

Upper Gastrointestinal Complaints and use of Acid Reducing Agents are frequent in patients treated with Antiretrovirals

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BACKGROUND

- ❖ The use of HAART in the management of HIV infection has produced significant benefits with respect to virological control and improved immunological function.
- ❖ However, the use of ARV medications has been associated with an increased risk for AEs, especially upper gastrointestinal symptoms.
- ❖ Control of or minimization of GI symptoms may lead to increased adherence and improved effectiveness of ARV treatment.
- ❖ The variation in GI symptoms associated with different ARV regimens has not been extensively documented in a real-life observational setting.
- ❖ The purpose of the current study was to assess this knowledge gap using a cross sectional survey design.

OBJECTIVES

- ❖ To describe the prevalence of upper GI symptoms in HIV⁺ patients treated with ARV.
- ❖ To describe the difference in the prevalence of upper GI symptoms between HIV⁺ patients treated with different PIs.

METHODS

- ❖ Cross sectional survey of patients treated with an anti-retroviral agent (ARVs)
- ❖ All patients completed a self administered survey.
- ❖ Prevalence of upper GI complaints (UGC) was ascertained as one of the following:
 - ◊ The occurrence of the following Upper GI Symptoms (UGS):
 - ⇒ Heartburn
 - ⇒ Gastric reflux
 - ⇒ Ulcer disease
 - ◊ Use of the following Acid Reducing Agents (ARA):
 - ⇒ H2 blockers
 - ⇒ PPIs
 - ⇒ Antacids

RESULTS

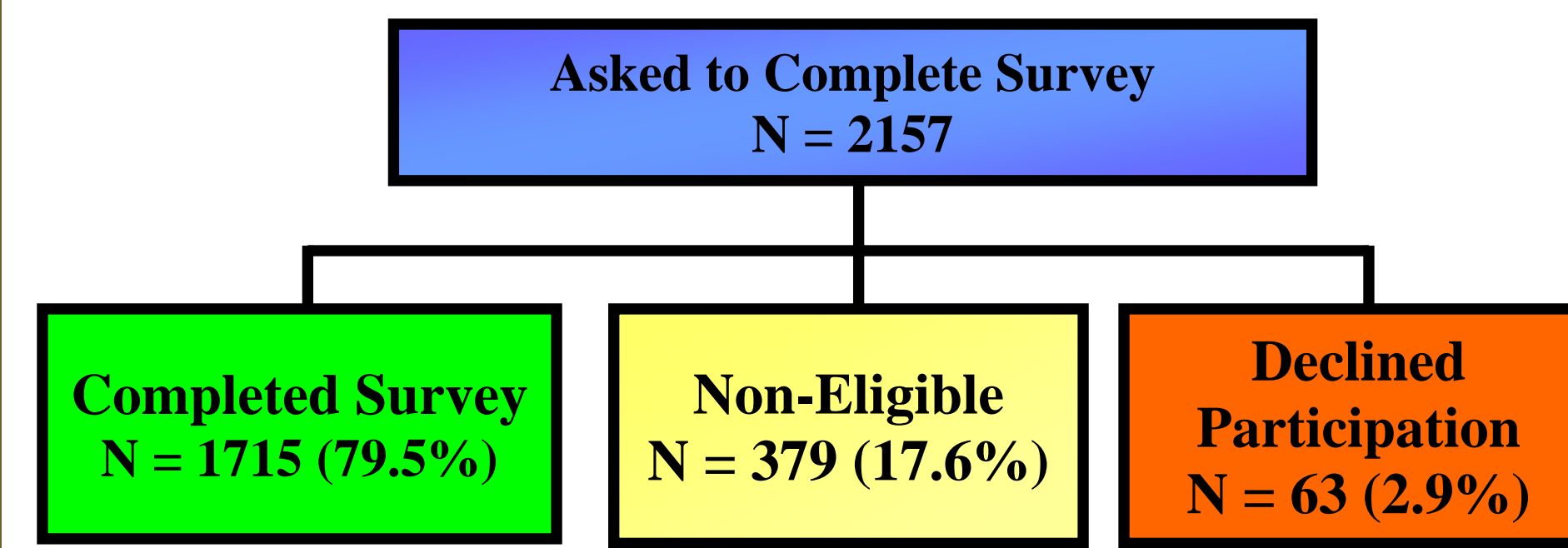
- ❖ 2157 patients were invited to participate:
 - ◊ 1715 (79.5%) were eligible and participated
 - ◊ 379 (17.6%) were non-eligible
 - ◊ 63 (2.9%) declined participation
- ❖ The analysis was based on eligible participants
- ❖ Mean (SD) age was 44.3 (9.4) years and 89% were male
- ❖ Respondent residence:
 - ⇒ Ontario (57.4%)
 - ⇒ Quebec (39.4%)
- ❖ UGC were reported by 871 (50.8%) patients:
 - ◊ Heartburn (40.9%)
 - ◊ Gastric reflux (28.3%)
 - ◊ Stomach ulcers (5.1%)
- ❖ 871 reported at least one UGC, of which 719 (82.5%) reported using at least one ARA
- ❖ 844 respondents had no UGC, of which only 165 (19.5%) reported using an ARA
- ❖ Patients treated with lopinavir/ritonavir (LPV/r) (N=381) vs other ARVs had statistically significant lower rates of:
 - ◊ UGC (45.4% vs. 52.3%; p = 0.02)
 - ◊ ARA use (47.0% vs. 52.8%; p = 0.04)
 - ◊ Antacid use (35.7% vs. 42.8%; p = 0.01), including
 - ◊ TUMS (16.7% vs. 22.3%; p = 0.02)
 - ◊ Roloids (14.2% vs. 19.4%; p = 0.02)
- ❖ PPI use was not statistically different (9.4% vs. 10.1%; p = 0.70).

CONCLUSIONS

- ❖ Upper gastrointestinal symptoms are highly prevalent among HIV⁺ patients treated with ARV.
- ❖ Those on LPV/r have a lower prevalence of UGC.
- ❖ Patients with LPV/r-containing regimens use significantly less ARA, including less use of any antacid, Tums (calcium carbonate) or Roloids (calcium carbonate, magnesium hydroxide).
- ❖ Inappropriate use of antacids in regimens containing Atazanavir might decrease effectiveness of these regimens.
- ❖ In patients with UGC needing ARA, LPV/r-containing regimens seem more appropriate than other PI's.

RESULTS

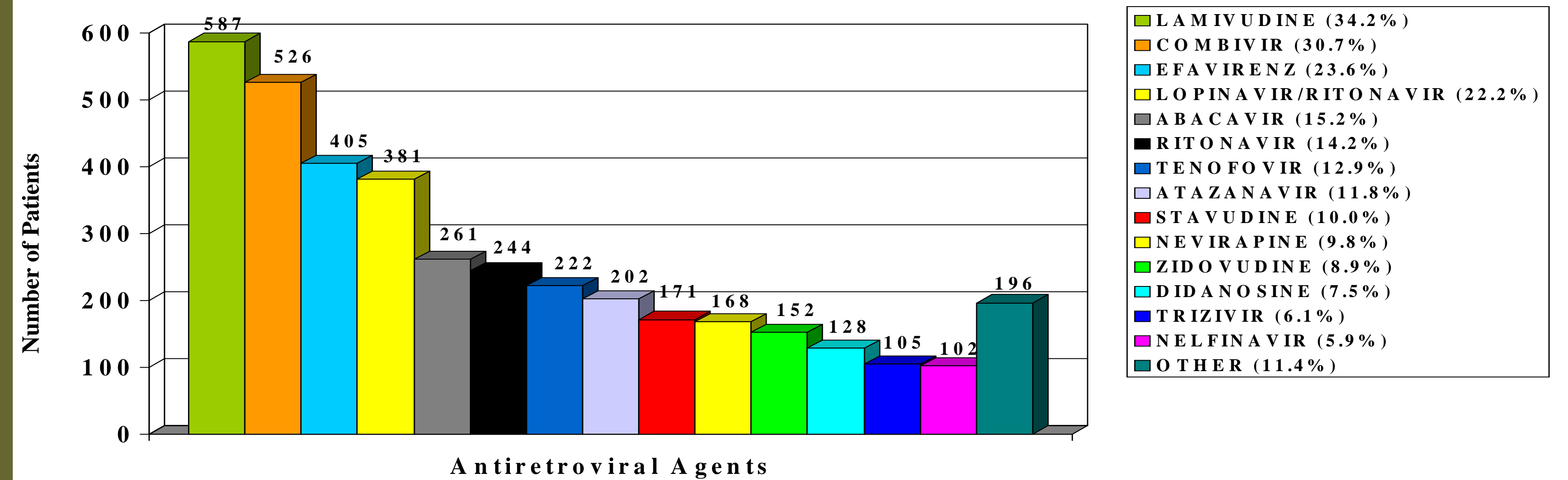
PATIENT DISPOSITION



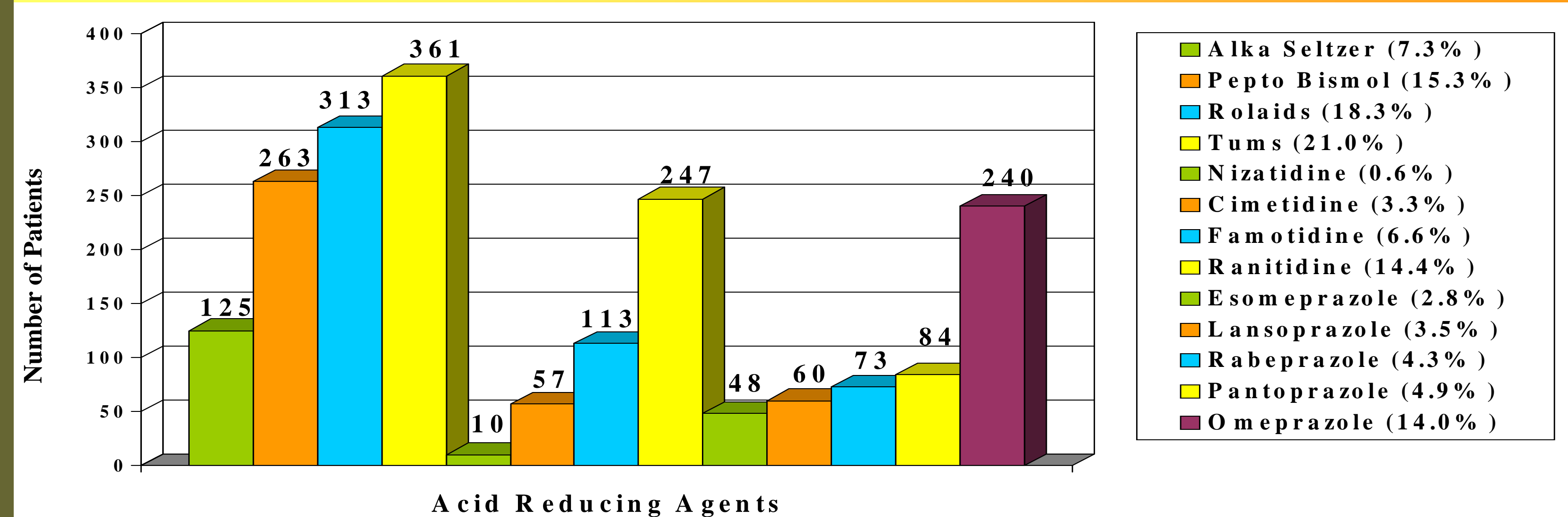
DEMOGRAPHICS

		N	%
Sex	Male	1523	88.8%
	Female	180	10.5%
Age Group	<24	29	1.7%
	25-34	202	11.8%
	35-44	655	38.2%
	45-54	570	33.2%
	55-64	212	12.4%
	65+	32	1.9%
Province	BC	39	2.3%
	AB	3	0.2%
	MB	1	0.1%
	ON	984	57.4%
	QC	675	39.4%

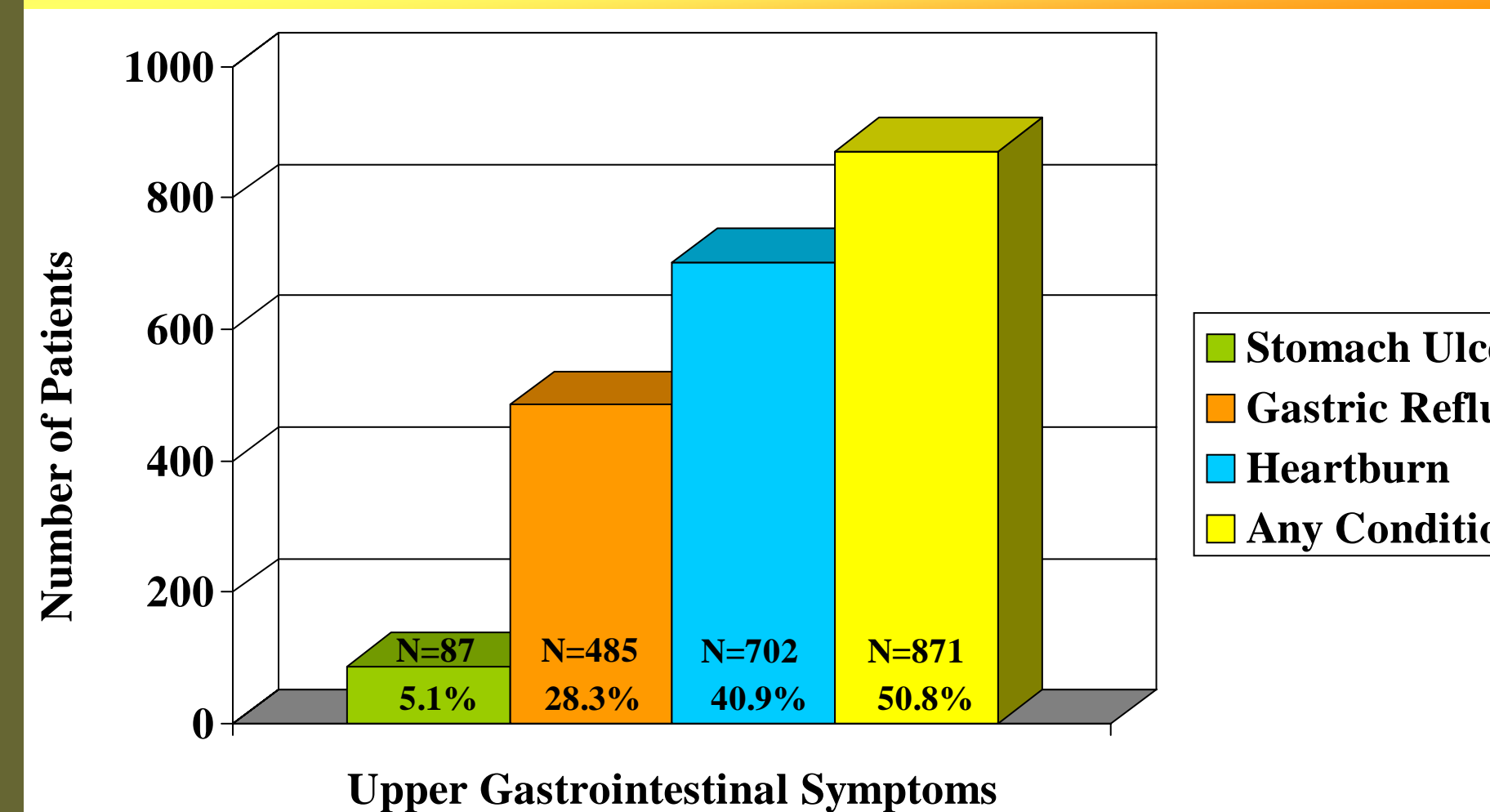
USE OF ANTIRETROVIRAL AGENTS (ARV)



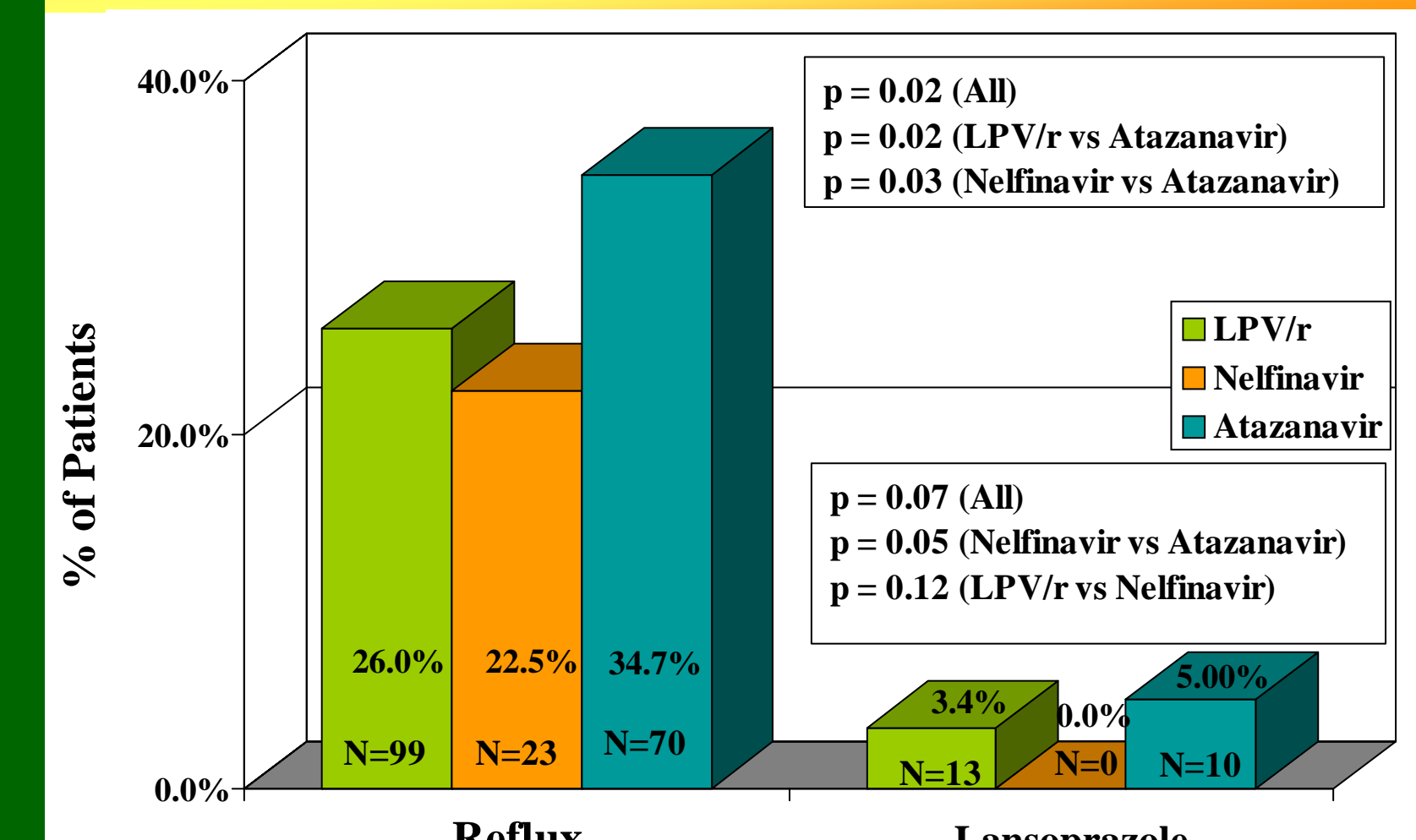
USE OF ACID REDUCING AGENTS (ARA)



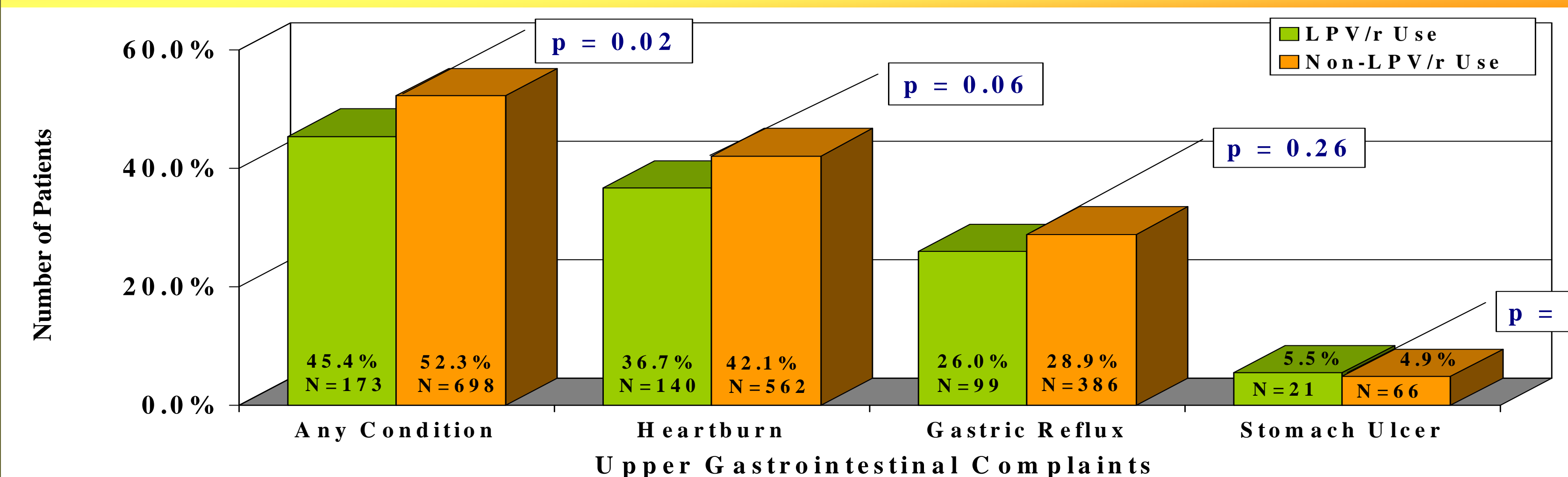
UPPER GASTROINTESTINAL SYMPTOMS (UGS)



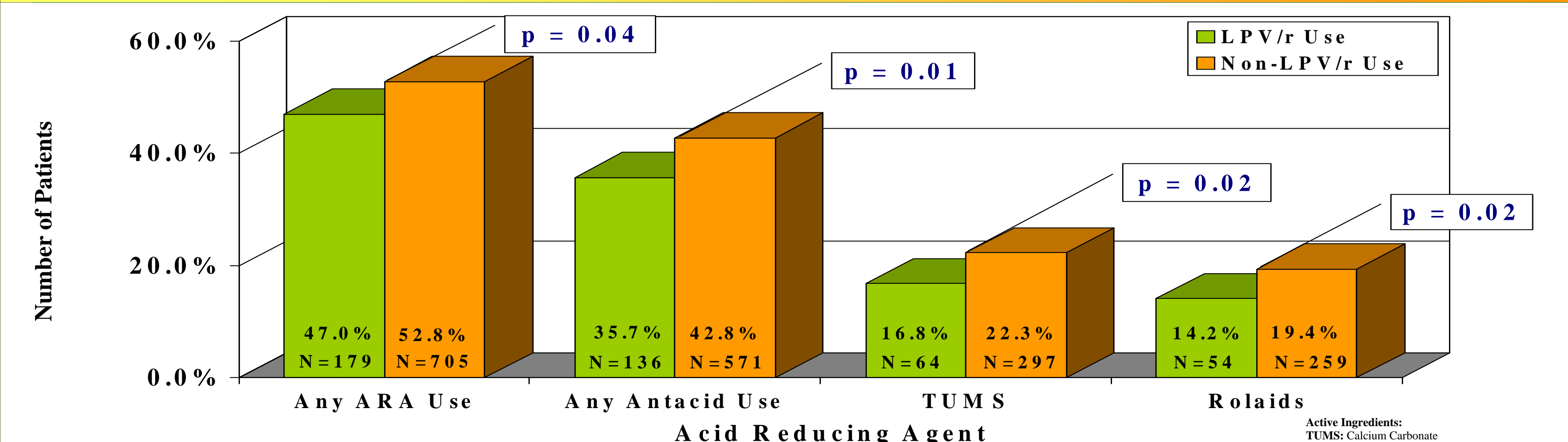
PI VS. ARA USE



UGC vs. Treatment with Lopinavir/ Ritonavir



ARA Use vs. Treatment with Lopinavir/ Ritonavir



ACKNOWLEDGEMENTS

We are grateful to all the participants who took the time to complete the survey as well to all the physicians who provided the survey to their patients to complete.