

1 **SUPPLEMENTARY MATERIAL**

Commercial kit	Technique	<i>bla</i> <sub>GES</sub> gene detection	Time	Sample / Isolate	Nucleic acid purification/ concentration	Sensitivity (%)	Specificity (%)	Price per reaction <sup>a</sup>	Ref
Eazyplex® SuperBug CRE	LAMP fluorescent	No	15 min	Isolate	No	100	100	€€€	(28)
LAMP-HNB	LAMP –HNB	No	1 h	Isolate	No	100	100	€	(29)
Check Direct CPE	Multiplex qPCR	No	<1.5 h	Sample	No	100	88	€€	(26)
Amplidiag CarbaR+MCR Kit	Multiplex qPCR	Yes	3 h	Sample	Yes	92.5	100	€€	(21)
EntericBio CPE	Multiplex qPCR	Yes	3 h	Isolate	No	100	100	€€	(22)
BD Max System	Multiplex qPCR	Yes	<1 h	Isolate	Yes	100	100	€€€	(23)
In-house qPCR	Multiplex qPCR	No	<1.5 h	Isolate	No	100	100	€€*	(27)

In-house qPCR	Multiplex qPCR	Yes	1 h	Isolate	Yes	100	100	€€	(24)
In-house qPCR	Multiplex qPCR	Yes	3 h	Isolate	Yes	100	100	€€*	(25)
Luminex xTAG®	Multiplex PCR + Luminex	Yes	5 h	Isolate	Yes	100	99.4	€€	(20)
In-house PCR	Multiplex PCR + electrophoresis	Yes	<2 h	Isolate	No	100	100	€	(19)
Multiplex microarray	Multiplex microarray	No	2 h	Sample	No	98.3	99.6	€€€	(30)

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3 **Supplementary Table S1.** Percentages of sensitivity and specificity parameters reported in 12 articles on the application of genotypic  
4 methods for the detection of OXA-48 and GES carbapenemase genes.

5 <sup>a</sup>Prices per reaction (under 10 € = €, 10 € to 49 € = €€, and 50 € to 100 € = €€€) from the UK Health Security Agency, regardless of  
6 the price of the equipments.

7 (\*) Standard real time PCR price (33).