I Encuentro Latinoamericano de Expertos en Gastroenterología BY PROCAPS

Papel de los IBPs De LI en la Enfermedad Acido Péptica

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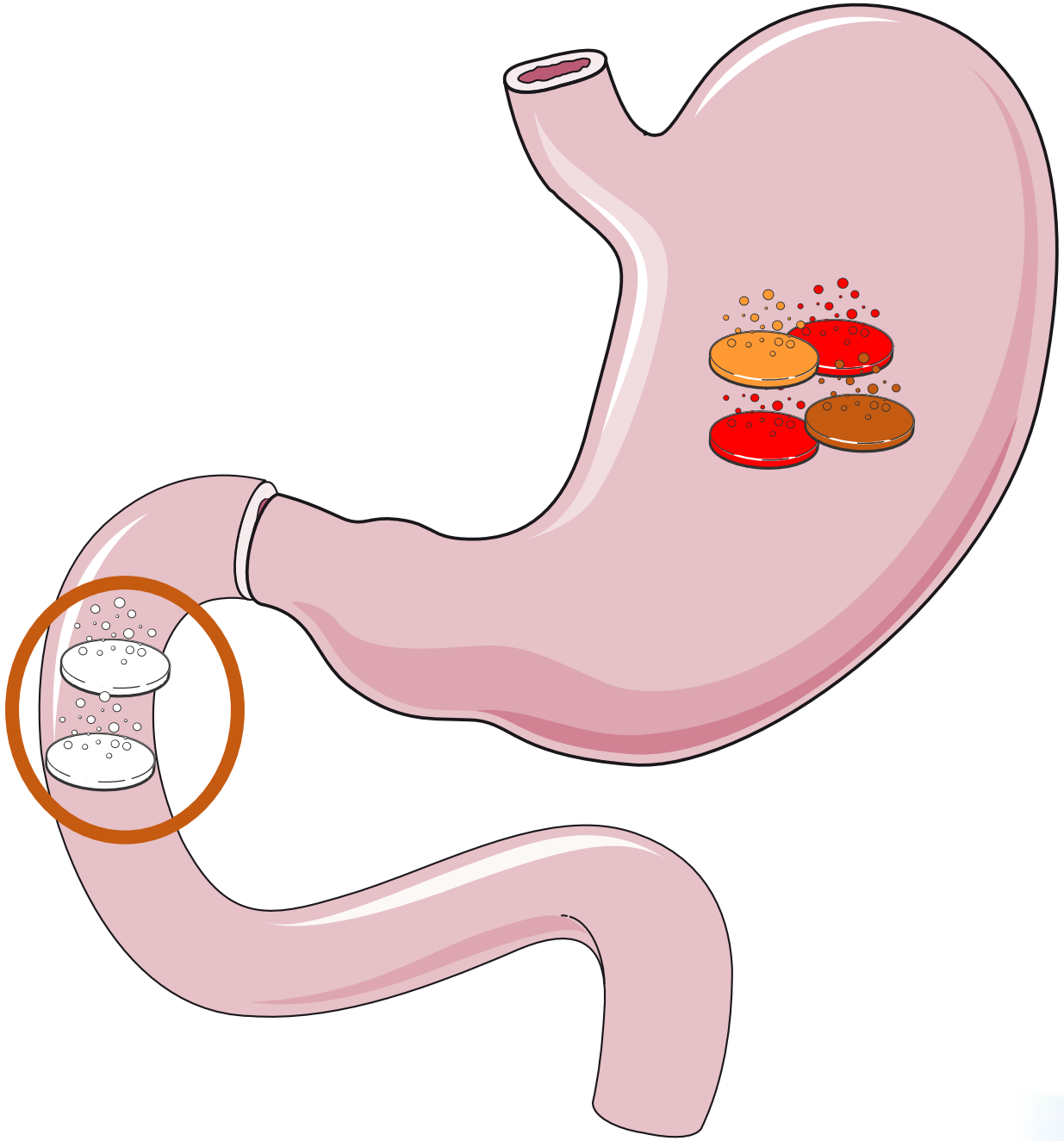
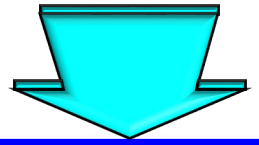
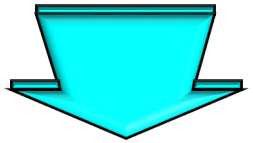


Liberación Inmediata

“Enfermedad Ácido-péptica”

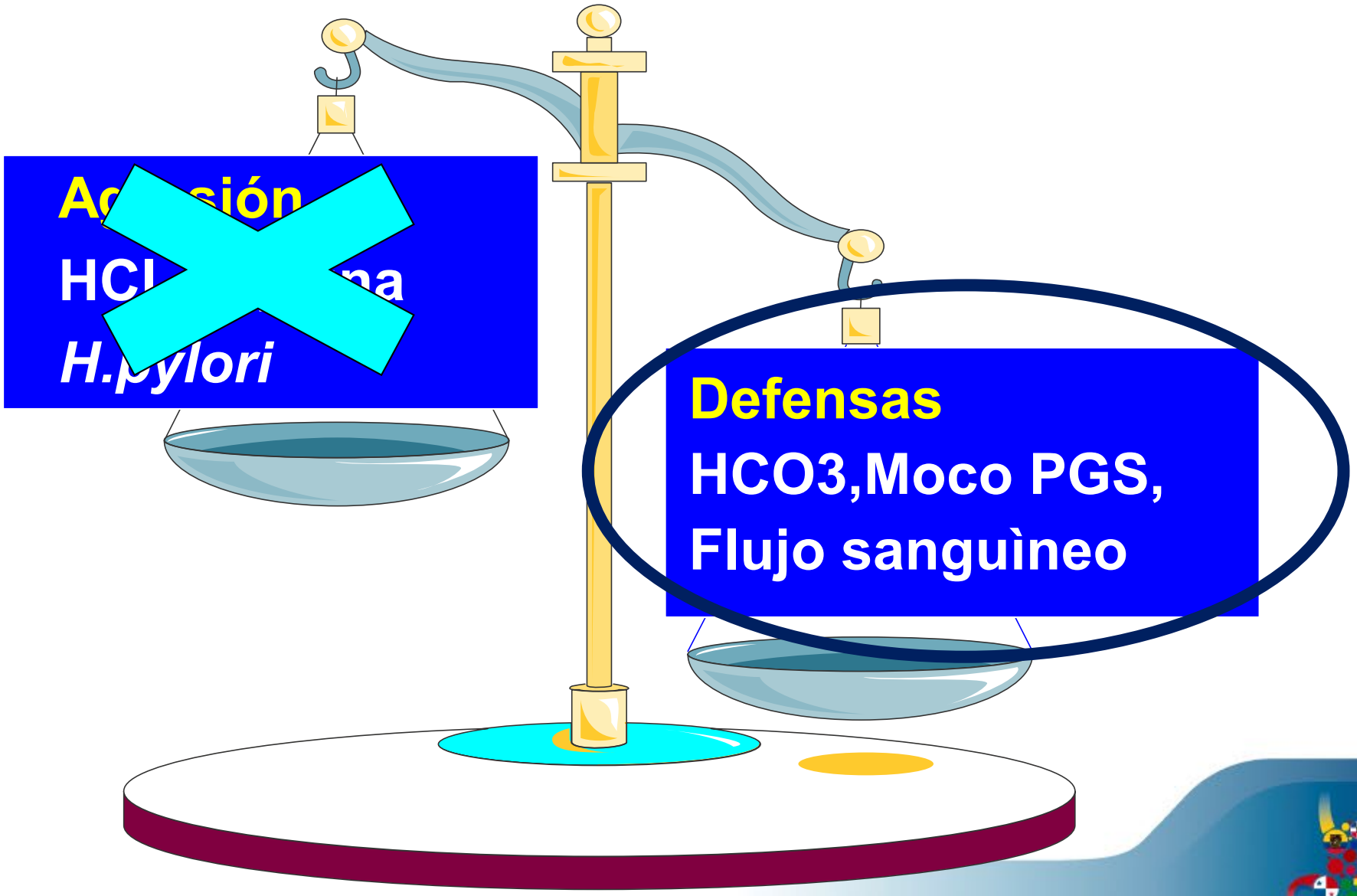


No es un diagnóstico Específico, Incluye Muchas enfermedades



Originadas por alteraciones Del ácido y la pepsina

Enfermedad “acido péptica”



Antiácidos

Protectores

Sucralfato

Prostaglandinas

Anticolinérgicos

Enfermedad Acido péptica
HCl

Anti-Gastrina

Anti-H2
Famotidina
Roxatidina

N-Nitrosodimetil amina 400 veces
Carcinogenesis, 2016;37:625–634
FDA detuvo fabricación 2019

Detienen fabricación de Ranitidina por sustancia cancerígena

La FDA anunció que se han encontrado niveles bajos del químico cancerígeno NDMA

Oral intake of ranitidine increases urinary excretion of *N*-nitrosodimethylamine

Teng Zeng[1,2,3] and William A.Mitch[2,3,*]

Abstract

The H_2-receptor antagonist, ranitidine, is among the most widely used pharmaceuticals to treat gastroesophageal reflux disease and peptic ulcers. While previous studies have demonstrated that amines can form *N*-nitrosamines when exposed to nitrite at stomach-relevant pH, *N*-nitrosamine formation from ranitidine, an amine-based pharmaceutical, has not been demonstrated under these conditions. In this work, we confirmed the production of *N*-nitrosodimethylamine (NDMA), a potent carcinogen, by nitrosation of ranitidine under stomach-relevant pH conditions *in vitro*. We also evaluated the urinary NDMA excretion attributable to ingestion of clinically used ranitidine doses. Urine samples collected from five female and five male, healthy adult volunteers over 24-h periods before and after consumption of 150 mg ranitidine were analyzed for residual ranitidine, ranitidine metabolites, NDMA, total *N*-nitrosamines and dimethylamine. Following ranitidine intake, the urinary NDMA excreted over 24 h increased 400-folds from 110 to 47 600 ng, while total *N*-nitrosamines increased 5-folds. NDMA excretion rates after ranitidine intake equaled or exceeded those observed previously in patients with schistosomiasis, a disease wherein *N*-nitrosamines are implicated as the etiological agents for bladder cancer. Due to metabolism within the body, urinary NDMA measurements represent a lower-bound estimate of systemic NDMA exposure. Our results suggest a need to evaluate the risks attributable to NDMA associated with chronic consumption of ranitidine, and to identify alternative treatments that minimize exposure to *N*-nitrosamines.

400 veces

Carcinogenesis, 2016;37:625–634

Exposure to Ranitidine and Risk of Bladder Cancer: A Nested Case-Control Study

Chris R. Cardwell, PhD[1], Ronald D. McDowell, PhD[1], Carmel M. Hughes, PhD[2], Blánaid Hicks, PhD[1] and Peter Murchie, MD, PhD[3]

Ranitidine and bladder cancer risk: A case-control study

Outcome

Bladder cancer cases (*n=3260*) and, population-based controls (*n=14037*) were identified from General Practice records.

Exposure

Ranitidine use was identified from prescription records.

Conclusion

Ranitidine was associated with a 22% increase in bladder cancer risk, after controlling for confounders. Future studies are required to replicate this finding.

- **3 años OR 1.43 (IC 95% 1.05–1.94).**

Am J Gastroenterol. 2021 Epub ahead May 21

Supresión àcido clorhidrìco

IBP

Estándar de oro

Mossner J, Dtsch Artztebl Int 2016;113:477-83
Targownik L, Am J Gastroenterol 2018;113:519-28

Mossner J, Dtsch Artztebl Int 2016;113:477-83
Targownik L, Am J Gastroenterol 2018;113:519-28

Indicaciones correctas de los IBPs

Por períodos Cortos <12 semanas

- Erradicación *H.pylori*
- Ulceras pépticas
- Ulcera péptica sangrante
- Profilaxis ulceras estrés
- Dispepsia funcional ("Gastritis")
- Esofagitis eosinofílica sin respuesta

Por períodos Indefinidos

- Esofagitis C y D
- Esófago de Barrett
- Ulcera péptica idiopática
- Profilaxis AINES
- Profilaxis antiplaquetarios
- Esofagitis eosinofílica (+)
- Fibrosis Pulmonar
- Zollinger Ellison

Herszényi L, Dig Dis 2020;38:104-11
Targownik LE, Gastroenterology 2022;162:1334-42

63% Wang J, Hepatol Int. 2020; 14:385-98

IBP no indicados

Pancreatitis aguda o crónica
Cirrosis Descompensada
Hospitalizados en sala general
"Polimedicados"
Reflujo Faringo-laringeo

Herszényi L, Dig Dis 2020;38:104-11
Targownik LE, Gastroenterology 2022;162:1334-42

Use of proton pump inhibitors to treat persistent throat symptoms: multicentre, double blind, randomised, placebo controlled trial

James O'Hara,[1,2] Deborah D Stocken,[3] Gillian C Watson,[4] Tony Fouweather,[5] Julian McGlashan,[6] Kenneth MacKenzie,[7] Paul Carding,[8] Yakubu Karagama,[9] Ruth Wood,[4] Janet A Wilson[10]

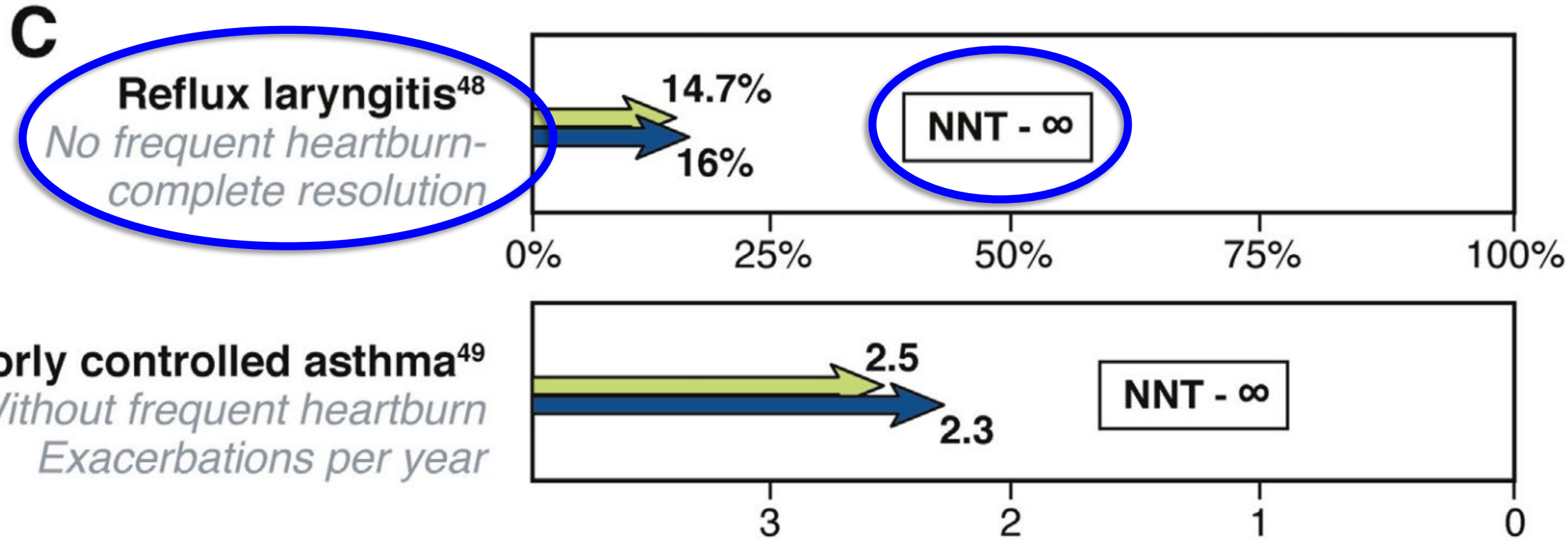
O'Hara J, BMJ 2021;372:4903.

Table 2 | Questionnaire outcome scores for compliant intention-to-treat group

Questionnaires and intervention	No in group	Mean score at follow-up (95% CI)		
		Baseline	16 weeks*	12 months
RSI*:				
Lansoprazole	102	22.0 (20.4 to 23.6)	17.4 (15.5 to 19.4)	16.0 (13.6 to 18.4)
Placebo	118	21.7 (20.5 to 23.0)	15.6 (13.8 to 17.3)	13.6 (11.7 to 15.5)
Difference†		0.3 (−1.7 to 2.3)	1.8 (−0.8 to 4.4)	2.4 (−0.6 to 5.4)
RSI-HB:				
Lansoprazole	102	20.3 (18.8 to 21.7)	16.3 (14.5 to 18.1)	14.7 (12.4 to 16.9)
Placebo	118	19.8 (18.6 to 21.0)	13.9 (12.2 to 15.5)	11.9 (10.1 to 13.7)
Difference†		0.5 (−1.4 to 2.4)	2.4 (−0.0 to 4.8)	2.8 (0.5 to 5.1)
CReSS:				
Lansoprazole	102	50.3 (44.9 to 55.7)	38.9 (33.4 to 44.3)	36.6 (29.8 to 43.5)
Placebo	118	51.1 (46.4 to 55.8)	34.7 (29.6 to 39.9)	31.8 (26.6 to 36.9)
Difference†		−0.8 (−7.9 to 6.3)	4.2 (−3.2 to 11.6)	4.8 (−3.5 to 13.1)
LPR-HRQL:				
Lansoprazole	102	28.9 (24.5 to 33.3)	20.5 (16.1 to 25.0)	18.8 (13.7 to 23.8
Placebo	118	26.5 (22.5 to 30.5)	17.1 (13.3 to 21.0)	13.9 (10.0 to 17.8)
Difference†		2.4 (−3.5 to 8.3)	3.4 (−2.4 to 9.2)	4.9 (−1.3 to 11.1)

O'Hara J, BMJ 2021;372:4903.

Síntomas extraesofágicos



Katzka DA, Clin Gastroenterol Hepatol 2020;18:767-76

Research Article

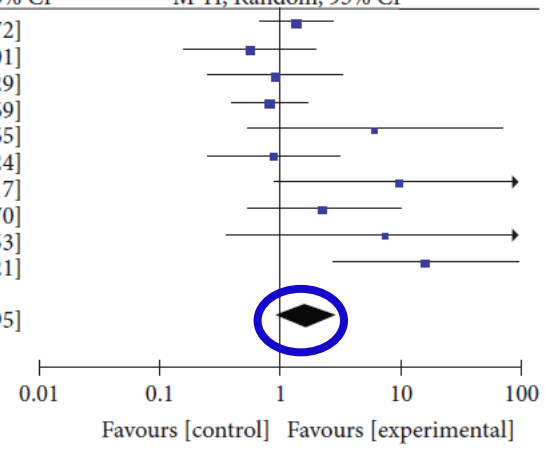
Meta-analysis of Proton Pump Inhibitors in the Treatment of Pharyngeal Reflux Disease

Xiulin Jin, Xufeng Zhou, Zongxian Fan, Yingchun Qin, and Junjie Zhan

Eficacia global

Study or Subgroup	Experimental Events	Experimental Total	Control Events	Control Total	Weight	Odds ratio M-H, Random, 95% CI
14.Chappity 2014	100	117	95	117	18.0%	1.36 [0.68, 2.72]
16.Fass 2009	8	24	8	17	11.4%	0.56 [0.16, 2.01]
19.Wo 2005	8	20	8	19	11.4%	0.92 [0.26, 3.29]
20.Vaezi 2006	40	83	23	43	17.4%	0.81 [0.39, 1.69]
21.Eherer 2003	9	10	6	10	4.8%	6.00 [0.53, 67.65]
22.Steward 2004	8	18	9	19	11.2%	0.89 [0.24, 3.24]
23.EL-Serag 2001	6	11	1	9	4.9%	9.60 [0.88, 105.17]
24.Noordzij 2001	9	15	6	15	9.8%	2.25 [0.52, 9.70]
25.Ours 1999	6	17	0	6	3.3%	7.35 [0.35, 152.53]
26.Langevin 2001	11	14	3	16	7.6%	15.89 [2.65, 95.21]
Total (95% CI)		329		271	100.0%	1.62 [0.89, 2.95]
Total events	205		159			

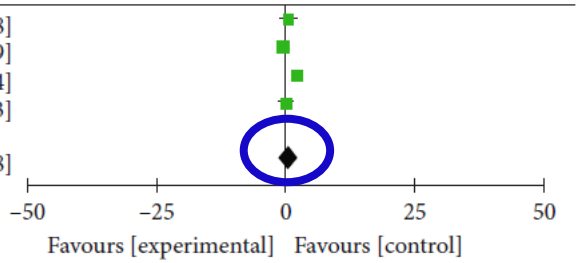
Heterogeneity: $Tau^2 = 0.39$; $Chi^2 = 17.50$, df = 9 (P = 0.04); $I^2 = 49\%$
Test for overall effect: Z = 1.59 (P = 0.11)



Puntaje sintomas

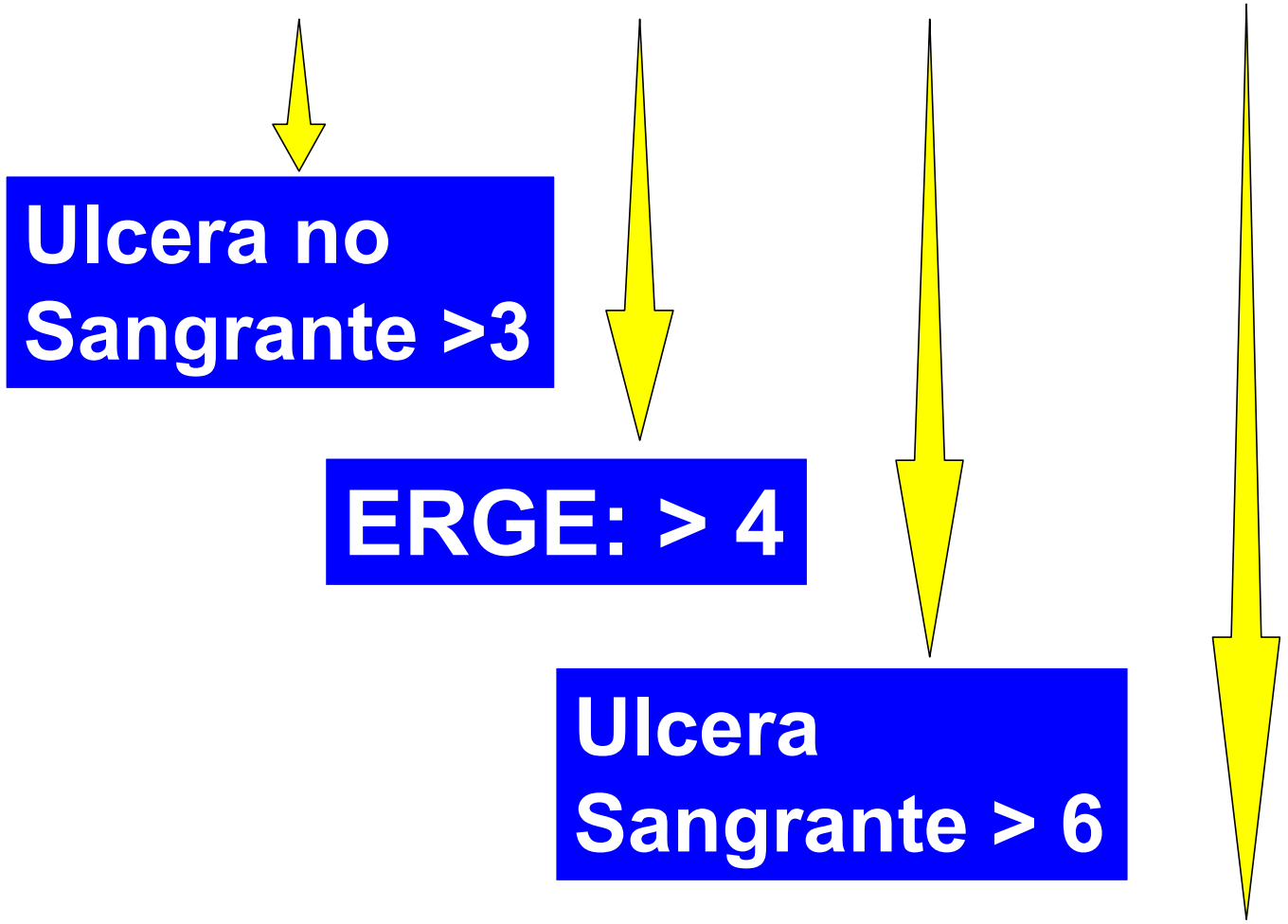
Study or Subgroup	Experimental Mean	Experimental SD	Experimental Total	Control Mean	Control SD	Control Total	Weight	Mean difference IV. Random. 95% CI
15.Shaheen 2010	0.6	2	22	0.1	2.9	18	22.7%	0.50 [−1.08, 2.08]
17.Lam 2010	2.21	0.64	42	2.75	0.5	40	26.8%	−0.54 [−0.79, −0.29]
18.Reichel 2008	4.6	0.63	30	2.32	0.76	28	26.7%	2.28 [1.92, 2.64]
22.Steward 2004	0.6	1.8	18	0.5	2.3	19	23.8%	0.10 [−1.23, 1.43]
Total (95% CI)			112			105	100.0%	0.60 [−1.28, 2.48]

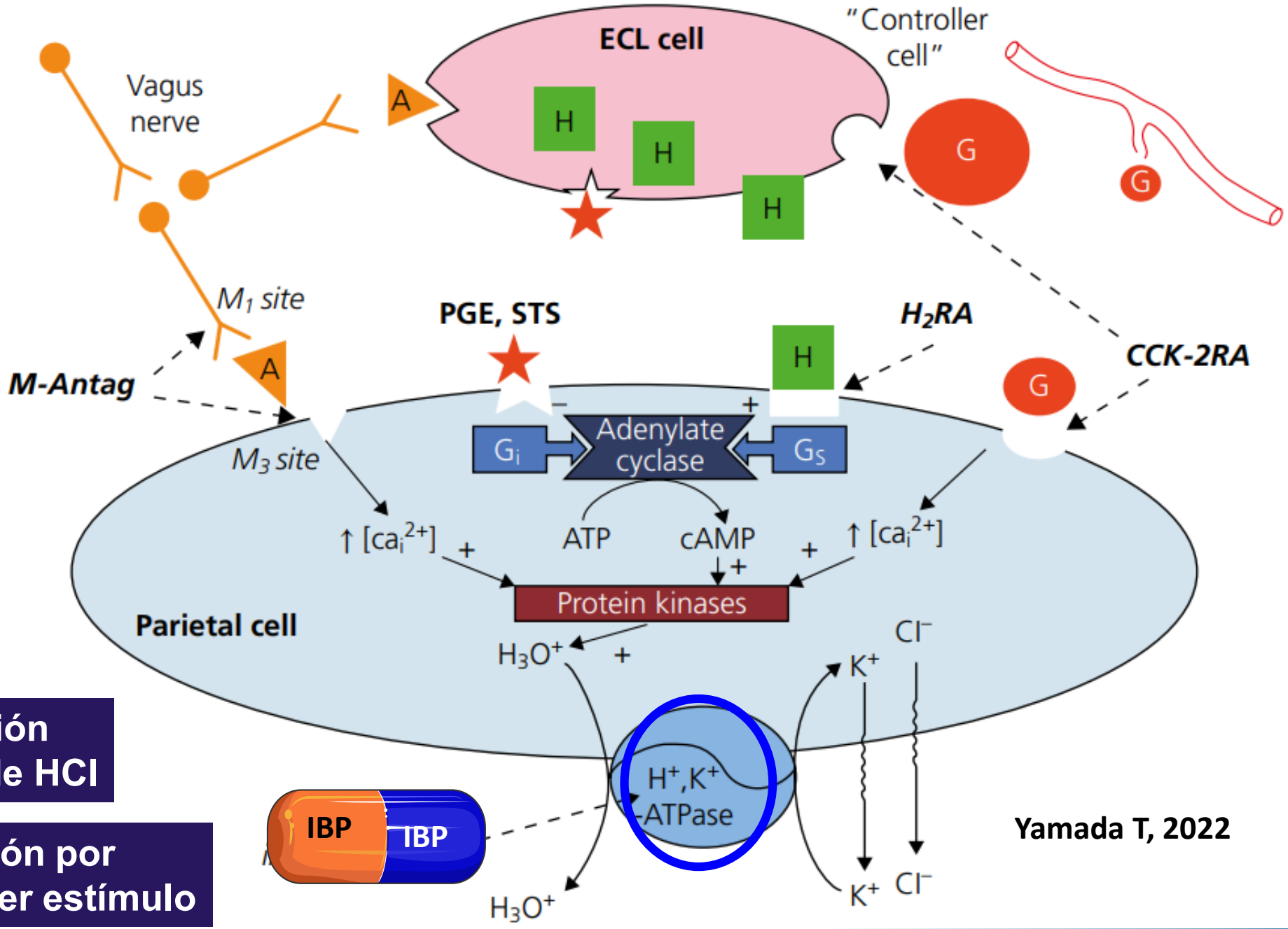
Heterogeneity: $Tau^2 = 3.42$; $Chi^2 = 159.67$, df = 3 (P < 0.00001); $I^2 = 98\%$
Test for overall effect: Z = 0.63 (P = 0.53)



Jin X,et al. Comp Math Meth Med 2022;2022: Article ID 9105814, 9 pages

Para cada enfermedad un nivel de pH





Secreción Basal de HCl

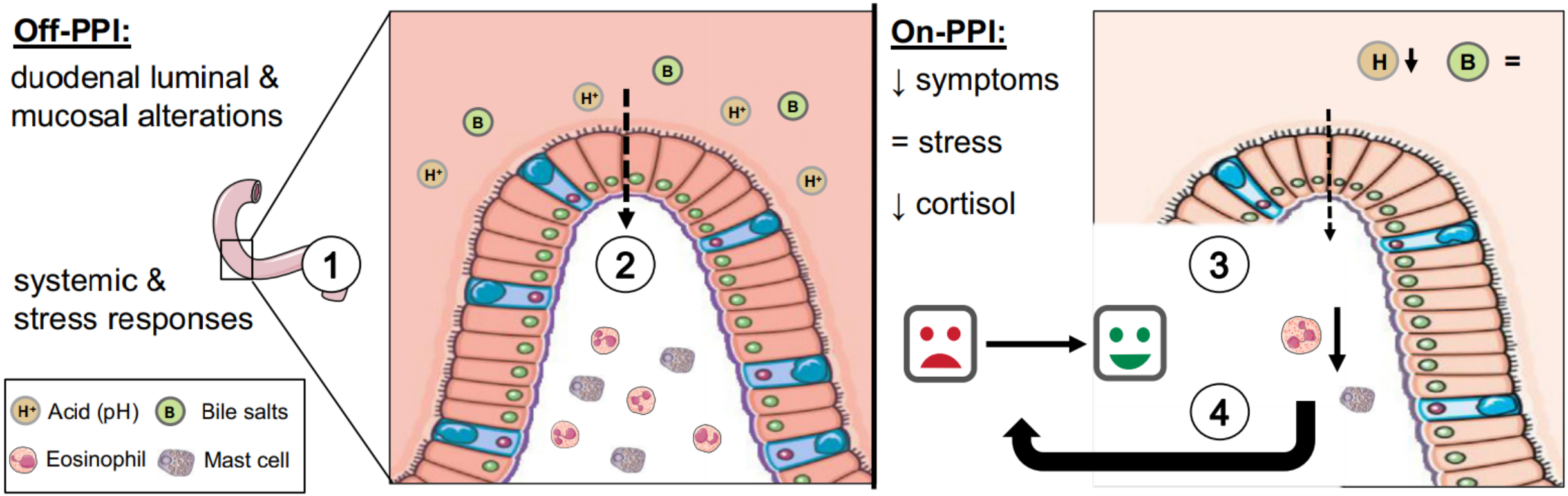
Secreción por cualquier estímulo

Yamada T, 2022

IBP

Efectos sistémicos anti inflamatorios

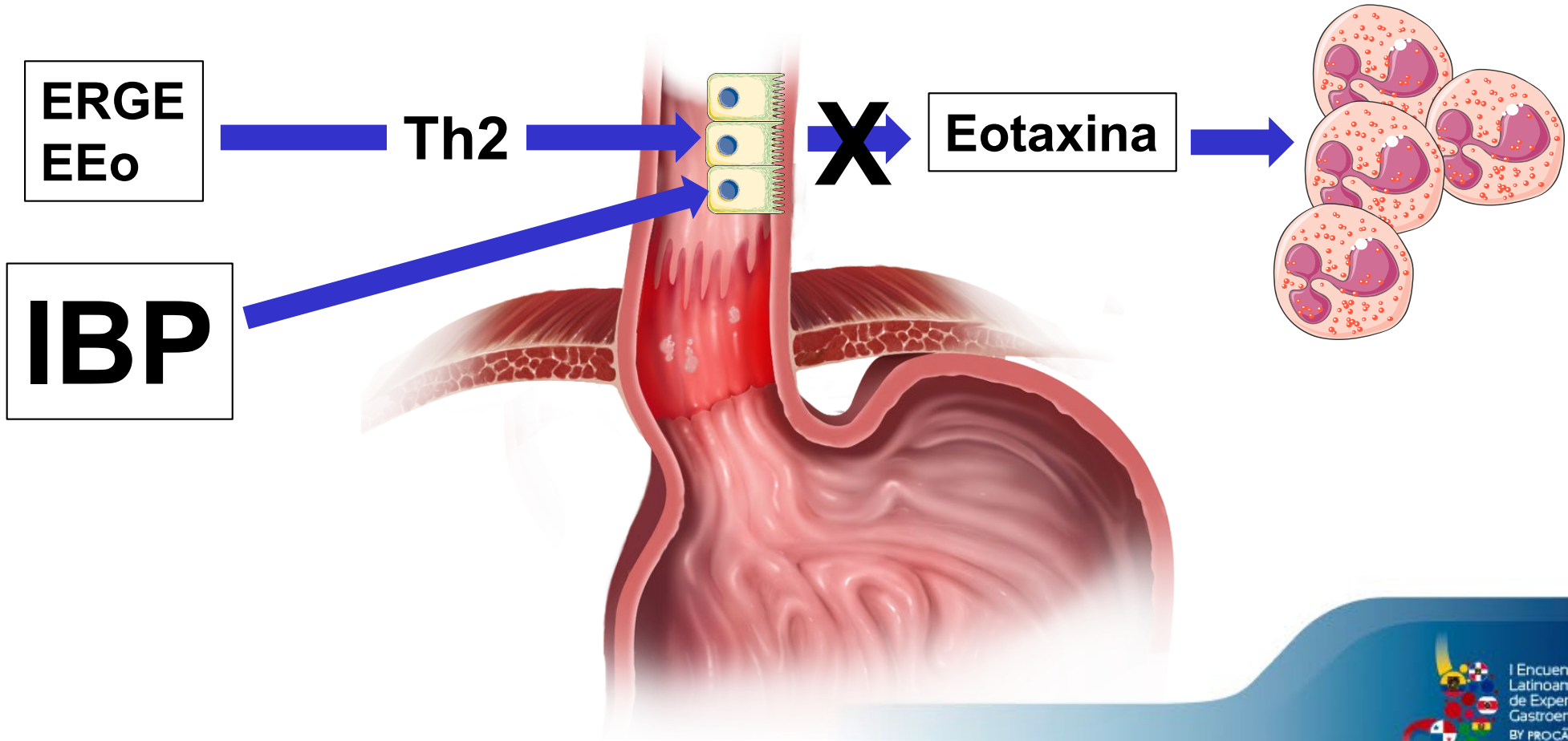
IBP y Dispepsia Funcional



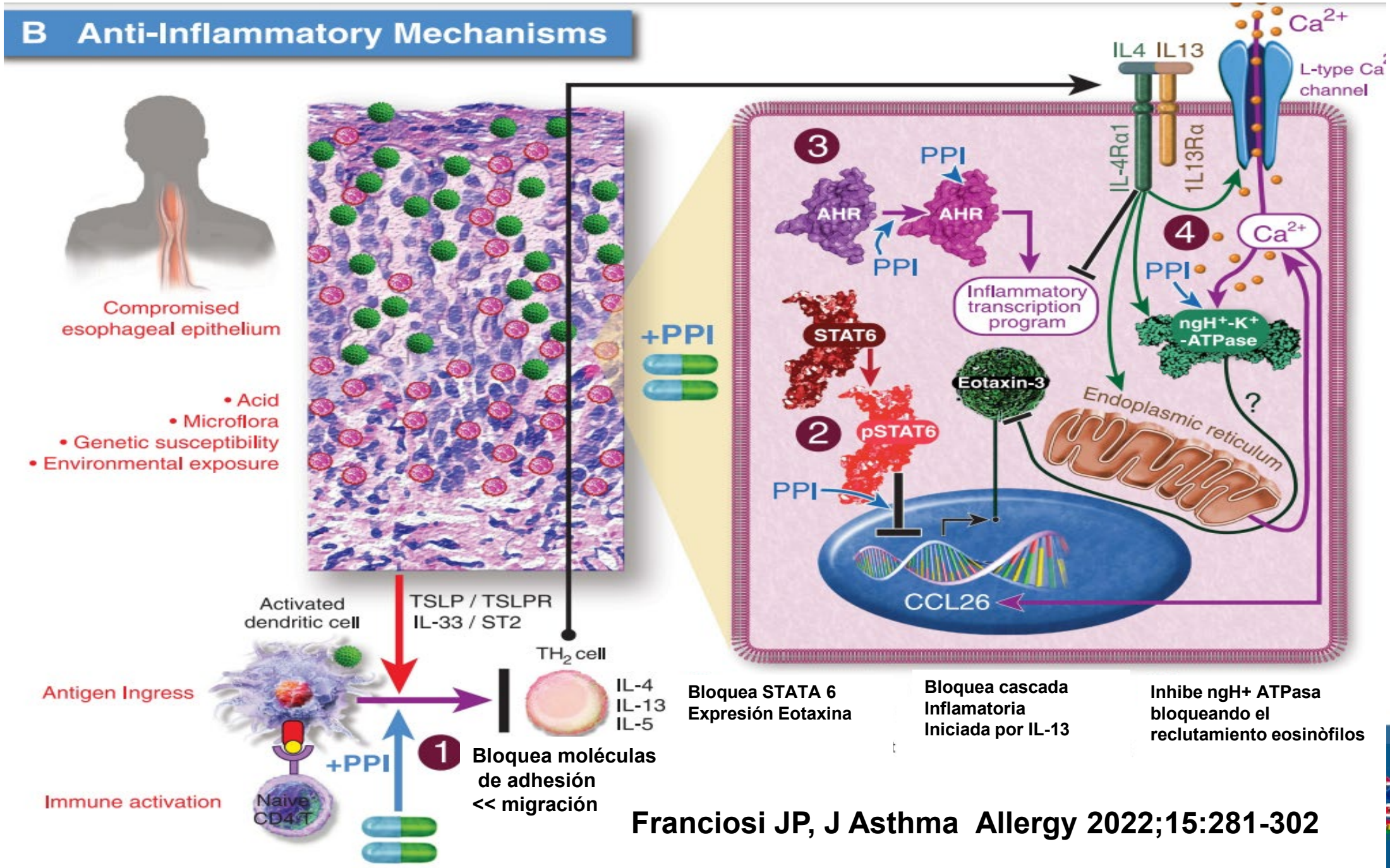
Wauters L, Gastroenterology 2021;160:1521-31

Omeprazole blocks eotaxin-3 expression by oesophageal squamous cells from patients with eosinophilic oesophagitis and GORD

Edaire Cheng,[1] Xi Zhang,[2] Xiaofang Huo,[2] Chunhua Yu,[2] Qiuyang Zhang,[2] David H Wang,[2] Stuart Jon Spechler,[2] Rhonda F Souza[2]



Cheng E, Gut 2013;62:824–832.



Franciosi JP, J Asthma Allergy 2022;15:281-302

Esofagitis eosinofílica

1990 2000

IBP Tratamiento EEo
Remisiòn sintomas 61%
Remisiòn Histología 51%

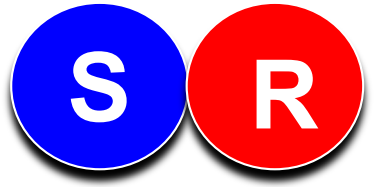
Reflujo con Eosinofilia

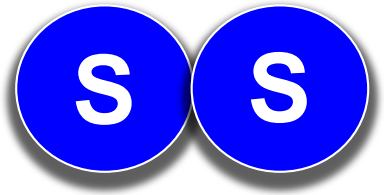
Respuesta + Eosinofilia Esofàgica VS EEo

Franciosi JP, J Asthma Allergy 2022:15 281-302
Lucendo AJ, Clin Gastroenterol Hepatol 2016;14:13-22

Omeprazol 1988

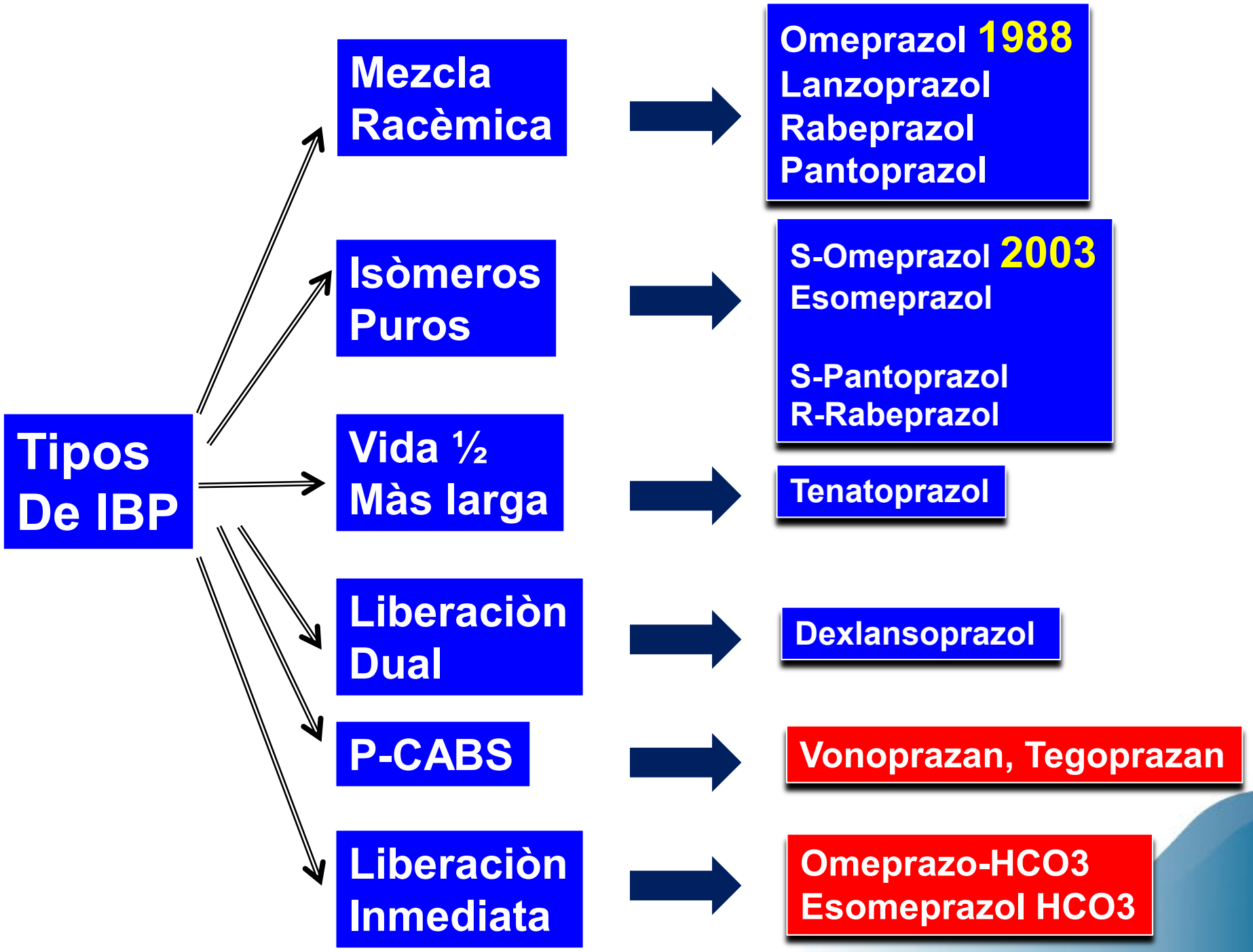
Esomeprazol 2003





Isómero S
> Vida media

Scarpignato C, Curr Opin Pharmacol 2008;8:677-84



IBP No son iguales

- Potencia
- Farmacognètica

Potencia de los IBPs comparados con omeprazol

Diferentes IBPs		Omeprazol mg
Rabeprazol	20 mg	36 mg
Esomeprazol	20 mg	32 mg *1.6 veces*
Omeprazol	20 mg	20 mg
Lansoprazol	20 mg	18 mg
Pantoprazol	20 mg	

Más potente

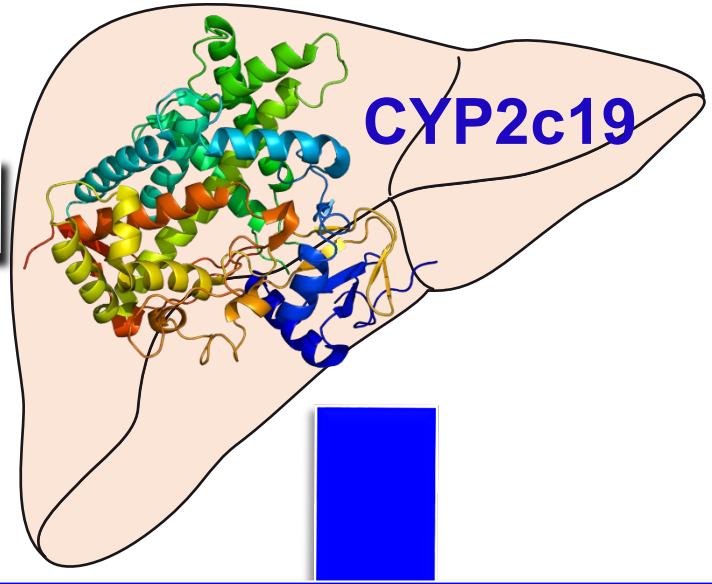
Menos potente

Graham DY, Clin Gastroenterol Hepatol. 2018;16:800-8

Farmacogenètica

Primera Generación
Omeprazol
Lansoprazol
Pantoprazol

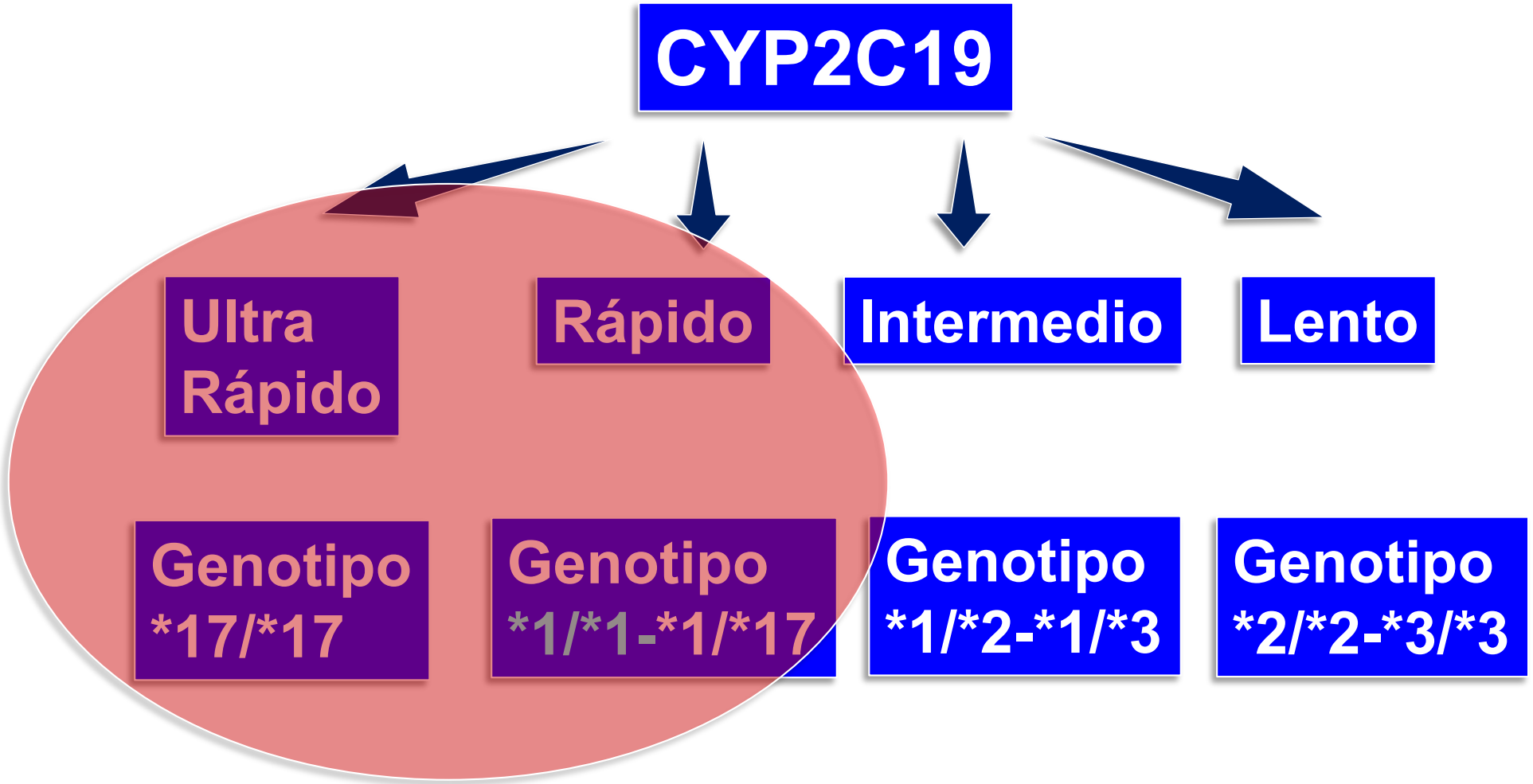
Dependientes



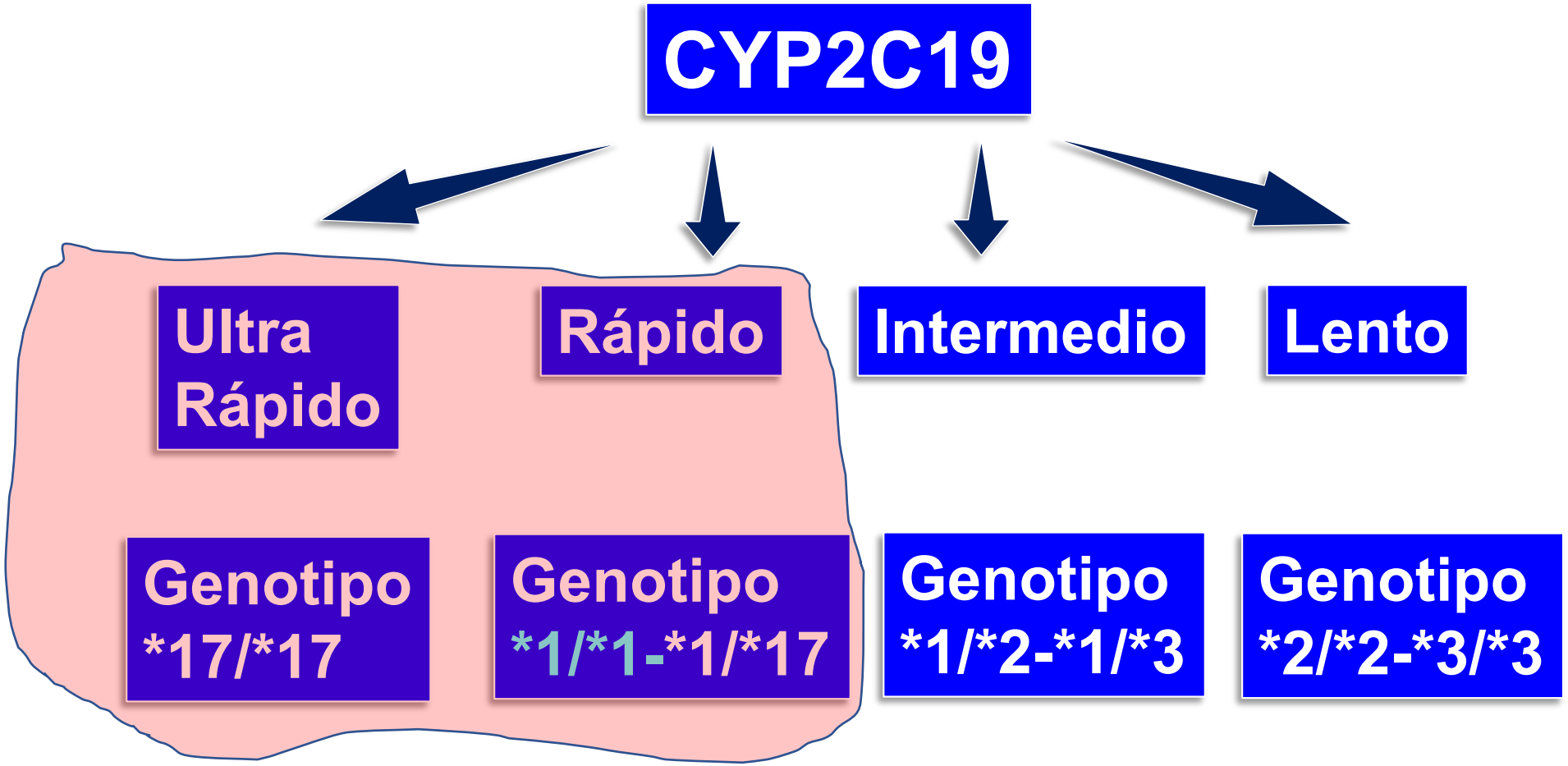
Menos dependientes

Segunda Generación
Esomeprazol
Rabeprazol

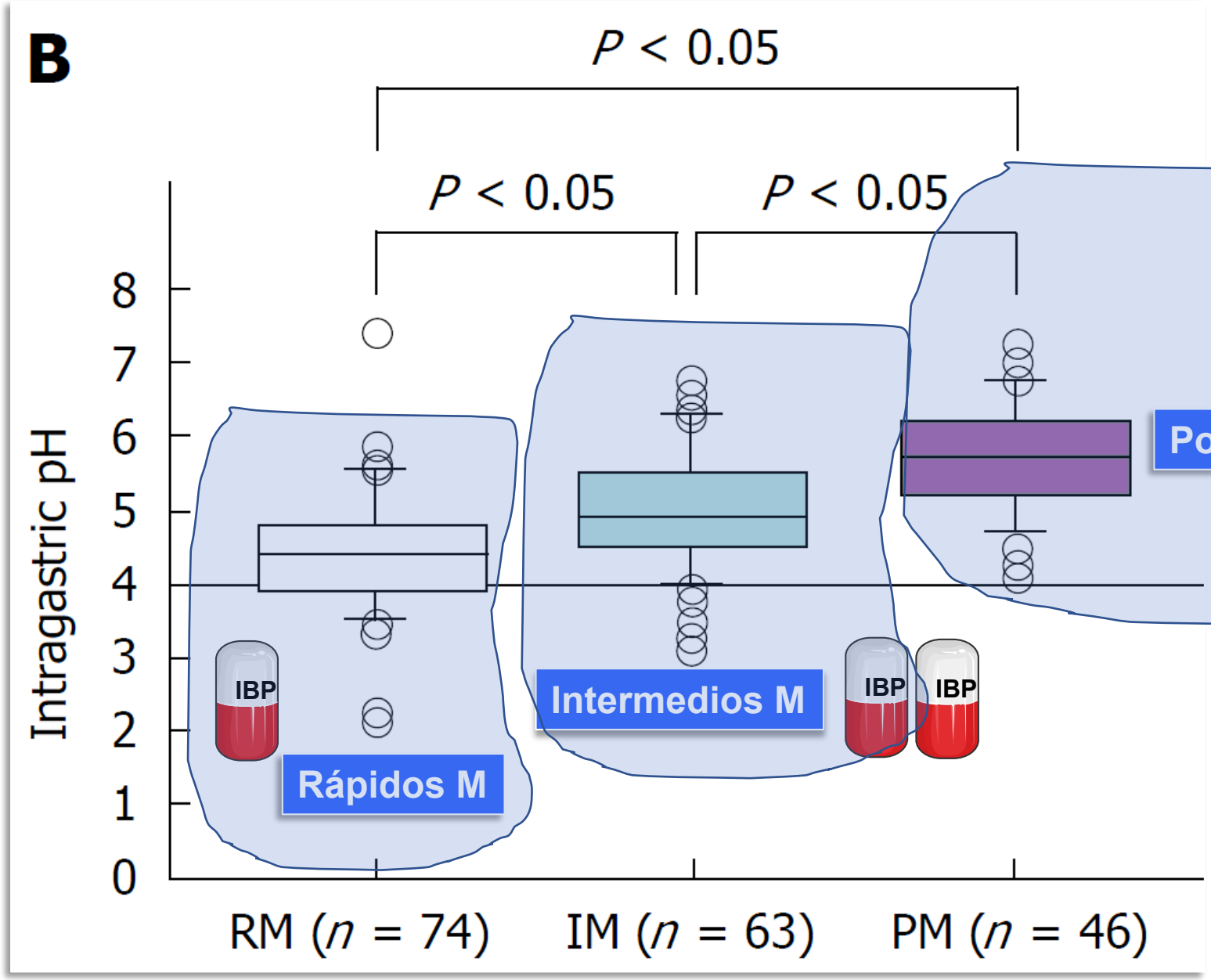
El Rouby N, Exp Opin Drug Metab Toxicol 2018;14:447-60
Hagymàsi K, Pharmacogenomics 2011;12:873-88



Arevalo A, Otero W, Trespalacios AA, et al. PLoS One 2021;16:e0245401



Arevalo A, Otero W, Trespalacios AA, et al. PLoS One 2021;16:e0245401



Sugimoto M, World J Gastroenterol 2014;20: 6400-11

Cyp2C19

Rápido, Ultrarrápido
80-84%

Esomeprazol **Rabeprazol menos Influidos por el CYP**
70% vs 90% OME

Isaza C, BMC Clin Pharmacol. 2007;7:6.
Arévalo A, Tresplacios A, Otero W, Helicobacter 2019;24:e12574
Arevalo A, Otero W PLoS One. 2021;16:e0245401

Diseases of the Esophagus (2017) **30**, 1–18
DOI: 10.1093/dote/dox055

DISEASES OF THE ESOPHAGUS

ISDE The International Society for Diseases of the Esophagus

Review article

A review of medical therapy for proton pump inhibitor nonresponsive gastroesophageal reflux disease

L. Hillman,[1] R. Yadlapati,[2] A. J. Thuluvath,[3] M. A. Berendsen,[4] J. E. Pandolfino[2]

SUMMARY. **Up to 40% of patients report persistent gastroesophageal reflux disease (GERD) symptoms despite proton pump inhibitor (PPI) therapy. This review outlines the evidence for medical therapy for PPI nonresponsive GERD. A literature search for GERD therapies from 2005 to 2015 in PubMed, EMBASE, Cochrane Central Register of Controlled Trials, and the Cochrane Database of Systematic Reviews identified 2928 unique citations. Of those, 40 unique articles specific to the impact of PPI metabolizer genotype on PPI response and the use adjunctive medical therapies were identified. Thirteen articles reported impacts on CYP genotypes on PPI metabolism demonstrating lower endoscopic healing rates in extensive metabolizers; however, outcomes across genotypes were more uniform with more CYP independent PPIs rabeprazole and esomeprazole. Twenty-seven publications on 11 adjunctive medications showed mixed results for adjunctive therapies including nocturnal histamine-2 receptor antagonists, promotility agents, transient lower esophageal sphincter relaxation inhibitors, and mucosal protective agents. Utilizing PPI metabolizer genotype or switching to a *CYP2C19* independent PPI is a simple and conservative measure that may be useful in the setting of incomplete acid suppression. The use of adjunctive medications can be considered particularly when the physiologic mechanism for PPI nonresponse is suspected. Future studies using adjunctive medications with improved study design and patient enrollment are needed to better delineate medical management options before proceeding to antireflux interventions.**

Esomeprazol/Rabeprazol

Erradicación de *H.pylori*

Host Genetic Determinants Associated With *Helicobacter pylori* Eradication Treatment Failure: A Systematic Review and Meta-analysis

Shailja C. Shah,[1,2,3,4] Adam Tepler,[5] Cecilia P. Chung,[6,7] Giovanni Suarez,[3] Richard M. Peek Jr,[3] Adriana Hung,[8,9] Christianne Roumie,[8,10] and Neeraj Narula[11]

57 estudios
Pacífico Asiático (Japón 24, Taiwan 6, Korea 5, Tailandia 1)
Europa (Alemania 3, Polonia 3, Italia 1)
Sur américa (Brazil 2)

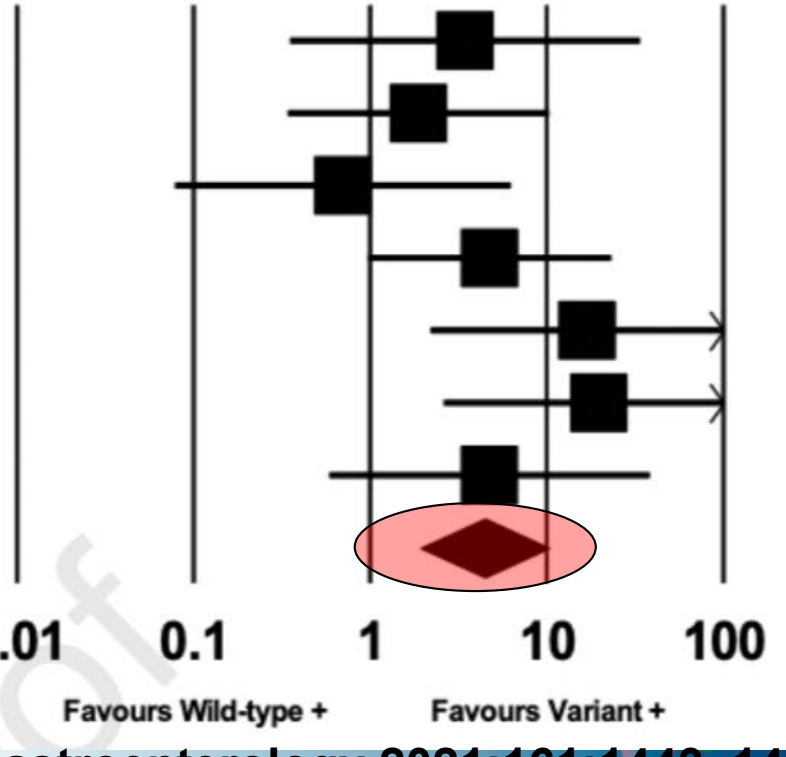
Gastroenterology 2021;161:1443–1459

Hpylori sensible a claritromicina o resistencia < 15% IBP Primera Generaciòn Lansoprazol, Omeprazol Pantoprazol Metabolizadores ràpidos

Study name	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value
Isomoto, 2003	3.438	0.352	33.612	1.061	0.289
Kawabata, 2004	1.875	0.342	10.269	0.725	0.469
Miki, 2003	0.700	0.079	6.224	-0.320	0.749
Sheu, 2005	4.742	0.975	23.062	1.929	0.054
Furuta, 2001	16.875	2.202	129.312	2.720	0.007
Furuta, 2004	19.753	2.617	149.103	2.893	0.004
Kang, 2008	4.738	0.589	38.140	1.462	0.144
	4.443	1.944	10.157	3.535	0.000

Statistics for each study

Odds ratio and 95% CI



Riesgo de Falla terapùtica

Shah SC, Gastroenterology 2021;161:1443–1459

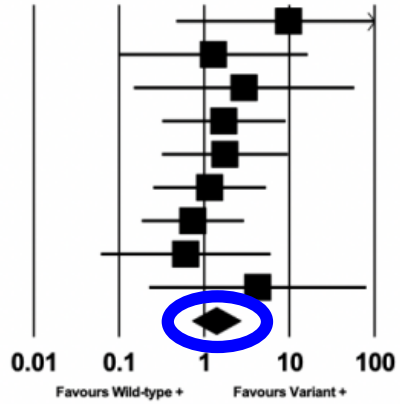
Ràpidos versus Pobres metabolizadors

Esomeprazol 9 estudios

Rabeprazol 18 estudios

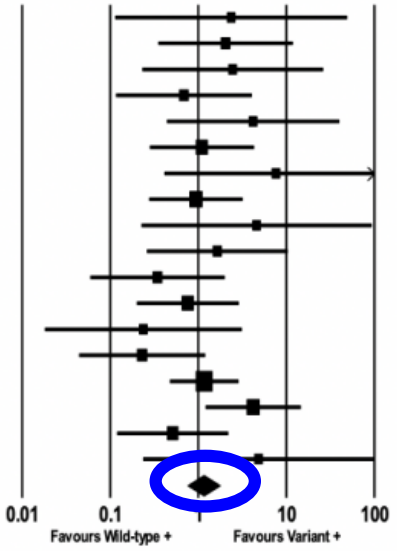
2B.

Study name	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value
Pan, 2010	9.783	0.473	202.374	1.475	0.140
Pan*, 2010	1.286	0.101	16.340	0.194	0.846
Miehlke, 2008	2.941	0.150	57.555	0.711	0.477
Sheu, 2005	1.705	0.323	9.007	0.628	0.530
Wu, 2011	1.750	0.321	9.554	0.646	0.518
Song, 2016	1.159	0.253	5.304	0.191	0.849
Okimoto, 2016	0.735	0.186	2.908	-0.438	0.661
Liou, 2011	0.606	0.061	5.985	-0.429	0.668
Kang, 2008	4.248	0.227	79.518	0.968	0.333
	1.387	0.723	2.662	0.984	0.325



2C.

Study name	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value
Isomoto*, 2003 - 7 days	2.368	0.114	49.041	0.558	0.577
Isomoto*, 2003 - 14 days	2.045	0.354	11.820	0.800	0.424
Yang, 2009	2.462	0.232	26.114	0.748	0.455
Pan, 2010	0.688	0.117	4.056	-0.414	0.679
Inaba, 2002	4.200	0.442	39.943	1.249	0.212
Miyoshi, 2001	1.100	0.283	4.282	0.137	0.891
Lay, 2010	7.638	0.414	140.829	1.367	0.172
Okimoto, 2016	0.942	0.278	3.189	-0.096	0.924
Lin, 2017	4.600	0.227	93.032	0.995	0.320
Dojo, 2001	1.647	0.262	10.359	0.532	0.595
Miki, 2003	0.345	0.060	1.993	-1.190	0.234
Lee, 2003	0.762	0.201	2.884	-0.400	0.689
Phiphatpatthamaamphan, 2016	0.238	0.018	3.121	-1.093	0.274
Kawabata, 2003	0.231	0.045	1.197	-1.746	0.081
Lee, 2010*	1.169	0.478	2.862	0.343	0.732
Kuwayama, 2007	4.211	1.216	14.585	2.268	0.023
Hokari, 2001	0.513	0.120	2.190	-0.902	0.367
Jiang, 2005	4.846	0.237	98.960	1.025	0.305
	1.153	0.761	1.748	0.674	0.501



Shah SC, Gastroenterology 2021;161:1443–1459

Influence of *Cytochrome P450 2C19* Genotype on *Helicobacter pylori* Proton Pump Inhibitor-Amoxicillin-Clarithromycin Eradication Therapy: A Meta-Analysis

OPEN ACCESS

Edited by:

Yuko Morino[1], Mitsushige Sugimoto[2], Naoyoshi Nagata[2], Ryota Niikiura[2], Eri Iwata[2], Mariko Hamada[2], Yusuke Kawai[2], Tatsuhiro Fujimiya[3], Hironori Takeuchi[4], Sakae Unezaki[3] and Takashi Kawai[2]*

25 ensayos clínicos controlados aleatorizados

24 ASIA, 1 Suramérica (Colombia), 5318 pacientes, Tasa resistencia: Amoxi 8.9%, Cla 13%

Morino Y, Front Pharmacol 2021;12:759240

Influence of *Cytochrome P450 2C19* Genotype on *Helicobacter pylori* Proton Pump Inhibitor-Amoxicillin-Clarithromycin Eradication Therapy: A Meta-Analysis

Yuko Morino[1], Mitsushige Sugimoto[2], Naoyoshi Nagata[2], Ryota Niikiura[2], Eri Iwata[2], Mariko Hamada[2], Yusuke Kawai[2], Tatsuhiro Fujimiya[3], Hironori Takeuchi[4], Sakae Unezaki[3] and Takashi Kawai[2]*

Extensos metabolizadores

Lansoprazol y omeprazol
Menor tasa erradicación

Esomeprazol y rapeprazol
No son influidos

Morino Y, Front Pharmacol 2021;12:759240

Gastroenterology 2021;160:1831–1841

CLINICAL PRACTICE UPDATE

AGA Clinical Practice Update on the Management of Refractory *Helicobacter pylori* Infection: Expert Review

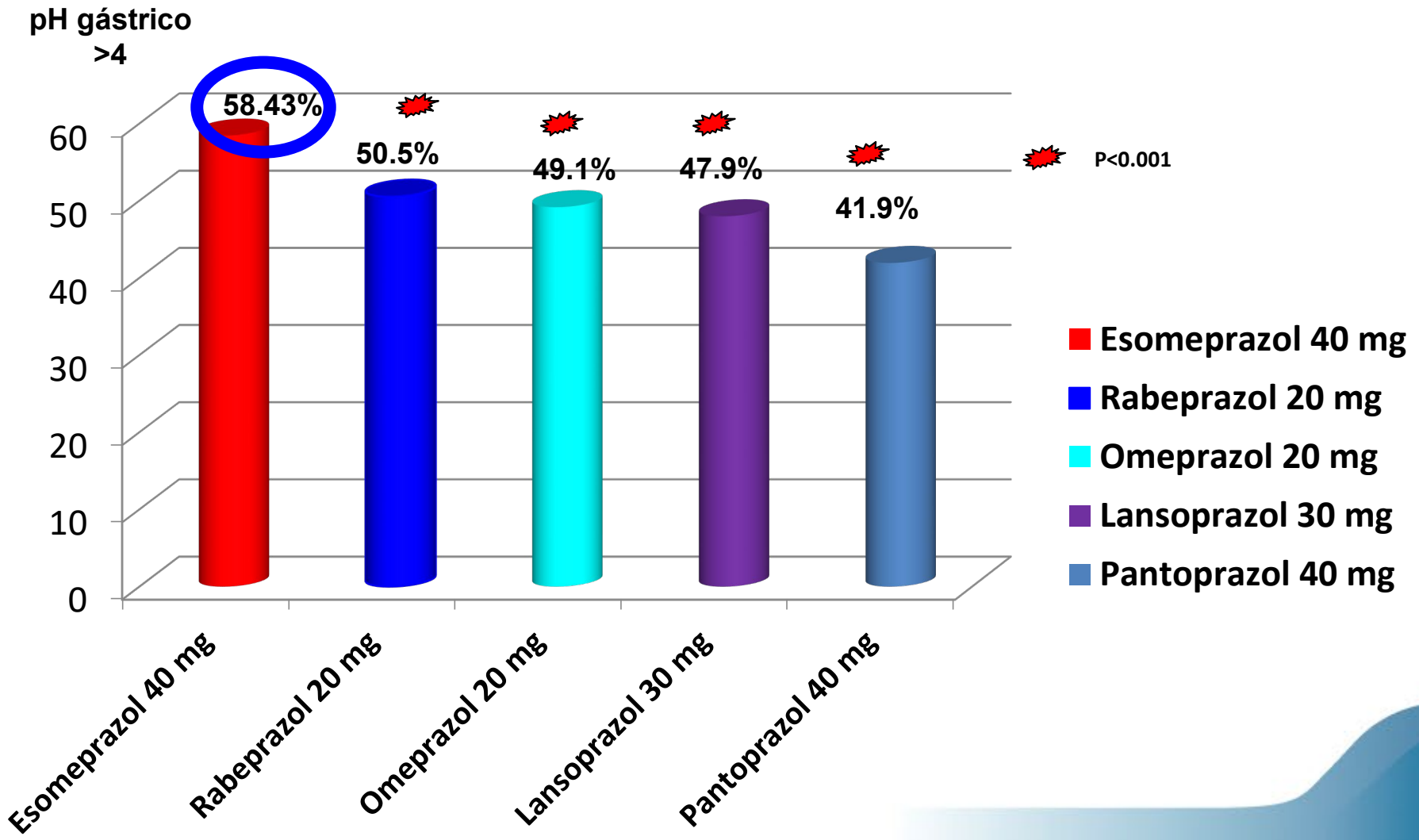
Shailja C. Shah,[1,2,3] Prasad G. Iyer,[4] and Steven F. Moss[5]

Best Practice Advice 7: Inadequate acid suppression is associated with *H pylori* eradication failure. The use of high-dose and more potent PPIs, PPIs not metabolized by *CYP2C19*, or potassium-competitive acid blockers, if available, should be considered in cases of refractory *H pylori* infection.

Opciòn Rabeprazol, Esomeprazol, Vonoprazan, Tegoprazan o aumentar dosis de IBP 1era generaciòn

Gastric Acid Control With Esomeprazole, Lansoprazole, Omeprazole, Pantoprazole, and Rabeprazole: A Five-Way Crossover Study

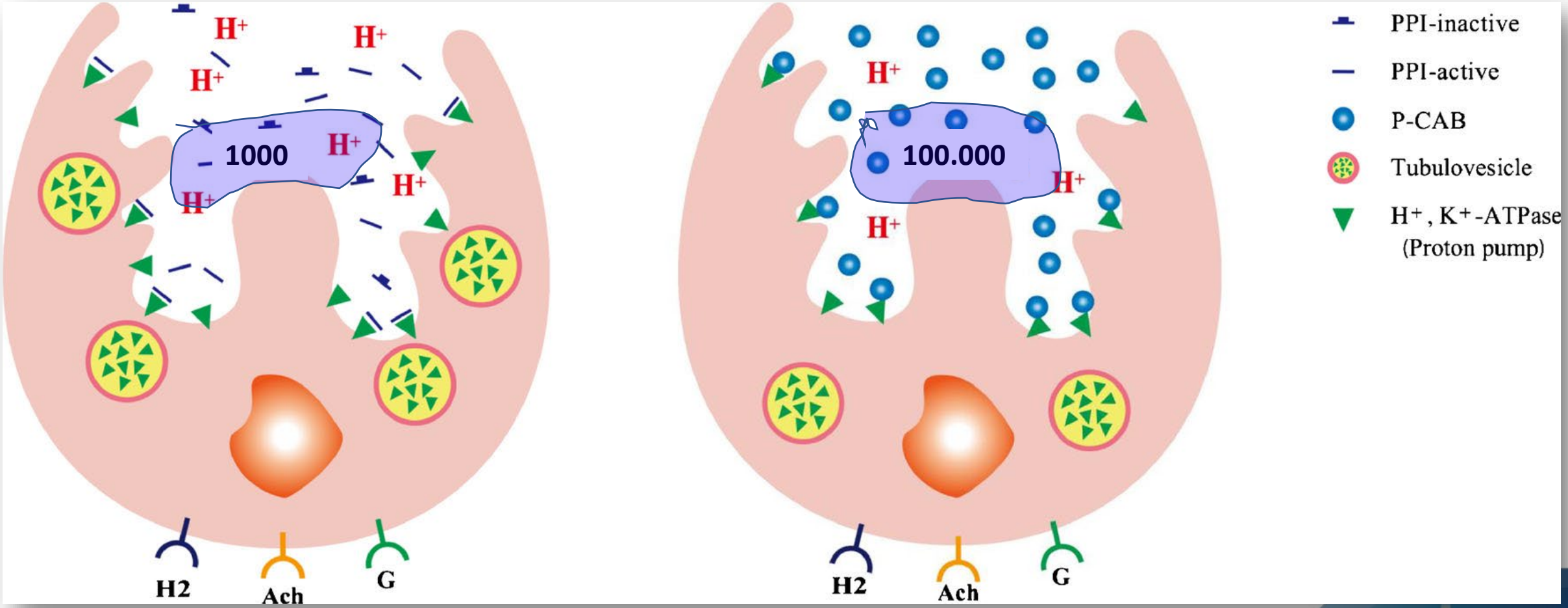
Philip Miner, Jr., M.D., Philip O. Katz, M.D., Yusong Chen, Ph.D., and Mark Sostek, M.D.



Am J Gastroenterol 2003;98:2616-20

Novedades para bloquear la secreciòn de HCl

IBP 3ª Generación competitivos de K: *P-CABs*



Shibli F, Curr Gastroenterol Rep 2020; 22:16
Hunt RH, Curr Opt Treat Gastroenterol 2018;16:57-90

Vonoprazan
P-CABs

Superior a IBPs Convencionales

P-CABs

Vonoprazan

Tegoprazan

Japón
Filipinas
Singapur
Tailandia
Malasia

Corea del Sur

Oshima T, *J Neurogastroenterol Motil*. 2018;24:334–44.
Scarpignato C, *Aliment Pharmacol Ther*. 2019;50:960–62.

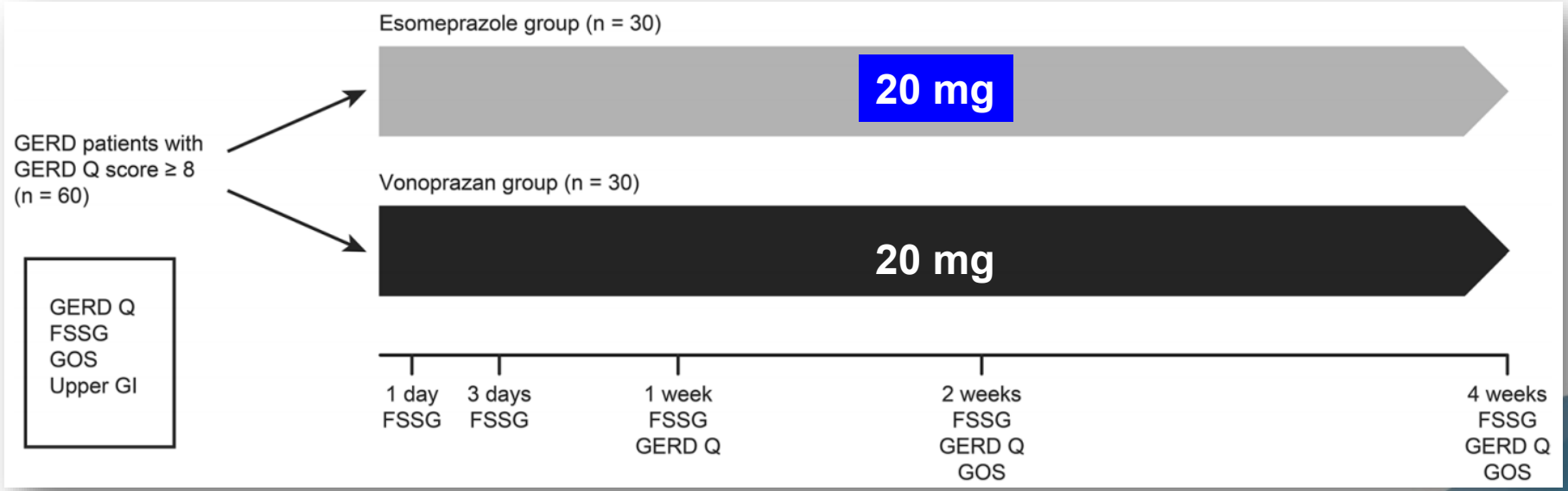
USA-Europa Ensayos 2021-22

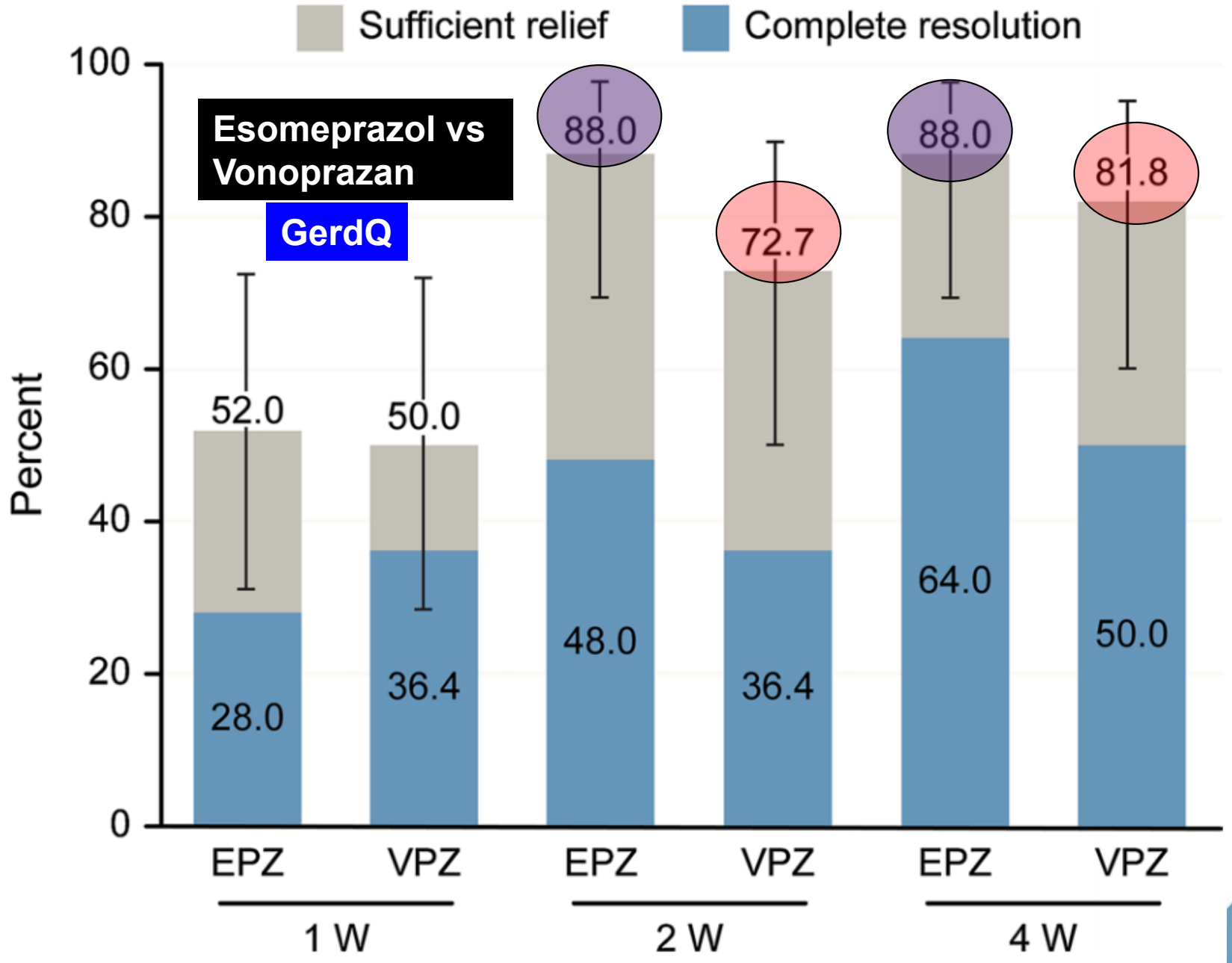
Digestive Diseases and Sciences (2019) 64:815–822
https://doi.org/10.1007/s10620-018-5365-0

ORIGINAL ARTICLE

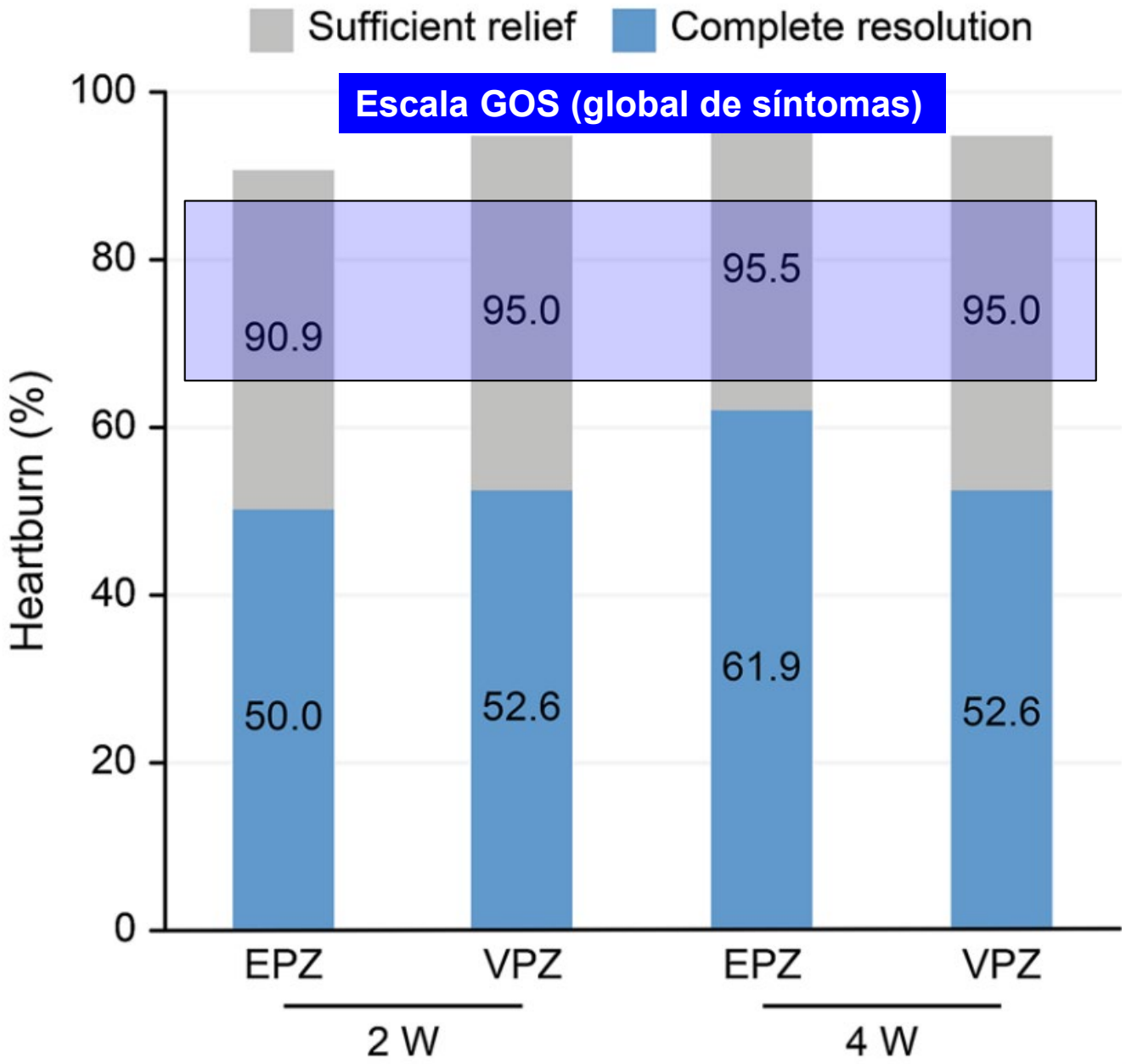
Short-Term Symptomatic Relief in Gastroesophageal Reflux Disease: A Comparative Study of Esomeprazole and Vonoprazan

Kouichi Sakurai[1] · Hiroko Suda[1] · Satomi Fujie[1] · Takayuki Takeichi[1] · Ayako Okuda[1] · Tetsuya Murao[1] · Kiwamu Hasuda[1] · Masahiro Hirano[2] · Kiyoharu Ito[3] · Katsuie Tsuruta[4] · Masahiro Hattori[1]

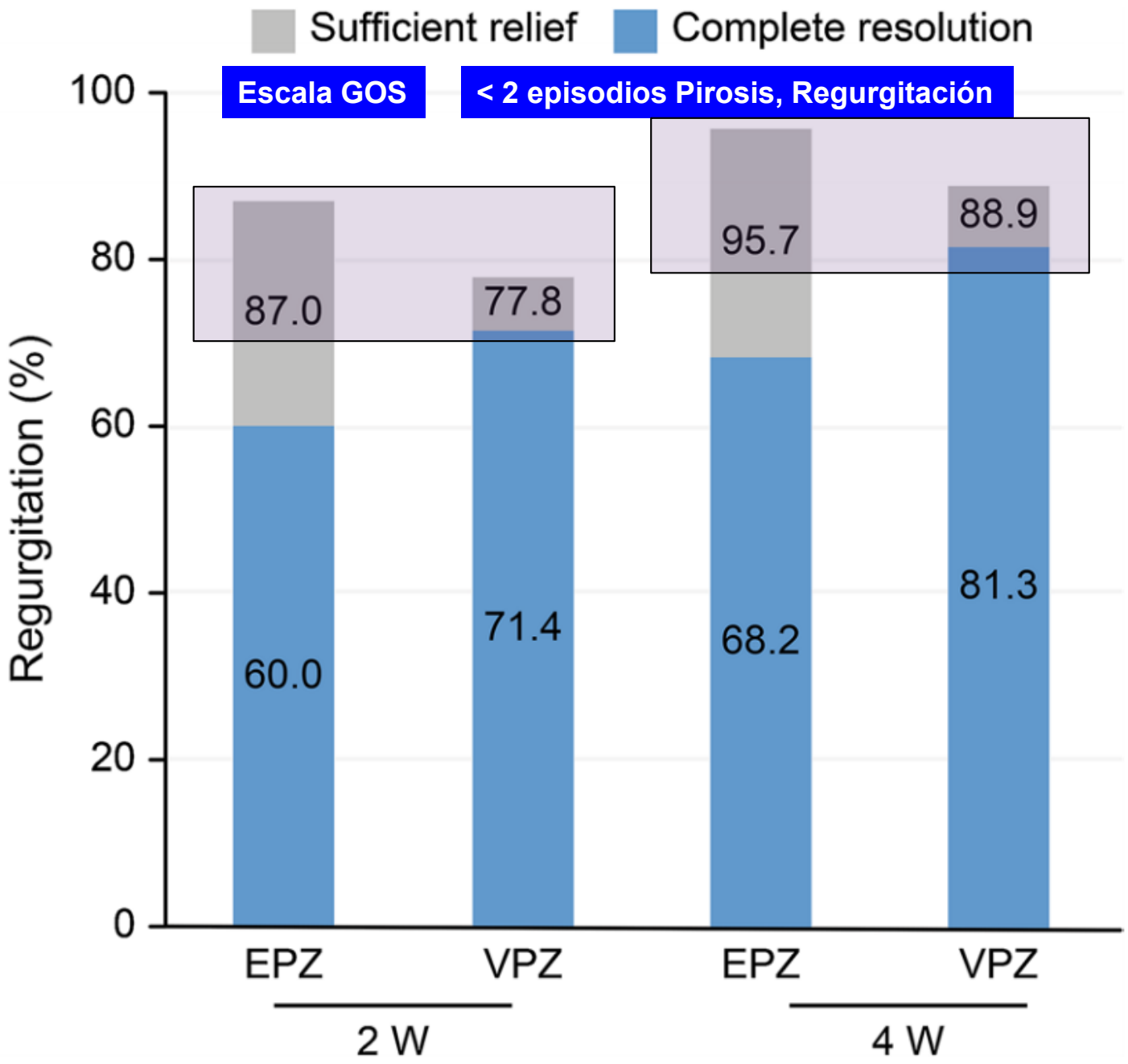




Sakurai K, Dig Dis Sci 2019; 64:815–22



Sakurai K, Dig Dis Sci 2019; 64:815–22



Sakurai K, Dig Dis Sci 2019; 64:815–22

ERGE Vonoprazan versus Esomeprazol

Esomeprazol Convencional

=

Vonoprazan

Esomeprazol Liberación inmediata ?

IBP liberación
Inmediata
Varios países
Latinoaméica

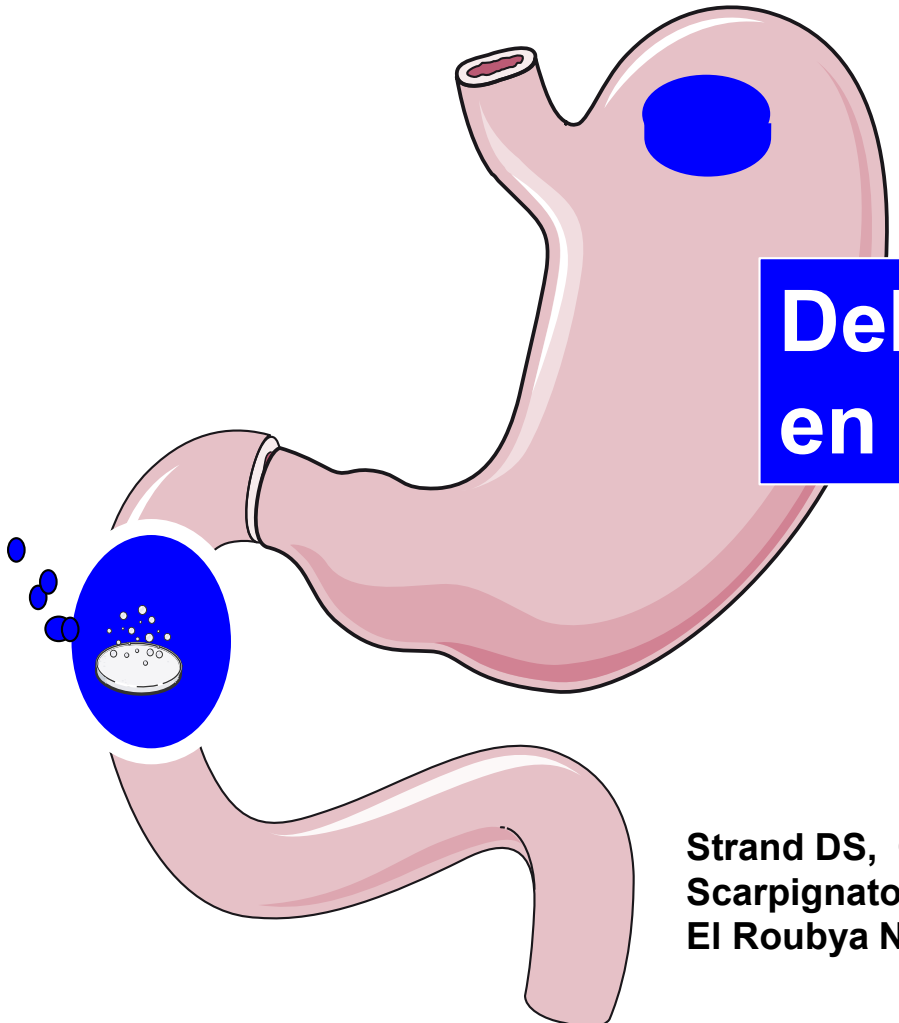
2022

IBP de liberación inmediata

Hasta el momento los IBPs Son de liberación retardada

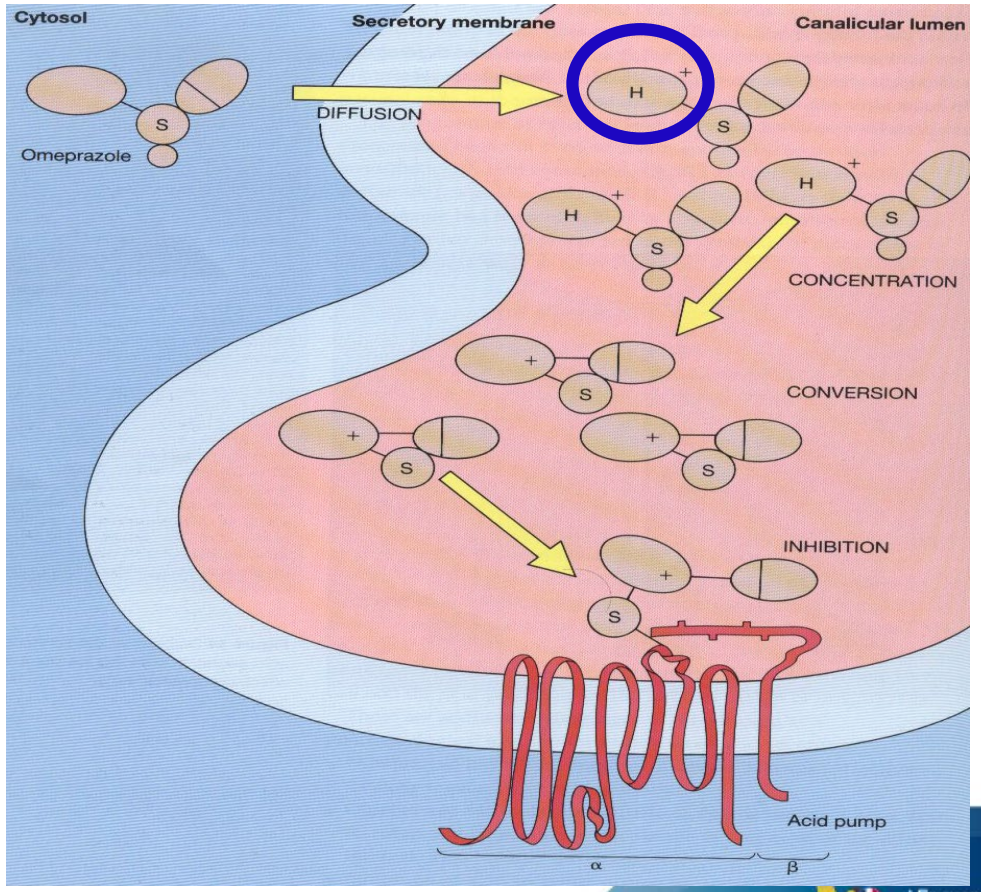
IBPs convencionales 1era y 2da Generación

Liberación Retardada



Debe darse en ayunas

Activación



Strand DS, Gut Liver 2017;11:27-37
Scarpignato C, Curr Opin Pharmacol 2008;;8:677-84
El Roubya N, Exp Opin Drug Met Toxicol 2018;14:447–60

Eficacia de los IBPs

IBP con el desayuno
pH >4, 17.2%

IBP antes del desayuno
pH >4, 42%**

****p<0.01**

Bombas activas
Pos comidas 70%
En ayunas 10%

Savarino V, Pharmacol Rev 2009;59:135-53
Shin JM, Curr Gastroenterol Rep 2008;10:528–34.

IBP de liberación Inmediata

Qué Es ?

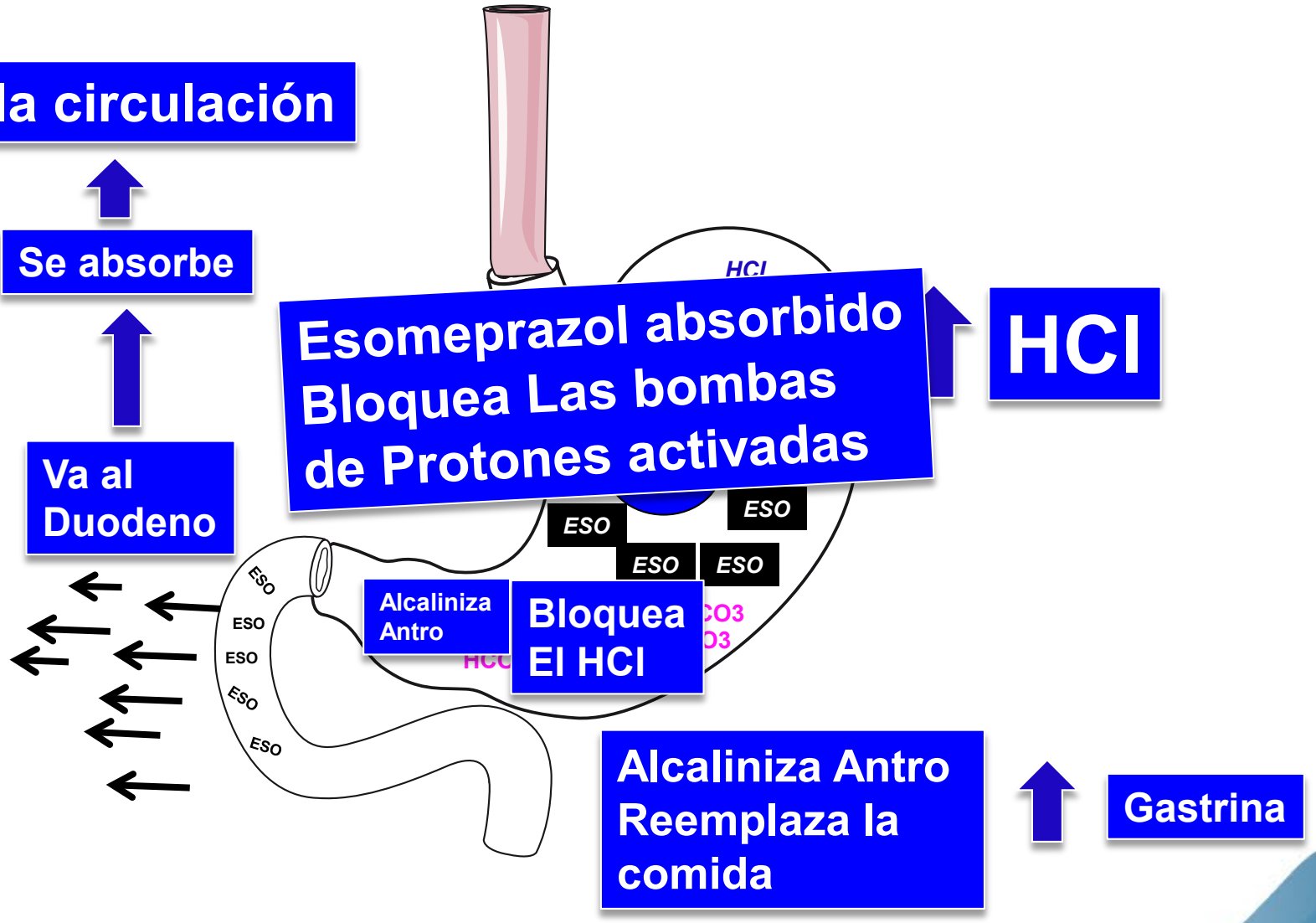
Tiene Ventajas ?

IBP Liberación Inmediata: envoltura ácido-sensible

Propósito

Agilizar la absorción

Superar Liberación Retardada



Adv Ther (2021) 38:1660–1676
https://doi.org/10.1007/s12325-021-01644-7

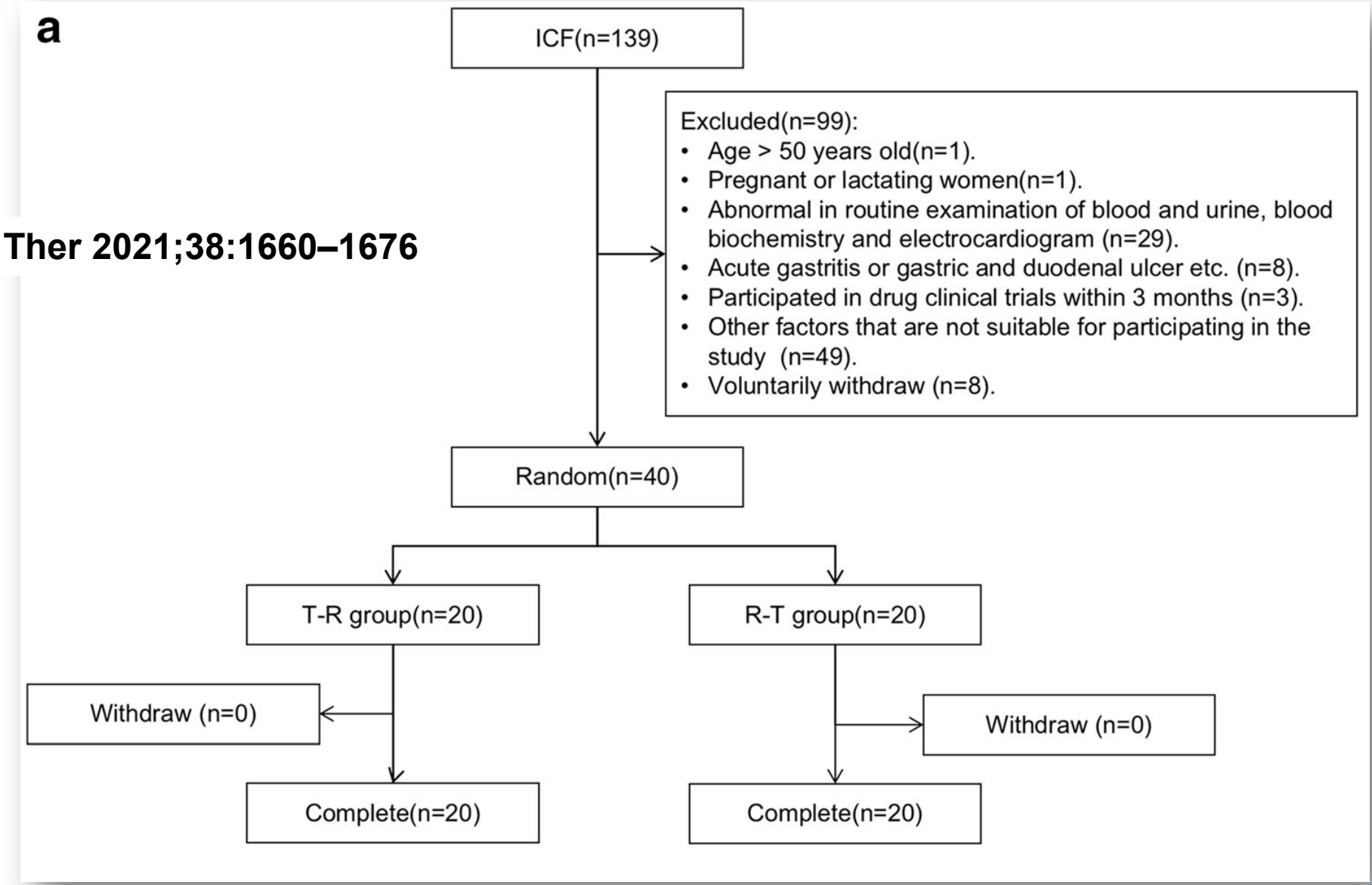
ORIGINAL RESEARCH

Changchun Haiyue Pharmaceutical have developed IR-ESO

Pharmacokinetics and Pharmacodynamics of Esomeprazole/Sodium Bicarbonate Immediate-Release Capsules in Healthy Chinese Volunteers: A Cross-Over, Randomized Controlled Trial

Shan Jing · Yue Zhu · Wenfang Liu · Kexu Yang · Lili Hu · Dan Deng · Chunyan Lu · Yang Lin

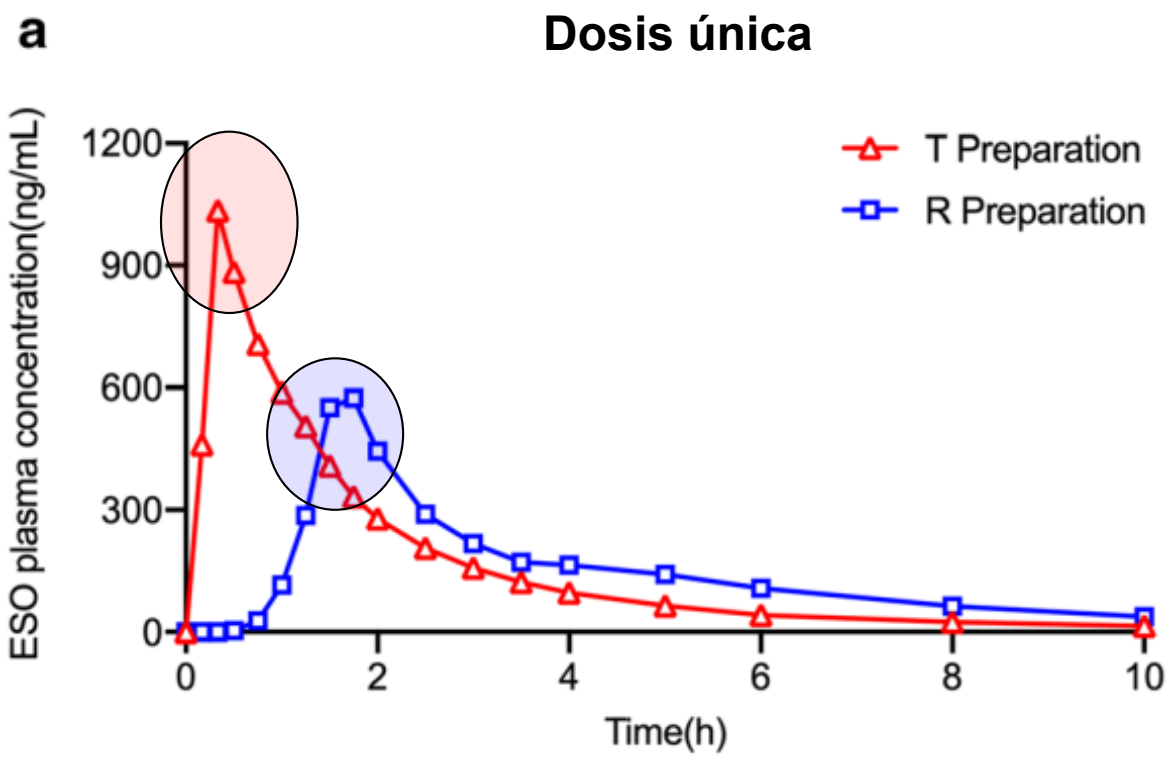
Jing S, Adv Ther 2021;38:1660–1676

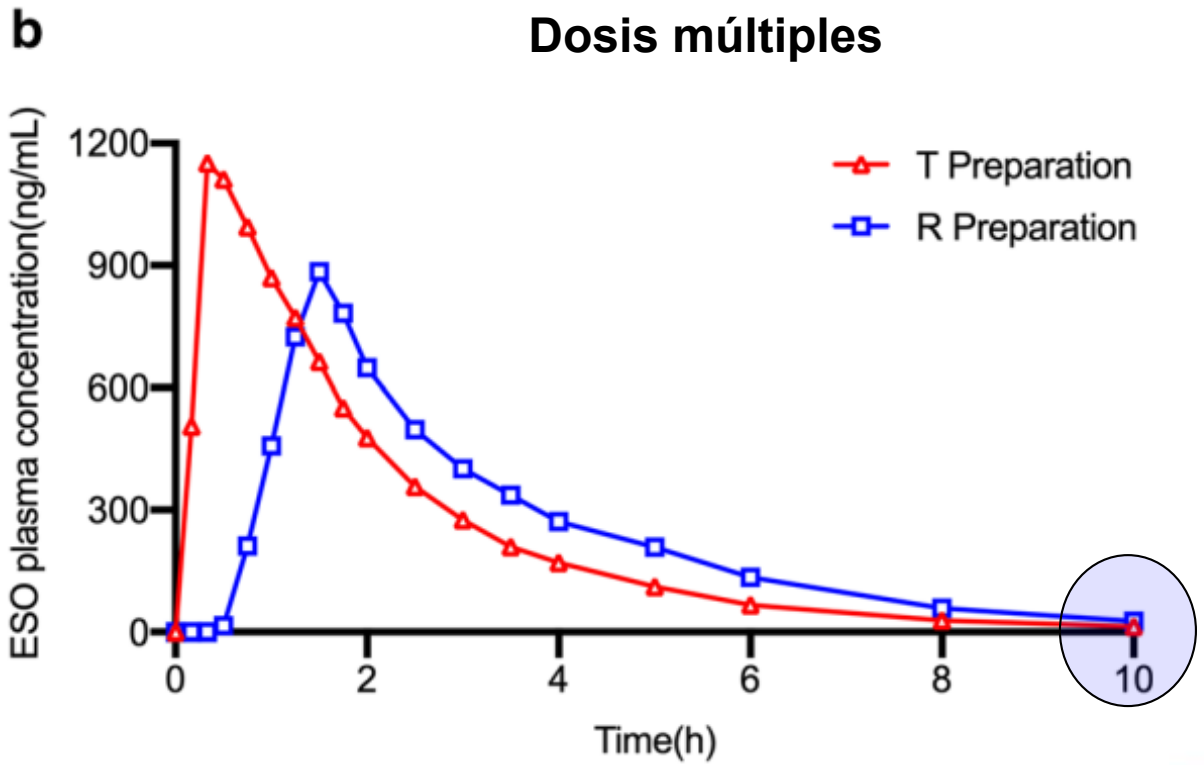


ESO 20 mg + Sodium bicarbonate 1100 mg Changchun Haiyue Pharmaceutical

ESO 1 tableta 20 mg Astrazeneca (Nexium)

Esomeprazol liberación inmediata vs Liberación retardada





Jing S, Adv Ther 2021;38:1660-76

The safety, pharmacodynamics, and pharmacokinetics of immediate-release formulation containing esomeprazole 20 mg/sodium bicarbonate 800 mg in healthy adult male

40 voluntarios sanos

Dasohm Kim[1,2]
Min Soo Park[1,2]
Byung Won Yoo[2]
Taegon Hong[2]
Shin Jung Park[3]
Choon Ok Kim[2]

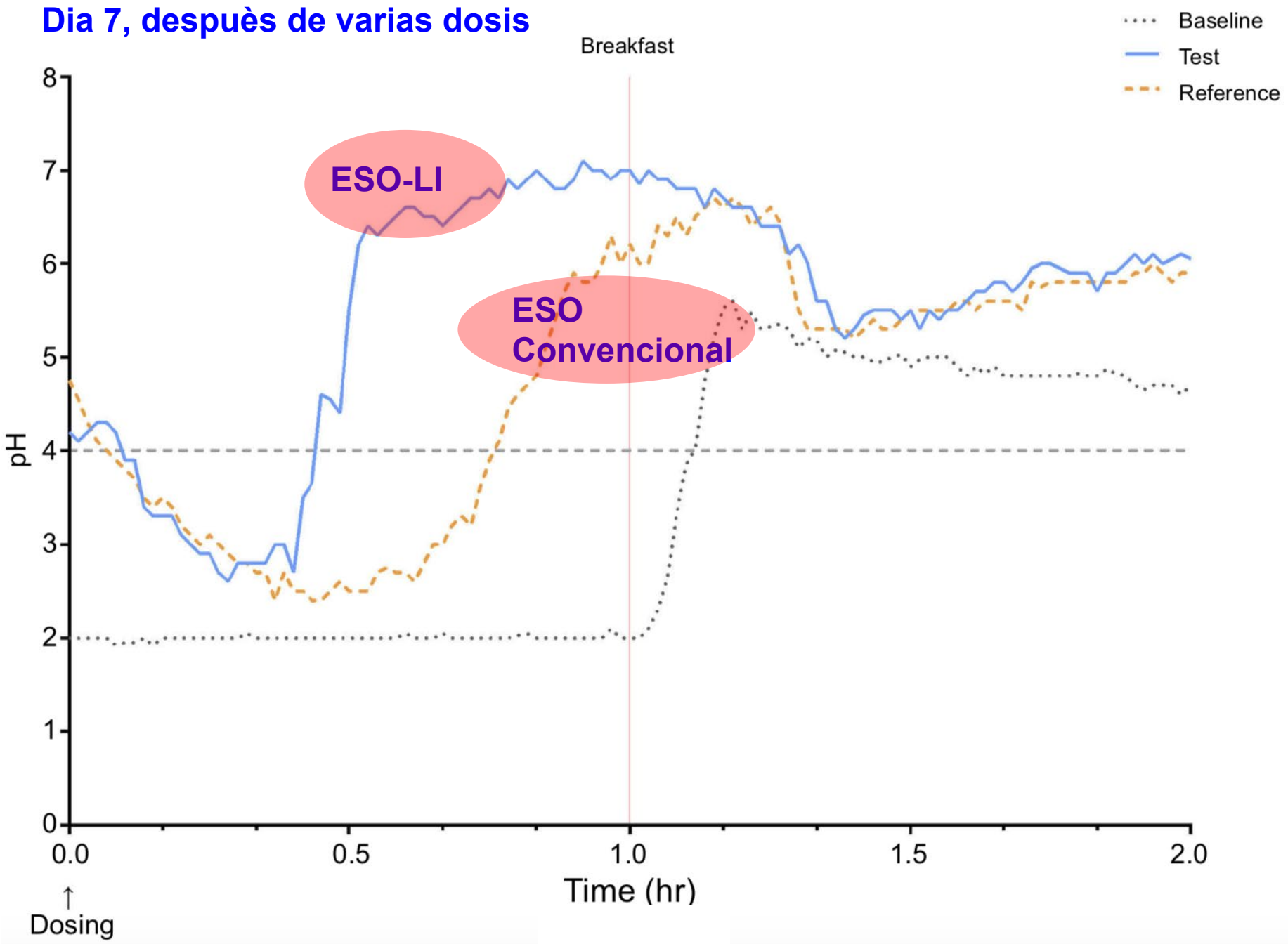
This article was published in the following Dove Press journal:
Drug Design, Development and Therapy

Background: Esomeprazole is the most effective treatment for acid-related disorders and is widely used with enteric coating due to rapid degradation in the acidic environment. However, the enteric-coated formulation delays absorption and onset of action. To overcome this limitation, an immediate-release formulation containing esomeprazole 20 mg and sodium bicarbonate 800 mg (IR-ESO) was developed.

Purpose: To evaluate the safety, pharmacokinetics (PK), and pharmacodynamics of IR-ESO compared to those of esomeprazole 20 mg (ESO)

Kim D, et al. Drug Design, Development and Therapy 2019:13

Dia 7, despuès de varias dosis



Kim D, et al. Drug Design, Development and Therapy 2019:13

GASTROENTEROLOGY

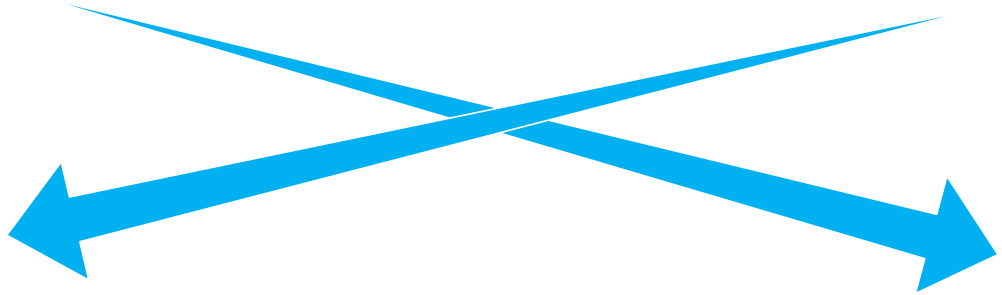
Oral buffered esomeprazole is superior to i.v. pantoprazole for rapid rise of intragastric pH: A wireless pH metry analysis

Rupa Banerjee,* D Nageshwar Reddy,* Nalini M Guda,† Rakesh Kalpala,* Swapna Mahurkar,* Santosh Darisetty* and G Venkat Rao*

10 Voluntarios sanos (8H, 2M), 31 años,IMC 21kg/m2, No anemia, *H.pylori* (-), perfil hepático normal. Dos dosis en 24 h *"washout"* 2 semanas Crossover

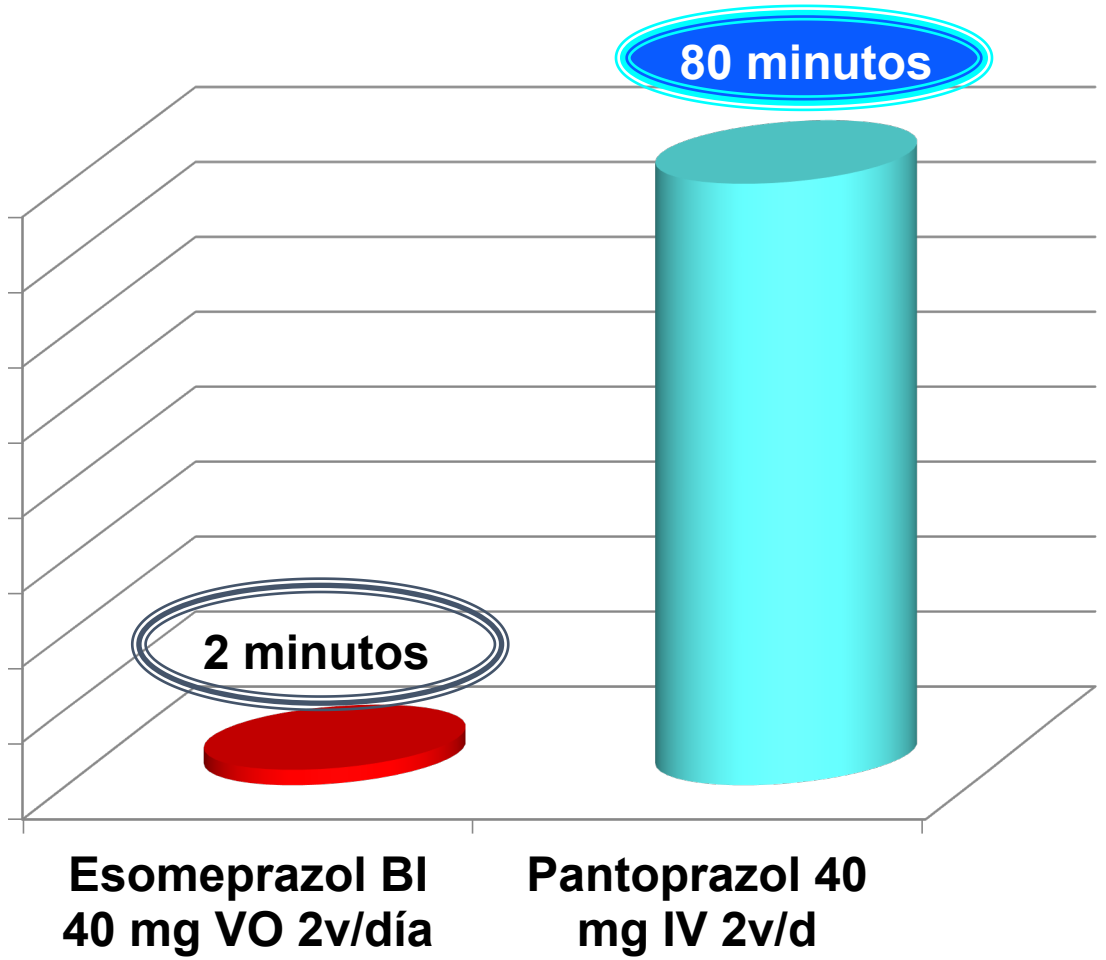
Esomeprazol BI 2v/dìa

Pantoprazol 40 mg IV 2v/dìa



Banerjee R, J Gastroenterol Hepatol 2010; 25: 43–47

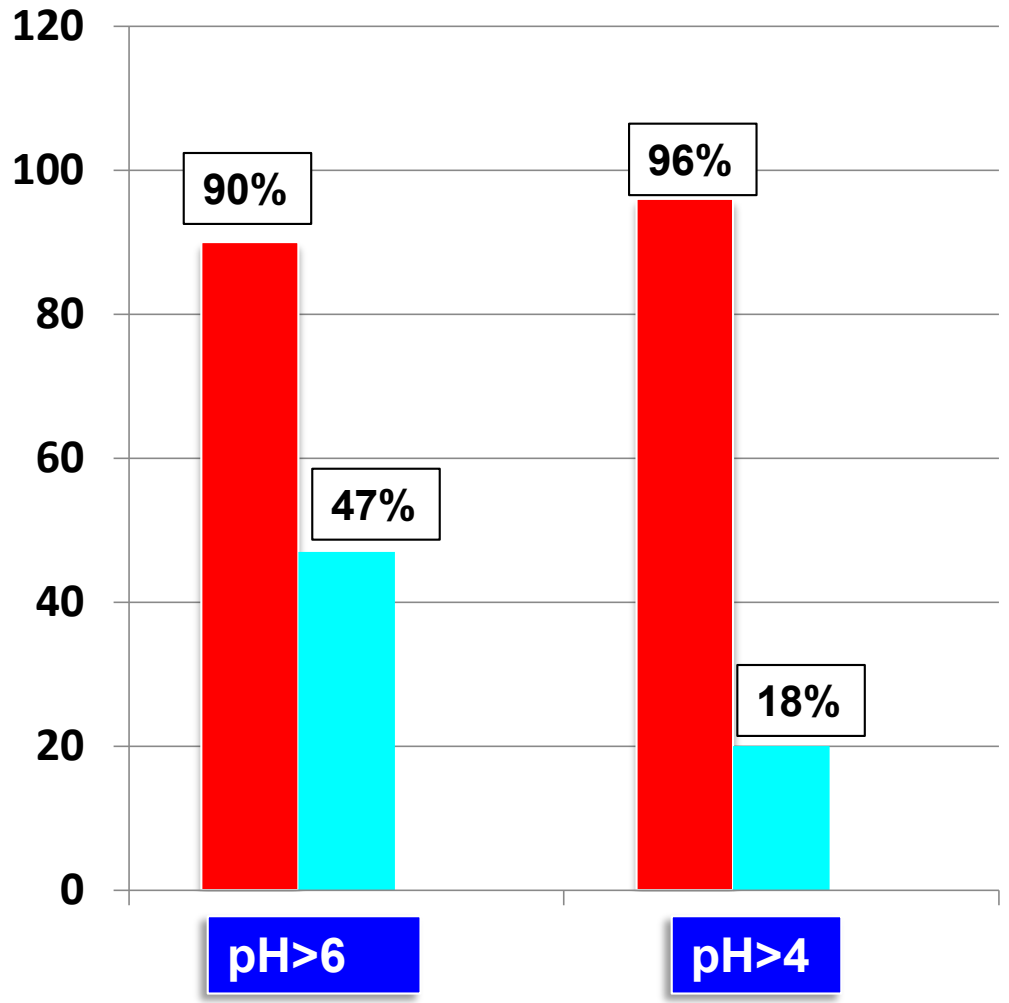
Tiempo para lograr pH > 6: Esomeprazol BI *vs* Pantoprazol IV/ 2v/dìa



Banerjee R, J Gastroenterol Hepatol 2010; 25: 43–47

% de 24 Horas con pH > 4 y >6
ESO BI 40 mg VO 2v/d VS Pantoprazol 40 mg IV/ 2v/dìa

pH
24 horas



La elevación del pH Persistió después de 6h de la 1era dosis: No es por efecto local del HCO3!

Banerjee R, J Gastroenterol Hepatol 2010; 25:43-47

Abstract

Background and Aims: A pH of more than 6 is required for clot stability and hemostasis. Intravenous proton pump inhibitors have a rapid onset of action compared to oral and have been preferred for management of non-variceal bleeding. Intravenous pantoprazole has

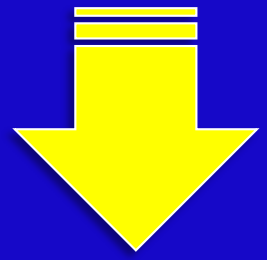
tration. It was significantly superior to i.v. pantoprazole in equivalent dosing. This finding could have implications in the management of non-variceal bleed where a rapid and sustained pH of more than 6 is desirable.

Por su rapidez de acción y Elevación de pH >6, Sería una excelente opción En en hemorragia por ulceras pépticas

I Encuentro Latinoamericano de Expertos en Gastroenterología BY PROCAPS

Banerjee R, J Gastroenterol Hepatol 2010; 25: 43–47

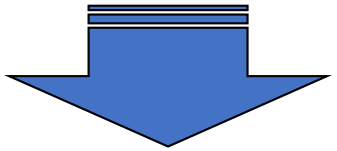
Ulceras pépticas Sangrantes



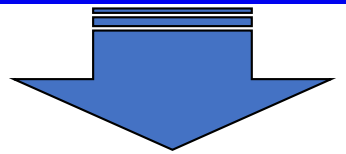
Objetivo

pH > 6

Esomeprazol liberación inmediata



Actùa más rápido que Esomeprazol original liberación retardada



Disoluciòn en estòmago
Acelera su absorciòn

Jing S, Adv Ther 2021;38:1660-76

Esomeprazol LI- Resuelve desventajas IBPs 1ª Generaciòn

Esomeprazol
Independiente Cyp2C19
Más potente > inhibición HCl

Bicarbonato

Acciòn Inmediata

No necesita darse Antes de comida

Supera actividad Esomeprazol original

CME

Katz PO, Am J Gastroenterol. 2022;117:27-56

ACG Clinical Guideline for the Diagnosis and Management of Gastroesophageal Reflux Disease

Philip O. Katz, MD, MACG[1], Kerry B. Dunbar, MD, PhD[2,3], Felice H. Schnoll-Sussman, MD, FACG[1], Katarina B. Greer, MD, MS, FACG[4], Rena Yadlapati, MD, MSHS[5] and Stuart Jon Spechler, MD, FACG[6,7]

An omeprazole-sodium bicarbonate combination that is not enteric-coated provides good control of intragastric pH in the first 4 hours of sleep when dosed at bedtime (57).

Review article: rethinking the "ladder" approach to reflux-like symptom management in the era of PPI "resistance" a multidisciplinary perspective

Hungin APS Aliment Pharmacol Ther 2022;55;1492

A. Pali S. Hungin[1] | Carmelo Scarpignato[2] | Laurie Keefer[3] | Maura Corsetti[4,5] | Foteini Anastasiou[6] | Jean W. M. Muris[7] | Juan M. Mendive[8] | Peter J. Kahrilas[9]

There is little rationale for switching (almost all PPIs are similarly effective at equiactive antisecretory doses) unless the switch is toward a more effective antisecretory compound (e.g., esomeprazole,[15,16] rabeprazole[17,18]) or immediate release-omeprazole[20]).

I Encuentro Latinoamericano de Expertos en Gastroenterología BY PROCAPS

Optimizaciòn IBP en ERGE

IBP Liberaciòn Inmediata

Otro IBP
Esomeprazol
Rabeprazol
Vonopran

IBP en ayunas
IBP 2v/D?

IBP 1v/D
Medidas Generales

Hungin APS Aliment Pharmacol Ther 2022;55;1492
Katz PO, Am J Gastroenterol. 2022;117:27-56

Colombia, Serie de casos

68 pacientes síntomas nocturnos, ERGE 2-5 años, 28-60 años, 35 mujeres, Esofagitis B y C, IBP 2v/día

No mejoría, pirosis 3-4 v/semana

Esomeprazol-Bicarbonato 40 mg (Ezolium ®)
Por la mañana o al acostarse 8 semanas

Persistencia Síntomas 8%

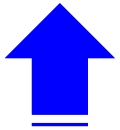
Mejoría Síntomas 10%

No síntomas 80%

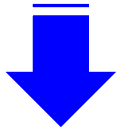
Otero W, Congreso Colombiano Gastroenterologia, 2021


En la Mañana
En la Noche
Con el estómago vacío
A demanda

Superior a IBP 1era Generación



Esomeprazol



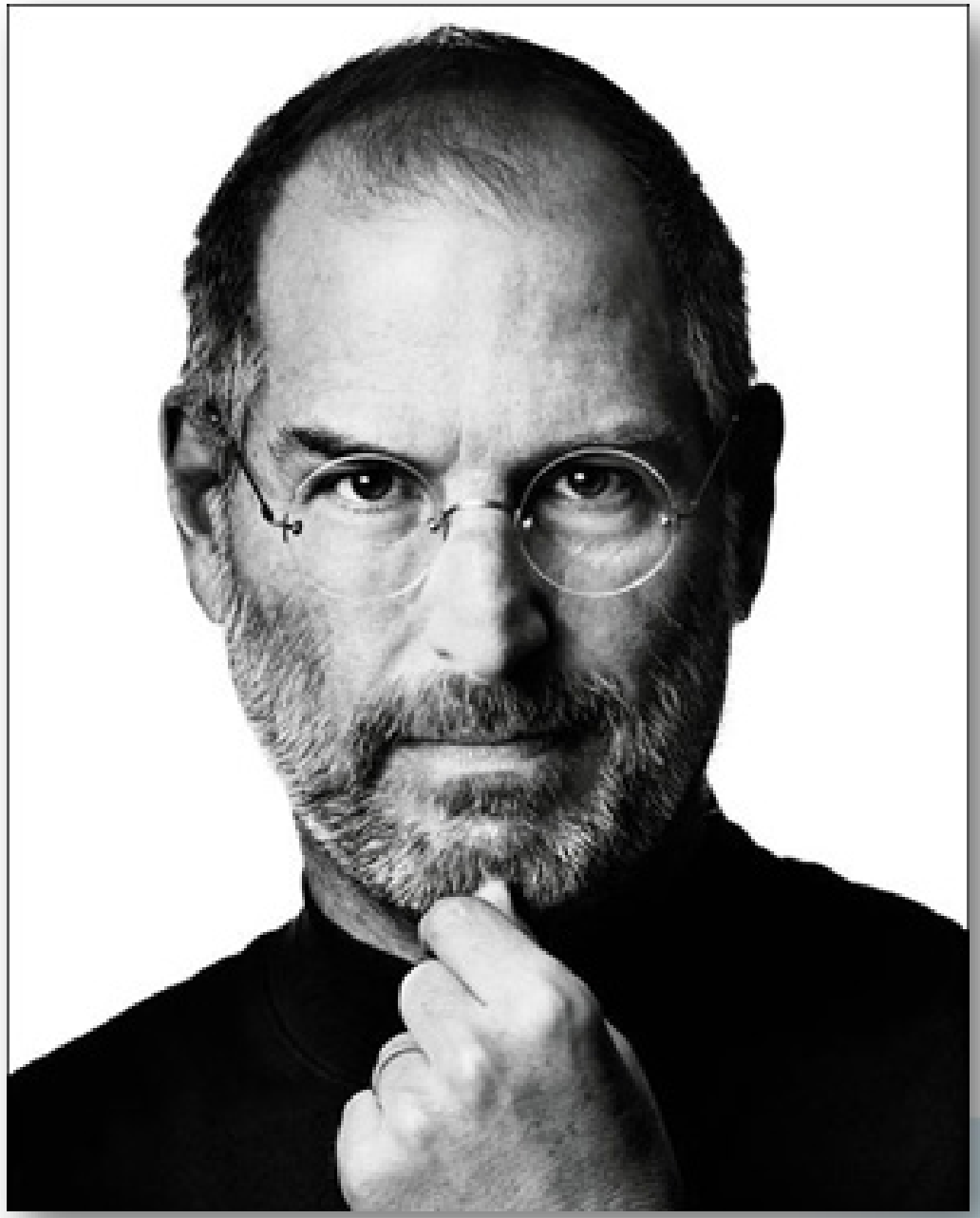
Similar a Vonoprazan

Mensajes para la casa

Esomeprazol superior a IBP 1ra generación
Similar a Vonoprazan 3ra generación
Con $NaHCO_3$ actúa inmediatamente 2 minutos
pH >4 más tiempo, noche
Evita horario rígido, cualquier hora
Es independiente del CYP2C19
Supera limitaciones tradicionales de “los IBP”

Esomeprazol + HCO3, el Messi de los IBPs

La sencillez es la maxima expresiòn de la sofisticaciòn



Lo dificil es
Hacerlo fàcil

Muchas gracias !