



## CURSO WEO-SIED DE ALTA CALIDAD EN ENDOSCOPIA DIGESTIVA ALTA

# Diagnóstico endoscópico de la gastritis asociada a *Hpylori*: ficción o realidad?



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**Universidad Nacional de Colombia**





# Cáncer Gástrico modelo Pelayo Correa

Mucosa sana

~~Helicobacter pylori~~

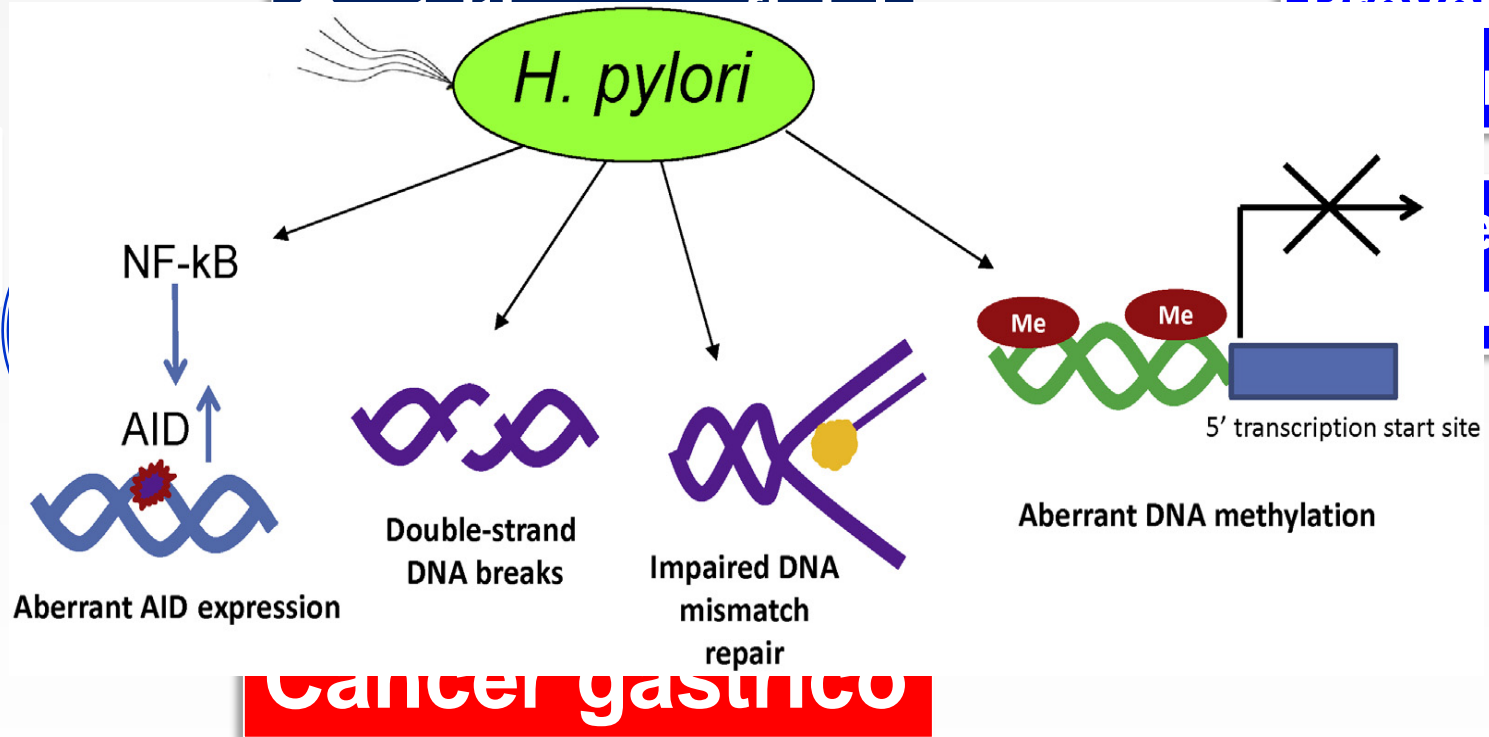


Prevención  
Primaria

Diagnóstico  
Probado

Estratificando  
severidad

Vigilancia  
Prevención  
Secundaria



Correa P. Cancer Res 1992; 52:6735–6740  
 Correa P. J Dig Dis 2012;13:2-9  
 Chen HN, Gastric Cancer 2016;19:166-7



**Erradicación *H.pylori***  
***Prevención primaria***



***cáncer gástrico***

***Hipótesis Demostrada***



***Helicobacter, pylori, atrofia, metaplasia***



**Práctica diaria**



**Diagnóstico imágenes endoscópicas**



**Permiten manejo patologías gastrointestinales ?**



# Endoscopia de rutina: identificar disminuir riesgo càncer

Investigar y erradicar *Helicobacter pylori*

Estratificar el riesgo para càncer Gàstrico

Endoscopios  
avanzados

NBI, BLI, CLI  
EGGIM

No hay dicotomía  
Son complementarios!

Biopsias  
Múltiples

OLGA

OLGIM

# ***Endoscopios avanzados***

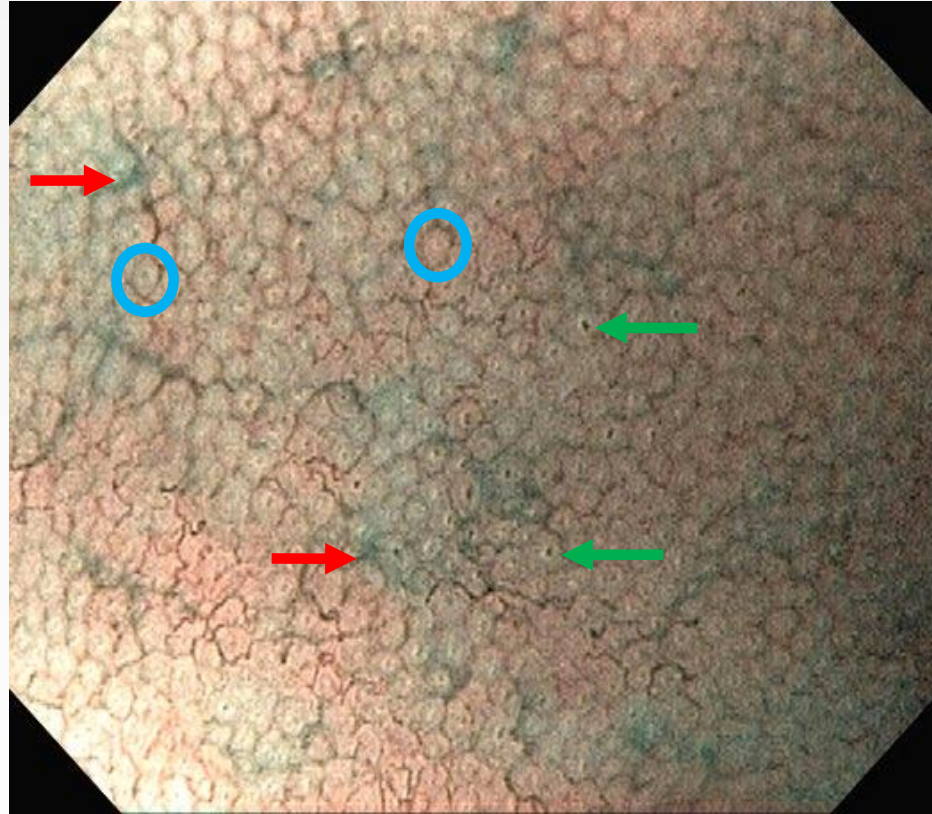


# Gastritis crónica en Japón es diferente

Extensa tradición de Cuidadosa visualización Endoscópica de la Mucosa gástrica

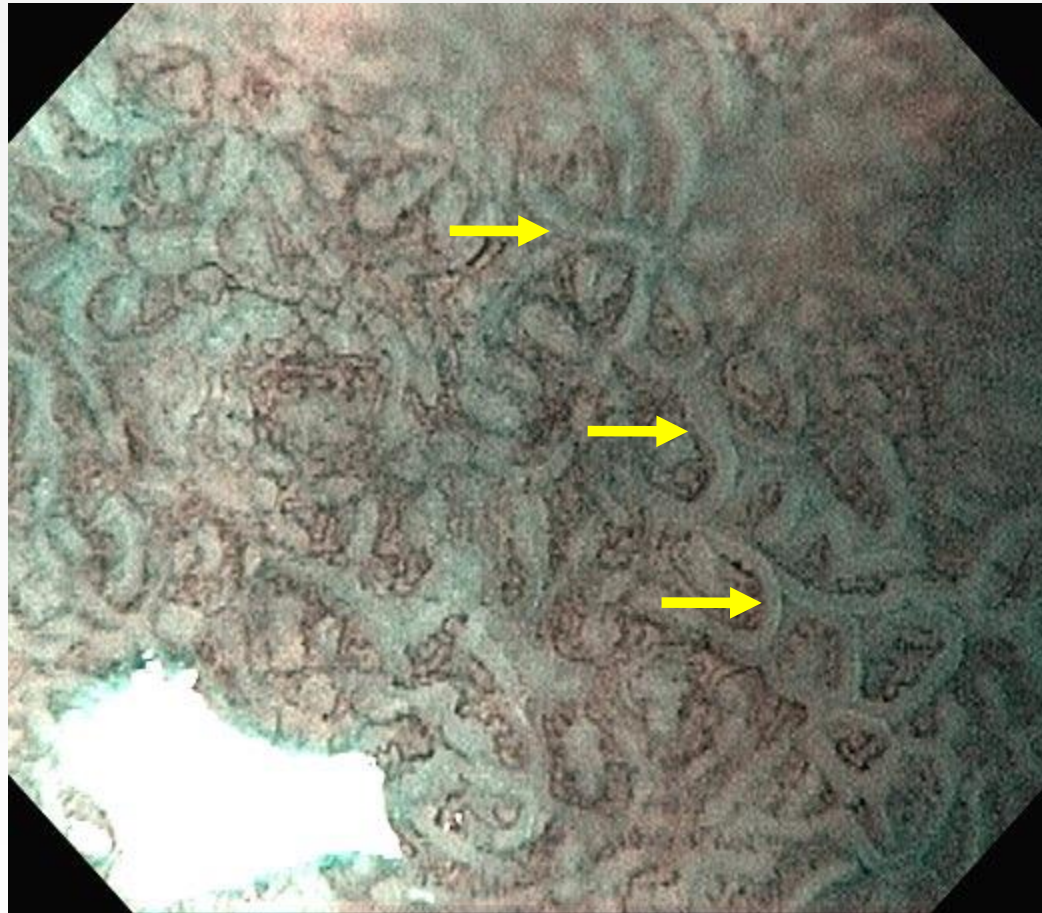


# NBI-Magnifying Normal Corpus Mucosa



Small, round pits (green arrows) surrounded by subepithelial capillary networks (blue circles) and collecting venules (red arrows).

## NBI-Magnifying Metaplastic Corpus Mucosa

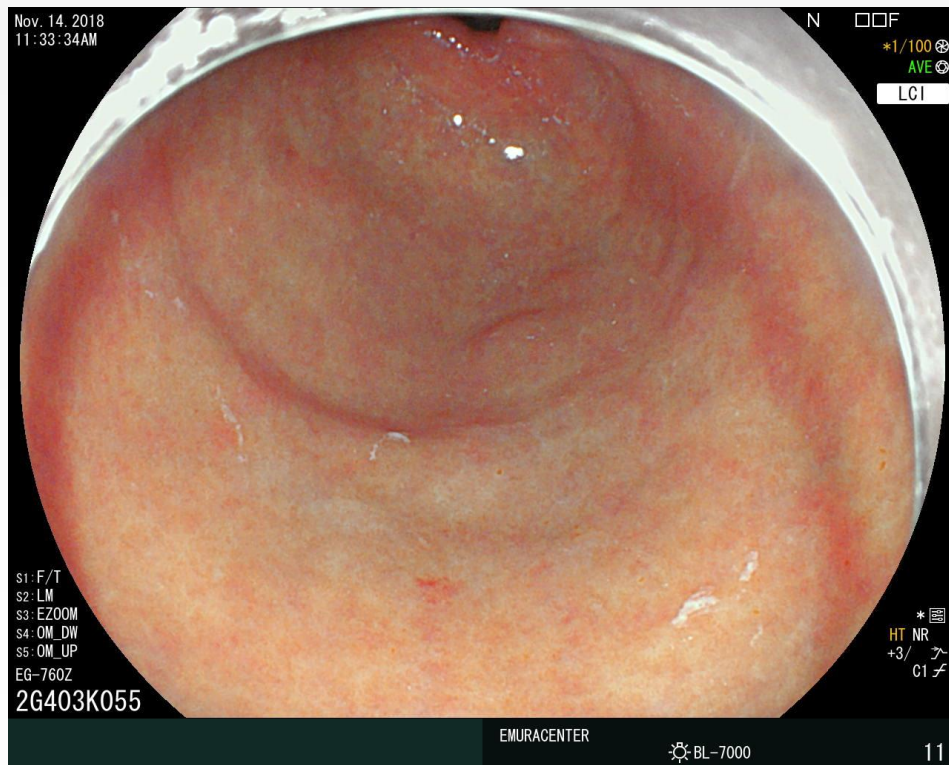


Thick borders enclosing a tubulovillous mucosal pattern (marginal turbid band) (yellow arrows)



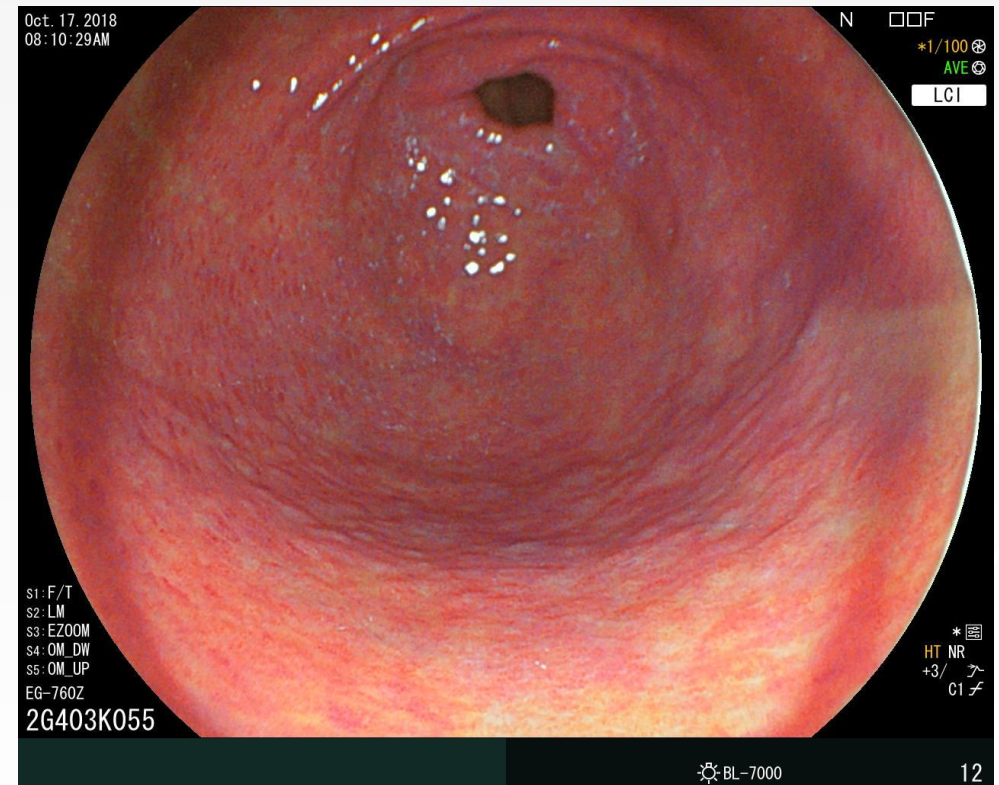
# LCI : antrum Hp associated gastritis

HP negative



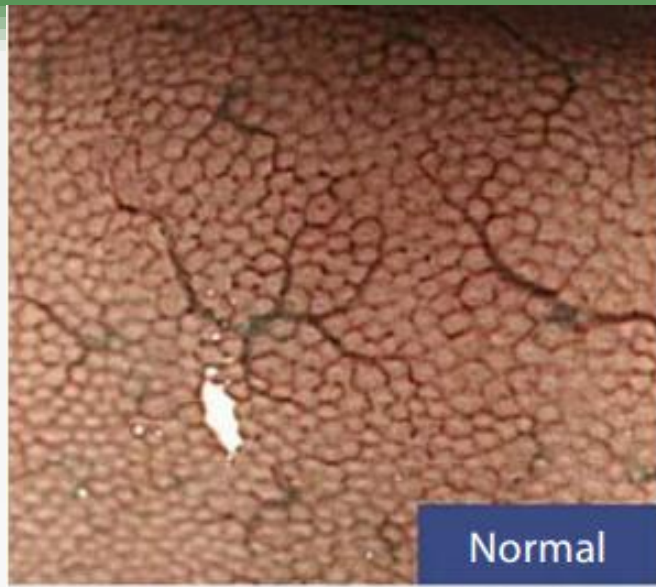
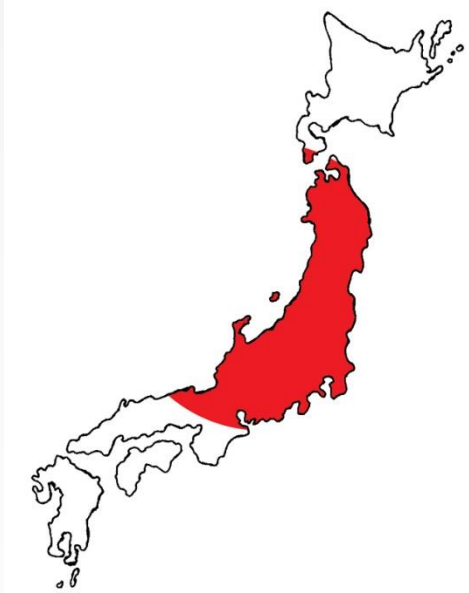
Almond predominant color

Hp +

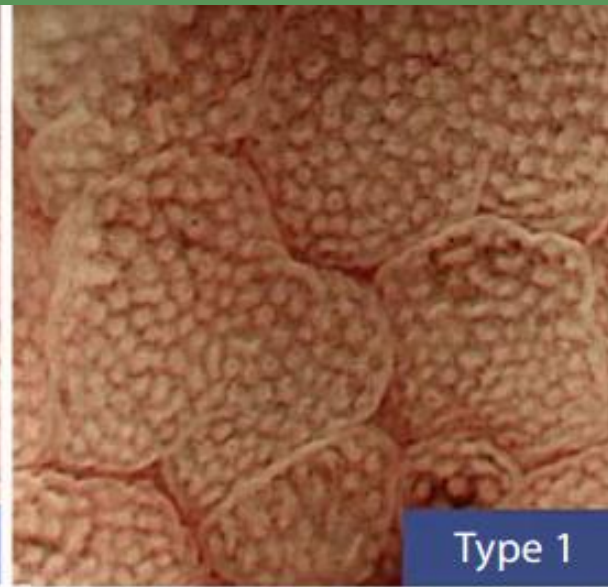


Magenta predominant color





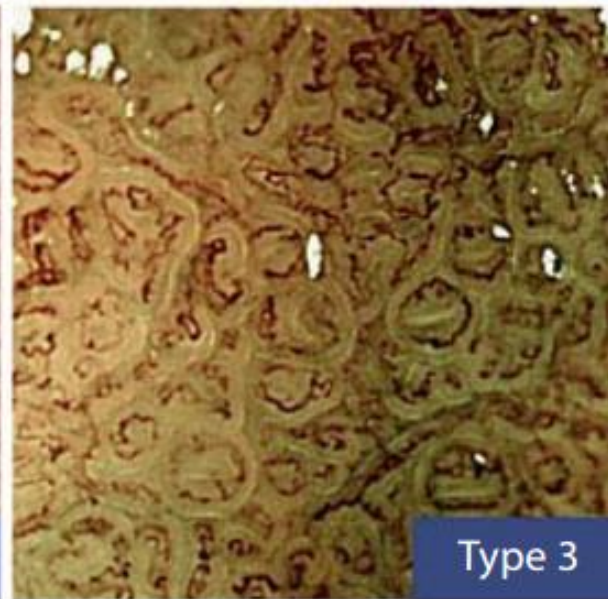
Normal



Type 1



Type 2



Type 3

**“Gastritis  
Crónica leve”**

**“Gastritis  
Crónica severa con  
Atrofia y metaplasia  
intestinal”**

**“Gastritis  
Crónica moderada”**



# Concordancia Histología-NBI ME

**Japón**

**NBI ME**

**OLGA  
OLGIM**

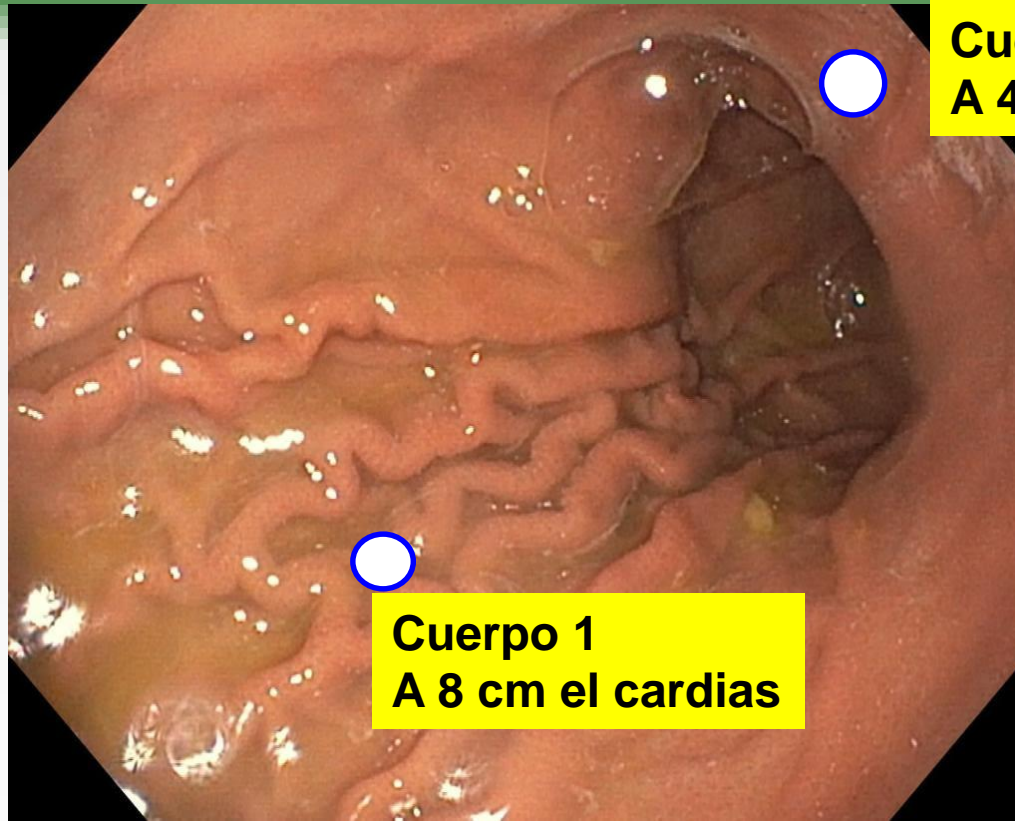
**Occidente**

	<b>Bajo riesgo 30 casos</b>	<b>Alto Riesgo 25 casos</b>
<b>Bajo riesgo O,I,II</b>	25	1
<b>Alto riesgo III,IV</b>	5	24

**Concordancia 89.1 (49/55)**

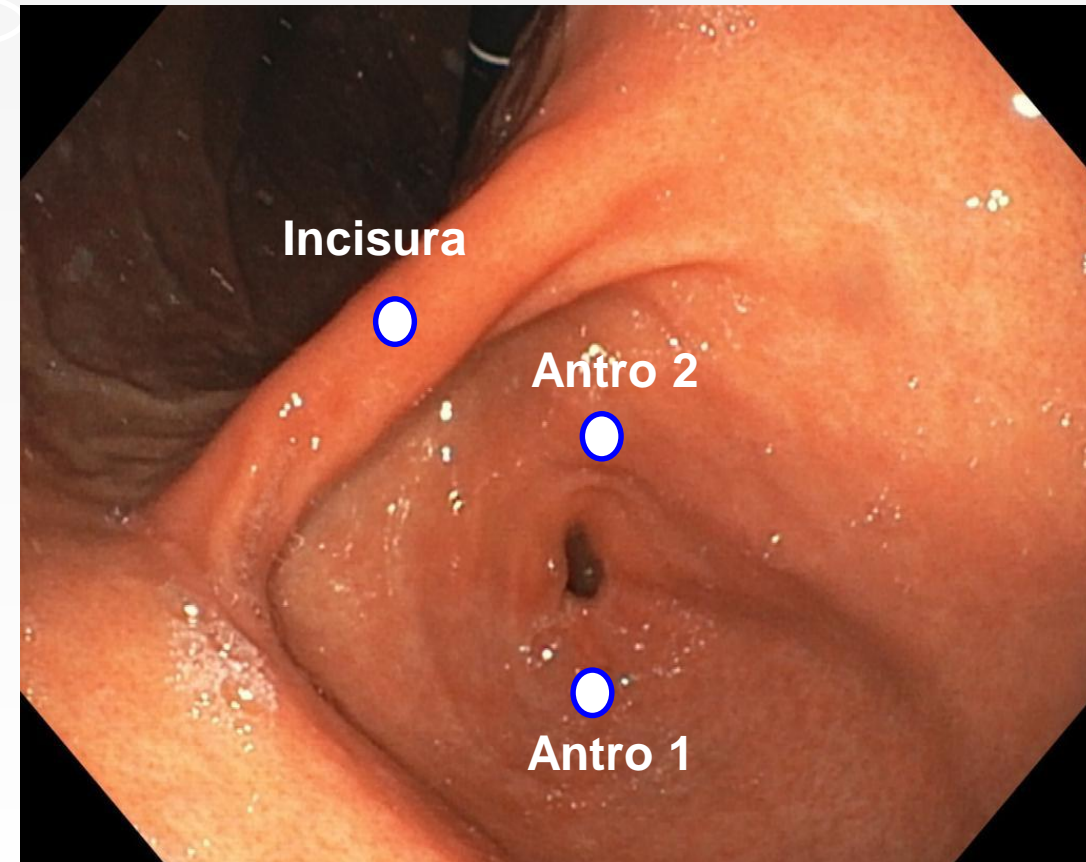


# Sídney



Cuerpo 2  
A 4 cm incisura

Cuerpo 1  
A 8 cm el cardias

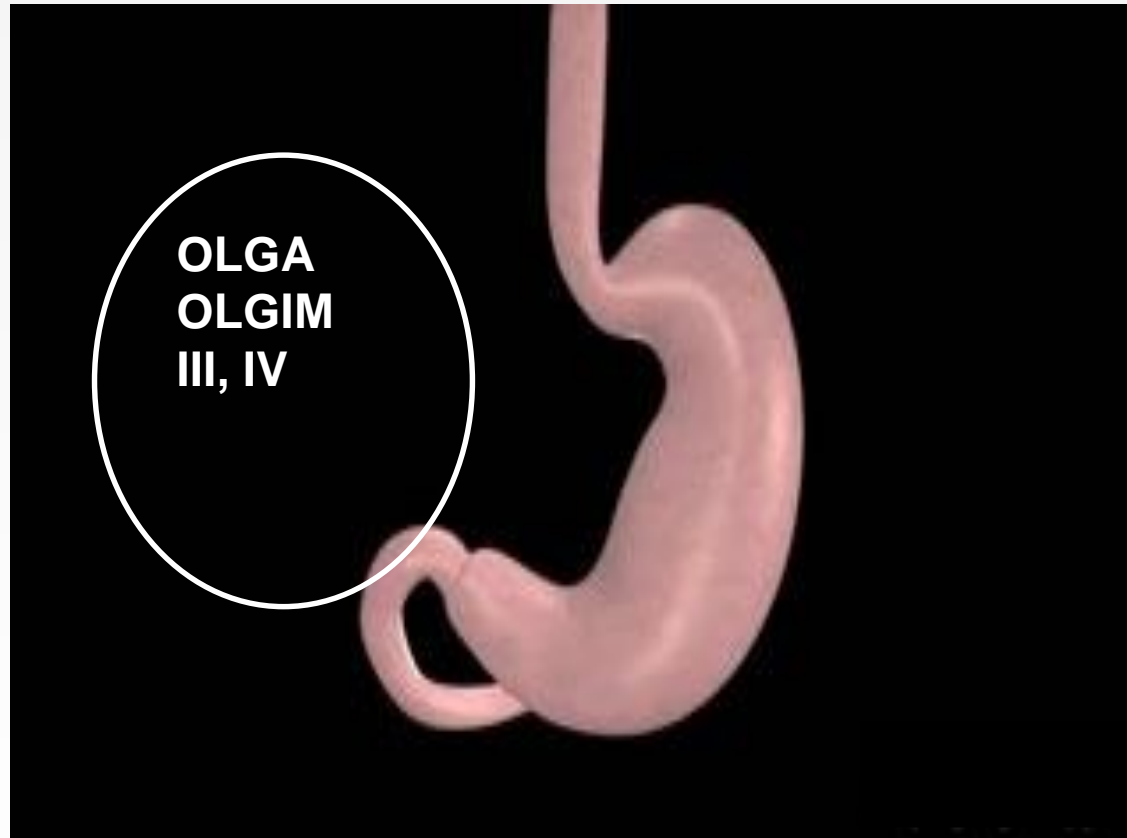


Kyoto 2015  
Maastricht 2022

# Estratificación de la atrofia o MI Biopsias

## Identificar el “Estómago premaligno”

OLGA  
OLGIM  
0, I



Sugano K, Gut 2015;64:1353-67

Take S, J Gastroenterol 2020;55:281-8

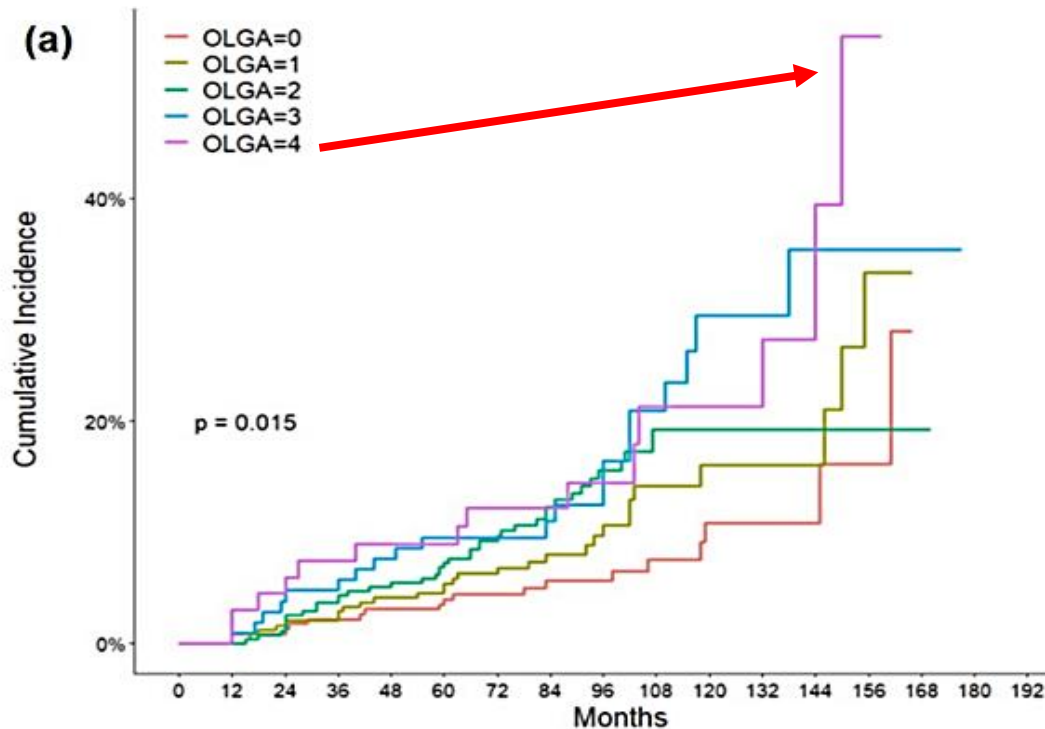
Malfertheiner P, Maastricht VI. Gut 2022 Online agosto 15



# Risk assessment of metachronous gastric cancer development using OLGA and OLGIM systems after endoscopic submucosal dissection for early gastric cancer: a long-term follow-up study

Yun Suk Na<sup>1</sup> · Sang Gyun Kim<sup>1</sup> · Soo-Jeong Cho<sup>1</sup> 

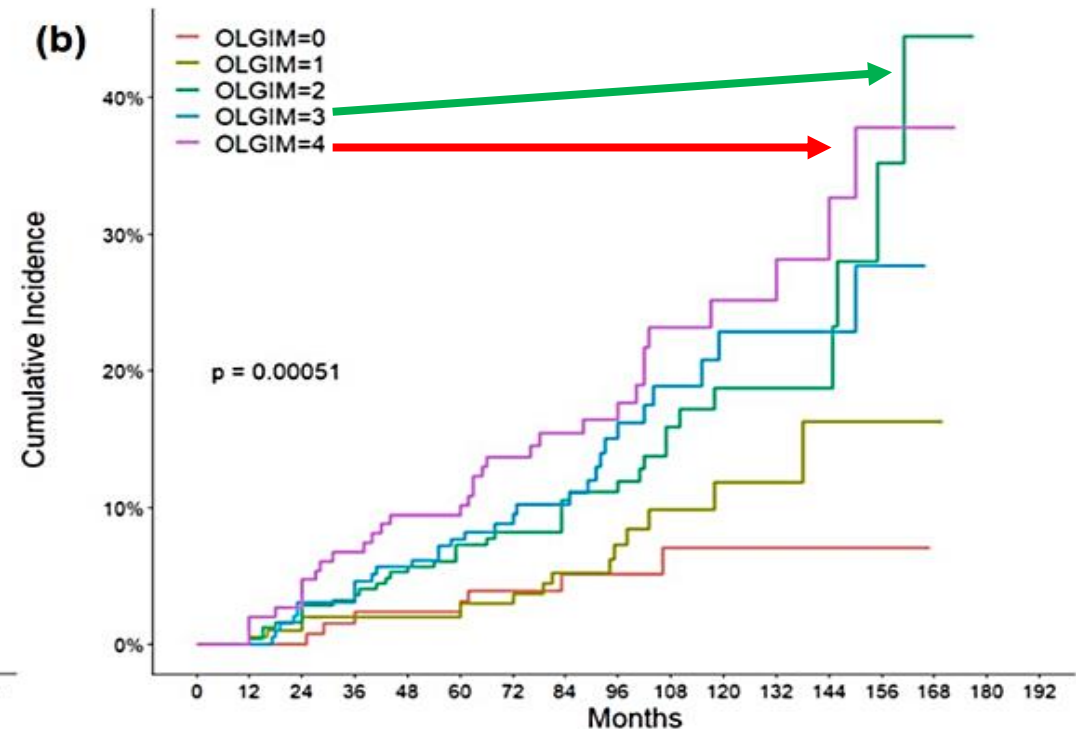
Na YS, et al. *Gastric Cancer* 2023;26:298–306



No. at risk

	0	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
OLGA=0	227	227	225	222	220	219	174	142	118	84	51	32	18	9	0	0	0
OLGA=1	242	242	238	237	232	231	182	134	96	58	42	34	18	10	0	0	0
OLGA=2	275	275	272	265	261	256	205	155	115	79	56	42	28	14	2	0	0
OLGA=3	105	105	101	100	97	95	80	61	45	32	22	14	9	5	2	0	0
OLGA=4	67	67	64	62	61	61	49	41	31	22	17	13	6	2	0	0	0

Months














No. at risk

	0	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192
OLGIM=0	128	128	128	126	125	125	102	79	62	45	28	18	12	8	0	0	0
OLGIM=1	198	198	196	194	194	194	150	114	85	58	39	29	14	3	1	0	0
OLGIM=2	247	247	243	239	234	229	190	151	115	73	50	36	18	9	1	0	0
OLGIM=3	195	195	189	189	184	180	140	104	74	50	38	27	19	10	0	0	0
OLGIM=4	148	148	144	138	134	134	108	85	69	49	33	25	16	10	2	0	0

Months



# Management of *Helicobacter pylori* infection: the Maastricht VI/Florence consensus report

Peter Malfertheiner ,<sup>1,2</sup> Francis Megraud ,<sup>3</sup> Theodore Rokkas ,<sup>4,5</sup>  
Javier P Gisbert ,<sup>6,7</sup> Jyh-Ming Liou ,<sup>8</sup> Christian Schulz ,<sup>1,9</sup>  
Antonio Gasbarrini,<sup>10</sup> Richard H Hunt,<sup>11,12</sup> Marcis Leja ,<sup>13,14</sup> Colm O'Morain,<sup>15</sup>  
Massimo Rugge ,<sup>16,17</sup> Sebastian Suerbaum,<sup>9,18</sup> Herbert Tilg ,<sup>19</sup>  
Kentaro Sugano ,<sup>20</sup> Emad M El-Omar ,<sup>21</sup> On behalf of the European  
Helicobacter and Microbiota Study group

**Statement 3:** When endoscopy is indicated it should: (1) apply the best available technologies; (2) include biopsy sampling. Biopsy samples, as obtained in accordance with validated protocols, should result in both aetiological diagnosis and gastritis staging. Any focal lesions should be additionally sampled.



Agreement 100%

Grade A2

Malfertheiner P, et al. Gut 2022;71:1724–62



# Endoscopic grading of gastric intestinal metaplasia on risk assessment for early gastric neoplasia: can we replace histology assessment also in the West?

Pedro Marcos ,<sup>1,2</sup> Gisela Brito-Gonçalves,<sup>3</sup> Diogo Libânio,<sup>1,4</sup> Inês Pita,<sup>1</sup> Rui Castro,<sup>1</sup> Inês Sá ,<sup>1</sup> Mário Dinis-Ribeiro,<sup>1,4</sup> Pedro Pimentel-Nunes<sup>1,4,5</sup>

**OLGIM, OLGA**

**EggIM: Graduación endoscópica Metaplasia intestinal**

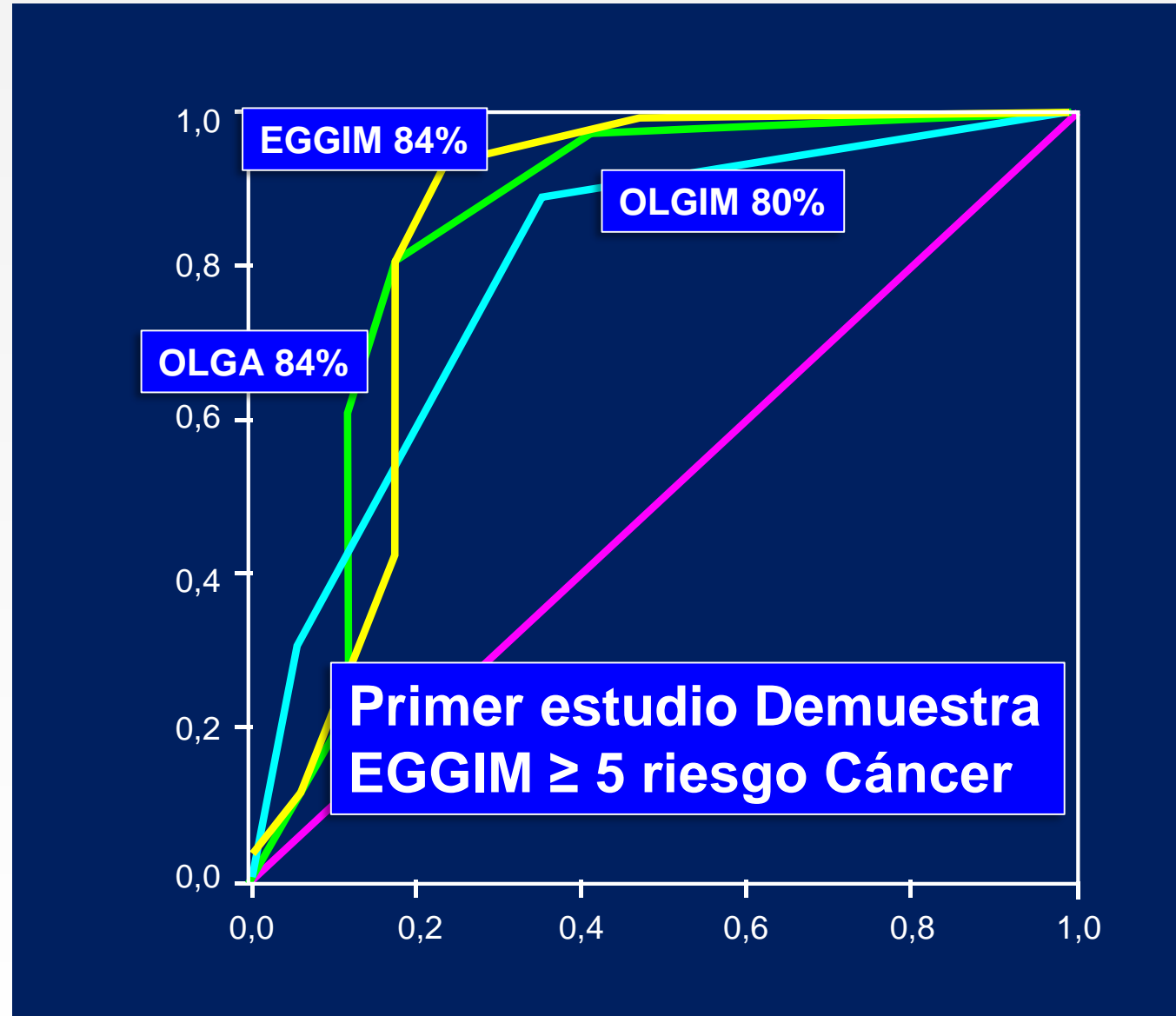
**Antro C>, C<, Cuerpo C>, C<, Incisura: estaciones de Sídney**

**Cada sitio 0-2 puntos**

**0=no MI, 1: MI(focal) <30%, 2: MI Extensa ≥ 30%**



# EGGIM Occidente



Marcos P, et al. Gut. 2020;69:1762-1768.



# An international survey on recognition and characterization of atrophic gastritis and intestinal metaplasia

OPEN  
ACCESS

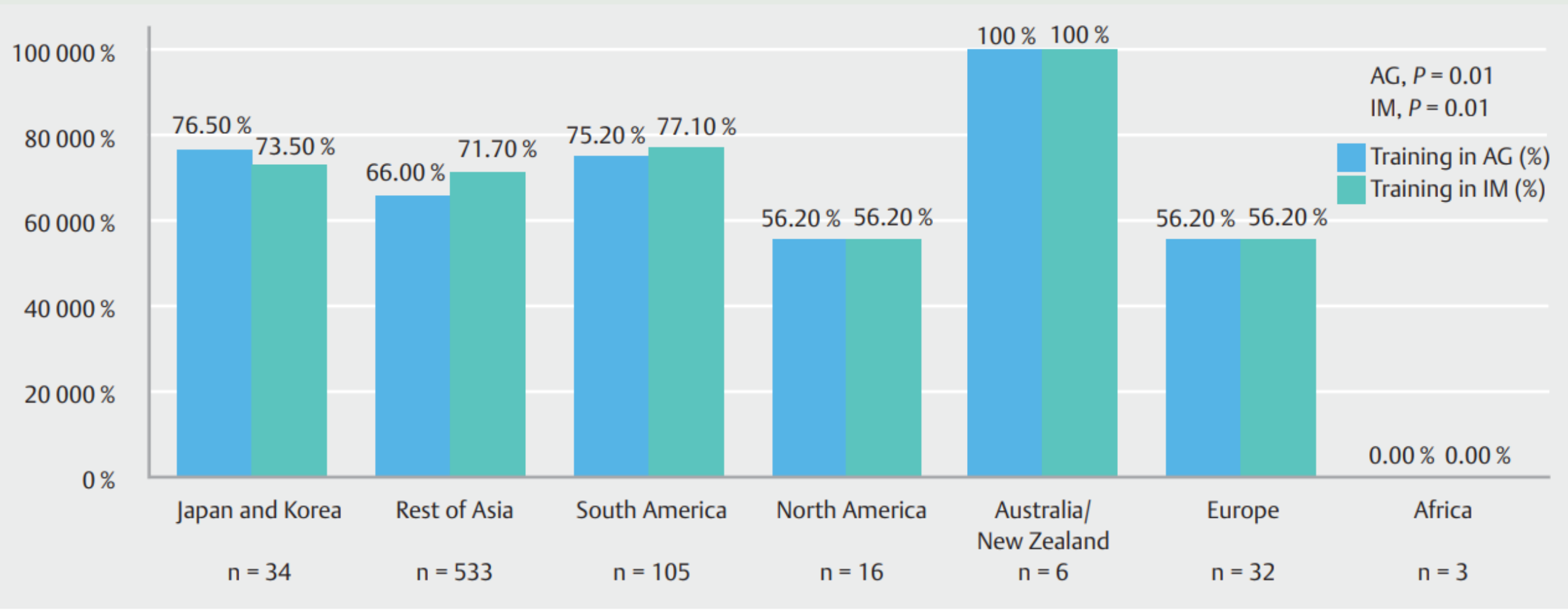


Authors

Hon Chi Yip<sup>1</sup>, **Noriya Uedo<sup>2</sup>**, Shannon M. Chan<sup>1</sup>, Anthony Yuen Bun Teoh<sup>1</sup>, Simon Kin Hung Wong<sup>1</sup>, Philip W. Chiu<sup>1</sup>, Enders Kwok Wai Ng<sup>1</sup>

Endosc Int Open 2020;08:E1365–E1370





## Docentes universitarios

Yip HC, Uedo N, Endosc Int Open 2020;08: E1365–E1370



# Evaluación e informe de AG y MI

Atrofia	Todos	Japón y Corea	USA	Europa	Suramérica
Kimura Takemoto	22.9%	94.1%			
OLGA	32.5%	0%		43.8%	51.4%
Kioto	4.9%	5.9%		"Gold standard"	
Ninguno	32.5%	0%	75%		

Yip HC, Uedo N, End Int Open 2020;08:E1365-70



► **Table 2** Current practice in assessment and reporting of AG & IM.

	All (n=249)	Japan & Korea (n=34)	Rest of world (n=215)
Report on endoscopic finding of AG & IM			
Number of biopsies taken			
▪ 0			6 (2.8%)
▪ 1			18 (8.4%)
▪ 2			40 (18.6%)
▪ 3		1 (2.9%)	22 (10.2%)
▪ 4	47 (18.9%)	0	47 (21.9%)
▪ 5	83 (33.3%)	1 (2.9%)	82 (38.1%)

**Con cualquier método  
Beneficiar al paciente**

AG, atrophic gastritis; IM, intestinal metaplasia; OLGA, Operative Link for Gastritis Assessment



# An explainable artificial intelligence system for diagnosing *Helicobacter Pylori* infection under endoscopy: a case-control study

Mengjiao Zhang\*, Jie Pan\*, Jiejun Lin, Ming Xu, Lihui Zhang, Renduo Shang, Liwen Yao, Yanxia Li, Wei Zhou, Yunchao Deng, Zehua Dong, Yijie Zhu, Xiao Tao, Lianlian Wu and Honggang Yu 

OPEN


## Application of artificial intelligence in endoscopic image analysis for the diagnosis of a gastric cancer pathogen-*Helicobacter pylori* infection

Chih-Hsueh Lin<sup>1,2,11</sup>, Ping-I Hsu<sup>3,11</sup>, Chin-Dar Tseng<sup>1,2</sup>✉, Pei-Ju Chao<sup>1,2</sup>, I-Ting Wu<sup>3</sup>, Supratip Ghose<sup>4</sup>, Chih-An Shih<sup>5,6</sup>, Shen-Hao Lee<sup>1,2,7</sup>, Jia-Hong Ren<sup>1,2</sup>, Chang-Bih Shie<sup>3</sup> & Tsair-Fwu Lee<sup>1,10,2,8,9</sup>✉

Exactitud 90%  
Sensibilidad 100%  
Especificidad 81%  
VPP 82%  
VPN 100%

Lin CH, et al. Sci Rep 2023;13:13380



A man with dark hair and a goatee, wearing a white lab coat, is seated in a black office chair. He is looking slightly to the left of the camera. The lab coat has a logo on the left chest that reads "EsoraCerve" and "Centro de Diagnóstico y Tratamiento". In the background, there is a white wall and a desk with a green pen holder containing a blue pen, a black telephone, and some papers. A black filing cabinet is visible on the left side of the frame.

**Diagnóstico endoscópico de la  
gastritis asociada a *Hpylori*:  
ficción o realidad?**







***Muchas  
Gracias !***

