

**S5 Table. Areas under the ROC curve from logistic regression models**

Characteristic of stratified analysis or definition of UTI positivity	Clean catch		Nappy pad	
	N obs (N +ve)	AUC (95% CI)	N obs (N +ve)	AUC (95% CI)
Routine health service laboratory positive, age <3 years	758 (45)	0.75 (0.67, 0.84)	2126 (144)	0.66 (0.61, 0.71)
Routine health service laboratory positive, age ≥3 years	1861 (59)	0.74 (0.67, 0.81)	63 (3)	Too few
Routine health service laboratory positive, age< 3 years, with “not known”±	758 (45)	0.76 (0.68, 0.85)	2126 (144)	0.66 (0.61, 0.71)
Research laboratory positive age <3 years	758 (22)	0.88 (0.80, 0.97)	2126 (29)	0.79 (0.70, 0.88)
Research laboratory positive age ≥3 years	1861 (37)	0.85 (0.77, 0.94)	63 (0)	Too few
Research laboratory positive age< 3 years, with “not known” ±	758 (22)	0.89 (0.81, 0.98)	2126 (29)	0.81 (0.72, 0.89)
Routine health service laboratory positive, surgery sample	2012 (84)	0.73 (0.67, 0.80)	935 (64)	0.66 (0.58, 0.73)
Routine health service laboratory positive, home sample	607 (20)	0.81 (0.71, 0.92)	1254 (83)	0.66 (0.59, 0.72)
Research laboratory positive, surgery sample	2012 (47)	0.90 (0.84, 0.96)	935 (12)	0.84 (0.73, 0.95)†
Research laboratory positive, home sample	607 (12)	0.73 (0.55, 0.90)†	1254 (17)	0.76 (0.64, 0.89)†
Routine health service laboratory positive, sample receipt <24 hours	1959 (76)	0.76 (0.69, 0.82)	1518 (108)	0.67 (0.31, 0.72)
Routine health service laboratory positive, sample receipt ≥24 hours	660 (28)	0.73 (0.64, 0.83)	671 (39)	0.62 (0.53, 0.70)†
Research laboratory positive, sample receipt <24 hours	794 (15)	0.89 (0.77, 1.00)	630 (7)	0.94 (0.87, 1.00)†
Research laboratory positive, sample receipt ≥24 hours	1825 (44)	0.84 (0.76, 0.92)	1559 (22)	0.75 (0.64, 0.86)†
Routine health service laboratory pure/predominant growth ≥10 <sup>5</sup> CFU	2619 (104)	0.75 (0.69, 0.80)	2189 (147)	0.65 (0.61, 0.70)
Routine health service laboratory pure/predominant growth ≥10 <sup>3</sup> -<10 <sup>5</sup> CFU	2515 (47)	0.58 (0.51, 0.66)†	2042 (40)	0.57 (0.48, 0.65)†
Research laboratory p/p ≥10 <sup>7</sup> CFU	2593 (33)	0.89 (0.81, 0.97)	2166 (6)	0.74 (0.60, 0.89)†
Research laboratory p/p ≥10 <sup>6</sup> -<10 <sup>7</sup> CFU	2573 (13)	0.84 (0.70, 0.98)	2166 (6)	0.96 (0.92, 1.00)†
Research laboratory p/p ≥10 <sup>5</sup> -<10 <sup>6</sup> CFU	2573 (13)	0.79 (0.64, 0.94)	2169 (9)	0.81 (0.68, 0.94)†
Research laboratory p/p ≥10 <sup>4</sup> -<10 <sup>5</sup> CFU	2560 (24)	0.59 (0.51, 0.68)†	2160 (61)	0.59 (0.54, 0.64)†
Research laboratory p/p ≥10 <sup>3</sup> -<10 <sup>4</sup> CFU	2560 (110)	0.57 (0.52, 0.62)	2160 (93)	0.61 (0.56, 0.66)
Routine health service laboratory positive and WBC <sup>#</sup> ≥30/mm <sup>3</sup>	2572 (57)	0.85 (0.79, 0.91)	2068 (26)	0.74 (0.62, 0.86)
Routine health service laboratory positive and WBC <sup>#</sup> <30/mm <sup>3</sup>	2562 (47)	0.63 (0.55, 0.71)	2163 (121)	0.64 (0.59, 0.69)
Research laboratory positive and WBC <sup>#</sup> ≥30/mm <sup>3</sup>	2599 (39)	0.97 (0.93, 1.00)	2164 (4)	0.79 (0.48, 1.00)†
Research laboratory positive and WBC <sup>#</sup> <30/mm <sup>3</sup>	2580 (20)	0.67 (0.54, 0.81)†	2185 (25)	0.80 (0.71, 0.89)†
Research laboratory pure growth ≥10 <sup>5</sup> CFU	2604 (44)	0.84 (0.76, 0.92)	2172 (12)	0.83 (0.72, 0.94)†
Research laboratory predominant growth ≥10 <sup>5</sup> CFU	2575 (15)	0.92 (0.84, 1.00)	2177 (17)	0.76 (0.64, 0.89)†

± Including “not known” responses for “Pain/crying when passing urine” and “Passing urine more often”; †Not all variables included because of perfect prediction;

# WBC: white blood cell count.