

Supplementary Table S1. Effectiveness of both triple therapy with amoxicillin and rifabutin and quadruple therapy with amoxicillin, rifabutin and bismuth, according to duration, potency of acid inhibition and treatment line.

Line*	Length (days)	PPI dose	Treatment	ITT, N (%)	95%CI	Effectiveness			
						mITT, N (%)	95%CI	PP, N (%)	95%CI
2 nd line	10	low	PPI+A+R	7 (71.4)	29.0-96.3	7 (71.4)	29.0-96.3	7 (71.4)	29.0-96.3
		standard	PPI+A+R	2 (50.0)	1.2-98.7	2 (50.0)	1.2-98.7	2 (50.0)	1.2-98.7
		high	PPI+A+R	8 (75.0)	34.9-96.8	7 (85.7)	42.1-99.6	7 (85.7)	42.1-99.6
		total	PPI+A+R	17 (70.6)	44.0-89.6	16 (75.0)	47.6-92.7	16 (75.0)	47.6-92.7
	12	low	PPI+A+R	59 (57.6)	44.1-71.1	52 (65.4)	51.4-79.2	52 (65.4)	51.4-79.2
		high	PPI+A+R	72 (76.4)	65.8-86.8	60 (91.7)	81.6-97.2	58 (93.1)	83.3-98.1
		total	PPI+A+R	131 (67.9)	59.5-76.3	112 (79.5)	71.5-87.3	110 (80.0)	72.1-87.9
	14	low	PPI+A+R	5 (40.0)	5.3-85.3	5 (40.0)	5.3-85.3	5 (40.0)	5.3-85.3
	Total	low	PPI+A+R	71 (57.7)	45.5-69.9	64 (64.1)	51.5-76.6	64 (64.1)	51.5-76.6
		standard	PPI+A+R	2 (50.0)	1.2-98.7	2 (50.0)	1.2-98.7	2 (50.0)	1.2-98.7
		high	PPI+A+R	80 (76.3)	66.3-86.2	67 (91)	83.4-98.6	65 (92.3)	82.9-97.4
		total	PPI+A+R	153 (67.3)	59.5-75.1	133 (77.4)	69.9-84.9	131 (77.9)	70.4-85.3
3 rd line	10	low	PPI+A+R	4 (100)	39.7-100	4 (100)	39.7-100	4 (100)	39.7-100
		standard	PPI+A+R	2 (50.0)	1.2-98.7	2 (50.0)	1.2-98.7	2 (50.0)	1.2-98.7
		high	PPI+A+R	2 (50.0)	1.2-98.7	1 (100)	1.2-98.7	1 (100)	1.2-98.7
		total	PPI+A+R	8 (75.0)	34.9-96.8	7 (85.7)	42.1-99.6	7 (85.7)	42.1-99.6
	12	low	PPI+A+R	40 (67.5)	51.7-83.2	35 (77.1)	61.8-92.4	35 (77.1)	61.8-92.4
		high	PPI+A+R	42 (66.7)	51.2-82.1	32 (87.5)	71.0-96.4	31 (87.1)	70.2-96.4
		total	PPI+A+R	82 (67.1)	56.3-77.8	67 (82.1)	72.1-92.0	66 (81.8)	71.7-91.8
	14	low	PPI+A+R	6 (0.0)	0.0-45.9	4 (0.0)	0.0-60.2	3 (0.0)	0.0-70.8
			PPI+A+R+B	1 (100)	1.2-98.7	1 (100)	1.2-98.7	1 (100)	1.2-98.7
		standard	PPI+A+R+B	2 (100)	15.8-100	2 (100)	15.8-100	2 (100)	15.8-100
		high	PPI+A+R	11 (36.4)	10.9-69.2	5 (80.0)	28.3-99.5	5 (80.0)	28.3-99.5
		total	PPI+A+R	17 (23.5)	6.8-49.8	9 (44.4)	13.7-78.8	8 (50.0)	15.7-84.3
			PPI+A+R+B	3 (100)	29.2-100	3 (100)	29.2-100	3 (100)	29.2-100
	Total	low	PPI+A+R	50 (62.0)	47.5-76.4	43 (72.1)	57.5-86.6	42 (73.8)	59.3-88.3
			PPI+A+R+B	1 (100)	1.2-98.7	1 (100)	1.2-98.7	1 (100)	1.2-98.7
		standard	PPI+A+R	2 (50.0)	1.2-98.7	2 (50)	1.2-98.7	2 (50.0)	1.2-98.7
			PPI+A+R+B	2 (100)	15.8-100	2 (100)	15.8-100	2 (100)	15.8-100
		high	PPI+A+R	55 (60.0)	46.1-73.8	38 (86.8)	71.9-95.6	37 (86.5)	71.2-95.4
		total	PPI+A+R	107 (60.7)	51.0-70.5	83 (78.3)	68.8-87.8	81 (79.0)	69.5-88.5
4 th line	10	low	PPI+A+R	22 (50.0)	26.8-73.2	21 (52.4)	28.6-76.1	20 (55)	31.5-76.9
			PPI+A+R+B	2 (50.0)	1.2-98.7	2 (50.0)	1.2-98.7	2 (50.0)	1.2-98.7
		standard	PPI+A+R	15 (73.3)	44.9-92.2	15 (73.3)	44.9-92.2	14 (78.6)	49.2-95.3
		high	PPI+A+R	6 (83.3)	35.9-99.6	5 (100)	47.8-100	5 (100)	47.8-100
			PPI+A+R+B	19 (68.4)	43.4-87.4	19 (68.4)	43.4-87.4	18 (66.7)	40.9-86.6
		total	PPI+A+R	43 (62.8)	47.2-78.4	41 (65.9)	50.1-81.6	39 (69.2)	53.4-84.9
			PPI+A+R+B	21 (66.7)	43.0-85.4	21 (66.7)	43.0-85.4	20 (65)	40.7-84.6
	12	low	PPI+A+R	12 (58.3)	27.6-84.8	10 (70.0)	34.7-93.3	10 (70.0)	34.7-93.3
		high	PPI+A+R	11 (72.7)	39.0-93.9	9 (88.9)	51.7-99.7	9 (88.9)	51.7-99.7
		total	PPI+A+R	23 (65.2)	43.6-86.8	19 (78.9)	54.4-93.9	19 (78.9)	54.4-93.9
	14	low	PPI+A+R	6 (66.7)	22.2-95.6	6 (66.7)	22.2-95.6	6 (66.7)	22.2-95.6

Total	standard	PPI+A+R	3 (33.3)	0.8-90.6	2 (50.0)	1.2-98.7	2 (50.0)	1.2-98.7
	high	PPI+A+R	21 (14.3)	3.0-36.3	8 (37.5)	8.5-75.5	7 (42.9)	9.8-81.5
	total	PPI+A+R	30 (26.7)	9.2-44.1	16 (50.0)	24.6-75.3	15 (53.3)	26.6-78.7
	low	PPI+A+R	40 (55.0)	38.3-71.7	37 (59.5)	42.2-76.6	36 (61.1)	43.7-78.4
		PPI+A+R+B	2 (50.0)	1.2-98.7	2 (50.0)	1.2-98.7	2 (50.0)	1.2-98.7
	standard	PPI+A+R	18 (66.7)	40.9-86.6	17 (70.6)	44.0-89.6	16 (75.0)	47.6-92.7
	high	PPI+A+R	38 (42.1)	25.1-59.1	22 (72.7)	49.7-89.2	21 (76.2)	52.8-91.8
		PPI+A+R+B	19 (68.4)	43.4-87.4	19 (68.4)	43.4-87.4	18 (66.7)	40.9-86.6
	total	PPI+A+R	96 (52.1)	41.6-62.6	76 (65.8)	54.4-77.1	73 (68.5)	57.1-79.8
		PPI+A+R+B	21 (66.7)	43.0-85.4	21 (66.7)	43.0-85.4	20 (65.0)	40.7-84.6

A: amoxicillin; B: bismuth; R: rifabutin; ITT: intention-to-treat ; PPI: proton pump inhibitor (low-dose PPI: 4.5–27 mg omeprazole equivalents (OE) twice daily (bid) (i.e., 20 mg OE bid), standard-dose PPI: 32–40 mg omeprazole equivalents bid (i.e., 40 mg OE bid), high-dose PPI: 54–128 mg omeprazole equivalents bid (i.e., 60 mg OE bid); mITT: modified intention-to-treat; PP: per protocol, CI: confidence interval, N: total number of patients analysed; *the remaining treatment lines were not reported, as less than 5 patients were included in each subgroup.