

**Table S2:** see legend below

	cut-off value	Sensitivity (%) (95% CI)	Specificity (%) (95% CI)	Likelihood ratio
Percentage of synovial neutrophils: aseptic - septic	> 29.50	100 (88.3 - 100.0)	53.85 (29.14 - 76.79)	2.167
	> 51.50	96.55 (82.82 - 99.82)	61.54 (35.52 - 82.29)	2.51
	> 60.00	96.55 (82.82 - 99.82)	69.23 (42.37 - 87.32)	3.138
	> 63.00	96.55 (82.82 - 99.82)	84.62 (57.77 - 97.27)	6.276
	> 67.50	96.55 (82.82 - 99.82)	92.31 (66.69 - 99.61)	12.55
	> 76.00	96.55 (82.82 - 99.82)	100 (77.19 - 100.0)	
Synovial leukocyte count: aseptic- septic	> 896.0	100 (88.30 - 100)	38.46 (17.71 - 64.48)	1.625
	> 1030	96.55 (82.82 - 99.82)	46.15 (23.21 - 70.86)	1.793
	> 1070	96.55 (82.82 - 99.82)	53.85 (29.14 - 76.79)	2.092
	> 1290	96.55 (82.82 - 99.82)	61.54 (35.52 - 82.29)	2.51
	> 2030	96.55 (82.82 - 99.82)	69.23 (42.37 - 87.32)	3.138
	> 2580	96.55 (82.82 - 99.82)	76.92 (49.74 - 91.82)	4.184
	> 2800	96.55 (82.82 - 99.82)	84.62 (57.77 - 97.27)	6.276
	> 3435	93.1 (78.04 - 98.77)	84.62 (57.77 - 97.27)	6.052
	> 4920	89.66 (73.61 - 96.42)	84.62 (57.77 - 97.27)	5.828
	> 5985	89.66 (73.61 - 96.42)	92.31 (66.69 - 99.61)	11.66
	> 6470	86.21 (69.44 - 94.50)	92.31 (66.69 - 99.61)	11.21
	> 6970	82.76 (65.45 - 92.40)	92.31 (66.69 - 99.61)	10.76
	> 8000	79.31 (61.61 - 90.15)	92.31 (66.69 - 99.61)	10.31
	> 9300	75.86 (57.89 - 87.78)	92.31 (66.69 - 99.61)	9.862
	> 9800	72.41 (54.28 - 85.30)	92.31 (66.69 - 99.61)	9.414
	> 10745	68.97 (50.77 - 82.72)	92.31 (66.69 - 99.61)	8.966
	> 12745	65.52 (47.35 - 80.06)	92.31 (66.69 - 99.61)	8.517
	> 14500	65.52 (47.35 - 80.06)	100 (77.19 - 100.0)	

Table S2: The cut-off values for the percentage of synovial neutrophils and the synovial leukocyte count to distinguish between aseptic and septic synovitis and for lysozyme and myeloperoxidase to differentiate between control, aseptic and septic synovitis were calculated using the receiver operating characteristic curve (ROC) method. The cut-off values ranging from the best specificity with maximum (100% or highest achieved value) sensitivity to the best sensitivity with maximum (100% or highest achieved value) specificity are detailed with the corresponding sensitivity and specificity values, including 95% confidence intervals (CI) and likelihood ratios (for specificities <100) for all ROC curve calculations which did not yield a cut-off value with 100% sensitivity and specificity.

	cut-off value	Sensitivity (%) (95% CI)	Specificity (%) (95% CI)	Likelihood ratio
Lysozyme: control - aseptic	> 2.458	88.89 (71.94 - 96.15)	0 (0.000 - 27.75)	0.8889
	> 14.36	85.19 (67.52 - 94.08)	0 (0.000 - 27.75)	0.8519
	> 26.90	81.48 (63.30 - 91.82)	0 (0.000 - 27.75)	0.8148
	> 30.01	77.78 (59.24 - 89.39)	0 (0.000 - 27.75)	0.7778
	> 36.35	77.78 (59.24 - 89.39)	10 (0.5129 - 40.42)	0.8642
	> 44.77	77.78 (59.24 - 89.39)	20 (3.554 - 50.98)	0.9722
	> 46.98	77.78 (59.24 - 89.39)	30 (10.78 - 60.32)	1.111
	> 47.30	74.07 (55.32 - 86.83)	30 (10.78 - 60.32)	1.058
	> 51.09	70.37 (51.52 - 84.15)	30 (10.78 - 60.32)	1.005
	> 58.89	66.67 (47.82 - 81.36)	30 (10.78 - 60.32)	0.9524
	> 64.33	66.67 (47.82 - 81.36)	40 (16.82 - 68.73)	1.111
	> 65.87	66.67 (47.82 - 81.36)	50 (23.66 - 76.34)	1.333
	> 67.07	66.67 (47.82 - 81.36)	60 (31.27 - 83.18)	1.667
	> 70.70	62.96 (44.23 - 78.47)	60 (31.27 - 83.18)	1.574
	> 75.04	59.26 (40.73 - 75.49)	60 (31.27 - 83.18)	1.481
	> 87.61	55.56 (37.31 - 72.41)	60 (31.27 - 83.18)	1.389
	> 113.0	51.85 (33.99 - 69.26)	60 (31.27 - 83.18)	1.296
	> 129.7	48.15 (30.74 - 66.01)	60 (31.27 - 83.18)	1.204
	> 134.9	48.15 (30.74 - 66.01)	80 (49.02 - 96.45)	2.407
	> 139.1	44.44 (27.59 - 62.69)	80 (49.02 - 96.45)	2.222
	> 145.5	44.44 (27.59 - 62.69)	90 (59.58 - 99.49)	4.444
	> 155.5	40.74 (24.51 - 59.27)	90 (59.58 - 99.49)	4.074
	> 166.1	37.04 (21.53 - 55.77)	90 (59.58 - 99.49)	3.704
	> 179.8	33.33 (18.64 - 52.18)	90 (59.58 - 99.49)	3.333
	> 191.4	29.63 (15.85 - 48.48)	90 (59.58 - 99.49)	2.963
	> 200.9	25.93 (13.17 - 44.68)	90 (59.58 - 99.49)	2.593
	> 208.7	25.93 (13.17 - 44.68)	100 (72.25 - 100.0)	

	cut-off value	Sensitivity (%) (95% CI)	Specificity (%) (95% CI)	Likelihood ratio
Myeloperoxidase: control - aseptic	> 0.04300	92.59 (76.63 -98.68)	10 (0.5129 -40.42)	1.029
	> 0.08700	51.85 (33.99 -69.26)	80 (49.02 -96.45)	2.593
	> 0.08850	48.15 (30.74 -66.01)	80 (49.02 -96.45)	2.407
	> 0.08950	44.44 (27.59 -62.69)	80 (49.02 -96.45)	2.222
	> 0.09050	44.44 (27.59 -62.69)	90 (59.58 -99.49)	4.444
	> 0.09150	40.74 (24.51 -59.27)	90 (59.58 -99.49)	4.074
	> 0.09250	37.04 (21.53 -55.77)	90 (59.58 -99.49)	3.704
	> 0.09700	33.33 (18.64 -52.18)	90 (59.58 -99.49)	3.333
	> 0.1029	33.33 (18.64 -52.18)	100 (72.25 -100.0)	
Myeloperoxidase: control - septic	> 0.04300	100 (88.65 -100.0)	10 (0.5129 -40.42)	1.111
	> 0.08800	96.67 (83.33 -99.83)	80 (49.02 -96.45)	4.833
	> 0.09500	96.67 (83.33 -99.83)	90 (59.58 -99.49)	9.667
	> 0.1005	93.33 (78.68 -98.82)	90 (59.58 -99.49)	9.333
	> 0.1254	93.33 (78.68 -98.82)	100 (72.25 -100.0)	
Myeloperoxidase: aseptic - septic	> 0.1305	93.33 (78.68 -98.82)	81.48 (63.30 -91.82)	5.04
	> 0.1399	93.33 (78.68 -98.82)	85.19 (67.52 -94.08)	6.3
	> 0.1467	93.33 (78.68 -98.82)	88.89 (71.94 -96.15)	8.4
	> 0.1784	90 (74.38 -96.54)	88.89 (71.94 -96.15)	8.1
	> 0.2225	86.67 (70.32 -94.69)	88.89 (71.94 -96.15)	7.8
	> 0.2570	83.33 (66.44 -92.66)	88.89 (71.94 -96.15)	7.5
	> 0.3270	80 (62.69 -90.49)	88.89 (71.94 -96.15)	7.2
	> 0.3970	80 (62.69 -90.49)	92.59 (76.63 -98.68)	10.8
	> 0.4420	76.67 (59.07 -88.21)	92.59 (76.63 -98.68)	10.35
	> 0.5533	76.67 (59.07 -88.21)	96.3 (81.72 -99.81)	20.7
	> 0.7043	73.33 (55.55 -85.82)	96.3 (81.72 -99.81)	19.8
	> 0.8475	73.33 (55.55 -85.82)	100 (87.54 -100.0)	