

TABLE 2

Selected Studies on Procedural Techniques Impacting Infectious Complications Following TRUS-Bx

Study	Year	Sample Size	Methodology	Country	Standard Technique	Alternative Technique	Outcome Variables
Bennet HY et al ⁵¹	2016	162,577	Meta-analysis	Multinational	TRUS-Bx	Transperineal prostate biopsy	Hospitalization, sepsis
Berger AP et al ⁵⁵	2004	5957	Retrospective	Austria	6 or 10 biopsy cores	15 biopsy cores	Infectious complications (epididymitis, fever, hospitalization, mortality, prostatitis)
Bruyere F et al ³⁸	2015	2718	Prospective	France	Antibiotics alone	Antibiotics plus enema	Infectious complications (fever with positive urine culture, LUTS)
Carey and Korman ⁴¹	2001	448	Retrospective	United States	Antibiotics alone	Antibiotics plus enema	Infectious complications (epididymitis, hospitalization, prostatitis, UTI)
Carignan A et al ⁶⁵	2012	5798	Retrospective	Canada	Antibiotics alone	Antibiotics plus enema	Infectious complications (not defined)
Grummet JP et al ⁴⁷	2014	245	Prospective	Australia	No comparator	Transperineal prostate biopsy	Sepsis
Grummet JP et al ⁴⁷	2014	6609	Systematic review	Australia	No comparator	Transperineal prostate biopsy	Sepsis
Hsieh T-Y et al ²⁵	2015	263	Retrospective	Taiwan	12-16 biopsy cores	10 biopsy cores	Infectious complications (chills, fever, macroscopic hematuria with blood clots, severe LUTS)
Hwang EC et al ³⁶	2015	814	Retrospective	Korea	Antibiotics alone	Antibiotics plus povidone-iodine disinfection	FQ-resistant rectal culture, Infectious complications (fever, bacteremia, prostatitis, UTI, sepsis)

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Selected Studies on Procedural Techniques Impacting Infectious Complications Following TRUS-Bx (<i>continued</i>)							
Study	Year	Sample Size	Methodology	Country	Standard Technique	Alternative Technique	Outcome Variables
Issa MM et al ⁵²	2013	2632	Retrospective	United States	Antibiotics alone	Antibiotics plus formalin (10%) disinfection of biopsy needle	Sepsis, UTI
Kam SC et al ⁵⁶	2014	1083	Retrospective	Korea	Antibiotics alone	Antibiotics plus enema	Infectious complication (prostatitis)
Kam SC et al ⁵⁶	2014	1083	Retrospective	Korea	6 biopsy cores	12 biopsy cores	Infectious complication (prostatitis)
Luong B et al ⁵⁴	2015	4134	Retrospective	United States	14 biopsy cores	18-24 biopsy cores	Infectious complications (hospitalization, sepsis)
Park DS et al ⁴³	2014	1684	Retrospective	Korea	Antibiotics alone	Antibiotics plus povidone-iodine disinfection	Rectal bacterial count
Pepe P et al ⁵⁰	2013	3000	Retrospective	Italy	12 biopsy cores	18-24 biopsy cores	Infectious complications (emergency department visit, epididymo-orchitis, fever, hospitalizations, prostatitis, UTI, sepsis)
Pu C et al ⁴²	2014	1901	Meta-analysis	Multinational	Placebo	Povidone-iodine disinfection	Infectious complications (bacteremia, bacteriuria, and fever)
Pu C et al ⁴²	2014	140	Meta-analysis	Multinational	Antibiotics alone	Antibiotics plus povidone-iodine disinfection	Infectious complications (bacteremia, bacteriuria, and fever)

Pu C et al ⁴²	2014	68	Meta-analysis	Multinational	Antibiotics alone	Antibiotics plus povidone-iodine disinfection	Infectious complications (bacteremia, bacteriuria, and fever)
Ruddick F et al ⁴⁰	2011	407	Retrospective	Canada	Antibiotics alone	Antibiotics + enemas	Sepsis
Simsir A et al ⁵³	2010	2023	Retrospective	Turkey	Varied number of biopsy cores	N/A	Sepsis
Singla N et al (unpublished data)	2015	917	Retrospective	United States	Antibiotics alone	Antibiotics + formalin (10%) disinfection of biopsy needle	UTI
Vyas L et al ⁴⁹	2014	634	Retrospective	United Kingdom	No comparator	Transperineal prostate biopsy	Epididymo-orchitis, hospitalization, sepsis
Wagenlehner FM et al ²	2013	521	Prospective	Multinational	Varied number of biopsy cores (range 1-40)	N/A	UTI
Zani EL et al ¹²	2011	147	Meta-analysis	Multinational	Antibiotics alone (varied regimen)	Antibiotics + enema	Bacteriuria
Zani EL et al ¹²	2011	68	Meta-analysis	Multinational	Antibiotics alone (varied regimen)	Antibiotics + enema	Bacteremia
Zani EL et al ¹²	2011	209	Meta-analysis	Multinational	Antibiotics alone (varied regimen)	Antibiotics + enema	Fever
Zaytoon OM et al ³⁷	2011	1438	Retrospective	United States	Oral 500 mg ciprofloxacin 1 h before biopsy	Oral 500 mg ciprofloxacin for 3 d + enema	Infectious complications (positive urine culture), sepsis

FQ, fluoroquinolone; LUTS, lower urinary tract symptoms; TRUS-Bx, transrectal ultrasound-guided prostate biopsy; UTI, urinary tract infection.