Helicobacter pylori Treatment

Indications for testing/treatment and first-line eradication regimens for H. pylori infection.

2024 ACG Clinical Guideline
Treatment of Helicobacter pylori Infection
Chey et al. · Am J Gastroenterol 2024;119:1730–1753

GRADE — Strong Rec — Conditional Rec

1 Who to Test & Treat

INDICATION
Peptic ulcer disease (prior history or active) · Marginal zone (MALT) B-cell lymphoma
Uninvestigated dyspepsia <60y (test-and-treat); test at 45–50y in high-risk populations · Functional dyspepsia
Adult household members of a person with a positive non-serological H. pylori test
Long-term NSAID use or starting long-term low-dose aspirin
Unexplained iron deficiency anemia · Idiopathic (autoimmune) thrombocytopenic purpura
Gastric cancer prevention: current/history of gastric premalignant conditions, early gastric cancer resection, gastric adenocarcinoma, gastric adenomas/hyperplastic polyps, autoimmune gastritis, first-degree relative with gastric cancer, high-incidence race/ethnicity or immigration, hereditary cancer syndromes

2 First-Line Regimens — Treatment-Naive (all × 14 days)

REGIMEN	COMPONENTS	FDA	GRADE
Optimized bismuth quadruple	PPI BID + bismuth subcitrate/subsalicylate QID + tetracycline QID + metronidazole TID–QID	Combo products only	1 · Strong
Rifabutin triple (Talicia)	Omeprazole + amoxicillin + rifabutin, 4 capsules TID	Yes	2 · Conditional
PCAB dual (Voquezna DualPak)	Vonoprazan 20mg BID + amoxicillin 1,000mg TID	Yes	2 · Conditional
PCAB triple (Voquezna TriplePak)	Vonoprazan 20mg BID + clarithromycin 500mg + amoxicillin 1,000mg BID	Yes	2 · Conditional — reserve for clarithromycin-sensitive strains

3 Naive-Patient Treatment Recommendations

STATEMENT	GRADE
PCAB-clarithromycin triple over PPI-clarithromycin triple when clarithromycin susceptibility is unknown	2 · Conditional
Concomitant therapy is not suggested over bismuth quadruple therapy	2 · Conditional

4 Salvage Regimens — Treatment-Experienced, Persistent Infection (all × 14 days)

REGIMEN	COMPONENTS	AST REQUIRED?	GRADE
Optimized bismuth quadruple	PPI BID + bismuth QID + tetracycline QID + metronidazole TID–QID	No	2 · Conditional
Rifabutin triple	PPI (standard–double) BID + amoxicillin 1,000mg BID–TID + rifabutin 50–300mg	No	2 · Conditional
Levofloxacin triple	PPI BID + levofloxacin 500mg daily + amoxicillin or metronidazole BID	**Yes**	2 · Conditional — only with known levofloxacin-sensitive strains
PCAB triple (clarithromycin)	Vonoprazan + clarithromycin + amoxicillin	Yes	No recommendation — evidence gap
High-dose dual therapy	Vonoprazan or PPI (double dose) + amoxicillin 1,000mg TID	No	No recommendation — evidence gap

5 Persistent-Infection Recommendations by Prior Therapy

PRIOR THERAPY	SUGGESTED NEXT STEP	GRADE
No prior bismuth quadruple therapy	Optimized bismuth quadruple	2 · Conditional
Prior PPI-clarithromycin triple	Optimized bismuth quadruple	2 · Conditional
Prior bismuth quadruple therapy	Rifabutin triple	2 · Conditional
No prior optimized bismuth quadruple	Optimized bismuth quadruple **over** quinolone-based therapy	2 · Conditional
Known levofloxacin-sensitive strain; bismuth quadruple/rifabutin triple already used or unavailable	Levofloxacin triple	2 · Conditional
Confirmed clarithromycin-sensitive strain	PPI/PCAB-clarithromycin triple	Key Concept

6 Key Concepts & General Principles

KEY — Testing and treatment should be viewed as a **single dependent decision** — anyone tested and confirmed positive should be treated, then undergo test-of-cure.

KEY — **Avoid empiric clarithromycin- and levofloxacin-containing regimens** without demonstrated macrolide/quinolone susceptibility.

KEY — All treated patients should undergo **test-of-cure** (urea breath test, fecal antigen, or biopsy-based) at least **4 weeks** after completing therapy.

2 — Insufficient evidence to suggest **probiotic therapy** improves eradication efficacy or tolerability.

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