

**SUPPLEMENTAL TABLE 1. The additional characteristics and reported diagnostic performance of 10 studies included in the meta-analysis**

Author / year (Reference)	No. of evaluated patients / No. of patients in original cohort	Inclusion–exclusion criteria	Technical characteristics	Reported diagnostic performance (Sensitivity /Specificity)	Country
Rose / 1999 (40)	32/32	Inclusion: FIGO stage IIB to IVA, no evidence of extrapelvic disease by CT scanning Exclusion: under 18 years of age, medically unstable, pregnant, lactating, body weight exceed 350 pounds	FDG: 20 mCi Fasting: 4h Time interval: 60 min PET scanner: Siemens ECAT EXACT	75% /92%	US
Narayan / 2001 (37)	26/27	Inclusion: All operable patients without definitive CT evidence of PALN disease (only PALN sampling if enlarged pelvic nodes was detected on CT scan)	FDG: 80 to 120 MBq Fasting: 4h Time interval: 60 min PET scanner: PENN-PET 300H, UGM Medical Systems, Philadelphia, PA	40% /95%	US
Reinhardt / 2001 (38)	12/35	Inclusion: cervical cancer patients	FDG: 370 MBq Fasting: overnight Time interval: 100 min PET scanner: Siemens ECAT EXACT 921	100% /100%	Germany

Lin / 2003 (35)	50/50	Inclusion: FIGO stage IIB through IVA or stage IB or IIA with a tumor diameter of at least 5 cm or involvement of pelvic lymph nodes) with negative abdominal CT finding (PALN less than 1.0 cm size) Exclusion: diabetic, pregnant, lactating, under 18 years of age	FDG: 10 mCi (370 MBq) Fasting: 4h Time interval: 60 min PET scanner: GE advanced NXi PET (Milwaukee, WI)	86% /94%	China
Roh / 2005 (39)	54/54	Inclusion: FIGO stage IB-IVA, age 18-65, no contraindication for surgery, no evidence of distant metastasis, ECOG performance score 0-1	FDG: 10-15 mCi (370-555 MBq) Fasting: 8h Time interval: 60 min PET scanner: GE advance, Milwaukee, WI	0 /100%	Korea
Wright / 2005 (42)	45/59	Inclusion: Invasive, FIGO stage IA2-IIA cervical carcinoma	FDG: 15-20 mCi Fasting: 4h Time interval: 45-60 min Conventional PET scanner (before Nov, 2002); PET-CT scanner (from Nov, 2002): Biograph LSO 2; Siemens Medical Solutions, Malvern, PA	25% /98%	US
Choi / 2006 (33)	27/22	Inclusion: FIGO stage IB-IVA invasive cervical cancer, no contraindication to the surgical procedures, no evidence of distant metastasis, ECOG performance score 0-1	FDG: 12-20 mCi (444-740 MBq) Fasting: 8h Time interval: 60 min PET-CT scanner: Biograph LSO (Siemens Medical Solutions) or	33% /92%	Korea

Boughanim / 2008 (32)	38/38	<p>Exclusion: histology other than squamous cell carcinoma</p> <p>Inclusion: FIGO stage IB2 or II cervical cancer</p> <p>Exclusion: patients with PALN suggestive of abnormality on MRI or CT scan and with significant uptake in PALN in PET-CT</p>	<p>Discovery LS (GE Medical Systems)</p> <p>FDG: 4-5 MBq/kg</p> <p>Fasting: NR</p> <p>Time interval: 50-70 min</p> <p>PET scanner: Biograph LSO (Siemens Medical Solutions, Erlangen, Germany)</p>	0 /100%	France
Vergote / 2008 (41)	85/44	<p>Inclusion: FIGO stage IB2-III B cervical cancer without PALN metastasis on PET and CT or PET-CT</p>	NR	0 /100%	Belgium
Yildirim / 2008 (43)	16/16	<p>Inclusion: patients with locally advanced cervical cancer with negative CT findings for PALN metastasis</p> <p>Exclusion: age &gt; 70 years, concurrent or previous malignant disease, previous radiation therapy, adenocarcinoma or adenosquamous carcinoma histology, WHO performance status <math>\geq</math> 3, inadequate renal, hepatic, cardiac function, BMI &gt; 40</p>	<p>FDG: 10-15 mCi (370-555 MBq)</p> <p>Fasting: 4h</p> <p>Time interval: 60 min</p> <p>PET scanner: NR</p>	50% /83%	Turkey

FIGO = International Federation of Gynecology and Obstetrics; FDG =  $^{18}\text{F}$ -fluorodeoxyglucose; PET = positron emission tomography; PALN = para-aortic lymph node; CT = computed tomography; ECOG = Eastern Cooperative Oncology Group; WHO = World Health Organization; NR = not reported

**SUPPLEMENTAL TABLE 2. Quality assessment scores of 10 studies included in the meta-analysis**

QUADAS components	Rose 1999	Narayan 2001	Reinhardt 2001	Lin 2003	Roh 2005	Wright 2005	Choi 2006	Boughanim 2008	Vergote 2008	Yildirim 2008
1. Was the spectrum of patients representative of the patients who will receive the test in practice?	0	0	0	0	0	0	0	0	0	0
2. Were selection criteria clearly described?	1	0	0	1	1	0	1	0	0	1
3. Is the reference standard likely to correctly classify the target condition?	1	1	1	1	1	1	1	1	1	1
4. Is the time period between reference standard and index test short enough to be reasonably sure that the target condition did not change between the two tests?	0	0	0	0	0	0	0	0	1	1
5. Did the whole sample or a random selection of the sample, receive verification using a reference standard of diagnosis?	1	0	0	0	1	0	1	1	0	1
6. Did patients receive the same reference standard regardless of the index test result?	1	1	1	1	1	1	1	1	1	1
7. Was the reference standard independent of the index test?	1	1	1	1	1	1	1	1	1	1

8. Was the execution of the index test described in sufficient detail to permit replication of the test?	1	1	1	1	1	1	1	1	0	0
9. Was the execution of the reference standard described in sufficient detail to permit its replication?	1	1	0	1	1	1	1	1	1	1
10. Were the index test results interpreted without knowledge of the results of the reference standard?	0	1	1	0	0	0	1	1	0	1
11. Were the reference standard results interpreted without knowledge of the results of the index test?	0	0	0	0	0	0	0	0	0	0
12. Were the same clinical data available when test results were interpreted as would be available when the test is used in practice?	1	1	1	1	1	1	1	1	1	1
13. Were uninterpretable/ intermediate test results reported?	1	1	1	1	1	1	1	1	1	1
14. Were withdrawals from the study explained?	1	0	0	1	0	1	1	0	0	1
Total score	10	8	7	9	9	8	11	9	7	11

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QUADAS = quality assessment of studies of diagnostic accuracy

**SUPPLEMENTAL TABLE 3. The comparison of the performance between PET and PET-CT using bivariate model**

	PET (n = 5)	PET-CT (n = 5)
Sensitivity	66% (95% CI = 33% to 89%)	13% (95% CI = 2% to 56%)
Specificity	97% (95% CI = 90% to 99%)	98% (95% CI = 87% to 100%)
Diagnostic odds ratio	57.2 (95% CI = 13.9-235.4)	7.9 (95% CI = 1.0 to 61.8)
Positive LR	19.9 (95% CI = 7.2 to 55.4)	7.0 (95% CI = 1.0 to 47.4)
Negative LR	0.35 (95% CI = 0.14 to 0.87)	0.89 (95% CI = 0.69 to 1.15)