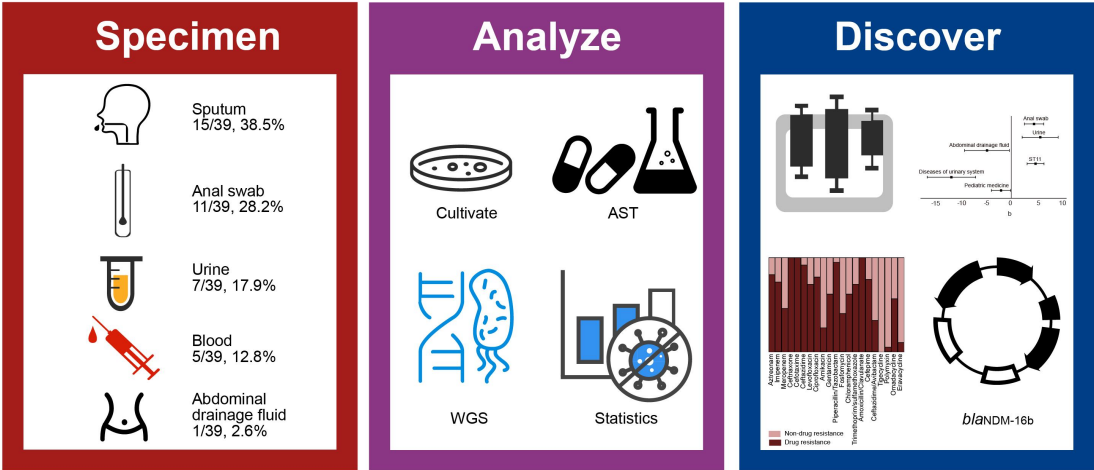


Graphical Abstract



Flowchart

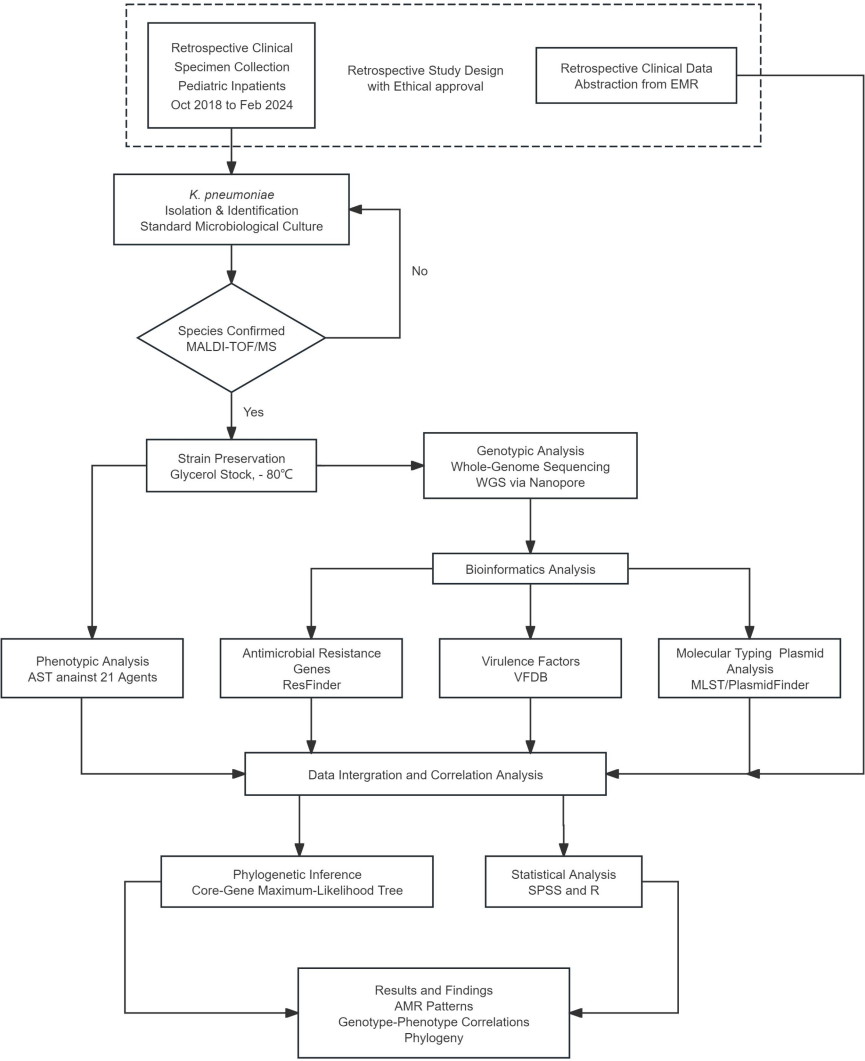


Table S1

Table S1 Information of pediatric patients and specimens	
Characteristic (37 patients, 39 isolates)	
Age (year) M (P₂₅, P₇₅)	2.0 (0.5, 6.0)
Sex [n (%)]	
Male	24 (64.9)
Female	13 (35.1)
Specimens [n (%)]	
Sputum	15 (38.5)
Anal swab	11 (28.2)
Urine	7 (17.9)
Blood	5 (12.8)
Abdominal drainage fluid	1 (2.6)
Departments [n (%)]	
PICU	15 (40.6)
Pediatric medicine	14 (37.8)
Pediatric surgery	8 (21.6)

Table S3

Strain	Antibiotics exposure
ETFK1306	Gentamicin; Vancomycin; Moxalactam; Imipenem and cilastatin; Azithromycin; Linezolid; Cefoperazone sulbactam; Rifamycin; Meropenem
ETFK24	Peracillin sulbactam; Cefoperazone sulbactam; Ceftazidime; Rifamycin; Penicillin g
ETFK2527	Cefoperazone sulbactam; Meropenem
ETFK2566	Cefoperazone sulbactam; Latamoxef
ETFK2603	Cefoperazone sulbactam
ETFK3149	Moxalactam; Cefoperazone sulbactam; Meropenem
ETFK3579	Polymyxin; Compound sulfamethoxazole; Meropenem; Ceftazidime avibactam
ETFK3699	
ETFK3743	Polymyxin; Compound sulfamethoxazole; Meropenem; Ceftazidime avibactam
ETFK3791	
ETFK3867	Meropenem; Avibactam ceftazidime; Aztreonam
ETFK4018	Ornidazole; Ceftriaxone; Meropenem; Vancomycin; Moxalactam; Cefaclor
ETFK4202	Cefminox; Cefacoxime
ETFK4374	
ETFK5076	
ETFK5145	
ETFK5280	
ETFK5283	Tigecycline; Cefazole oxime; Meropenem; Vancomycin; Polymyxin
ETFK5459	Moxalactam; Cefminox; Azithromycin
ETFK5515	Azithromycin; Cefoperazone sulbactam; Imipenem and cilastatin; Linezolid; Sulfonamide tablets; Cefepime; Meropenem
ETFK555	
ETFK5559	Polymyxin; Moxalactam; Imipenem; Vancomycin
ETFK5728	Ceftriaxone; Azithromycin; Moxalactam; Rifamycin; Cefoperazone sulbactam
ETFK574	Moxalactam; Azithromycin; Cefoperazone sulbactam; Imipenem and cilastatin; Rifamycin
ETFK5780	Moxalactam; Azithromycin; Meropenem; Tigecycline; Cefoperazone sulbactam
ETFK6090	Latamoxef
ETFK6184	
ETFK6299	Imipenem and cilastatin; Vancomycin; Aztreonam; Tigecycline; Ceftazidime avibactam
ETFK6414	
ETFK650	
ETFK6631	
ETFK6634	Latamoxef
ETFK6703	Moxalactam; Ceftazidime; Meropenem
ETFK6897	Latamoxef
ETFK7324	Cefoperazone sulbactam; Imipenem and cilastatin; Tigecycline; Linezolid; Meropenem; Cefepime; Cefacoxime
ETFK7759	Azithromycin; Compound sulfamethoxazole; Linezolid; Imipenem and cilastatin; Meropenem
ETFK798	
ETFK8577	Cefoperazone sulbactam
ETFK8895	Cefoperazone sulbactam; Compound sulfamethoxazole

Table S4

Table S4 Genomic features of *K. pneumoniae* ETFK5283

Feature	Chromosome	p5283-1	p5283-2	p5283-3	p5283-4
Size (bp)	5,119,611	209,929	46,161	45,043	9,594
G+C content (%)	57.68	52.47	46.65	50.52	43.58
Protein-coding sequences	4,712	208	51	45	8
tRNA genes	88	0	0	0	0
rRNA genes	25	0	0	0	0
Type		IncFIB (K)	IncX3	IncR	Col440I

Table S6

Table S6 Univariable linear regression analysis with the number of antimicrobial resistance types as the outcome variable					
Variable ¹	<i>b</i>	SE	95% CI	Wald χ^2 / <i>t</i>	<i>P</i>
Specimen (Urine)	-3.067	1.182	-5.384–0.750	6.729	0.009
Department (Pediatric surgery)	-3.937	1.101	-6.96–1.779	12.780	< 0.001
MLST (ST11)	3.127	0.915	1.333–4.920	11.676	0.001
Virulence genes	0.095	0.072	-0.051–0.241	1.316	0.196
Diseases of urinary system	-4.750	1.519	-7.727–1.773	9.781	0.002

¹ Sputum samples served as the control group for specimen types; the PICU was designated as the reference for clinical departments; other sequence types (ST) were established as the control group for MLST analysis; and diseases from other organ systems were used as the control group for disease system classification.

Table S7

Table S7 Univariable logistic regression analysis with antimicrobial resistance status as the outcome variable							
Drug	Variable	<i>b</i>	SE	Wald χ^2	<i>P</i>	OR	95%CI
Carbapenems	Department			6.122	0.047		
Carbapenems	MLST	-20.615	12118.636	0	0.999		
Aminoglycosides	Department			6.122	0.047		
Aminoglycosides	Gravidity	-0.805	0.521	2.389	0.122	0.447	0.161–1.241
Aminoglycosides	Parity	-0.231	0.522	0.196	0.658	0.794	0.285–2.207
Fosfomycin	MLST*	3.602	1.145	9.887	0.002	36.667	3.884–346.182
Fosfomycin	Drug resistance genes	-0.3	0.118	6.471	0.011	0.741	0.588–0.933
Fosfomycin	Virulence genes	0.147	0.056	6.858	0.009	1.159	1.038–1.294
Sulfonamides	MLST*	3.951	1.079	13.419	< 0.001	52.000	6.279–430.668
Sulfonamides	Drug resistance genes	0.796	0.291	7.464	0.006	2.216	1.252–3.922
Sulfonamides	Virulence genes	-0.281	0.098	8.332	0.004	0.755	0.623–0.914

*The control group was non-ST11 type