

**Supplementary Table 1. Sensitivity analysis when suspicion for malignancy in cytology was not included**

	10 times (n=147)	20 times (n=148)	30 times (n=148)	<i>P</i> value
Sensitivity	0.14(0.09, 0.21)	0.21(0.14, 0.29)*	0.30(0.23, 0.39) <sup>#&amp;</sup>	0.004
Specificity	1 (0.29, 1)	1 (0.29%, 1)	1 (0.40, 1)	NA

\*p=0.151, vs 10 times group; #p=0.001, vs 10 times group; &p=0.094, vs 20 times group

**Supplementary Table 2. Sensitivity analysis after the exclusion of patients with clinically diagnosed malignancy**

	10 times (n=103)	20 times (n=105)	30 times (n=114)	<i>P</i> value
Sensitivity	0.56 (0.45 ,0.66)	0.68(0.57, 0.77)*	0.76 (0.66, 0.83) <sup>#&amp;</sup>	0.012
Specificity	1(0.55, 1)	1 (0.66, 1)	1 (0.59, 1)	NA

\*p=0.102, vs 10 times group; #p=0.004, vs 10 times group; &p=0.215, vs 20 times group

**Supplementary table 3. Sensitivity analysis for individual center**

	10 times	20 times	30 times
Center1	0.38 (0.26, 0.51)	0.52 (0.33, 0.70)	0.58 (0.42, 0.73)
Center2	0.37 (0.24, 0.51)	0.45 (0.35, 0.56)	0.58 (0.46, 0.68)
Center3	0.43 (0.18, 0.71)	0.47 (0.21, 0.73)	0.56 (0.31, 0.78)