

**Screening cultures (total n=21373)**  
rectal swabs (n=10528), throat swabs (n=8904) and stool (n=1941)

growth on Ceftrimid agar plates

Identification by MALDI TOF

***P. putida* group (n=89)**

Antimicrobial susceptibility testing

***P. putida* group meropenem non-susceptible (n=62)**

Molecular detection of carbapenamase genes

*P. aeruginosa*

Antimicrobial susceptibility testing

*P. aeruginosa* Meropenem non-susceptible

Molecular detection of carbapenamase genes

***P. putida* group *bla*<sub>VIM</sub> positive (n=41)**

***P. aeruginosa* *bla*<sub>VIM</sub> positive (n=7)**

***P. putida* *bla*<sub>VIM</sub> positive obtained from environmental sources (n=18)**

**Whole genome sequencing (n=76)**

***P. aeruginosa* *bla*<sub>VIM</sub> positive obtained from environmental sources (n=10)**

**Phylogenetic analysis**

**Determination of resistance gene content**

**Prediction of plasmids and characterisation of genetic environment of *bla*<sub>VIM</sub> gene**