

Supplementary methods

Products	Manufacturer	Initial concentration / Dose	Batch numbers	Expiration dates
Vancomycin	Mylan	1 g	C0312	2023-10
			C0274	2023-09
			C0323	2023-09
Piperacillin/tazobactam (PT)	Panpharma	4 g/500 mg	307484 306723	2025-02 2023-12
Saline solution (SS)	Baxter	0.9%	22B25T1G	2024-01
			22D18T1B	2024-01
			21L01T1D	2023-11

Table S1: The infused drugs and diluents used in the *in vitro* study

Medical devices	Manufacturer	References	Batch numbers	Expiration dates
Needles 1.2 mm x 40 mm	Becton Dickinson, Fraga, Spain	K111815 304622	80108010 1805 15	2026-08-11 2023-04
Syringe 20 mL Luer-lock BD Plastipak	BD Switzerland Sàrl, Eysins, Switzerland	300629	2102012	2026-01-31
Syringe 50 mL Luer-lock BD Plastipak	BD Switzerland Sàrl, Eysins, Switzerland	300865	2204025	2027-03-31
Three-port manifold + 150 cm PE/PVC extension line	CAIR LGL, Lissieu, France	RPB3315	22A24-TJB	2026-12-24
PE/PVC extension line	CAIR LGL, Lissieu, France	PB3115	22C28-TNPW	2027-02-28
Four-port manifold + 200 cm PE/PVC extension line	CAIR LGL, Lissieu, France	RPB4320	22C23-TWNP	2027-02-23
Infusion pump set	Fresenius Kabi AG, Bad Homburg, Germany	M46441000S Z072810F	84461131 84171129	2024-11-14 2022-04
Syringe pump	Fresenius Vial, Brezins, France	083010		
Infusion pump	Fresenius Vial, Brezins, France	Volumat MC agilia F	EP5113-0	

Table S2: The medical devices used for preparation and infusion in the present *in vitro* study