

## Treatment of *H. pylori* Associated Peptic Ulcer Disease<sup>a</sup>

Therapy Approach	Regimen	Eradication Rate	Duration	Cost <sup>b</sup>	
				10 days	14 days
Proton Pump Inhibitor Based Triple Therapy	Proton Pump Inhibitor BID Amoxicillin 1 gm BID Clarithromycin 500mg BID	80%-90%	10-14 days	\$197-\$213	\$272-\$298
	<b>The optimal regimen for sensitive strains and a twice-daily dosage</b>				
Prevpac <sup>®</sup>	Amoxicillin 1gm BID Clarithromycin 500mg BID Lansoprazole (Prevacid <sup>®</sup> ) 30mg BID	80%-90%	14 days		\$284
	Proton Pump Inhibitor BID Metronidazole 500mg BID Clarithromycin 500mg BID <i>In case of Clarithromycin allergy/intolerance:</i> Amoxicillin 1 gm BID	80%-90%	10-14 days	\$179-\$196	\$248-\$274
NIH "Conventional Triple Therapy"	Bismuth 2 tablets QID Metronidazole 250mg QID Tetracycline 500mg QID	75-85%	14 days	\$88-\$105	\$121-\$147
	Triple regimens consist of metronidazole, tetracycline or amoxicillin, and a bismuth compound. <b>These regimens are cost effective but may cause more side effects and more drug-drug interactions</b>				
Helidac <sup>®</sup>	Contains: Bismuth, Metronidazole, and Tetracycline	75%-85%	14 days		\$155
	Must add either H2 blocker BID or PPI QD				\$160-\$213

The ACG guidelines state that antimicrobial resistance to *H. pylori* eradication regimens has become a concern in the US. One report suggests that metronidazole resistance is present in 54% of strains. Clarithromycin resistance in the US is relatively low at 7 to 11%. Resistance to amoxicillin is limited and tetracycline resistance has never been adequately documented.

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## Treatment Strategy

### First-line treatment

Triple therapy:  
Proton pump inhibitor/ ranitidine + amoxicillin + clarithromycin



### Second-line treatment

Quadruple therapy:  
Proton pump inhibitor + bismuth + tetracycline + metronidazole



### Third-line treatment

Choice depends on antibiotic resistance