

Supplementary Material

Table S1. Characteristics of clinical isolates and control strains included in this study. * Environmental isolate. HUC: Hospital Universitario Cruces; N/A: Not Applicable.

Isolate	Collection Date	Patient gender	Patient age (years)	Clinical sample	Hospital	Ward	Clinical features	Genbank Accession number
<i>HUC-SM28 (Control)</i>	26/04/1999	Male	82	Sputum	HUC	IM for Elder Care	Pneumonia	SAMN39242203
<i>HUC-A11 (Control)</i>	25/02/2002	Male	76	NA	HUC	IM for Elder Care	Bronchiectasia	SAMN39242202
<i>HUC-86</i>	18/07/2009	Male	25	Blood culture	HUC	Recovery Unit	Bacteremia	SAMN39242188
<i>HUC-88</i>	17/02/2009	Male	40	Sputum	HUC	Recovery Unit	Pneumonia	SAMN39242189
<i>HUC-89</i>	03/06/2009	Male	61	Swab	HUC	Major Burns Unit	Third-degree burn	SAMN39242190
<i>HUC-90</i>	26/06/2009	Male	49	Surveillance swab	HUC	ICU	Aortic aneurysm	SAMN39242191
<i>HUC-92</i>	18/09/2009	Male	50	Surveillance swab	HUC	ID Dept	Multiple sclerosis	SAMN39242192
<i>HUC-93</i>	13/08/2009	Male	85	Skin swab	HUC	IM for Elder Care	CVA (Cerebral Vascular Accident)	SAMN39242193
<i>HUC-94</i>	12/08/2009	Male	49	Surveillance swab	HUC	ICU	Tetraparesis	SAMN39242194
<i>HUC-96</i>	02/07/2009	Male	49	Swab	HUC	ICU	Poliraduculitis	SAMN39242195
<i>HUC-97</i>	17/06/2009	Male	50	Swab	HUC	ICU	Pneumonia	SAMN39242196
<i>HUC-98</i>	26/06/2009	Male	51	Surveillance swab	HUC	ICU	Brain aneurysm	SAMN39242197
<i>HUC-99</i>	25/06/2009	Male	40	Not surgical wound	HUC	Internal Medicine	Brain aneurysm	SAMN39242198
<i>HUC-100</i>	24/08/2009	Female	67	Tip of Intravascular catheter	HUC	Major Burns Unit	Third-degree burn	SAMN39242199
<i>HUC-101</i>	24/08/2009	Male	47	Tip of Intravascular catheter	HUC	ICU	Bacteraemia	SAMN39243021
<i>HUC-106</i>	09/10/2009	Male	48	Swab	HUC	Recovery Unit	Quadriplegia	SAMN39242200
<i>HUC-109</i>	22/06/2009	Female	36	Tip of Intravascular catheter	HUC	ICU	Cushing's syndrome dysregulation	SAMN39242201

<i>Hi873</i>	07/12/2019	Female	32	Inguinal swab (burn)	HUC	Major Burns Unit	Third-degree burn	SAMN39242200
<i>Aba1516</i>	11/06/2020	Male	64	Surveillance swab	HUC	ICU	COVID19	SAMN39242205
<i>Aba1517</i>	11/06/2020	Female	53	Blood culture	HUC	ICU	Bacteraemia	SAMN39242206
<i>Aba1518</i>	15/06/2020	Male	73	Inguinal swab	HUC	ICU	COVID19	SAMN39242207
<i>Aba1519</i>	02/06/2020	Female	63	Urinary catheterization	HUC	ICU	Quadriplegia	SAMN39242208
<i>Aba1520*</i>	15/06/2020	N/A	N/A	Patient room 1: bedrails	HUC	ICU	N/A	SAMN39242209
<i>Aba1521</i>	14/07/2020	Male	72	Surgical wound	HUC	ICU	COVID19	SAMN39242210
<i>Aba1522</i>	13/10/2020	Male	64	Blood culture	HUC	ICU	COVID19	SAMN39242211
<i>Aba1523</i>	13/10/2020	Male	43	Rectal swab	HUC	ICU	COVID19	SAMN39242212
<i>Aba1524</i>	12/10/2020	Male	64	Blood culture	HUC	ICU	Bacteraemia	SAMN39242213
<i>Aba1525</i>	27/09/2020	Female	47	Pharyngeal swab	HUC	ICU	Kidney transplant, hepatic pathology, COVID19	SAMN39242214
<i>Aba1526</i>	20/10/2020	Male	62	Inguinal swab	HUC	ICU	Kidney transplant failure	SAMN39242215
<i>Aba1527</i>	24/10/2020	Female	35	Blood culture	HUC	ICU	Bacteraemia	SAMN39242216
<i>Aba1528</i>	17/07/2020	Female	65	Surgical wound	HUC	ICU	Cardiopathy	SAMN39242217
<i>Aba1529*</i>	16/10/2020	N/A	N/A	Patient room 2: furniture	HUC	ICU	N/A	SAMN39242218
<i>Aba1530*</i>	16/10/2020	N/A	N/A	Patient room 2: bedrails	HUC	ICU	N/A	SAMN39242219
<i>Aba1531*</i>	30/09/2020	N/A	N/A	Patient room 3: mattress	HUC	ICU	N/A	SAMN39242220
<i>Aba1532*</i>	24/08/2020	N/A	N/A	Patient room 4: bedrails	HUC	ICU	N/A	SAMN39242221
<i>Aba1533*</i>	23/10/2020	N/A	N/A	Patient room 4: bedrails	HUC	ICU	N/A	SAMN39242222
<i>Aba1534*</i>	23/10/2020	N/A	N/A	Patient room 5: mattress	HUC	ICU	N/A	SAMN39242223
<i>Aba1552</i>	04/01/2021	Male	64	Urine	HUC	ICU	COVID19	SAMN39242224

Table S2. Antibiotic susceptibility profile of the CRAB isolates belonging to Outbreak 1 and control strains.

Isolate	MIC (mg/L)										
	Imipenem	Meropenem	Gentamicin	Tobramycin	Amikacin	Ciprofloxacin	Levofloxacin	Cotrimoxazole	Minocycline*	Tigecycline**	Colistin
HUC-86	≥16, R	≥16, R	≥16, R	≥16, R	8, S***	≥4, R	≥8, R	>4/76, R	≤1	4, R	≤0,5, S
HUC-88	≥16, R	≥16, R	≥16, R	8, R	32, R	≥4, R	≥8, R	>4/76, R	≤1	4, R	≥16, R
HUC-89	≥16, R	≥16, R	≥16, R	8, R	16, R	≥4, R	≥8, R	>4/76, R	≤1	4, R	≤0,5, S
HUC-90	≥16, R	≥16, R	≥16, R	≥16, R	32, R	≥4, R	≥8, R	>4/76, R	≤1	4, R	≤0,5, S
HUC-92	≥16, R	≥16, R	≥16, R	8, R	8, S***	≥4, R	≥8, R	>4/76, R	≤1	4, R	≤0,5, S
HUC-93	≥16, R	≥16, R	≥16, R	8, R	8, S***	≥4, R	≥8, R	>4/76, R	≤1	1, R	≤0,5, S
HUC-94	≥16, R	≥16, R	≥16, R	8, R	16, R	≥4, R	≥8, R	>4/76, R	≤1	4, R	≤0,5, S
HUC-96	≥16, R	≥16, R	≥16, R	≥16, R	32, R	≥4, R	≥8, R	>4/76, R	≤1	4, R	≤0,5, S
HUC-97	≥16, R	≥16, R	≥16, R	8, R	32, R	≥4, R	≥8, R	>4/76, R	≤1	4, R	≤0,5, S
HUC-98	≥16, R	≥16, R	≥16, R	≥16, R	32, R	≥4, R	≥8, R	>4/76, R	≤1	4, R	≤0,5, S
HUC-99	≥16, R	≥16, R	≥16, R	≥16, R	≥64, R	≥4, R	≥8, R	>4/76, R	≤1	4, R	≤0,5, S
HUC-100	≥16, R	≥16, R	≥16, R	≥16, R	16, R	≥4, R	≥8, R	>4/76, R	≤1	2, R	≤0,5, S
HUC-101	≥16, R	≥16, R	≥16, R	≥16, R	16, R	≥4, R	≥8, R	>4/76, R	≤1	2, R	≤0,5, S
HUC-106	≥16, R	≥16, R	8, R	4, S***	≤2, S***	≥4, R	≥8, R	2/38, S	≤1	≤0,5, S	≤0,5, S
HUC-109	≥16, R	≥16, R	8, R	4, S***	≤2, S***	≥4, R	≥8, R	2/38, S	≤1	≤0,5, S	≤0,5, S
HUC-A11	≥16, R	≥16, R	≥16, R	≥16, R	≥64, R	≥4, R	≥8, R	>4/76, R	≤1	1, R	≤0,5, S
HUC-SM28	≥16, R	≥16, R	≥16, R	≥16, R	≥64, R	≥4, R	≥8, R	>4/76, R	≤1	4, R	≤0,5, S
MIC ₅₀ (mg/L)	≥16, R	≥16, R	≥16, R	≥16, R	32, R	≥4, R	≥8, R	>4/76, R	≤1	4, R	≤0,5, S
MIC ₉₀ (mg/L)	≥16, R	≥16, R	≥16, R	≥16, R	≥64, R	≥4, R	≥8, R	>4/76, R	≤1	4, R	≤0,5, S

* There are no breakpoints available as EUCAST considers the agent is unsuitable for treatment of systemic infections

** In the absence of EUCAST breakpoints for this organism, breakpoint of 0.5 mg/L for Enterobacterales was used

*** According to EUCAST there is insufficient evidence to recommend this agent in monotherapy

Table S3. Antibiotic susceptibility profile of the CRAb isolates belonging to Outbreak 2.

Isolate	MIC (mg/L)										
	Imipenem	Meropenem	Gentamicin	Tobramycin	Amikacin	Ciprofloxacin	Levofloxacin	Cotrimoxazole	Minocycline*	Tigecycline**	Colistin
Hi873	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	2, R	≤0,5, S
Aba1516	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	4, R	≤0,5, S
Aba1517	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	4, R	≤0,5, S
Aba1518	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	4, R	≤0,5, S
Aba1519	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	4, R	≤0,5, S
Aba1520	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	4, R	≤0,5, S
Aba1521	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	4, R	≤0,5, S
Aba1522	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
Aba1523	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
Aba1524	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
Aba1525	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
Aba1526	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
Aba1527	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	4, R	≤0,5, S
Aba1528	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
Aba1529	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
Aba1530	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
Aba1531	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
Aba1532	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
Aba1533	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
Aba1534	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
Aba1552	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
MIC ₅₀ (mg/L)	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	1, R	≤0,5, S
MIC ₉₀ (mg/L)	>8, R	>8, R	>8, R	>8, R	32, R	>2, R	>4, R	>4/76, R	≤1	4, R	≤0,5, S

* There are no breakpoints available as EUCAST considers the agent is unsuitable for treatment of systemic infections

** In the absence of EUCAST breakpoints for this organism, breakpoint of 0.5 mg/L for Enterobacterales was used