

Appendix 1: Description of original cohort, the “Chemoprevention of Cancer” cohort.

This cohort included all individuals residing in Sweden who received at least one dispensed prescription of one of the following commonly prescribed drugs between July 2005 and December 2014 (with corresponding ATC codes): sex hormones (G03), drugs for peptic ulcers and gastro-esophageal reflux disease (A02B), acetylsalicylic acid (B01AC06, N02BA), non-steroidal anti-inflammatory drugs (M01A), HMG CoA reductase inhibitors (C10AA, C10BA), drugs affecting bone structure and mineralization, (M05B), and antibiotics (J01AA, J01CA04, J01FA, J01MA, J01XD, J01XE, J04AB04). This cohort included approximately 85% of all Swedish residents, with especially high coverage of adults. All adult individuals receiving at least one dispensed prescription of a gastric acid inhibitor (proton pump inhibitor or H2 receptor antagonist) were included.

Appendix 2: International Classification of Diseases (ICD) and Anatomical Therapeutic Chemical classification system (ATC) codes to describe the indication for gastric acid inhibitors.

	ICD-7 (Since 1955)	ICD-8 (Since 1968)	ICD-9 (Since 1987)	ICD-10 (Since 1997)
Reflux codes	784,3; 539,11- 539,12; 560,4	530,93- 530,94; 551,3; 784,3	530B-C; 553D; 787B	K20-21; K44; R12
Barrett's esophagus	-	-	-	K227
Peptic ulcer disease	540-541	531-533	531-533	K25-K27
Zollinger-Ellison syndrome / Hypergastrinemia	-	-	251F	E16.4
Gastro-duodenitis	543	535	535	K29
Dyspepsia/disruption of gastric function	544	536	536	K30-K31
<i>Helicobacter pylori</i> infection	-	-	-	B96.8 or B98.0
ATC				
Non-steroidal anti-inflammatory drugs	M01A			
Aspirin		B01AC06, N02BA		
<i>Helicobacter pylori</i> eradication		A02BD, or A02BC (PPI) in combination with 2 out of 3 antibiotics (Amoxicillin [J01CA04]; Clarithromycin [J01FA09], or metronidazole [J01XD]); or combined with metronidazole [J01XD], doxycycline [J01AA02] and bismuth [A02BX05]; or with amoxicillin [J01CA04] and levofloxacin [J01MA12].		

Note: an indication was considered present if the ICD code occurred at least once in the in- or out-Patient Registry. NSAIDs and Aspirin were only considered if the cumulative dosage was ≥ 180 days.

Appendix 3: Tumor stage and anatomical locations of gastric cancer in the cohort exposed to maintenance use of proton pump inhibitors (PPIs) and in the Swedish background population of the same age.

	PPI maintenance cohort	Background population
	Number (%)	Number (%)
Total	2219 (100.0)	5821 (100.0)
Tumor stage - Cardia		
0-1	72 (12.7)	134 (8.9)
2	36 (6.4)	80 (5.3)
3	207 (36.5)	480 (31.9)
4	145 (25.6)	496 (33.0)
unclear/incomplete	107 (18.9)	315 (20.9)
Tumor stage - Non-cardia		
0-1	291 (17.6)	617 (14.3)
2	68 (4.1)	168 (3.9)
3	408 (24.7)	979 (22.7)
4	422 (25.5)	1260 (29.2)
unclear/incomplete	463 (28.0)	1292 (29.9)
Anatomical location		
Cardia	567 (25.6)	1505 (25.9)
Fundus	97 (4.4)	268 (4.6)
Corpus	389 (17.5)	1040 (17.9)
Antrum	398 (17.9)	915 (15.7)
Pylorus	157 (7.1)	303 (5.2)
Minor curvature	74 (3.3)	173 (3.0)
Major curvature	33 (1.5)	93 (1.6)
Overgrowth of unknown origin	2 (0.1)	15 (0.3)
Unspecified	502 (22.6)	1509 (25.9)