

Supplementary Table 8. Categorization of salvage regimens from overall 36 randomized controlled trials with 77 intervention arms

Category	Previous failed regimen	Salvage regimen	Interventions, n (number of intervention arms)	
2nd line, 23 studies, 47 arms	PAC fail, 15 studies, 31 arms	Bismuth quadruple, n = 12	PBTM, n = 9 ^a	
			PBTA, n = 2	
			PBMA, n = 2	
			Quinolone triple, n = 9	PAL, n = 8 ^a
				PML, n = 1
				Quinolone quadruple, n = 5
			Levo-bismuth + tetra (PBLT), n = 1	
			Levo-sequential (PA-PML), n = 2	
			Others, n = 4	PAM, n = 2
				PAT, n = 1
	PATM, n = 1			
	Concomitant (PACM), n = 1			
	PAM fail, 1 study, 2 arms	PB + furazolidone + levofloxacin, n = 1		
		PB + furazolidone + rlufoxacin, n = 1		
	PAC/M fail, 2 studies, 4 arms			Levo-bismuth (PBLA), n = 1
			PBTM, n = 1	
			Furazolidone + PL, n = 1	
			Furazolidone + PB + doxycycline, n = 1	
			Sequential (PA-PC + tinidazole), n = 1	
	Triple, NS, 2 studies, 4 arms		PBTM (tetracycline/doxycycline), n = 1	
			PBTM, n = 1	
			PM + moxifloxacin, n = 1	
			PBAC/M, 2 studies, 4 arms	Quintuple: PBTM + oxifloxacin, n = 1
Quintuple: PBAC + tinidazole, n = 1				
NS, 2 studies, 5 arms				PBAC, n = 1
				PB + ofloxacin + azithromycin, n = 1
	PAL, n = 2			
	Levo-sequential (PA-PML), n = 1			
	High dose dual (PA), n = 1			
3rd line, 5 studies, 11 arms	PAC-PAM fail, 3 studies, 7 arms	Quinolone triple, n = 5	Sequential (PA-PCM), n = 1	
			PA + sitafloxacin, n = 2	
			PM + sitafloxacin, n = 1	
			PAL, n = 1	
			PA + gatifloxacin, n = 1	
	PACM + quinolone fail, 2 studies, 4 arms		Dual (not high dose), n = 2	PA, n = 2
				PBTM, n = 1

Supplementary Table 8. Continued

Category	Previous failed regimen	Salvage regimen	Interventions, n (number of intervention arms)
			PBMA, n = 1
			PB + minocycline + tinidazole, n = 1
			PB + minocycline + rifabutin, n = 1
Duration, 5 studies, 12 arms	PAC fail, 3 studies		PBTM, 7D vs. 14D, 3 studies ^a
	PAC/M fail, 1 study		PAL, 7D vs. 10D, 1 study (levofloxacin 500 mg vs. 1,000 mg)
	PAC-PAM (sitafloxacin regimen) fail, 1 study		PA + rifabutin, 10D vs. 14D, 1 study
PPI comparison, 2 studies, 4 arms	PAC-PBTM fail, 1 study		Rifabutin + amoxicillin 1g tid + PPI standard vs. double dose bid, 1 study
	PAC fail, 1 study		PBTM: rabeprazole vs. esomeprazole, 1 study

PAC, pantoprazole, amoxicillin, clarithromycin; P, proton pump inhibitor; B, bismuth; T, tetracycline; M, metronidazole; A, amoxicillin; PAL, proton pump inhibitor (PPI), amoxicillin, levofloxacin; L, levofloxacin; AMX, amoxicillin; PAM, proton pump inhibitor (PPI) + amoxicillin + metronidazole; C, clarithromycin; NS, not significant; tid, three times per day; bid, twice per day.

^aIncluded in the meta-analysis.