

Table S1. Incidence and distribution of CPE and ESBL-E colonization by ward and period during the R-GNOSIS Project.

Ward	Period ¹	Intervention Strategy ²	Patients (No.)	ESBL-E				CPE			
				Isolates (No.)	Patients (No.)	Incidence (%)	±95% CI	Isolates (No.)	Patients (No.)	Incidence (%)	±95% CI
TOTAL			8209	730	687	8.4%	0.60	198	162	2.0%	0.30
Medical wards	P1	SP	2331	222	209	9.0%	1.16	67	52	2.2%	0.60
Surgical wards	P1	CI	2006	165	159	7.9%	1.18	31	27	1.3%	0.50
TOTAL	P1		4337	387	368	8.5%	0.83	98	79	1.8%	0.40
Medical wards	P2	CI	2006	197	184	9.2%	1.26	49	42	2.1%	0.63
Surgical wards	P2	SP	1866	146	135	7.2%	1.18	51	41	2.2%	0.67
TOTAL	P2		3872	343	319	8.2%	0.87	100	83	2.1%	0.46
Gastroenterology	P1	SP	1165	125	117	10.0%	1.73	30	26	2.2%	0.85
	P2	CI	999	111	102	10.2%	1.88	18	15	1.5%	0.75
	Total		2164	236	219	10.1%	1.27	48	41	1.9%	0.57
Pneumology	P1	SP	1166	97	92	7.9%	1.55	37	26	2.2%	0.85
	P2	CI	1007	86	82	8.1%	1.69	31	27	2.7%	1.0
	Total		2173	183	174	8.0%	1.14	68	53	2.4%	0.65
Medical Wards	TOTAL		4337	419	393	9.1%	0.85	116	94	2.2%	0.43
Neurosurgery	P1	CI	456	40	39	8.6%	2.57	14	12	2.6%	1.47
	P2	SP	456	39	37	8.1%	2.51	28	22	4.8%	1.97
	Total		912	79	76	8.3%	1.79	42	34	3.7%	1.23
Urology	P1	CI	1550	125	120	7.7%	1.33	17	15	1.0%	0.49
	P2	SP	1410	107	98	7.0%	1.33	23	19	1.3%	0.60
	Total		2960	232	218	7.4%	0.94	40	34	1.1%	0.38
Surgical wards	TOTAL		3872	311	294	7.6%	0.83	82	68	1.8%	0.41

¹Periods= P1 (March 2014-March 2015) and P2 (April 2015-March 2016). ² Intervention strategy for ESBL-E carriers. SP= Standard precautions; CI= Contact Isolation.

Table S2. CPE species distribution and diversity (SDI) by semesters and periods during the R-GNOSIS Project.

Ward	Semester	Kp	Ec	Ecl	Kaer	Ek	Cf	Ck	Ko	Ka	Ro	Rp	TOTAL	SDI
Gastroenterology	S1	4	6	5	-	-	-	1	-	1	-	-	17	0.77
	S2	6	1	3	1	-	-	-	1	1	-	-	13	0.77
	S3	3	4	1	-	-	1	-	1	-	-	-	10	0.8
	S4	5	3	-	-	-	-	-	-	-	-	-	8	0.53
	Total	18	14	9	1	-	1	1	2	2	-	-	48	0.74
Pneumology	S1	4	2	3	-	-	2	-	-	1	1	-	13	0.86
	S2	10	5	1	1	-	3	-	3	1	-	-	24	0.78
	S3	11	2	2	-	-	1	-	-	-	-	-	16	0.52
	S4	9	3	1	-	-	1	-	-	-	-	1	15	0.63
	Total	34	12	7	1	-	7	-	3	2	1	1	68	0.7
Neurosurgery	S1	6	1	-	-	-	-	-	-	-	-	-	7	0.29
	S2	3	2	1	-	-	-	-	1	-	-	-	7	0.81
	S3	3	-	1	-	-	-	-	-	-	-	-	4	0.5
	S4	22	2	-	-	-	-	-	-	-	-	-	24	0.16
	Total	34	5	2	-	-	-	-	1	-	-	-	42	0.34
Urology	S1	3	2	-	-	-	-	-	-	1	-	-	6	0.73
	S2	4	-	2	2	-	1	-	2	-	-	-	11	0.84
	S3	11	3	1	2	-	-	-	-	1	-	-	18	0.61
	S4	2	2	1	-	-	-	-	-	-	-	-	5	0.8
	Total	20	7	4	4	-	1	-	2	2	-	-	40	0.71
	Total S1	17	11	8	-	-	2	1	-	3	1	-	43	0.73
	Total S2	23	8	7	4	-	4	-	7	2	-	-	55	0.77
	Total S3	28	9	5	2	-	2	-	1	1	-	-	48	0.62
	Total S4	38	10	2	-	-	1	-	-	-	-	1	52	0.43
Gastroenterology	P1	10	7	8	1	-	-	1	1	2	-	-	30	0.77
	P2	8	7	1	-	-	1	-	1	-	-	-	18	0.68
Pneumology	P1	14	7	4	1	-	5	-	3	2	1	-	37	0.77
	P2	20	5	3	-	-	2	-	-	-	-	1	31	0.56
Medical wards	P1	24	14	12	2	-	5	1	4	4	1	-	67	0.79
	P2	28	12	4	-	-	3	-	1	-	-	1	49	0.61
Neurosurgery	P1	9	3	1	-	-	-	-	1	-	-	-	14	0.57
	P2	25	2	1	-	-	-	-	-	-	-	-	28	0.2
Urology	P1	7	2	2	2	-	1	-	2	1	-	-	17	0.76
	P2	13	5	2	2	-	-	-	-	1	-	-	23	0.64
Surgical wards	P1	16	5	3	2	-	1	-	3	1	-	-	31	0.71
	P2	38	7	3	2	-	-	-	-	1	-	-	51	0.43
	Total P1	40	19	15	4	-	6	1	7	5	1	-	98	0.77
	Total P2	66	19	7	2	-	3	-	1	1	-	1	100	0.54
	TOTAL	106	38	22	6	-	9	1	8	6	1	1	198	0.66

Kp=*K. pneumoniae*, Ec=*E. coli*, Ecl=*E. cloacae* complex, Kaer=*K. aerogenes*, Ek=*E. kobei*; Cf=*C. freundii*, Ck=*C. koseri*, Ko=*K. oxytoca*, Ka=*Kluyvera* spp., Ro=*R. ornithinolytica*, Rp=*R. planticola*.

Table S3. ESBL-E species distribution and diversity (SDI) by semesters and periods during the R-GNOSIS Project.

Ward	Semester	Kp	Ec	Ecl	Kaer	Ek	Cf	Ck	Kox	Ka	Ro	Rp	TOTAL	SDI
Gastroenterology	S1	8	44	-	-	-	1	-	1	-	-	-	54	0.32
	S2	17	54	-	-	-	-	-	-	-	-	-	71	0.37
	S3	18	37	2	-	1	-	-	-	-	-	-	58	0.46
	S4	12	41	-	-	-	-	-	-	-	-	-	53	0.36
	Total		176	2	-	1	1	-	1	-	-	-	236	0.39
Pneumology	S1	3	43	4	-	-	1	-	-	-	-	-	51	0.28
	S2	9	35	-	-	-	1	-	1	-	-	-	46	0.39
	S3	6	49	-	-	1	2	-	-	-	-	-	58	0.28
	S4	5	21	1	-	-	-	-	1	-	-	-	28	0.42
	Total		148	5	-	1	4	-	2	-	-	-	183	0.33
Neurosurgery	S1	4	13	-	-	-	1	1	-	-	-	-	19	0.51
	S2	6	14	-	-	-	1	-	-	-	-	-	21	0.49
	S3	4	15	-	-	-	2	-	-	-	-	-	21	0.47
	S4	4	12	1	-	-	-	-	1	-	-	-	18	0.53
	Total		54	1	-	-	4	1	1	-	-	-	79	0.44
Urology	S1	6	59	-	-	-	1	-	-	-	-	-	66	0.19
	S2	9	49	-	1	-	-	-	-	-	-	-	59	0.29
	S3	10	51	3	-	1	1	1	-	-	-	-	67	0.4
	S4	3	36	1	-	-	-	-	-	-	-	-	40	0.19
	Total		195	4	1	1	2	1	-	-	-	-	232	0.28
	Total S1		21	159	4	-	-	4	1	1	-	-	190	0.29
	Total S2		41	152	-	1	-	2	-	1	-	-	197	0.36
	Total S3		38	152	5	-	3	5	1	-	-	-	204	0.41
	Total S4		24	110	3	-	-	-	-	2	-	-	139	0.34
Gastroenterology	P1	25	98	-	-	-	1	-	1	-	-	-	125	0.35
	P2	30	78	2	-	1	-	-	-	-	-	-	111	0.44
Pneumology	P1	12	78	4	-	-	2	-	1	-	-	-	97	0.34
	P2	11	70	1	-	1	2	-	1	-	-	-	86	0.33
Medical wards	P1	37	176	4	-	-	3	-	2	-	-	-	222	0.35
	P2	41	148	3	-	2	2	-	1	-	-	-	197	0.4
Neurosurgery	P1	10	27	-	-	-	2	1	-	-	-	-	40	0.47
	P2	8	27	1	-	-	2	-	1	-	-	-	39	0.49
Urology	P1	15	108	-	1	-	1	-	-	-	-	-	125	0.24
	P2	13	87	4	-	1	1	1	-	-	-	-	107	0.32
Surgical wards	P1	25	135	-	1	-	3	1	-	-	-	-	165	0.31
	P2	21	114	5	-	1	3	1	1	-	-	-	146	0.37
	Total P1		62	311	4	1	-	6	1	2	-	-	387	0.33
	Total P2		62	262	8	-	3	5	1	2	-	-	343	0.38
	TOTAL		124	573	12	1	3	11	2	4	-	-	730	0.35

Kp=*K. pneumoniae*, Ec=*E. coli*, Ecl=*E. cloacae* complex, Kaer=*K. aerogenes*, Ek=*E. kobei*; Cf=*C. freundii*, Ck=*C. koseri*, Kox=*K. oxytoca*, Ka=*Kluyvera* spp., Ro=*R. ornithinolytica*, Rp=*R. planticola*.