

Supplementary Table S6. Cephalosporin resistance, ESBL genes, and production of ESBL.

| Sample no. | Resistance pattern | Presence of resistance gene(s) | Production of ESBL ^a |
|-----------------|---|---|---------------------------------|
| J133, J211 | R*: Cefepime + Cephalothin + Ceftazidime + Cefoxitin + Cefotaxime + Ceftriaxone | J133: <i>bla</i> _{OXA-1} + <i>ampC</i> + <i>bla</i> _{CTX-M} + <i>bla</i> _{TEM} | + |
| | | J211: <i>bla</i> _{OXA-1} + <i>bla</i> _{CMY-2} + <i>ampC</i> | + |
| Z304 | IR**: Cefepime + Cefoxitin R: Cephalothin + Ceftazidime + Cefotaxime + Ceftriaxone | <i>ampC</i> + <i>bla</i> _{CTX-M} + <i>bla</i> _{TEM} | + |
| Z92, H164 | IR: Cefepime R: Cephalothin + Ceftazidime + Cefoxitin + Cefotaxime + Ceftriaxone | Z92: <i>bla</i> _{CMY-2} + <i>ampC</i> | - |
| | | H164: <i>bla</i> _{CMY-2} + <i>ampC</i> + <i>bla</i> _{TEM} | - |
| Z25, J293 | IR: Cefoxitin R: Cefepime + Cephalothin + Ceftazidime + Cefotaxime + Ceftriaxone | Z25: <i>ampC</i> + <i>bla</i> _{CTX-M} + <i>bla</i> _{TEM} | - |
| | | J293: <i>ampC</i> + <i>bla</i> _{CTX-M} | + |
| Z138 | R: Cefepime + Cephalothin + Ceftazidime + Cefoxitin + Ceftriaxone | <i>ampC</i> + <i>bla</i> _{TEM} | - |
| H58 | IR: Ceftazidime + Ceftriaxone R: Cephalothin + Cefoxitin + Cefotaxime | <i>bla</i> _{CMY-2} + <i>ampC</i> | - |
| Z277 | IR: Ceftriaxone R: Cephalothin + Ceftazidime + Cefoxitin + Cefotaxime | <i>ampC</i> | - |
| J76, H126, J181 | IR: Cefepime + Ceftazidime + Cefoxitin R: Cephalothin + Cefotaxime | J76: <i>ampC</i> | - |
| | | H126, J181: <i>ampC</i> + <i>bla</i> _{TEM} | |
| J152 | IR: Cefepime + Cephalothin + Ceftazidime + Cefoxitin R: Cefotaxime | <i>ampC</i> | - |
| H80 | IR: Cefepime + Ceftazidime R: Cephalothin + Cefoxitin + Cefotaxime | <i>bla</i> _{OXA-1} + <i>ampC</i> | - |
| H29 | IR: Cefepime + Cefoxitin R: Cephalothin + Ceftazidime + Cefotaxime | <i>ampC</i> + <i>bla</i> _{TEM} | - |
| H300 | IR: Cefoxitin R: Cefepime + Cephalothin + Ceftazidime + Cefotaxime | <i>ampC</i> | - |
| H248 | IR: Ceftriaxone R: Cefepime + Cephalothin + Cefoxitin + Cefotaxime | <i>ampC</i> | - |
| J154 | IR: Cefepime + Cephalothin + Ceftazidime + Ceftriaxone R: Cefotaxime | <i>ampC</i> | - |
| J22, J183 | IR: Cefepime + Ceftazidime R: Cephalothin + Cefotaxime + Ceftriaxone | J22: <i>ampC</i> + <i>bla</i> _{CTX-M} + <i>bla</i> _{TEM} | - |
| | | J183: <i>ampC</i> + <i>bla</i> _{TEM} | |
| J132, H306 | IR: Cefepime + Ceftazidime + Ceftriaxone R: Cephalothin + Cefotaxime | <i>ampC</i> + <i>bla</i> _{TEM} | - |

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| J2, H75, H99, J185, Z199, H189, H224, H225, Z252, J264, Z275, Z302, Z303 | R: Cefepime + Cephalothin + Ceftazidime + Cefotaxime + Ceftriaxone | J2: <i>bla</i> _{OXA-1} + <i>ampC</i> + <i>bla</i> _{TEM} | J2, H75, H99, J185, Z199, H224, H225, Z252, J264, Z275, Z302, Z303: + |
| | | H75: <i>ampC</i> + <i>bla</i> _{CTX-M} | H189: - |
| | | H99, J185: <i>bla</i> _{OXA-1} + <i>ampC</i> + <i>bla</i> _{CTX-M} | |
| | | Z199, H189, H224, H225, J264, Z75: <i>ampC</i> + <i>bla</i> _{CTX-M} | |
| | | Z252, Z302, Z303: <i>ampC</i> + <i>bla</i> _{CTX-M} + <i>bla</i> _{TEM} | |
| J236 | IR: Cefepime + Cephalothin + Cefotaxime + Ceftriaxone | <i>bla</i> _{CMY-2} + <i>ampC</i> | - |
| Z225, Z227 | IR: Cefepime + Ceftriaxone R: Cephalothin + Cefotaxime | <i>ampC</i> + <i>bla</i> _{TEM} | - |
| J262 | IR: Cephalothin + Ceftazidime + Ceftriaxone R: Cefotaxime | <i>ampC</i> | - |
| Z248 | IR: Ceftazidime + Cefotaxime R: Cephalothin + Ceftriaxone | <i>ampC</i> | - |
| J207 | IR: Ceftazidime + Ceftriaxone R: Cephalothin + Cefotaxime | <i>ampC</i> | - |
| J295 | IR: Cefoxitin R: Cephalothin + Cefotaxime + Ceftriaxone | <i>ampC</i> | - |
| J291 | IR: Cefoxitin + Cefotaxime R: Cephalothin + Ceftriaxone | <i>bla</i> _{CMY-2} + <i>ampC</i> | - |
| J45, Z220 | IR: Cefoxitin + Cefotaxime + Ceftriaxone R: Cephalothin | J45: <i>ampC</i> | - |
| | | Z220: <i>bla</i> _{OXA-1} + <i>bla</i> _{CMY-2} + <i>ampC</i> + <i>bla</i> _{TEM} | |
| H24, H112, J158 | IR: Cefepime + Cefoxitin R: Cephalothin + Cefotaxime | H24, H112: <i>ampC</i> | - |
| | | J158: <i>ampC</i> + <i>bla</i> _{TEM} | |
| J28 | IR: Cephalothin + Ceftazidime + Cefoxitin R: Cefotaxime | <i>ampC</i> | - |
| Z307 | IR: Cefoxitin R: Cephalothin + Ceftazidime + Cefotaxime | <i>ampC</i> | - |
| H97 | IR: Cefepime + Cephalothin + Ceftazidime + Cefotaxime | <i>ampC</i> + <i>bla</i> _{TEM} | - |
| J296 | IR: Cefepime R: Cephalothin + Ceftazidime + Cefotaxime | <i>ampC</i> | - |
| | IR: Cefepime + Ceftazidime + Cefotaxime | J209, H305: <i>ampC</i> + <i>bla</i> _{TEM} | - |

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| J209, J235, H305 | R: Cephalothin | J235: <i>ampC</i> | |
| J25, H31, J135, J260, H293 | IR: Cefepime + Cephalothin + Ceftazidime R: Cefotaxime | J25, J135, J260: <i>ampC</i> | - |
| | | H31: <i>ampC</i> + <i>bla</i> _{TEM} | |
| | | H293: <i>bla</i> _{OXA-1} + <i>ampC</i> | |
| H122, J153 | IR: Cefepime + Ceftazidime R: Cephalothin + Cefotaxime | H122: <i>ampC</i> + <i>bla</i> _{TEM} | - |
| | | J153: <i>ampC</i> | |
| Z60, J79 | IR: Ceftazidime R: Cefepime + Cephalothin + Cefotaxime | Z60: <i>ampC</i> + <i>bla</i> _{CTX-M} | Z60: + |
| | | J79: <i>ampC</i> + <i>bla</i> _{CTX-M} + <i>bla</i> _{TEM} | J79: - |
| J24, Z222 | R: Cefepime + Cephalothin + Ceftazidime + Cefotaxime | J24: <i>ampC</i> + <i>bla</i> _{TEM} | J24: - |
| | | Z222: <i>ampC</i> + <i>bla</i> _{CTX-M} | Z222: + |
| J294 | IR: Cefepime + Ceftazidime R: Cephalothin | <i>ampC</i> + <i>bla</i> _{TEM} | - |
| H192 | IR: Ceftazidime + Ceftriaxone R: Cephalothin | <i>ampC</i> + <i>bla</i> _{TEM} | - |
| Z306 | R: Cephalothin + Cefotaxime + Ceftriaxone | <i>ampC</i> | - |
| J104 | IR: Cephalothin + Cefotaxime R: Cefoxitin | <i>ampC</i> | - |
| Z201 | IR: Cefoxitin + Cefotaxime R: Cephalothin | <i>ampC</i> + <i>bla</i> _{CTX-M} + <i>bla</i> _{TEM} | - |
| H250 | R: Cephalothin + Cefoxitin + Cefotaxime | <i>ampC</i> | - |
| Z319 | IR: Cephalothin + Ceftazidime + Cefotaxime | <i>ampC</i> | - |
| H124, Z281, H304 | IR: Cephalothin + Ceftazidime R: Cefotaxime | H124, H304: <i>ampC</i> + <i>bla</i> _{TEM} | - |
| | | Z281: <i>ampC</i> | |
| H166 | IR: Cefepime + Cephalothin + Cefotaxime | <i>ampC</i> | - |
| Z198 | IR: Ceftazidime R: Cephalothin + Cefotaxime | <i>ampC</i> + <i>bla</i> _{TEM} | - |
| H265 | R: Cephalothin + Ceftazidime + Cefotaxime | <i>ampC</i> | - |
| H295 | IR: Ceftazidime + Cefotaxime R: Cephalothin | <i>ampC</i> + <i>bla</i> _{TEM} | - |
| Z169, J208, J292 | IR: Cefepime + Cefotaxime R: Cephalothin | Z169: <i>bla</i> _{OXA-1} + <i>ampC</i> | - |
| | | J208: <i>ampC</i> + <i>bla</i> _{TEM} | |
| | | J292: <i>ampC</i> | |
| H109 | IR: Cefepime + Cephalothin + Cefotaxime | <i>bla</i> _{CMY-2} + <i>ampC</i> + <i>bla</i> _{TEM} | - |
| H103, H104 | IR: Cefepime + Cephalothin R: Cefotaxime | H103: <i>ampC</i> | - |
| | | H104: <i>ampC</i> + <i>bla</i> _{TEM} | |
| J85 | IR: Cefepime + Cefotaxime R: Cephalothin | <i>ampC</i> + <i>bla</i> _{TEM} | - |
| H32, Z118 | IR: Cefepime R: Cephalothin + Cefotaxime | <i>ampC</i> | - |
| Z19 | IR: Cefepime + Ceftazidime R: Cefotaxime | <i>ampC</i> | - |

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|---|-----------------------------------|---|---|
| Z56 | IR: Cefepime R: Cephalothin | <i>ampC</i> | - |
| H195 | IR: Ceftriaxone R: Cephalothin | <i>ampC</i> + <i>bla</i> _{TEM} | - |
| H168 | IR: Ceftazidime R: Cephalothin | <i>ampC</i> | - |
| H100 | IR: Cefepime | <i>ampC</i> | - |
| Z4, H51, H78, H79, J97, H106, H110, Z226, Z278, Z280 | IR: Cephalothin + Cefotaxime | Z4, J97, H106, H110, Z278: <i>ampC</i> + <i>bla</i> _{TEM} | - |
| | | H51, H78, H79, Z226, Z280: <i>ampC</i> | |
| J232, Z305, H303 | IR: Cephalothin R: Cefotaxime | J232: <i>ampC</i> | - |
| | | Z305: <i>ampC</i> + <i>bla</i> _{TEM} | |
| | | H303: <i>ampC</i> + <i>bla</i> _{CTX-M} | |
| Z82, Z84, Z89, Z93, H135, H220, H222, J239, Z279, H272, H302 | IR: Cefotaxime R: Cephalothin | Z82, Z84, Z89, Z93, H220, J239, H272: <i>ampC</i> | - |
| | | H135, H222, Z279, H302: <i>ampC</i> + <i>bla</i> _{TEM} | |
| Z202, J289, H301 | R: Cephalothin + Cefotaxime | <i>ampC</i> | - |
| H159, H82 | IR: Cefotaxime | <i>ampC</i> | - |
| H267 | R: Cefotaxime | <i>ampC</i> | - |
| H28, J86, H77, H297, Z58, Z88 | IR: Cephalothin | H28, J86, H77, H297: <i>ampC</i> | - |
| | | Z58, Z88: <i>ampC</i> + <i>bla</i> _{TEM} | |
| J18, J23, H221, H70, J126 | R: Cephalothin | J18, J23, H221: <i>ampC</i> + <i>bla</i> _{TEM} | - |
| | | H70, J126: <i>ampC</i> | |

^aExtended-spectrum β -lactamase

R*: Resistant

IR**: Intermediate resistant