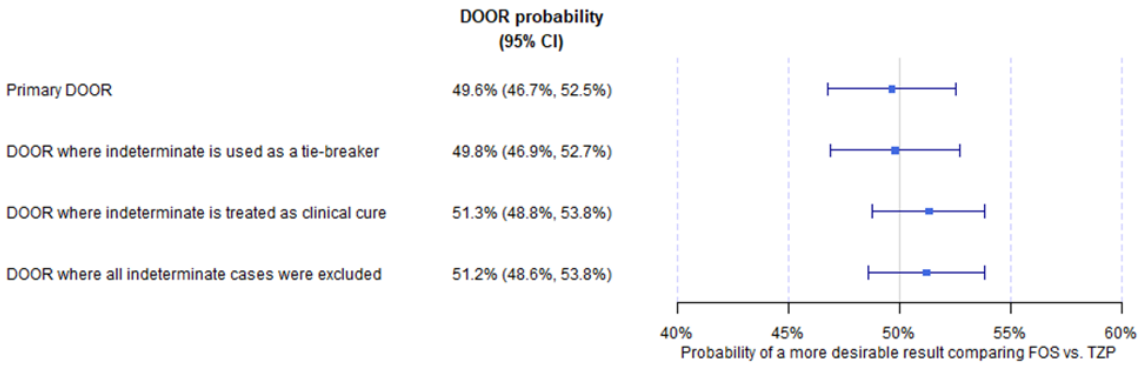
Supplemental Material

A.



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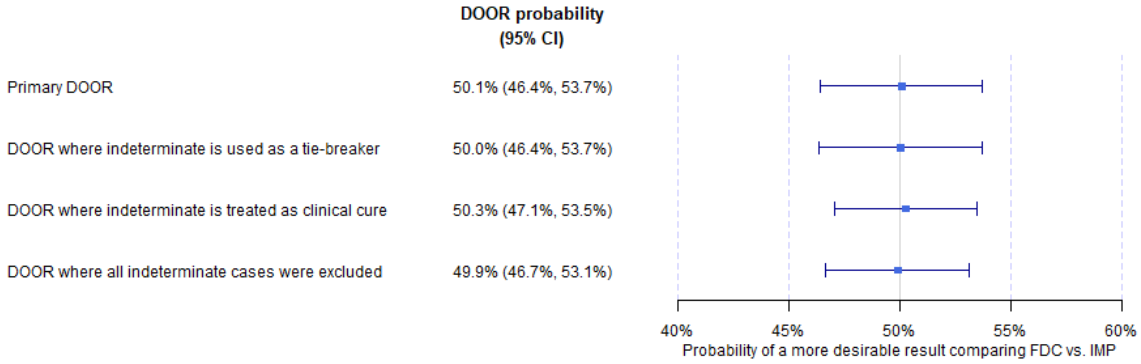
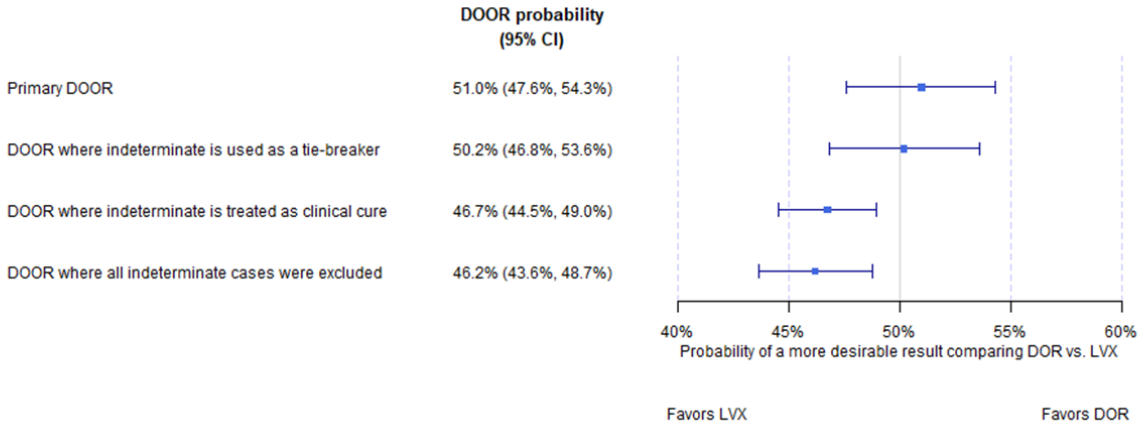
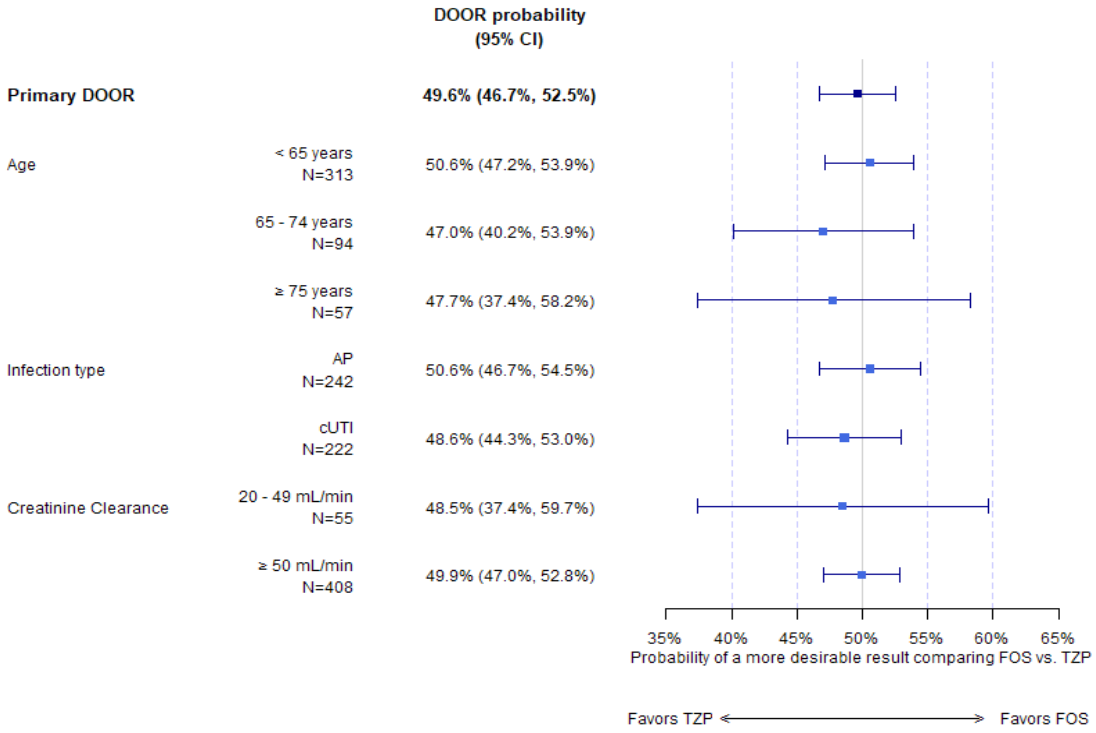


C.



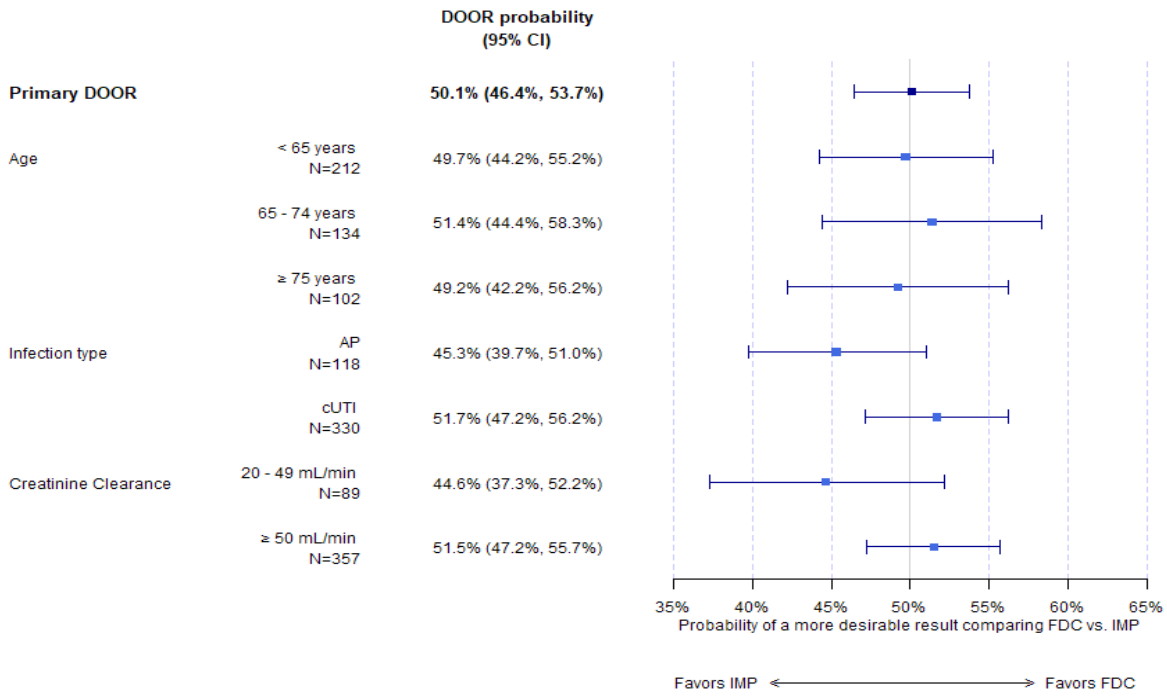
Supplemental Figure 1: Estimated desirability of outcome ranking (DOOR) probabilities and associated 95% confidence intervals for sensitivity analyses where we modified how patients with indeterminate or missing clinical outcomes were categorized in the DOOR analysis (A. ZEUS; B. APEKS-cUTI; C. DORI-05).

Abbreviations: CI, confidence interval; DOR, doripenem; FDC, cefiderocol; FOS, fosfomycin; IMP, imipenem-cilastatin; LVX, levofloxacin; TZP, piperacillin-tazobactam



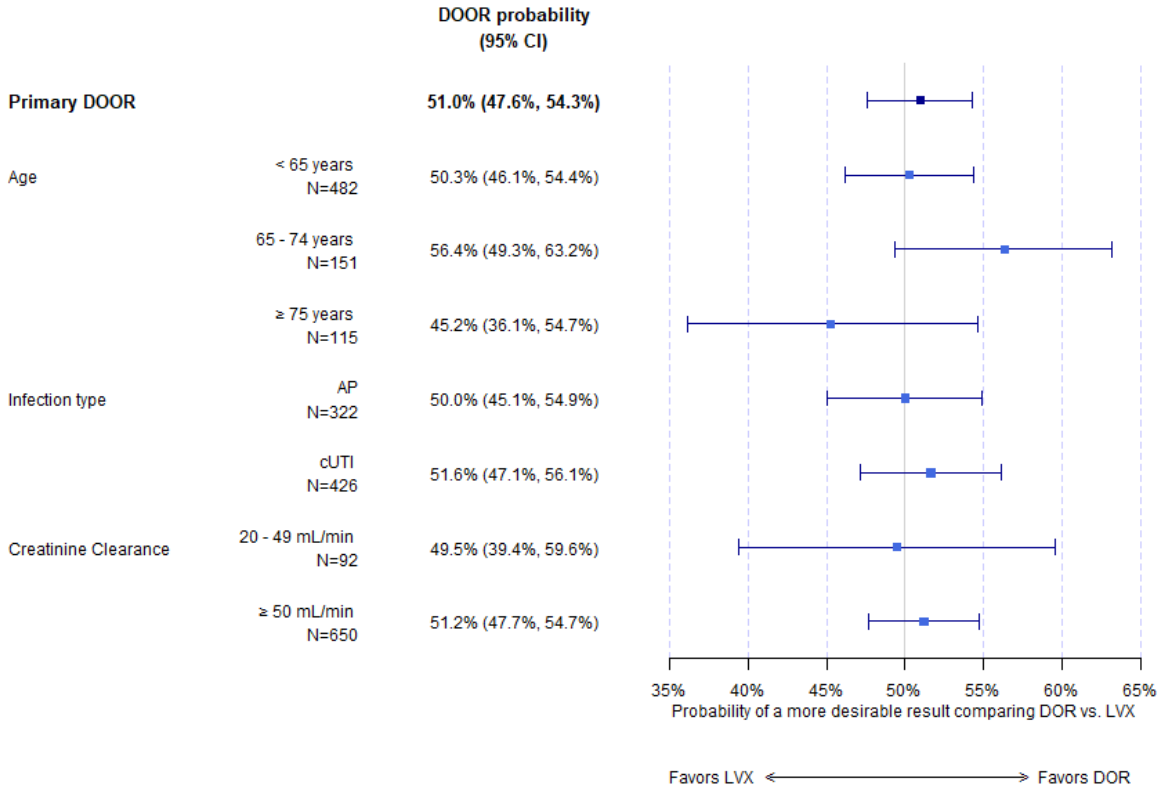
Supplemental Figure 2: Estimated desirability of outcome ranking (DOOR) probabilities and associated 95% confidence intervals for all subgroup analyses (age, infection type and creatinine clearance) for ZEUS trial

Abbreviations: AP, acute pyelonephritis; CI, confidence interval; cUTI, complicated urinary tract infection; FOS, fosfomycin; TZP, piperacillin-tazobactam



Supplemental Figure 3: Estimated desirability of outcome ranking (DOOR) probabilities and associated 95% confidence intervals for all subgroup analyses (age, infection type and creatinine clearance) for APEKS-cUTI trial

Abbreviations: AP, acute pyelonephritis; CI, confidence interval; cUTI, complicated urinary tract infection; FDC, cefiderocol; IMP, imipenem



Supplemental Figure 4: Estimated desirability of outcome ranking (DOOR) probabilities and associated 95% confidence intervals for all subgroup analyses (age, infection type and creatinine clearance) for DORI-05.

Abbreviations: AP, acute pyelonephritis; CI, confidence interval; cUTI, complicated urinary tract infection; DOR, doripenem; LVX, levofloxacin

Supplemental Table 1: Summary of DOOR Components

	ZEUS		APEKS-cUTI		DORI-05	
	FOS (n=233)	TZP (n=231)	FDC (n=300)	IMP (n=148)	DOR (n=374)	LVX (n=374)
Clinical Assessment at TOC						
Cure	211 (91)	212 (92)	261 (87)	130 (88)	293 (78)	261 (70)
Failure[a]	11 (5)	16 (7)	17 (6)	8 (5)	16 (4)	13 (3)
Indeterminate[a]	11 (5)	3 (1)	22 (7)	10 (7)	1 (<1)	2 (<1)
Missing[a,b]					64 (17)	98 (26)
Infectious Complications[c]	5 (2)	5 (2)	3 (1)	8 (5)	23 (6)	5 (1)
Renal or intra-abdominal abscess	0 (0)	2 (<1)	1 (<1)	0 (0)	2 (<1)[d]	0 (0)
Bacteremia	0 (0)	1 (<1)[e]	0 (0)	0 (0)	0 (0)	0 (0)
Recurrent UTI/pyelonephritis[f]	3 (1)	2 (<1)	1 (1)	2 (1)[g]	21 (6)[h]	5 (1)
Clostridioides difficile	0 (0)	1 (<1)	1 (<1)	5 (3)	1 (<1)	0(0)
Epididymo-orchitis	1 (<1)	0 (0)	0 (0)	0 (0)	1 (<1)	0 (0)
Prostatic abscess	1 (<1)	0 (0)	0 (0)	1 (<1)	0 (0)	0 (0)
≥1 SAE	5 (2)	6 (3)	15 (5)	11 (7)	25 (7)	14 (4)
Death	0 (0)	0 (0)	1 (<1)	0 (0)	1 (<1)	0 (0)

Displayed as n (%) unless otherwise stated

a. Included in the primary DOOR analysis as "absence of clinical response"
b. Includes assessments that were completed outside the prespecified test of cure visit time frame
c. A patient can have more than one infectious complication; however even if a patient has more than one infectious complication they are still counted as having one DOOR event (i.e. an "infectious complication")
d. One of these events was coded as "intra-abdominal infection" and ARLG physician reviewers agreed this should count in the intra-abdominal abscess category
e. This patient was coded as having a renal abscess and septicemia
f. Occurred after test of cure
g. One of the adverse events was coded as "percutaneous nephrostomy tube infection" which the ARLG physician reviewers agreed should count as recurrent UTI/pyelonephritis
h. Two events were coded as "urosepsis" which the ARLG physician reviewers agreed should count as recurrent UTI/pyelonephritis. Information about whether these patients had associated bacteremia was not available.

Abbreviations: DOR, doripenem; FDC, cefiderocol; FOS, fosfomycin; IMP, imipenem-cilastatin; LVX, levofloxacin; SAE, serious adverse event; TOC, test of cure; TZP, piperacillin-tazobactam; UTI, urinary tract infection