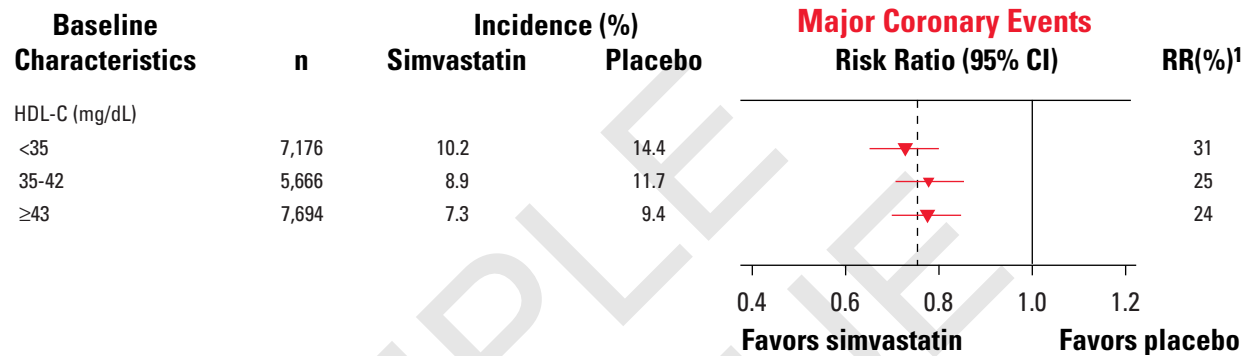


Figure 1. Heart Protection Study (HPS) Major Coronary Events by Baseline HDL-C

1. Data available on request from Merck & Co., Inc. Please specify 20350138(1)-ZOC.

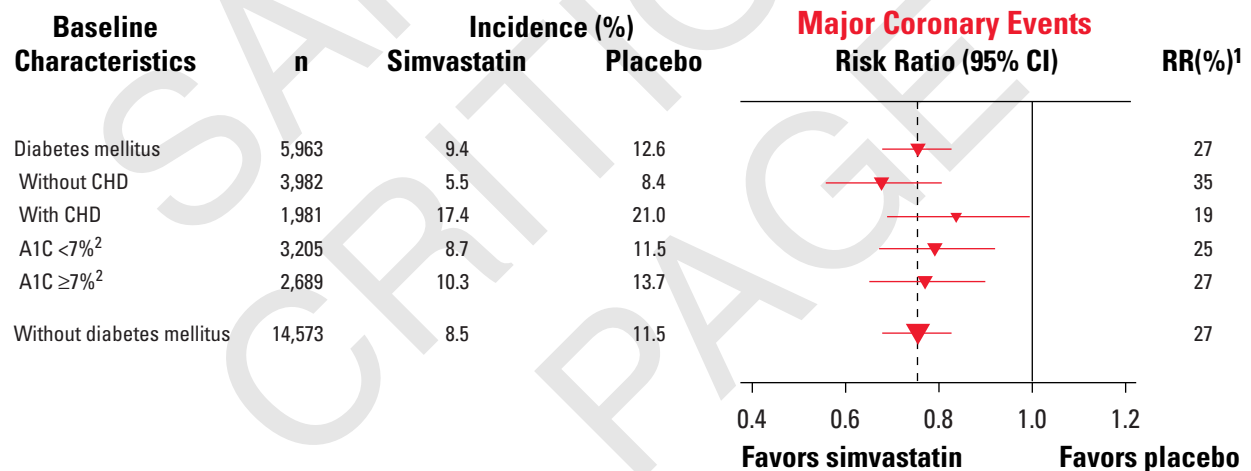


Figure 2. Heart Protection Study (HPS) Major Coronary Events by Diabetes Presence/Absence and Degree of Glycemic Control

1. Data available on request from Merck & Co., Inc. Please specify 20350138(1)-ZOC.

2. Heart Protection Study Collaborative Group. Available at: <http://image.thelancet.com/extras/03art3418webfigure2.pdf>. Accessed July 17, 2003.