

Supplementary Material

Gallium-protoporphyrin IX inhibits *Pseudomonas aeruginosa* growth by targeting cytochromes

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Table S1. *P. aeruginosa* clinical isolates used in this study.

Strain	Origin	Source	GaPPIX IC ₅₀ (μ M)	Ga(NO ₃) ₃ IC ₅₀ (μ M)	Reference or source
TB73	CF	rs	-	9	Bragonzi <i>et al.</i> , 2009
KK2	CF	rs	3.2	2.7	Bragonzi <i>et al.</i> , 2009
KK27	CF	rs	-	3.9	Bragonzi <i>et al.</i> , 2009
TR1	CF	rs	0.27	3	Bragonzi <i>et al.</i> , 2009
AA11	CF	rs	-	5.7	Bragonzi <i>et al.</i> , 2009
AA44	CF	rs	0.25	1.2	Massai <i>et al.</i> , 2011
FM1	CF	rs	0.32	81.6	Massai <i>et al.</i> , 2011
FM2	CF	rs	0.26	1.3	Massai <i>et al.</i> , 2011
FM4	CF	rs	0.2	1.6	Massai <i>et al.</i> , 2011
FM13	CF	rs	1.7	6.3	Massai <i>et al.</i> , 2011
FM17	CF	rs	0.38	4.7	Massai <i>et al.</i> , 2011
SP1	non-CF	ws	-	8.7	Bonchi <i>et al.</i> , 2015
SP6	non-CF	blood	15.2	3.7	Bonchi <i>et al.</i> , 2015
SP9	non-CF	cvc	-	5.8	Bonchi <i>et al.</i> , 2015
SP10	non-CF	blood	0.2	0.3	Bonchi <i>et al.</i> , 2015
SP11	non-CF	ascites	0.83	8.2	Bonchi <i>et al.</i> , 2015
SP15	non-CF	pe	0.21	0.2	Bonchi <i>et al.</i> , 2015
SP18	non-CF	bile	0.25	1.96	Bonchi <i>et al.</i> , 2015
SP20	non-CF	blood	0.19	1	Bonchi <i>et al.</i> , 2015
SP21	non-CF	pe	0.22	1.26	Bonchi <i>et al.</i> , 2015
SP24	non-CF	bile	-	7.7	Bonchi <i>et al.</i> , 2015
PA14	non-CF	burn	0.1	3.8	Rahme <i>et al.</i> , 1995
PAO1	non-CF	ATCC15692	12.5	5.25	American type culture collection

Abbreviations: CF, cystic fibrosis; rs, respiratory secretions; ws, wound swab; cvc, central venous catheter; pe, pleural exudate; - resistant.

Table S2. Effect of GaPPIX on different *P. aeruginosa* strains determined by mean of disk diffusion assays.

Strain	GaPPIX susceptibility (avg ZOI $\pm$ SD) ^a
PAO1	27.6 $\pm$ 2.0
Δ hasR	27.6 $\pm$ 2.0
Δ phuR	24.5 $\pm$ 0.7
Δ hasR Δ phuR/pUCPhasR	27.6 $\pm$ 2.0
Δ hasR Δ phuR/pUCPphuR	34.0 $\pm$ 1.0
Δ hasR Δ phuR/pUCPhasRphuR	33.3 $\pm$ 0.5
Δ cyo Δ cio Δ cox	34.6 $\pm$ 1.24
PAO1 in the presence of 350 μ M NaN ₃	36.6 $\pm$ 3.0
Δ cyo Δ cco Δ cox	30.0 $\pm$ 0.7

^a ZOIs were measured in mm; Average (avg) is the mean of at least three independent experiments.

Additional references not included in the main text:

Bragonzi, A., Paroni, M., Nonis, A., Cramer, N., Montanari, S., Rejman, J., Tümmler, B., et al. (2009). *Pseudomonas aeruginosa* microevolution during cystic fibrosis lung infection establishes clones with adapted virulence. *Am. J. Respir. Crit Care Med.* 180, 138-145. doi: 10.1164/rccm.200812-1943OC

Massai, F., Imperi, F., Quattrucci, S., Zennaro, E., Visca, P., Leoni, L., et al. (2011). A multitask biosensor for micro-volumetric detection of N-3-oxo-dodecanoyl-homoserine lactone quorum sensing signal. *Biosens. Bioelectron.* 26, 3444-3449. doi: dx.doi.org/10.1016/j.bios.2011.01.022

Rahme, L. G., Stevens, E. J., Wolfort, S. F., and Shao, J. (1995). Common virulence factors for bacterial pathogenicity in plants and animals. *Science* 268, 1899.