

(10/20), EZ/S 40 mg (10/40), and EZ/S 80 mg (10/80) through Periods 1-4; and (3) EZ/S 20 mg titrated to EZ/S 40 mg (for Periods 2 and 3), then EZ/S 80 mg for Period 4. Primary endpoint was % change from baseline in LDL-C after the initial 6-week period. Secondary endpoints included % change from baseline in LDL-C to ends of Periods 2, 3, and 4; and HDL-C to ends of Periods 1, 2, 3, and 4. Safety measurements were clinical and laboratory adverse events including ALT or AST ≥ 3 upper limit of normal (ULN), CK ≥ 10 ULN.

Results: Baseline LDL-C and HDL-C levels were comparable between treatment groups. At the end of Period 1, mean LDL-C reduction and mean HDL-C increase were significantly ($p < 0.01$) greater for the EZ/S 10 mg and EZ/S 20 mg groups compared with the A10 mg group (see Table). At the end of Period 4, comparing maximum doses, EZ/S 80 mg was superior to A80 mg in LDL-C reduction (-59.4 vs -52.5) and HDL-C increase (12.3 vs 6.5).

Table. Summary of Endpoints

					LS-Mean Percent Change from Baseline in:	
Period	Group	Treatment	n available for analysis†	LDL-C	HDL-C	
1	1	Atorvastatin 10 mg	250	-37.2	5.1	
	2	Ezetimibe/Simvastatin 10 mg	252	-46.1‡	8.0‡	
	3	Ezetimibe/Simvastatin 20 mg	253	-50.3‡	9.5‡	
2	1	Atorvastatin 20 mg	235	-44.3	6.9	
	2	Ezetimibe/Simvastatin 20 mg	239	-50.2‡	9.0	
	3	Ezetimibe/Simvastatin 40 mg	243	-54.3‡	12.4‡	
3	1	Atorvastatin 40 mg	228	-49.1	7.8	
	2&3*	Ezetimibe/Simvastatin 40 mg	466	-55.6‡	11.4‡	
4	1	Atorvastatin 80 mg	223	-52.5	6.5	
	2&3*	Ezetimibe/Simvastatin 80 mg	441	-59.4‡	12.3‡	

LS means and p-values are from analysis of variance model with terms for treatment and baseline LDL-C strata. †Baseline values for LDL-C (mg/dL) were: (Group 1, 180.6; Group 2, 180.0; Group 3, 179.2), for HDL-C: (Group 1, 46.9; Group 2, 46.6; Group 3, 46.8). ‡ $p < 0.01$ for difference with Atorvastatin in the specified period. *Treatment Groups 2 and 3 combined in Periods 3 and 4.

Conclusion: Greater LDL-C reduction and HDL-C increase can be attained by treating with EZ/S compared with atorvastatin. Treatments with EZ/S and A were well-tolerated.

1084-178 Trends in Use of Statins in Older Patients With Acute Myocardial Infarction

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Background: Treatment with HMG CoA Reductase Inhibitors (statins) decreases cardiovascular events and mortality in patients with coronary artery disease (CAD). Little is known regarding trends in the use of statins in a population-based sample of older patients surviving acute myocardial infarction (AMI).

Methods and Results: In two national cohorts of 31,399 and 31,759 older patients hospitalized between 1998-9 and 2000-1 with confirmed AMI, we identified patients who survived to discharge. We assessed change in rates of use of statins at discharge in 'ideal candidates' without contraindications to statins. Overall, 27.5% and 46.2% of patients were discharged in 1998-9 and 2000-1, respectively. Of those patients with an LDL-c greater than the guideline-based threshold of 130 mg/dL, 55% received lipid-lowering therapy in 1998-9 compared to 71% in 2000-1. In general, women and the elderly were consistently less likely to receive statins on discharge.

Conclusions: In a national sample of older AMI survivors, significant increases in discharge prescription of statins occurred irrespective of patient age, sex, race and LDL cholesterol. Despite these increases, a significant proportion of older patients do not receive guideline-based lipid management.

Rates of Statin Use in Older AMI Survivors

	1998-9 N =14,808 %	2000-1 N =14,606 %
Overall Use	27.5	46.2
Age ≥ 75 years *	21.6	40.1
LDL < 100 mg/dL	28.8	47.4
LDL 100-129 mg/dL	34.7	56.2
LDL ≥ 130 mg/dL	55.0	71.3
* in ideal patients with LDL-c ≥ 130 mg/dL		

1084-179 Ezetimibe/Simvastatin Therapy Is More Effective Than Simvastatin Alone at Reducing Remnant-Like Particle Cholesterol

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Background: Levels of remnant lipoproteins are independent predictors of future coronary events in patients with coronary artery disease. We evaluated the effects of ezetimibe/simvastatin (EZE/SIM) combination therapy versus SIM alone on remnant-like particle cholesterol (RLP-C) in hypercholesterolemic patients.

Methods: After a 6- to 8-wk washout and a 4-wk diet/placebo run-in, 1528 patients with LDL-C 145 - 250 mg/dL and triglycerides ≤ 350 mg/dL, were randomized to one of the following daily treatments for 12 wks: EZE/SIM tablet (10/10, 10/20, 10/40, or 10/80 mg/mg); SIM alone (10, 20, 40, or 80 mg); EZE 10 mg; or placebo. The primary endpoint was % change from baseline in LDL-C for pooled EZE/SIM vs pooled SIM alone. RLP-C levels were measured using an immune separation assay.

Results: EZE/SIM produced significantly greater reductions in RLP-C than did SIM alone (table). For each SIM dose comparison, RLP-C was reduced more by the EZE/SIM combination (range: -31.8% to -47.4%) than by the corresponding dose of SIM alone (range: -22.5% to -37.5%; $p < 0.001$ for all comparisons). The effects of EZE/SIM on RLP-C were consistent with the effects on LDL-C (-53.1% vs -39.0%; $p < 0.001$); apolipoprotein B (-42.4% vs -31.6%; $p < 0.001$); non-HDL-C (-48.7% vs -35.9%; $p < 0.001$); and triglyceride (-24.3% vs -20.8%; $p < 0.001$).

Conclusion: EZE/SIM in a single tablet (10/10 to 10/80 mg/mg) is more effective than the corresponding dose of SIM alone in reducing plasma levels of potentially atherogenic remnant lipoproteins.

Effect of Treatment on RLP-C

	Pbo (N=141)	EZE 10 mg (N=144)	Pooled SIM (N=597)	Pooled EZE/SIM (N=570)
Baseline RLP-C (mg/dL)	13.3	14.0	14.0	14.0
% Change from baseline	5.4	-15.6^	-29.31^	-40.6^

* $p < 0.001$ versus Pooled SIM; ^ $p < 0.001$ versus Pbo
RLP-C: remnant-like particle cholesterol; Pbo: placebo; EZE: ezetimibe; SIM: simvastatin

POSTER SESSION

1085

Hypertension Treatment Effects

Monday, March 08, 2004, Noon-2:00 p.m.

Morial Convention Center, Hall G

Presentation Hour: 1:00 p.m.-2:00 p.m.

1085-165 Aliskiren, a Novel, Orally Effective Nonpeptide Renin Inhibitor, Lowers Blood Pressure After Once-Daily Dosing in Marmosets, Rats and Humans

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Background: Renin inhibitors (RIs) provide an attractive new therapeutic approach to the treatment of hypertension, as they block the first and rate-limiting step of the renin-angiotensin system (RAS). The present study investigates the in vivo effects of aliskiren, the first of a new class of non-peptide RIs.

Methods: Aliskiren was administered orally to normotensive, sodium-depleted marmosets and to hypertensive (mean systolic BP ≥ 140 mmHg) human patients, and subcutaneously to spontaneous hypertensive rats (SHR). In animal studies, changes in mean arterial pressure (MAP; mean \pm s.e. mean) and heart rate were measured continuously by telemetry; 24 h ambulatory BP measurement was used in humans. Plasma renin activity was measured by antibody trapping assay.