

## STUDY REPORT SUMMARY

### ASTRAZENECAPHARMACEUTICALS

**FINISHED PRODUCT:** Nexium

**ACTIVE INGREDIENT:** Esomeprazole

<b>Study No: D9612L00019 / NIS-GHR-NEX-2008/1</b>

#### **Developmental phase: Non-interventional study**

Study Completion Date: 03/2009

**Date of Report: 10/2009**

#### **OBJECTIVES:**

##### **Primary objective**

Primary objective was to assess symptom load and impact on daily life in PPI (Proton Pump Inhibitor)-treated GERD patients with persistent GERD symptoms.

##### **Secondary objectives**

- To describe the frequency and severity of extraoesophageal and/or atypical GERD symptoms;
- To describe current and previous treatment strategies;
- To describe the diagnostic and therapeutic approaches during the study visit;
- To assess the concordance between patient-reported and physician-reported symptom load.

#### **METHODS:**

##### **Patient population**

This study enrolled patients who consulted Primary Care Physicians (PCP) due to persisting GERD symptoms after PPI treatment. All patients had established diagnosis of GERD with predominant typical GERD symptoms which did not resolve after first full course of standard dose of PPI. The patients must have been on continuous PPI treatment with unchanged doses of PPI, according to local labeling, during the last 4-8 weeks prior to the enrolment visit.

##### **Design**

This study was non-interventional, cross-sectional, multinational, multi-centre study.

Study was conducted by 145 Primary Care Physicians.

This non-interventional study had one study visit.

Each PCP enrolled 10-25 consecutive patients with persistent GERD symptoms after taking full course of PPIs.

When patients with persistent GERD symptoms visited PCP, the study details were explained to patient and he/she was asked to sign the Informed Consent in line with local regulations.

During the same visit investigator filled in Case Report Forms (CRF) with the data obtained from the interview as well as from patient's medical records. Patient completed, PRO questionnaires (GIS – GERD Impact Scale and RDQ – Reflux Disease Questionnaire) without PCP's assistance

**Table 1. Study plan**

	<i>Study visit</i>
Informed Consent	X
RDQ and GIS Questionnaires	X
Subject demographics (sex, age, educational degree, professional activity, weight and height, habits –smoking and drinking)	X
History of GERD: reflux symptoms, diagnosis, any diagnostic procedure(s)	X
GERD related complications	X
Co-morbidities	X
Treatment (previous and current treatment)	X
Reason of visit	X
Prior health care utilization and subject referral to specialist/hospital clinic	X
Recent symptoms (past 7 days) assessed by the physician	X

### Study Drug

All PPIs registered in Croatia for treatment of GERD (esomeprazole, pantoprazole, lansoprazole and omeprazole).

### Statistical analysis

Descriptive statistical methods were used for data analysis.

## RESULTS:

### Demographics

In total, 2674 patients were enrolled in the study. Demographic data are shown in the Table 2.

**Table 2. Patient demographic data**

		Female						Male					
N (%)		1534 (57.4%)						1103 (41.2%)					
Age	Up	30-	40-	50-59	60-69	>70	Up	30-	40-	50-59	60-69	>70	
N	to	39	49				to	39	49				
	29						29						
		105	191	296	379	279	282	63	169	241	159	205	163

<b>BMI</b>	<b>19</b>	<b>20-24</b>	<b>25-29</b>	<b>&gt;30</b>	<b>19</b>	<b>20-24</b>	<b>25-29</b>	<b>&gt;30</b>
<b>N (%)</b>	<b>51 (3.3)</b>	<b>545 (35.5)</b>	<b>637 (41.6)</b>	<b>300 (19)</b>	<b>13 (1.2)</b>	<b>272 (24.7)</b>	<b>642 (58.2)</b>	<b>176 (16)</b>
<b>Smoking</b>	<b>Non-smoker</b>	<b>Ex-smoker</b>	<b>Occasional smoker</b>	<b>Habitual smoker</b>	<b>Non-smoker</b>	<b>Ex-smoker</b>	<b>Occasional smoker</b>	<b>Habitual smoker</b>
<b>N (%)</b>	<b>1021 (66.6)</b>	<b>216 (14.1)</b>	<b>109 (7.1)</b>	<b>185 (12.1)</b>	<b>377 (34.2)</b>	<b>292 (26.5)</b>	<b>123 (11.2)</b>	<b>310 (28.1)</b>
<b>Alcohol</b>	<b>yes</b>	<b>no</b>		<b>yes</b>	<b>no</b>			
<b>N (%)</b>	<b>134 (8.7)</b>	<b>1398 (91.1)</b>		<b>546 (49.5)</b>	<b>557 (50.5)</b>			

### Medical History

Relevant co-morbidities were recorded in 65% of patients. In those patients, most frequent co-morbidities were: cardiovascular diseases in 68% of patients (arterial hypertension in 40% and hypercholesterolemia in 28% of patients); mental diseases in 35% of patients (depression in 17% and anxiety in 18% of patients) and esophagitis in 17% of patients.

Patients were taking antihypertensives (37% of patients), anxiolytics (33,1% of patients), NSAIDs (33,5% of patients), acetilsalicylic acid (18,7%) and bisphosphonates (5,9%).

### Reasons for the visit

The main reasons for patient's visit to PCPs were lack of response to prescribed PPI therapy (in 42,7% of patients) and change in the severity or frequency of GERD symptoms (in 33,7% of patients).

### Diagnosis and diagnostic procedures

GERD was diagnosed by PCPs in 48,7% of patients and by gastroenterologists in 42,4% of patients.

At the end of study visit, additional GERD-related diagnostical procedures were recommended to 32,8% of enrolled patients. Most frequently recommended procedures were following: endoscopy (in 86,8% of cases); referral to specialist (in 15,6% of cases) and pH monitoring (in 2,7% of cases).

### Treatment

As compared with the type of PPIs and dose of PPIs taken during the previous treatment course, at the study visit treatment was changed in 96,1% of enrolled patients. The type of PPI was changed in 83,6% of enrolled patients and only the dose of PPI was changed in 12,1 % of enrolled patients.

Antacids and H2 receptor antagonists were prescribed as concomitant therapy in higher proportion of patients during the previous treatment course than at the end of the study visit (decrease from 26,5% to 6,3% of patients taking antacids and from 24,8% to 0,3% of patients taking H2 receptor antagonists).

### Frequency of GERD/other GI symptoms during previous 7 days

Overall, most frequent GERD symptoms were heartburn, burning sensation in epigastrium and acid regurgitation.

According to data entered by investigators, proportions of patients experiencing these symptoms were: for heartburn - 88,1%, for burning sensation in epigastrium - 76,4% and for acid regurgitation - 76,7% and

Patients assessed frequency (RDQ) as following: acid taste in mouth was present in 92,9% of patients, burning sensation in epigastrium in 89,6% of patients, unpleasant regurgitation in 87,4% of patients and retrosternal burning sensation in 86,1% of patients.

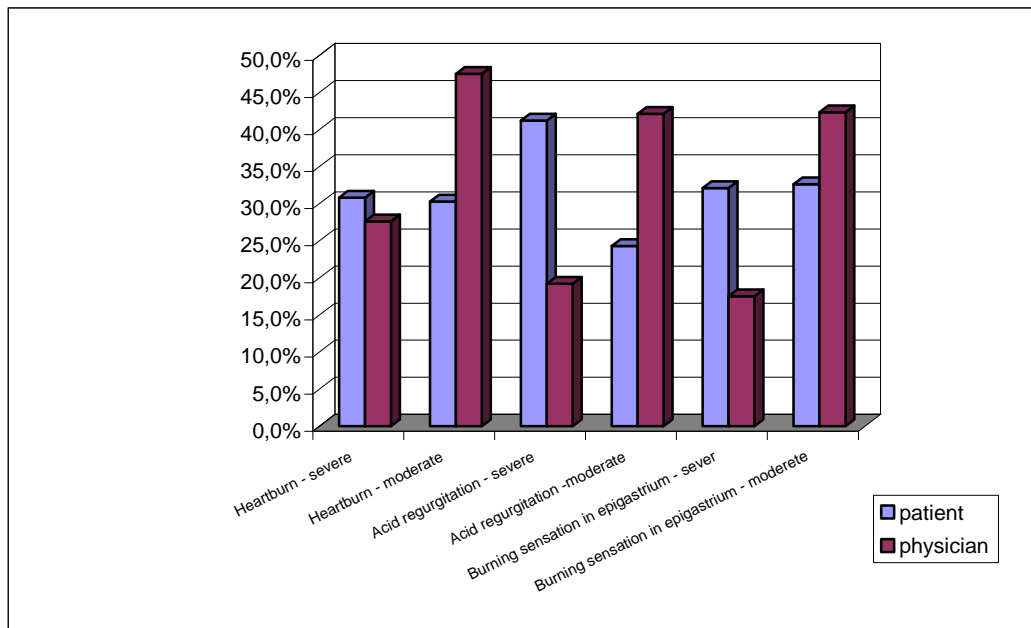
**Severity of GERD/other GI symptoms during the previous 7 days**

According physicians assessment heartburn was severe in 27,6% of patients and moderate in 47,5% of patients. Burning sensation in epigastrium was severe in 17,5% of patients and moderate in 42,3% of patients. Acid regurgitation was severe in 19,2% of patients and moderate in 42,1% of patients.

According patient’s assessment – 30,4% of patients said that heartburn was severe and 30,3% said that it was moderate. Acid regurgitation was severe in 41,2% cases and moderate in 24,3%.

Differences between patient-reported and physician-reported symptoms load are significant (p< 0,001). Results are shown in Graf 1.

Graf 1. Differences between patient-reported and physician-reported symptoms load



**Impact of symptoms on quality of life**

According to the data entered into GIS by patients, GERD symptoms have high impact on patient’s life.

GERD symptoms have prevented 93,6% of patients from consuming their favorite food/drink, decreased productivity in 85,5% of patients and caused sleeping disorders in 84% of patients due to GERD.

**Adverse event**

No adverse events were reported in this study.