Methods. BLs in *A. baumannii* were identified by genotyping. Broth microdilution MICs and susceptibilities were obtained following CLSI methods and breakpoints (BPs), except for ceftazidime-avibactam (CAZ/AVI) where FDA *P. aeruginosa* BPs were used. CLSI FEP BPs were used for FEP/AAI101.

Results. All OXA-51 producers had the ISAba1 promoter. MIC_{90} data and % susceptibilities (%S) for FEP/AAI101 and comparators are shown in the Table: FEP/AAI101 was highly active against meropenem-susceptible (MPM^s) isolates. FEP/AAI101 (AAI101 fixed at 8 µg/ml) covered 67% of OXA-51 and 53% of OXA-58 strains. Lower susceptibilities were obtained for OXA-23 and OXA-24/40 producers. FEP/AAI101 was the most active β-lactam product. Colistin (COL) was the only agent with consistently high activity against all *A. baumannii* isolates.

Group		FEP	FEP/ AAI101 [4*]	FEP/ AAI101 [8*]	CAZ/ AVI [4*]	AMP/ SUL [2:1*]	PIP/ TAZ [4*]	COL
MPM^s	MIC_{90}	64	8	0.06	64	32	256	1
(*N* = 17)	%S	70.6	94.1	100	58.8	82.4	70.6	100
OXA-23	MIC_{90}	>128	>128	>128	>128	128	>256	0.5
(*N* = 30)	%S	0	0	0	3.3	0	0	96.7
OXA-24/40	MIC_{90}	>128	>128	>128	64	128	>256	4
(*N* = 30)	%S	3.3	3.3	6.7	6.7	3.3	0	86.7
OXA-51	MIC_{90}	>128	>128	>128	>128	>128	>256	0.5
(*N* = 30)	%S	0	36.7	66.7	3.3	16.7	0	100
OXA-58	MIC_{90}	>128	128	64	>128	64	>256	1
(*N* = 30)	%S	13.3	33.3	53.3	16.7	6.7	0	100
All	MIC_{90}	>128	>128	>128	>128	128	>256	1
(*N* = 137)	%S	12.4	27.7	40.1	13.9	16.1	8.8	96.4

AMP, ampicillin; SUL, sulbactam; PIP, piperacillin; TAZ, tazobactam
*BLI at fixed concentration in µg/mL or ratio as indicated

Conclusion. FEP/AAI101 was the most potent β-lactam product tested against clinical isolates of *A. baumannii* producing OXA-51 and OXA-58 β-lactamases. Infections by this difficult pathogen often require combination therapy, of which FEP-AAI101 may be a component.

Disclosures. **S. Shapiro**, Allecra: Employee, Salary

1201. Comparative *in vitro* Activities of Ceftazidime–Avibactam and Ceftolozane-tazobactam Against Characterized β-Lactamase-producing *Pseudomonas aeruginosa*

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Session: 147. Expanded Spectrum – New Antimicrobial Susceptibility Testing
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Background. Ceftazidime-avibactam (CAZ-AVI) and ceftolozane-tazobactam (TOL-TAZ) are cephalosporin/β-lactamase inhibitor combinations recently approved for the treatment of complicated intra-abdominal infections (cIAI) and complicated urinary tract infections (cUTI). Both agents are reported to have antibacterial activity against *P. aeruginosa* including multi-drug-resistant strains, but few studies have directly compared the activities of both agents against the same strains in a single study. This study evaluated the activities of both agents against characterized β-lactamase-producing *P. aeruginosa* using broth microdilution (BMD) and disk diffusion (DD) methods.

Methods. A total of 98 clinical isolates of *P. aeruginosa*, including characterized β-lactamase-producing strains were tested for susceptibility to CAZ-AVI and TOL-TAZ using BMD and DD and results were interpreted using FDA/CLSI breakpoints. The isolates tested included CTX-M (ESBL), AmpC, KPC, OXA and metallo-β-lactamase (MBL) producing organisms. The results from both BMD and DD were analyzed to assess the correlation between the testing methods and ability to differentiate isolates susceptible and resistant to both agents.

Results. CAZ-AVI and TOL-TAZ exhibited similar MIC values against all isolates with $MIC_{50/90}$ values of 2 and 16 µg/mL, respectively. When results were interpreted using FDA/CLSI breakpoints, the susceptibility rates for CAZ-AVI and TOL-TAZ were 82.7% and 62.2%, respectively. Isolates resistant to CAZ-AVI were predominantly MBL-producers whereas isolates resistant to TOL-TAZ included both MBL and KPC-producing *P. aeruginosa*. Both agents were active against AmpC-producing *P. aeruginosa* and both agents showed good correlation between BMD and DD methods.

Conclusion. CAZ-AVI and TOL-TAZ were active against β-lactamase-producing subsets of *P. aeruginosa* isolates in this challenge set. Both AmpC and KPC-producing *P. aeruginosa* were susceptible to CAZ-AVI whereas TOL-TAZ activity was limited to AmpC-producing organisms. Neither agent was active against MBL-producing organisms.

Disclosures. **L. Y. Lin**, Allergan plc: Employee, Salary; **M. Vail**, Allergan plc: Employee and Intern during study conduct and analysis, Educational support; **D. Debabov**, Allergan plc: Employee, Salary; **I. Critchley**, Allergan plc: Employee, Salary

1202. Activity of Ceftolozane-Tazobactam and Comparators When Tested against Bacterial Surveillance Isolates Collected from Pediatric Patients in the US during 2012–2016 as Part of a Global Surveillance Program

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Background. Ceftolozane-tazobactam (C-T) is an antibacterial combination of a novel antipseudomonal cephalosporin and a β-lactamase inhibitor. C-T was approved by the US Food and Drug Administration in 2014 and by the European Medicine Agency in 2015 to treat complicated urinary tract infections, acute pyelonephritis, and complicated intra-abdominal infections in adults. The Program to Assess Ceftolozane-Tazobactam Susceptibility (PACTS) monitors C-T resistance to gram-negative (GN) isolates worldwide.

Methods. A total of 4121 GN isolates were collected during 2012–2016 from pediatric patients (<18 years old) in 31 US hospitals and tested for C-T susceptibility (S) by CLSI broth microdilution method in a central monitoring laboratory (JMI Laboratories). Other antibiotics tested were amikacin (AMK), cefepime (FEP), ceftazidime (CAZ), colistin (COL), levofloxacin (LVX), meropenem (MER), and piperacillin-tazobactam (TZP). Antibiotic-resistant phenotypes identified using CLSI (2017) clinical breakpoints included: carbapenem-resistant *Enterobacteriaceae* (CRE), non-CRE extended-spectrum β-lactamase screen positive (ESBL, non-CRE), ceftazidime-nonsusceptible (CAZ-NS), and meropenem-NS (MER-NS). EUCAST (2017) COL clinical breakpoints were used for *Enterobacteriaceae* (ENT).

Results. The most common infection type in hospitalized pediatric patients was pneumonia (*n* = 1,488) followed by urinary tract infection (*n* = 1,143) and bloodstream infection (*n* = 767). A total of 2,969 ENT and 1,152 non-enterics were isolated. The 5 most common species were *Escherichia coli* (EC: 1,311), *Pseudomonas aeruginosa* (PSA: 821 isolates), *Klebsiella pneumoniae* (KPN: 429), *Enterobacter cloacae* complex (ECC: 360), and *Serratia marcescens* (SM: 264). Susceptibilities of C-T and comparators for the main species and resistant phenotypes are shown in the Table. Only 7 isolates were CRE in this study.

Conclusion. C-T demonstrated good activity against pediatric ENT isolates (96.1%S), EC (99.2%S), and KPN (97.9%S). For ENT, all agents but COL had >90% S. For PSA, C-T demonstrated potent activity (99.5%S) and was the most potent antibiotic tested with activity similar to COL.

		% susceptible[a]							
Organism / organism group	N	C-T	FEP	CAZ	MER	TZP	LVX	AMK	COL[b]
ENT	2,969	96.1	95.2	91.0	99.7	94.0	92.9	99.8	81.9[c]
EC	1,311	99.2	94.0	93.8	99.8	96.9	86.2	99.7	99.8
EC ESBL, non-CRE	119	92.4	35.3	32.8	99.2	84.0	37.0	97.5	100.0
KPN	429	97.9	92.3	90.9	98.8	95.3	98.1	99.8	98.8
KPN ESBL, non-CRE	44	86.4	36.4	20.5	97.7	70.5	88.6	100.0	95.5
ECC	360	84.2	95.3	77.5	99.7	82.7	100.0	100.0	77.1
SM	264	97.3	98.1	97.0	100.0	97.0	97.7	99.6	N/A
PSA	821	99.6	94.3	92.8	92.4	90.7	90.4	97.2	99.5
CAZ-NS	59	94.9	37.3	0.0	64.4	13.6	71.2	88.1	98.3
MER-NS	62	96.8	72.6	66.1	0.0	62.9	54.8	90.3	100

[a]CLSI (2017)
[b]EUCAST (2017)
[c]Includes species that are inherently resistant to COL

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1203. In Vitro Activity of Newer Antimicrobials and Relevant Comparators Vs. 349 *Stenotrophomonas maltophilia* Clinical Isolates Obtained from Patients in Canadian Hospitals (CANWARD, 2011–2016)

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Background. *Stenotrophomonas maltophilia* is a non-fermentative gram-negative bacillus that has emerged as an important opportunistic pathogen among hospitalized, debilitated patients. Treatment options for infections caused by this organism are limited because it is intrinsically resistant to antimicrobials from multiple different classes. The purpose of this study was to evaluate the in vitro activity of several newer antimicrobial agents (ceftazidime-avibactam [CZA], ceftolozane-tazobactam [C/T], moxifloxacin [MXF], tigecycline [TGC]) and relevant comparators [e.g., trimethoprim-sulfamethoxazole [TMP-SMX]) against a large collection of *S. maltophilia* clinical isolates obtained as part of an ongoing national surveillance study (CANWARD, 2011–2016).