**Supplementary table 1.** PCR primers and probes used to detect the carbapenemases KPC, OXA-48, NDM and VIM.

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| --- | --- | --- |
| KPC | Forward primerReverse primerProbeReference | 5’-TGCAGAGCCCAGTGTCAGTTT-3’5’-CGCTCTATCGGCGATACCA-3’5’-TTCCGTCACGGCGCGCG-3’\*  |
| OXA-48 | Forward primerReverse primerProbeReference | 5’-GCGAACCAAGCATTTTTACC-3’5’-ATCCTTAACCACGCCCAAAT-3’5’-CCCAATAGCTTGATCGCCCTCG-3’This study |
| NDM | Forward primerReverse primerProbeReference | 5’-CATTAGCCGCTGCATTGATG-3’5’-GTCGCCAGTTTCCATTTGCT-3’5’-CATGCCCGGTGAAATCCGCC-3’\* |
| VIM | Forward primerReverse primer 1Reverse primer 2ProbeReference | 5’-GCAAATTGGACTTCCYGTAA-3’5’-GACGGTGATGCGTACGTTG-3’5’-CCCTAAGGGCATCAACTCC-3’5’-TTTCATGACGACCGCGTCGG-3’This study |

\* A. van der Zee, L. Roorda, G. Bosman, A.C. Fluit, M. Hermans, P.H. Smits, A.G. van der Zanden, R. Te Witt, L.E. Bruijnesteijn van Coppenraet, J. Cohen Stuart, and J.M. Ossewaarde, Multi-centre evaluation of real-time multiplex PCR for detection of carbapenemase genes OXA-48, VIM, IMP, NDM and KPC. BMC Infect Dis 14 (2014) 27.

**Supplementary table 2.** Candidate peptides for detection of the carbapenemases KPC, OXA-48, NDM and VIM.

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| --- | --- | --- |
| Carbapenemase | Candidate peptides | Variants included |
| KPC | GFLAAAVLARAPIVLAVYTRSIGDTTFRFPLCSSFKAVTESLQKGNTTGNHRAAVPADWAVGDK | blaKPC-1 to 19, 21, 22, 24 to 26, 28 and 1 unannotated subtypeas aboveas aboveas aboveas aboveas aboveas above |
| OXA-48 | ANQAFLPASTFKSWNAHFTEHKSQGVVVLWNENKQQGFTNNLKQAMLTEANGDYIIRIPNSLIALDLGVVKDEHQVFKYSVVPVYQEFAR | blaOXA-48, 162, 163, 181, 199, 204, 232, 244, 245, 247, 370 and 3 unannotated subtypesblaOXA-48, 162, 163, 181, 204, 232, 244, 245, 247, 370as aboveblaOXA-48, 162, 163, 181, 199, 204, 232, 244, 245, 247, 370as aboveblaOXA-48, 162, 163, 181, 199, 204, 232, 244, 245, 247, 370 and 3 unannotated subtypesas aboveblaOXA-48, 162, 163, 181, 199, 204, 232, 244, 247, 370 and 3 unannotated subtypes |
| NDM | FGDLVFRQEINLPVALAVVTHAHQDKAFGAAFPKASMIVMSHSAPDSRPTIGQQMETGDQRAAITHTAT | blaNDM-1 to 16 and 1 unannotated subtypeas aboveas aboveas aboveblaNDM-1 to 9, 11 to 16 and 1 unannotated subtypeblaNDM-1 to 15 and 1 unannotated subtype |
| VIM | DGDELLLIDTAWGAKNTAALLAEIEKVGGVDVLRQIGLPVTRAVSTHFHDDR | blaVIM-1 to 6, 8 to 12, 14 to 20, 23 to 46, 49 to 51 and 11 unannotated subtypesas aboveblaVIM-1 to 12, 14 to 20, 23 to 46, 49 to 51 and 11 unannotated subtypesblaVIM-1 to 20, 23 to 47, 49 to 51 and 11 unannotated subtypesblaVIM-1 to 6, 8 to 12, 14 to 20, 23 to 33, 35 to 46, 49 to 51 and 11 unannotated subtypes |