



Figure S1. Phylogenetic tree of IMP β-lactamases on which the NG-test Carba5 was performed (1, 2, this study). The IMP variants that are currently detected by the NG-test Carba5 are underlined.

1. Boutal H, Vogel A, Bernabeu S, Devilliers K, Creton E, Cotellon G, Plaisance M, Oueslati S, Dortet L, Jousset A, Simon S, Naas T, Volland H. 2018. A multiplex lateral flow immunoassay for the rapid identification of NDM-, KPC-, IMP- and VIM-type and OXA-48-like carbapenemase-producing Enterobacteriaceae. *J Antimicrob Chemother* 73:909-915.
1. Hopkins KL, Meunier D, Naas T, Volland H, Woodford N. 2018. Evaluation of the NG-Test CARBA 5 multiplex immunochromatographic assay for the detection of KPC, OXA-48-like, NDM, VIM and IMP carbapenemases. *J Antimicrob Chemother* 73:3523-3526.

Table S1. Molecular and susceptibility features of carbapenemase-producing strains included in the study

| Strain | Species | Beta-lactamase | MICs (mg/L) | |
|---------------------------------|------------------------|----------------|-------------|-----------|
| | | | Imipenem | Meropenem |
| <i>P. aeruginosa</i> COL | <i>P. aeruginosa</i> | KPC-2 | >32 | >32 |
| <i>P. aeruginosa</i> P13 | <i>P. aeruginosa</i> | KPC-2 | >32 | >32 |
| <i>P. aeruginosa</i> 17-4978 | <i>P. aeruginosa</i> | KPC-2 | >32 | >32 |
| <i>P. aeruginosa</i> GW-1 | <i>P. aeruginosa</i> | GES-2 | 3 | 1 |
| <i>P. aeruginosa</i> P-35 | <i>P. aeruginosa</i> | GES-5 | >32 | >32 |
| <i>P. aeruginosa</i> 18-6034 | <i>P. aeruginosa</i> | GES-6 | >32 | >32 |
| <i>A. xylosoxydans</i> 22 | <i>A. xylosoxydans</i> | VIM-1 | >32 | >32 |
| <i>P. aeruginosa</i> P0510 | <i>P. aeruginosa</i> | VIM-1 | >32 | >32 |
| <i>P. fluorescens</i> COU | <i>P. fluorescens</i> | VIM-2 | >32 | >32 |
| <i>P. aeruginosa</i> REZQUA | <i>P. aeruginosa</i> | VIM-2 | >32 | >32 |
| <i>P. putida</i> 9335 | <i>P. putida</i> | VIM-2 | >32 | >32 |
| <i>P. stutzeri</i> P511503100 | <i>P. stutzeri</i> | VIM-2 | >32 | >32 |
| <i>P. aeruginosa</i> 15 NEC 02 | <i>P. aeruginosa</i> | VIM-2 | >32 | >32 |
| <i>P. aeruginosa</i> 15 NEC 15 | <i>P. aeruginosa</i> | VIM-2 | >32 | >32 |
| <i>P. aeruginosa</i> 15 CAE 13 | <i>P. aeruginosa</i> | VIM-2 | >32 | >32 |
| <i>P. aeruginosa</i> 15 TOUL 13 | <i>P. aeruginosa</i> | VIM-2 | 16 | 2 |
| <i>P. aeruginosa</i> 15NANT08 | <i>P. aeruginosa</i> | VIM-2 | >32 | 32 |
| <i>P. aeruginosa</i> 15BICH32 | <i>P. aeruginosa</i> | VIM-2 | >32 | >32 |
| <i>P. aeruginosa</i> NANC10 | <i>P. aeruginosa</i> | VIM-2 | 32 | 8 |
| <i>P. aeruginosa</i> PBI06 | <i>P. aeruginosa</i> | VIM-2 | >32 | >32 |
| <i>P. aeruginosa</i> CAS | <i>P. aeruginosa</i> | VIM-4 | >32 | >32 |
| <i>P. aeruginosa</i> 12-1019 | <i>P. aeruginosa</i> | VIM-6 | >32 | 4 |
| <i>P. aeruginosa</i> 18-5939 | <i>P. aeruginosa</i> | VIM-11 | >32 | >32 |
| <i>P. aeruginosa</i> 16-3548 | <i>P. aeruginosa</i> | VIM-28 | >32 | >32 |
| <i>P. aeruginosa</i> 13-1413 | <i>P. aeruginosa</i> | VIM-30 | >32 | >32 |
| <i>P. putida</i> 17-4364 | <i>P. putida</i> | VIM-60 | >32 | >32 |
| <i>P. aeruginosa</i> 12870 | <i>P. aeruginosa</i> | IMP-1 | 12 | >32 |
| <i>P. stutzeri</i> PB207 | <i>P. stutzeri</i> | IMP-1 | 2 | 4 |
| <i>P. putida</i> NTU 92/99 | <i>P. putida</i> | IMP-1 | 1 | 0.19 |
| <i>P. aeruginosa</i> 0607097 | <i>P. aeruginosa</i> | IMP-2 | >32 | >32 |
| <i>P. aeruginosa</i> 12-1020 | <i>P. aeruginosa</i> | IMP-5 | >32 | >32 |
| <i>P. aeruginosa</i> 11-622 | <i>P. aeruginosa</i> | IMP-10 | >32 | >32 |
| <i>P. aeruginosa</i> ITA | <i>P. aeruginosa</i> | IMP-13 | >32 | >32 |
| <i>P. aeruginosa</i> 11-700 | <i>P. aeruginosa</i> | IMP-13 | >32 | >32 |
| <i>P. aeruginosa</i> 17-4723 | <i>P. aeruginosa</i> | IMP-13 | >32 | >32 |
| <i>P. aeruginosa</i> 17-5099 | <i>P. aeruginosa</i> | IMP-15 | 32 | 6 |
| <i>P. aeruginosa</i> 12-1011 | <i>P. aeruginosa</i> | IMP-18 | >32 | >32 |

| | | | | |
|---------------------------------|-----------------------|----------------|-----|------|
| <i>P. aeruginosa</i> 18-5750 | <i>P. aeruginosa</i> | IMP-19 | >32 | >32 |
| <i>P. aeruginosa</i> CNR 174320 | <i>P. aeruginosa</i> | IMP-26 | >32 | >32 |
| <i>P. aeruginosa</i> CNR 131829 | <i>P. aeruginosa</i> | IMP-29 | >32 | >32 |
| <i>P. aeruginosa</i> CNR 185693 | <i>P. aeruginosa</i> | IMP-39 | >32 | >32 |
| <i>P. putida</i> 14-2223 | <i>P. putida</i> | IMP-63 | >32 | >32 |
| <i>P. aeruginosa</i> 17-3940 | <i>P. aeruginosa</i> | IMP-63 | 2 | 1 |
| <i>P. aeruginosa</i> 17-4324 | <i>P. aeruginosa</i> | IMP-71 | >32 | >32 |
| <i>P. aeruginosa</i> 16-3874 | <i>P. aeruginosa</i> | IMP-79 | >32 | >32 |
| <i>P. aeruginosa</i> 453 | <i>P. aeruginosa</i> | NDM-1 | >32 | >32 |
| <i>P. aeruginosa</i> 353 | <i>P. aeruginosa</i> | NDM-1 | >32 | >32 |
| <i>P. aeruginosa</i> 73-12198 | <i>P. aeruginosa</i> | GIM-1 | 3 | 0.19 |
| <i>P. aeruginosa</i> 73-15574 | <i>P. aeruginosa</i> | GIM-1 | >32 | >32 |
| <i>P. aeruginosa</i> WCH2677 | <i>P. aeruginosa</i> | AIM-1 | >32 | >32 |
| <i>P. aeruginosa</i> WCH2813 | <i>P. aeruginosa</i> | AIM-1 | >32 | >32 |
| <i>P. aeruginosa</i> 16 | <i>P. aeruginosa</i> | SPM-1 | >32 | >32 |
| <i>P. aeruginosa</i> 18-5419 | <i>P. aeruginosa</i> | DIM-1 | >32 | >32 |
| <i>P. alcaligenes</i> 18-5635 | <i>P. alcaligenes</i> | PAM-1 | 12 | >32 |
| <i>P. otitidis</i> 18-5993 | <i>P. otitidis</i> | POM-1 | 1.5 | 3 |
| <i>P. aeruginosa</i> 41437 | <i>P. aeruginosa</i> | OXA-198 | >32 | 8 |
| J1048 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| J4050 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| CNR 9 J9 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| F2045 | <i>A. baumannii</i> | NDM-1 + OXA-23 | >32 | >32 |
| B10051 | <i>A. baumannii</i> | NDM-1 + OXA-23 | >32 | >32 |
| H10044 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| CNR 10 G8 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| CNR 15 J5 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| CNR 22 F7 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| CNR 24 E3 | <i>A. baumannii</i> | NDM-1 + OXA-23 | >32 | >32 |
| CNR 24 I6 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| G4R8 | <i>A. baumannii</i> | NDM-2 | >32 | >32 |
| BH12051736 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| BG12067160 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| BH12081441 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| BH12081824 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| CNR 23 E5 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| 13-297 | <i>A. baumannii</i> | NDM-9 | >32 | >32 |
| 15-1151 | <i>A. baumannii</i> | NDM-1 + OXA-23 | >32 | >32 |
| 13-432 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| 18-2144 | <i>A. baumannii</i> | NDM-1 | >32 | >32 |
| 15-838 | <i>A. baumannii</i> | NDM-1 + OXA-23 | >32 | >32 |
| 17-1882 | <i>A. baumannii</i> | NDM-1 + OXA-23 | >32 | >32 |

| | | | | |
|---------|----------------------------|-----------------|-----|-----|
| H7R3 | <i>A. baumannii</i> | IMP-1 | 4 | 6 |
| H8R3 | <i>A. baumannii</i> | IMP-4 | 24 | 16 |
| 12-213 | <i>A. pittii</i> | IMP-1 | 24 | 32 |
| 15-867 | <i>A. pittii</i> | IMP-5 | 16 | >32 |
| 18-2101 | <i>A. junii</i> | IMP-37 + OXA-58 | 4 | 8 |
| C8O30 | <i>A. genomospecies</i> 16 | VIM-4 | >32 | >32 |
| 17-1934 | <i>A. pittii</i> | VIM-4 | 16 | 16 |
| F5O22 | <i>A. baumannii</i> | SIM-1 | >32 | >32 |
| B4O60 | <i>A. baumannii</i> | OXA-23 | >32 | >32 |
| E10O42 | <i>A. baumannii</i> | GES-14 | 32 | 32 |
| 18-2339 | <i>A. baumannii</i> | OXA-23 | >32 | >32 |
| 18-2373 | <i>A. baumannii</i> | OXA-23 | >32 | >32 |
| 18-2390 | <i>A. baumannii</i> | OXA-23 | >32 | >32 |
| 18-2335 | <i>A. baumannii</i> | OXA-23 | >32 | >32 |
| E8O15 | <i>A. baumannii</i> | OXA-25 | >32 | >32 |
| F1O15 | <i>A. baumannii</i> | OXA-26 | >32 | >32 |
| F7O45 | <i>A. baumannii</i> | OXA-72 | >32 | >32 |
| B9O47 | <i>A. baumannii</i> | OXA-72 | >32 | >32 |
| C8O50 | <i>A. baumannii</i> | OXA-72 | >32 | >32 |
| 18-2313 | <i>A. baumannii</i> | OXA-72 | >32 | >32 |
| 18-2314 | <i>A. baumannii</i> | OXA-72 | >32 | >32 |
| D4O25 | <i>A. baumannii</i> | OXA-58 | >32 | >32 |
| E7O25 | <i>A. baumannii</i> | OXA-58 | >32 | 24 |
| H2O36 | <i>A. baumannii</i> | OXA-58 | 24 | 24 |
| D1R7 | <i>A. baumannii</i> | OXA-97 | >32 | >32 |
| C3O30 | <i>A. baumannii</i> | OXA-92 | 32 | 16 |
| 18-2367 | <i>A. baumannii</i> | OXA-58 | 6 | 3 |
| 18-2323 | <i>A. nosocomialis</i> | OXA-420 | >32 | >32 |