

Omeprazole-Mg OTC Efficacy Program

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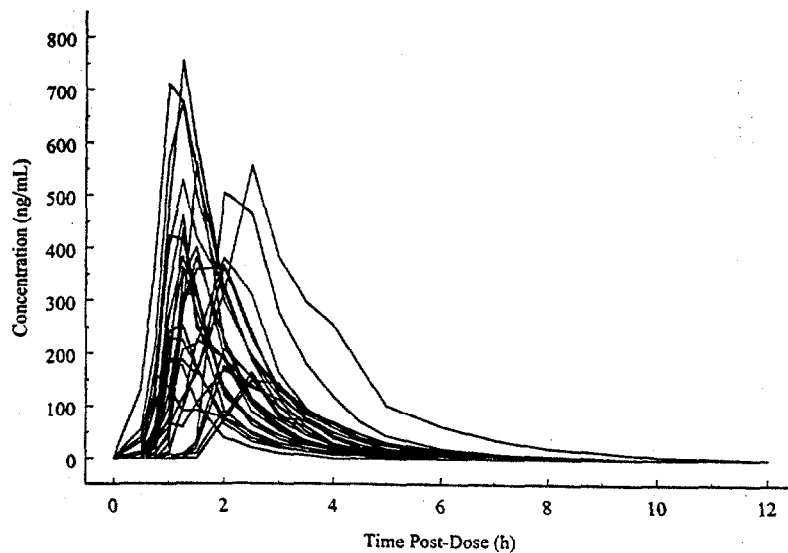
Points to Consider in Support of OTC Suitability

- ◆ Pharmacokinetics/Pharmacodynamics
of Omeprazole

- ◆ Efficacy Results
 - Heartburn Prevention
 - Heartburn Treatment

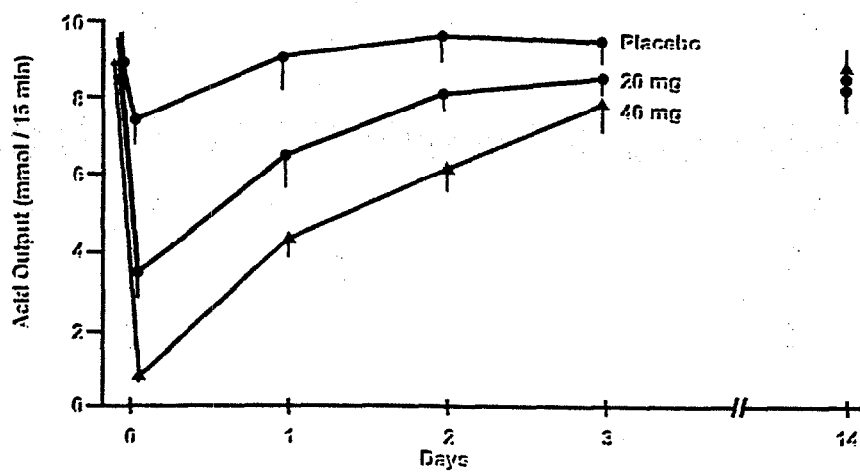
Individual Plasma Concentration Profiles — 20mg Omeprazole-Mg (2x10mg)

EP3



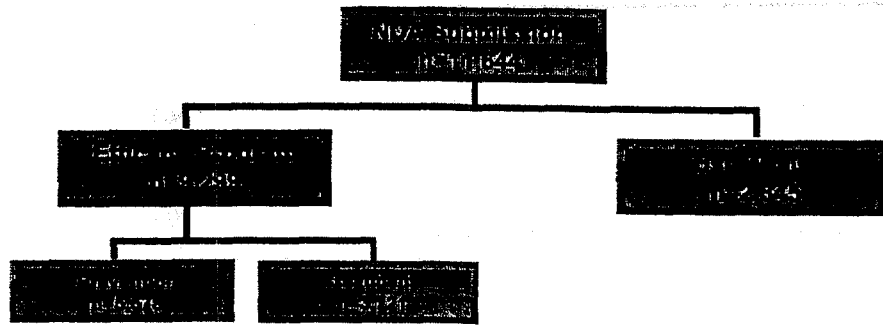
Acid Output Following Dosing

EP4

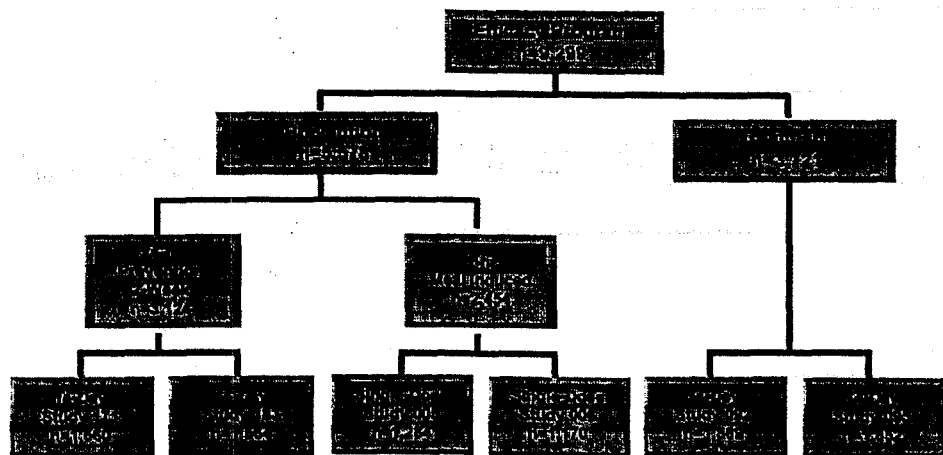


Lind et al. Gut 1983;24:270-6

Omeprazole Program Overview



Clinical Efficacy Program Overview



General Study Design

- ◆ **Subject Recruitment**
 - National advertising campaign
 - Subjects asked:
 - Do you suffer from heartburn?

General Study Design

- ◆ **Screening Phase – heartburn history**
 - Previous use of OTC HB medication
 - Subjects did not need continuous treatment for HB
 - No physician diagnosis of GERD or EE
 - 2 days/week with episodes of HB in last month
- ◆ **Qualifying Phase – heartburn occurrence**
 - Confirm at least 2 days of HB
 - Complete diary correctly
- ◆ **Experimental Phase – heartburn assessment**

Demographic Characteristics of Subjects in Efficacy Trials

EP9

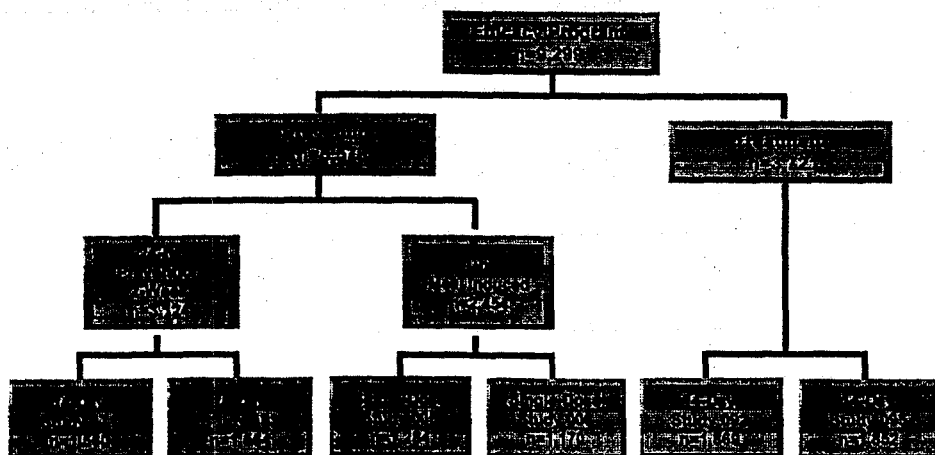
Characteristic

Gender (% Female)	55%	(47–66%)
Race (% Caucasian)	86%	(76–91%)
Age (yrs)	44	(18–93)
Weight (kg)	87	(36–199)
Height (cm)	170	(124–213)
Smoking (%)	27%	(19–34%)
Alcohol Use (%)	47%	(39–53%)
Caffeine Use (%)	89%	(84–95%)

Values given are means (ranges) from 6 separate trials involving 9,299 subjects.

Clinical Efficacy Program Overview

EP10



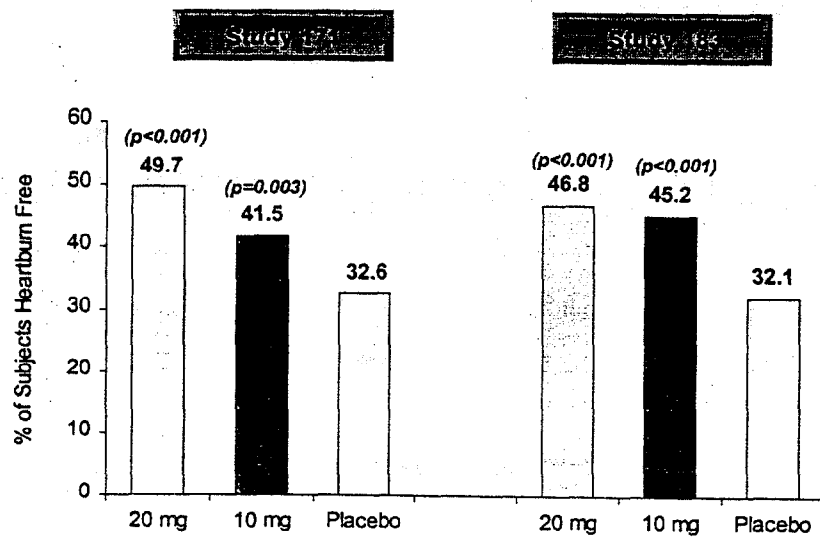
**14-Day Prevention Study:
Trial Design**

EP11

- ◆ Placebo, 10 mg or 20 mg omeprazole
- ◆ One dose each morning
- ◆ Rescue medication was provided
- ◆ 14-day duration
- ◆ Evaluated heartburn occurrence over a full 24 hours and nighttime occurrence

**14-Day Prevention Study —
24 Hours: Results Following First Dose**

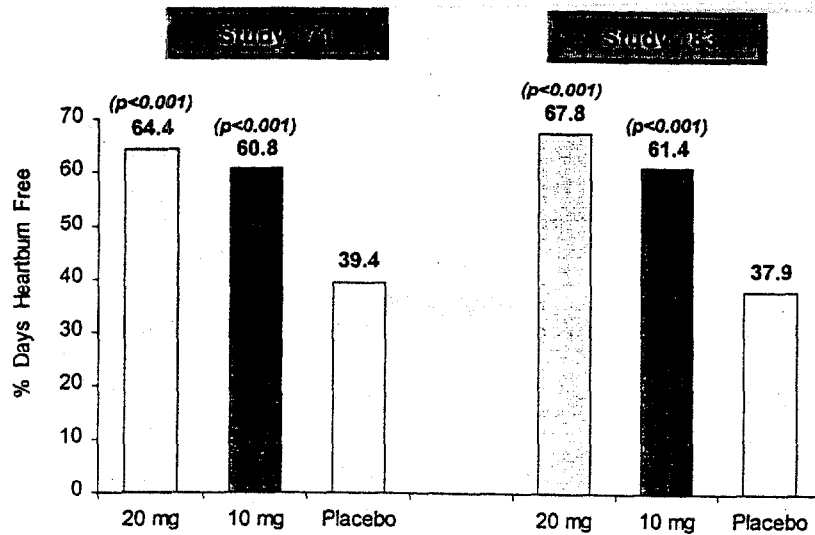
EP12



p-values vs. placebo

**14-Day Prevention Study —
24 Hours: Results Over 14 Days**

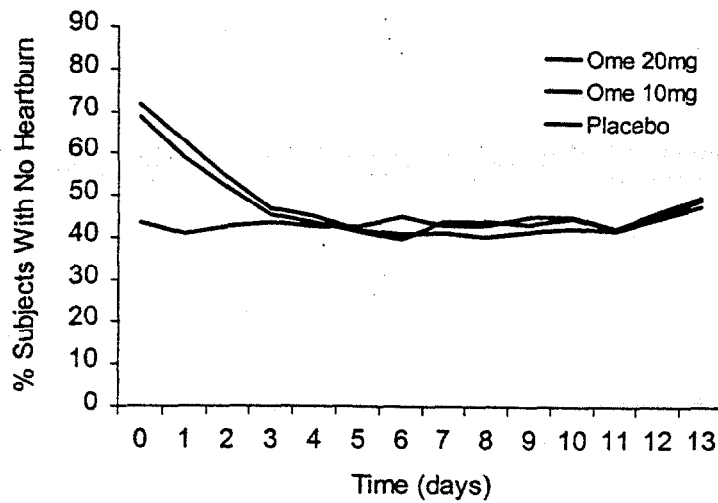
EP13



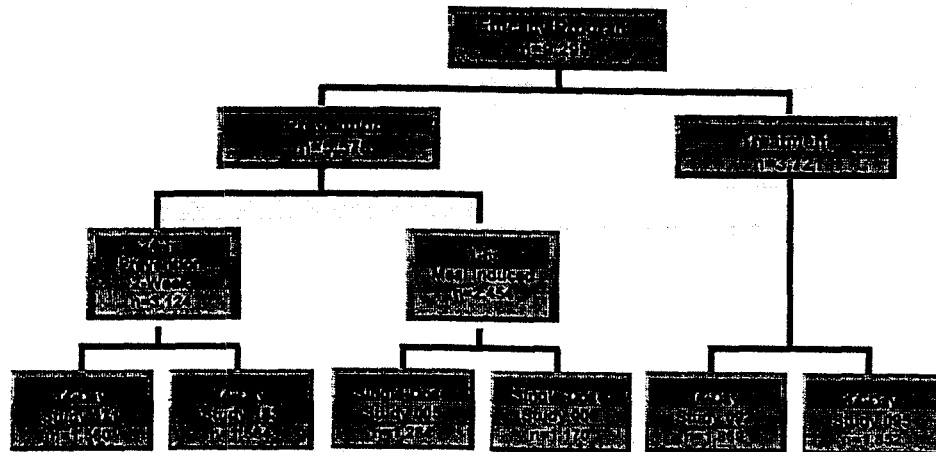
p-values vs. placebo

**Return of Heartburn Following Cessation
of 14 Days Consecutive Dosing**

EP14



Clinical Efficacy Program Overview

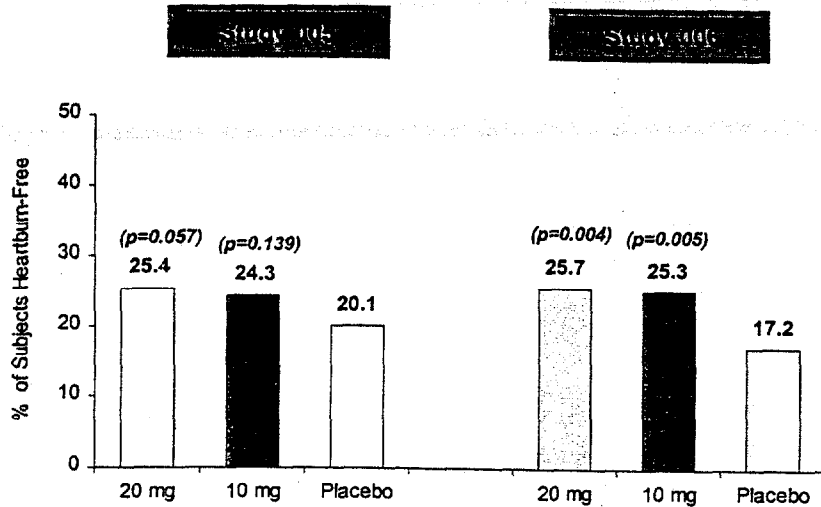


Single-Dose Prevention Studies: Trial Design

- ◆ Single-dose
- ◆ Placebo, 10 mg or 20 mg omeprazole
- ◆ Dosed 1 hour before a provocative meal
- ◆ Rescue medication was provided
- ◆ Evaluated heartburn occurrence for 4 hours from the meal
 - Complete prevention of heartburn over all 4 hours

Single-Dose Prevention Studies: Results over 4 Hours Post-Meal

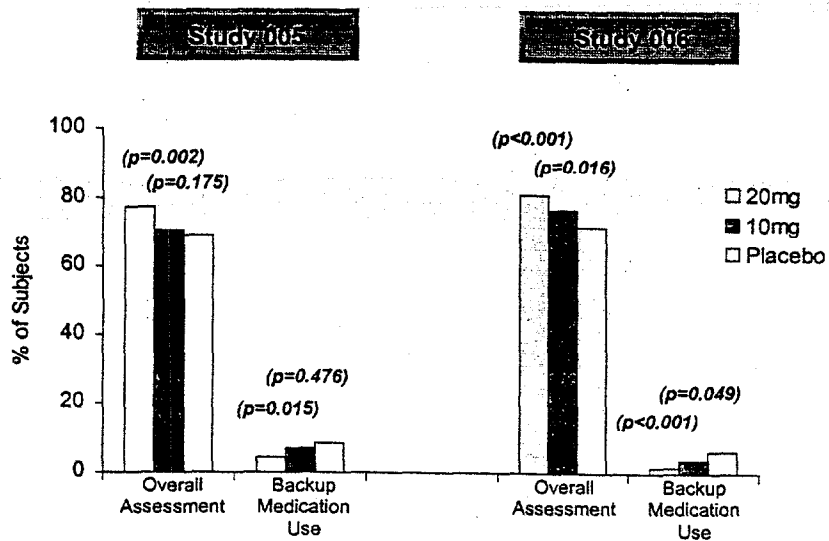
EP17



p-values vs. placebo

Single-Dose Prevention Studies: Results over 4 Hours Post-Meal

EP18

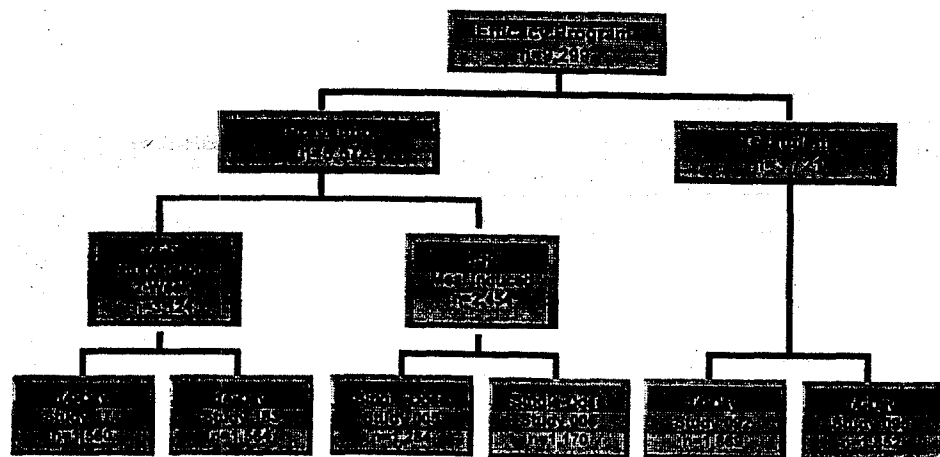


p-values vs. placebo

Summary of Prevention Program

- ◆ Both 10 mg and 20 mg prevent heartburn
 - When dosed in the morning for all day prevention
 - When dosed 1 hour before food/beverage

Clinical Efficacy Program Overview



**Treatment Study:
Trial Design**

EP21

- ◆ Placebo, 10 mg or 20 mg omeprazole
- ◆ Dosed prn, no more than 1 dose / day
- ◆ Rescue medication was provided
- ◆ 14-day duration
- ◆ Primary Endpoint: Sustained Complete Relief
 - Complete Relief within first hour, sustained an additional 2 hours

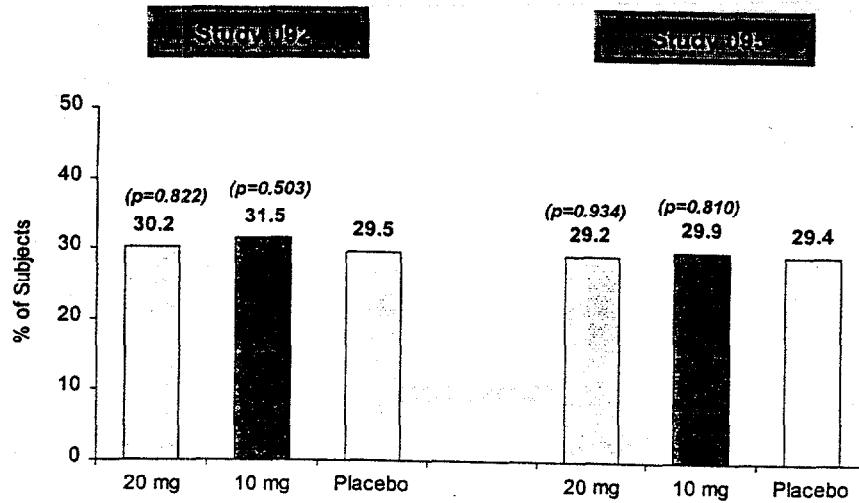
**Frequency of Days with Heartburn
in Treatment Trials (placebo groups)**

EP22

- ◆ Median days of heartburn was 6
- ◆ 25% of subjects had heartburn on ≥ 10 days
- ◆ 83% of subjects had heartburn on 2 consecutive days
- ◆ 36% of subjects had heartburn on 4 consecutive days

Treatment of Heartburn
1st Treated Episode — Sustained Complete Relief

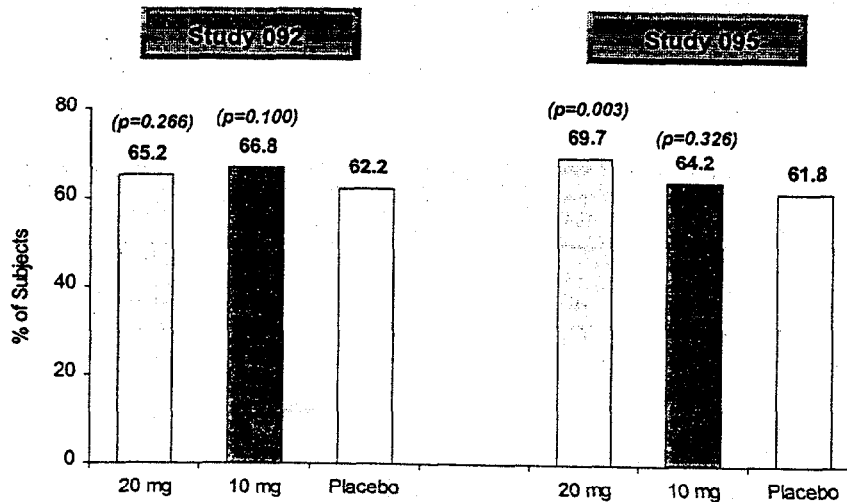
EP23



p-values vs. placebo

Treatment of Heartburn
1st Treated Episode — Sustained Adequate Relief

EP24



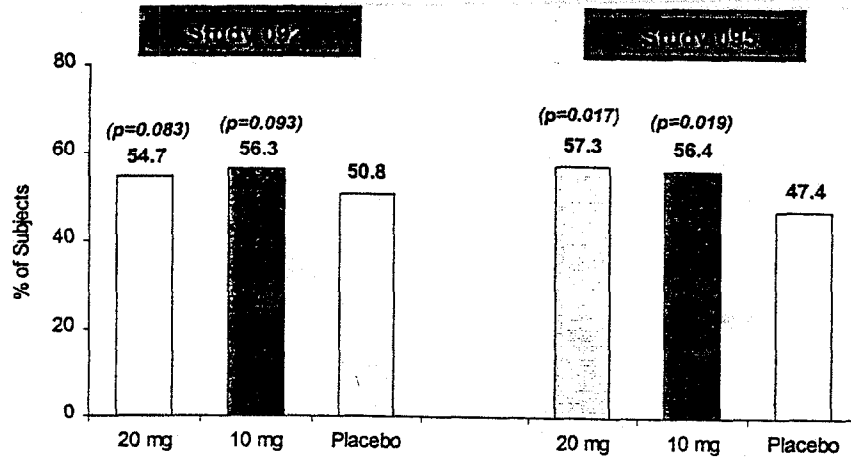
p-values vs. placebo

Treatment of Heartburn
1st Treated Episode — Overall Assessment

EP25

“Overall, How Would You Rate the Medication?”

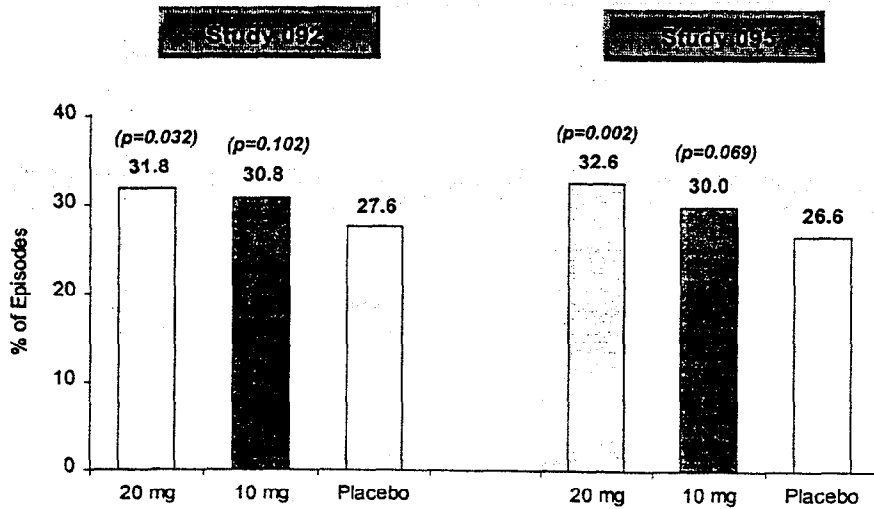
Percent of subjects with Good/Very Good/Excellent rating



p-values vs. placebo

Treatment of Heartburn
All Treated Episodes — Sustained Complete Relief

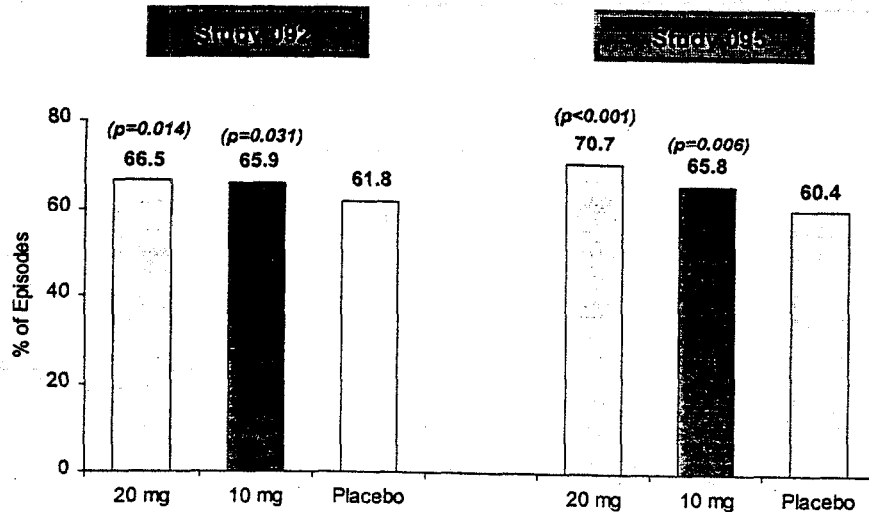
EP26



p-values vs. placebo

Treatment of Heartburn
All Treated Episodes — Sustained Adequate Relief

EP27



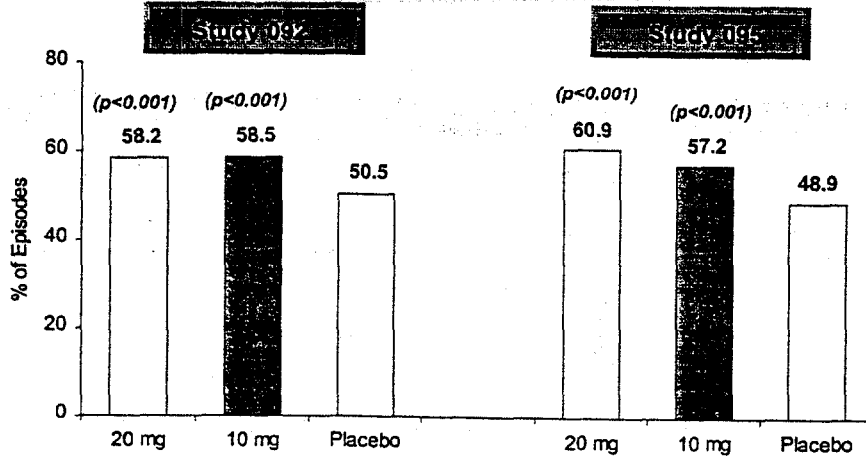
p-values vs. placebo

Treatment of Heartburn
All Treated Episodes — Overall Assessment

EP28

“Overall, How Would You Rate the Medication?”

Percent of subjects with Good/Very Good/Excellent rating



p-values vs. placebo

Summary of OTC Clinical Efficacy

- ◆ Omeprazole prevents heartburn
- ◆ Omeprazole is effective in the treatment of frequent heartburn
- ◆ Both 10 and 20 mg are efficacious