MRC/BHF Heart Protection Study

In our commentary on the summary of the Heart Protection Study (HPS) in the January/February 2003 issue of *ACP Journal Club* (1), a table germane to our discussion had to be omitted due to space constraints and was replaced with a notation referring readers to the table on the Web site. We thank the editors for allowing us to reproduce the table below.

Coronary heart disease (CHD) event prevention for statins vs placebo*

Individual trials (combined trials)†	Patient group	Mean or median y of follow-up	RRR (95% CI)	NNT (CI)	NNT/y (CI)
a) AFCAPS/ TexCAPS	No CHD, normal cholesterol	5.4	37% (21 to 50)	49 (33 to 99)	256 (170 to 514)
b) WOSCOPS	No CHD, high cholesterol	4.9	31% (17 to 43)	44 (29 to 95)	217 (141 to 463)
c) CARE	CHD, normal cholesterol	5.0	24% (9 to 36)	33 (20 to 99)	167 (100 to 496)
d) LIPID	CHD, normal cholesterol	6.1	24% (12 to 35)	28 (20 to 48)	172 (122 to 294)
e) 4S	CHD, high cholesterol	5.2	34% (25 to 41)	12 (9 to 17)	63 (49 to 89)
(a + b)	No CHD	5.2	33% (22 to 42)	47 (34 to 74)	237 (177 to 382)
(c + d + e)	CHD	5.4	26% (20 to 31)	23 (19 to 31)	129 (103 to 172)
(a + c + d)	Normal cholesterol	5.5	25% (18 to 31)	39 (30 to 55)	209 (163 to 398)
(b + e)	High cholesterol	5.2	30% (23 to 37)	29 (22 to 43)	151 (114 to 221)

*AFCAPS/TexCAPS = AirForce/Texas Coronary Atherosclerosis Prevention Study; WOSCOPS = West of Scotland Coronary Prevention Study; CARE = Cholesterol and Recurrent Events; LIPID = Long-term Intervention with Pravastatin in Ischaemic Disease trial; 4S = Scandinavian Simvastatin Survival Study. Abbreviations defined in Glossary. Data adapted from Kumana and colleagues (2), which contains references for these trials. The combined NNT/y for secondary prevention trials was lower than that for primary prevention trials; for individual trials, only that for 4S was lower than the others ($P < 0.05$).
†Results are weighted for combined trials.

Regarding the HPS, derivation of the corresponding NNT/year and 95% CI for prevention of CHD events gives very similar values (165, CI 130 to 230) to those for patients in the CARE and LIPID trials. Thus, in terms of CHD prevention, statin therapy appears to confer similar levels of benefit in individuals with diverse risk factors other than hypercholesterolemia.

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References

1. **Kumana CR, Cheung BM, Lauder IJ.** Commentary on "Simvastatin reduced mortality and vascular events in high-risk patients" and "Antioxidant vitamins did not reduce death, vascular events, or cancer in high-risk patients." ACP J Club. 2003 Jan-Feb;138:2-3. Comment on: MRC/BHF Heart Protection Study of cholesterol lowering with simvastatin in 20 536 high-risk individuals: a randomized placebo-controlled trial. Lancet. 2002;360:7-22 and MRC/BHF Heart Protection Study of antioxidant vitamin supplementation in 20 536 high-risk individuals: a randomized placebo-controlled trial. Lancet. 2002; 360:23-33.
2. **Kumana CR, Cheung BM, Lauder IJ.** Gauging the impact of statins using number needed to treat. JAMA. 1999;282:1899-901.

