

Table S1 Statistical analysis of the killing activity of imipenem (IPM) and rifabutin (RFB) against *M. abscessus* CIP104536S
P value for the indicated comparison (Mann-Whitney U test)

	ss Atb	IPM 8	IPM 32	RFB 16	IPM 8 RFB 16	IPM 32 RFB 16
	9.7	4.3	4.5	6.1	3.7	4.7
ss Atb	9.7	NA	0.0262	0.0262	0.0262	0.0262
IPM 8	4.3	NA	0.0339	0.0262	0.0253	0.4867
IPM 32	4.5		NA	0.0308	0.0339	0.8248
RFB 16	6.1			NA	0.0262	0.0323
IPM 8 RFB 16	3.7				NA	0.0369
IPM 32 RFB 16	4.7					NA

Log10 cfu/ml after 72h of incubation in the presence of the drugs ($\mu\text{g}/\text{ml}$) are indicated. NA, not applicable.

Table S2 Statistical analysis of the killing activity of imipenem (IPM) and rifabutin (RFB) against *M. abscessus* $\Delta\text{bla}_{\text{Mab}}$

	ss Atb	IPM 8	IPM 32	RFB 16	IPM8 RFB16	IPM32 RFB16
	9.2	4.0	4.7	5.5	4.1	4.1
ss Atb	9.2	NA	0.0025	0.016	0.0017	0.0025
IPM 8	4.0	NA	0.5962	0.0025	0.2539	0.4308
IPM 32	4.7		NA	0.0384	0.7928	0.0463
RFB 16	5.5			NA	0.0027	0.0157
IPM8 RFB16	4.1				NA	0.4288
IPM32 RFB16	4.1					NA

Log10 cfu/ml after 72h of incubation in the presence of the drugs ($\mu\text{g}/\text{ml}$) are indicated. NA, not applicable.

Table S3 Statistical analysis of the killing activity of imipenem (IPM) and rifabutin (RFB) alone or in combination with avibactam (AVI) against *M. abscessus* CIP104536S

	ss Atb	IPM 8	RFB 16	IPM 8 RFB 16	IPM 8 AVI 4	IPM 8 RFB 16 AVI 4
	9.6	5.4	6.0	4.7	4.8	5.3
ss Atb	9.6	NA	0.0463	0.0463	0.0463	0.0463
IPM 8	5.4	NA	0.0431	0.0431	0.0431	0.0431
RFB 16	6.0		NA	0.0431	0.0431	0.0431
IPM 8 RFB 16	4.7			NA	0.0431	0.0431
IPM 8 AVI 4	4.8				NA	0.0431
IPM 8 RFB 16 AVI 4	5.3					NA

Log10 cfu/ml after 72h of incubation in the presence of the drugs ($\mu\text{g}/\text{ml}$) are indicated. NA, not applicable.

Table S4 Statistical analysis of the intracellular activity of imipenem (IPM) and rifabutin (RFB) against *M. abscessus* CIP104536S

	ss Atb	IPM 8	IPM 32	RFB 16	IPM 8 RFB 16	IPM 32 RFB 16
	134	1.7	0.44	6.1	0.22	0.01
ss Atb	134	NA	0.0495	0.0495	0.0495	0.0495
IPM 8	1.7	NA	0.0495	0.0389	0.0495	0.0495
IPM 32	0.44		NA	0.0495	0.0495	0.0495
RFB 16	6.1			NA	0.0495	0.0495
IPM 8 RFB 16	0.22				NA	0.0495
IPM 32 RFB 16	0.01					NA

Fold change in the number of intracellular bacteria after 72h of incubation in the presence of the drugs ($\mu\text{g}/\text{ml}$) are indicated. NA, not applicable.

Table S5 Statistical analysis of the intracellular activity of imipenem (IPM) and rifabutin (RFB) against *M. abscessus* Δbla_{Mab}

		P value for the indicated comparison (Mann-Whitney U test)					
		ss Atb	IPM 8	IPM 32	RFB 16	IPM 8 RFB 16	IPM 32 RFB 16
		233.5	0.39	0.17	3.65	0.065	0.019
ss Atb	233.5	NA	0.0495	0.0495	0.0495	0.0495	0.0495
IPM 8	0.39		NA	0.0763	0.0201	0.0495	0.0495
IPM 32	0.17			NA	0.0495	0.0495	0.0495
RFB 16	3.65				NA	0.0495	0.0495
IPM 8 RFB 16	0.065					NA	0.5127
IPM 32 RFB 16	0.019						NA

Fold change in the number of intracellular bacteria after 72h of incubation in the presence of the drugs (μg/ml) are indicated. NA, not applicable.

Table S6 Statistical analysis of the intracellular activity of imipenem (IPM) and rifabutin (RFB) alone or in combination with avibactam (AVI) against *M. abscessus* CIP1045365

		P value for the indicated comparison (Mann-Whitney U test)								
		ss Atb	IPM 8	RFB 1	RFB 8	IPM 8 RFB 1	IPM 8 RFB 8	IPM 8 AVI 16	IPM 8 RFB 8 AVI 16	IPM 8 RFB 8 AVI 16
		125	1.23	7.48	3.65	0.52	0.6	0.59	0.22	0.33
ss Atb	125	NA	0.0495	0.0495	0.0495	0.0495	0.0495	0.0495	0.0495	0.0495
IPM 8	1.23		NA	0.0495	0.2752	0.0495	0.0495	0.011	0.0495	0.0495
RFB 1	7.48			NA	0.1266	0.0495	0.0495	0.0495	0.0495	0.0495
RFB 8	3.65				NA	0.0495	0.0495	0.0495	0.0495	0.0495
IPM 8 RFB 1	0.52					NA	0.6579	0.5127	0.1266	0.2752
IPM 8 RFB 8	0.6						NA	0.8273	0.0495	0.2752
IPM 8 AVI	0.59							NA	0.2752	0.2752
IPM 8 RFB 1 AVI 16	0.22								NA	0.5127
IPM 8 RFB 8 AVI 16	0.33									NA

Fold change in the number of intracellular bacteria after 72h of incubation in the presence of the drugs (μg/ml) are indicated. NA, not applicable.