Supplementary material

Supplementary Table 1. Clinical and pathological characteristics of patients with stage IB1 to IIB cervical cancer.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | |  | Uterine corpus invasion | | |
| Characteristic | | Total (%) | Endometrial invasion | Myometrial invasion <50% | Myometrial invasion ≥50% |
| Number (%) | | 284 (100%) | 90 (100.0%) | 105 (100.0%) | 89 (100.0%) |
| Age, mean (range), y | | 55 (22–78) | 59 (33–78) | 55 (33–75) | 53 (22–75) |
|  | <50 | 67 (23.6) | 14 (15.6) | 20 (19.0) | 33 (37.1) |
| 50–59 | 115 (40.5) | 27 (30.0) | 54 (51.4) | 34 (38.2) |
| ≥60 | 102 (35.9) | 49 (54.4) | 31 (29.5) | 22 (24.7) |
| Year at diagnosis | | | | | |
|  | 2004–2008 | 30 (10.6) | 12 (13.3) | 8 (7.6) | 10 (11.2) |
| 2009–2016 | 254 (89.4) | 78 (86.7) | 97 (92.4) | 79 (88.8) |
| Stage | | | | | |
|  | IB1 | 98 (34.5) | 33 (36.7) | 38 (36.2) | 27 (30.3) |
| IB2 | 36 (12.7) | 6 (6.7) | 15 (14.3) | 15 (16.9) |
| IB | 2 (0.7) | 0 (0.0) | 2 (1.9) | 0 (0.0) |
| IIA1 | 93 (32.7) | 35 (38.9) | 35 (33.3) | 23 (25.8) |
| IIA2 | 39 (13.7) | 10 (11.1) | 13 (12.4) | 16 (18.0) |
| IIA | 7 (2.5) | 3 (3.3) | 1 (1.0) | 3 (3.4) |
| IIB | 9 (3.2) | 3 (3.3) | 1 (1.0) | 5 (5.6) |
| Tumor size, mean (SD), cm | | 3.8 (1.3) | 3.4 (1.2) | 3.8 (1.3) | 4.2 (1.4) |
|  | ≤2 | 31 (10.9) | 14 (15.6) | 10 (9.5) | 7 (7.9) |
| 2.1–4 | 154 (54.2) | 52 (57.8) | 59 (56.2) | 43 (48.3) |
| >4 | 77 (27.1) | 16 (17.8) | 29 (27.6) | 32 (36.0) |
| Unknown | 22 (7.7) | 8 (8.9) | 7 (6.7) | 7 (7.9) |
| Histologic type | | | | | |
|  | Squamous cell | 245 (86.3) | 80 (88.9) | 91 (86.7) | 74 (83.1) |
| Adenocarcinoma | 35 (12.3) | 8 (8.9) | 12 (11.4) | 15 (16.9) |
| Adenosqumous | 4 (1.4) | 2 (2.2) | 2 (1.9) | 0 (0.0) |
| Grade | | | | | |
|  | G1 | 4 (1.4) | 1 (1.1) | 1 (1.0) | 2 (2.2) |
| G2 | 144 (50.7) | 51 (56.7) | 55 (52.4) | 38 (42.7) |
| G3 | 99 (34.9) | 32 (35.6) | 35 (33.3) | 32 (36.0) |
| Unknown | 37 (13.0) | 6 (6.7) | 14 (13.3) | 17 (19.1) |
| Surgical approach | | | | | |
|  | Laparotomy | 209 (73.6) | 65 (72.2) | 79 (75.2) | 65 (73.0) |
| Laparoscope | 75 (26.4) | 25 (27.8) | 26 (24.8) | 24 (27.0) |
| Stromal invasion depth | | | | | |
|  | ≤1/2 | 42 (14.8) | 21 (23.3) | 14 (13.3) | 7 (7.9) |
| >1/2 | 238 (83.8) | 68 (75.6) | 90 (85.7) | 80 (89.9) |
| Unknown | 4 (1.4) | 1 (1.1) | 1 (1.0) | 2 (2.2) |
| LVSI | | | | | |
|  | No | 192 (67.6) | 74 (82.2) | 70 (66.7) | 48 (53.9) |
| Yes | 92 (32.4) | 16 (17.8) | 35 (33.3) | 41 (46.1) |
| PMI | | | | | |
|  | No | 271 (95.4) | 89 (98.9) | 100 (95.2) | 82 (92.1) |
| Yes | 13 (4.6) | 1 (1.1) | 5 (4.8) | 7 (7.9) |
| RMI | | | | | |
|  | No | 270 (95.1) | 84 (93.3) | 100 (95.2) | 86 (96.6) |
| Yes | 14 (4.9) | 6 (6.7) | 5 (4.8) | 3 (3.4) |
| LN metastasis | | | | | |
|  | No | 177 (62.3) | 69 (76.7) | 69 (65.7) | 39 (43.8) |
| Yes | 107 (37.7) | 21 (23.3) | 36 (34.3) | 50 (56.2) |
| Adjuvant radiotherapy | | | | | |
|  | No | 112 (39.4) | 41 (45.6) | 31 (29.5) | 40 (44.9) |
| Yes | 172 (60.6) | 49 (54.4) | 74 (70.5) | 49 (55.1) |
| Adjuvant chemotherapy | | | | | |
|  | No | 213 (75.0) | 59 (65.6) | 77 (73.3) | 77 (86.5) |
| Yes | 71 (25.0) | 31 (34.4) | 28 (26.7) | 12 (13.5) |
| Pathological risk | | | | | |
|  | low-risk | 108 (38.0) | 52 (57.8) | 39 (37.1) | 17 (19.1) |
| Intermediate-risk | 55 (19.4) | 14 (15.6) | 23 (21.9) | 18 (20.2) |
| High-risk | 119 (41.9) | 24 (26.7) | 41 (39.0) | 54 (60.7) |
| Unknown | 2 (0.7) | 0 (0.0) | 2 (1.9) | 0 (0.0) |
| Recurrence | 70 (24.6) | 12 (13.3) | 22 (21.0) | 36 (40.4) |
| Death | 49 (17.2) | 7 (7.8) | 13 (12.4) | 29 (32.6) |

LVSI, lymph vascular space invasion; PMI, parametrial involvement; RMI, resection margin involvement; LN, lymph node.

Supplementary Table 2. Patients’ baseline characteristic of before and after matching for endometrial invasion.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Characteristic | | Before matching | | | After matching | | |
| ART | non-ART | *p*a | ART | non-ART | *p*b |
| Number (%) | | 49 (54.4) | 41 (45.6) |  | 26 (50.0) | 26 (50.0) |  |
| Age, y | | | | | | | |
|  | <50 | 10 (20.4) | 4 (9.8) | 0.328 | 2 (7.7) | 2 (11.5) | 0.881 |
| 50–59 | 15 (30.6) | 12 (29.3) | 10 (38.5) | 9 (34.6) |
| ≥60 | 24 (49.0) | 25 (61.0) | 14 (53.8) | 14 (53.8) |
| Year at diagnosis | | | | | | | |
|  | 2004–2008 | 6 (12.2) | 6 (14.6) | 0.740 | 4 (15.4) | 4 (15.4) | 1.000 |
| 2009–2016 | 43 (87.8) | 35 (85.4) | 22 (84.6) | 22 (84.6) |
| Stage | | | | | | | |
|  | IB | 22 (44.9) | 17 (41.5) | 0.840 | 11 (42.3) | 10 (38.5) | 0.960 |
| IIA | 25 (51.0) | 23 (56.1) | 14 (53.8) | 15 (57.7) |
| IIB | 2 (4.1) | 1 (2.4) | 1 (3.8) | 1 (3.8) |
| Tumor size, cm | | | | | | | |
|  | ≤2 | 6 (12.2) | 8 (19.5) | 0.508 | 3 (11.5) | 4 (15.4) | 0.711 |
| 2.1–4 | 30 (61.2) | 22 (53.7) | 18 (69.2) | 14 (53.8) |
| >4 | 10 (20.4) | 6 (14.6) | 4 (15.4) | 6 (23.1) |
| Unknown | 3 (6.1) | 5 (12.2) | 1 (3.8) | 2 (7.7) |
| Histologic type | | | | | | | |
|  | Squamous cell | 44 (89.8) | 36 (87.8) | 0.956 | 24 (92.3) | 24 (92.3) | 1.000 |
| Adenocarcinoma | 4 (8.2) | 4 (9.8) | 2 (7.7) | 2 (7.7) |
| Adenosqumous | 1 (2.0) | 1 (2.4) | - | - |
| Grade | | | | | | | |
|  | G1 + G2 | 29 (59.2) | 23 (56.1) | 0.948 | 14 (53.8) | 15 (57.7) | 0.292 |
| G3 | 17 (34.7) | 15 (36.6) | 12 (46.2) | 9 (34.6) |
| Unknown | 3 (6.1) | 3 (7.3) | 0 (0.0) | 2 (7.7) |
| Surgical approach | | | | | | | |
|  | Laparotomy | 34 (69.4) | 31 (75.6) | 0.512 | 20 (76.9) | 19 (73.1) | 0.749 |
| Laparoscope | 15 (30.6) | 10 (24.4) | 6 (23.1) | 7 (26.9) |
| Stromal invasion depth | | | | | | | |
|  | ≤1/2 | 6 (12.2) | 15 (36.6) | 0.019 | 5 (19.2) | 5 (19.2) | 1.000 |
| >1/2 | 42 (85.7) | 26 (63.4) | 21 (80.8) | 21 (80.8) |
| Unknown | 1 (2.0) | 0 (0.0) | - | - |
| LVSI | | | | | | | |
|  | No | 40 (81.6) | 34 (82.9) | 0.873 | 21 (80.8) | 21 (80.8) | 1.000 |
| Yes | 9 (18.4) | 7 (17.1) | 5 (19.2) | 5 (19.2) |
| PMI | | | | | | | |
|  | No | 48 (98.0) | 41 (100.0) | 1.000 | 26 (100.0) | 26 (100.0) | - |
| Yes | 1 (2.0) | 0 (0.0) | - | - |
| RMI | | | | | | | |
|  | No | 46 (93.9) | 38 (92.7) | 0.821 | 25 (96.2) | 24 (92.3) | 1.000 |
| Yes | 3 (6.1) | 3 (7.3) | 1 (3.8) | 2 (7.7) |
| LN metastasis | | | | | | | |
|  | No | 37 (75.5) | 32 (78.0) | 0.777 | 20 (76.9) | 19 (73.1) | 0.749 |
| Yes | 12 (24.5) | 9 (22.0) | 6 (23.1) | 7 (26.9) |

ART, adjuvant radiotherapy; LVSI, lymph vascular space invasion; PMI, parametrial involvement; RMI, resection margin involvement; LN, lymph node. a *p* for the χ2 test. b *p* for likelihood ratio test following conditional logistic regression.

Supplementary Table 3. Patients’ baseline characteristic of before and after matching for myometrial invasion <50%.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Characteristic | | Before matching | | | After matching | | |
| ART | non-ART | *p*a | ART | non-ART | *p*b |
| Number (%) | | 74 (70.5) | 31 (29.5) |  | 31 (60.8) | 20 (39.2) |  |
| Age, y | | | | | | | |
|  | <50 | 14 (18.9) | 6 (19.4) | 0.908 | 5 (16.1) | 2 (10.0) | 0.825 |
| 50–59 | 39 (52.7) | 15 (48.4) | 13 (41.9) | 9 (45.0) |
| ≥60 | 21 (28.4) | 10 (32.3) | 13 (41.9) | 9 (45.0) |
| Year at diagnosis | | | | | | | |
|  | 2004–2008 | 6 (8.1) | 2 (6.5) | 1.000 | 3 (9.7) | 2 (10.0) | 1.000 |
| 2009–2016 | 68 (91.9) | 29 (93.5) | 28 (90.3) | 18 (90.0) |
| Stage | | | | | | | |
|  | IB | 40 (54.1) | 15 (48.4) | 0.676 | 17 (54.8) | 9 (45.0) | 0.493 |
| IIA | 33 (44.6) | 16 (51.6) | 14 (45.2) | 11 (55.0) |
| IIB | 1 (1.4) | 0 (0.0) | - | - |
| Tumor size, cm | | | | | | | |
|  | ≤2 | 4 (5.4) | 6 (19.4) | 0.035 | 3 (9.7) | 1 (5.0) | 0.824 |
| 2.1–4 | 44 (59.5) | 15 (48.4) | 16 (51.6) | 12 (60.0) |
| >4 | 23 (31.1) | 6 (19.4) | 10 (32.3) | 5 (25.0) |
| Unknown | 3 (4.1) | 4 (12.9) | 2 (6.5) | 2 (10.0) |
| Histologic type | | | | | | | |
|  | Squamous cell | 65 (87.8) | 26 (83.9) | 0.769 | 27 (87.1) | 17 (85.0) | 0.624 |
| Adenocarcinoma | 8 (10.8) | 4 (12.9) | 3 (9.7) | 3 (15.0) |
| Adenosqumous | 1 (1.4) | 1 (3.2) | 1 (3.2) | 0 (0.0) |
| Grade | | | | | | | |
|  | G1 + G2 | 38 (51.4) | 18 (58.1) | 0.552 | 19 (61.3) | 11 (55.0) | 0.895 |
| G3 | 27 (36.5) | 8 (25.8) | 9 (29.0) | 7 (35.0) |
| Unknown | 9 (12.2) | 5 (16.1) | 3 (9.7) | 2 (10.0) |
| Surgical approach | | | | | | | |
|  | Laparotomy | 59 (79.7) | 20 (64.5) | 0.099 | 25 (80.6) | 15 (75.0) | 0.632 |
| Laparoscope | 15 (20.3) | 11 (35.5) | 6 (19.4) | 5 (25.0) |
| Stromal invasion depth | | | | | | | |
|  | ≤1/2 | 8 (10.8) | 6 (19.4) | 0.140 | 2 (6.5) | 3 (15.0) | 0.316 |
| >1/2 | 66 (89.2) | 24 (77.4) | 29 (93.5) | 17 (85.0) |
| Unknown | 0 (0.0) | 1 (3.2) | - | - |
| LVSI | | | | | | | |
|  | No | 43 (58.1) | 27 (87.1) | 0.004 | 22 (71.0) | 16 (80.0) | 0.470 |
| Yes | 31 (41.9) | 4 (12.9) | 9 (29.0) | 4 (20.0) |
| PMI | | | | | | | |
|  | No | 69 (93.2) | 31 (100.0) | 0.327 | 31 (100.0) | 20 (100.0) | - |
| Yes | 5 (6.8) | 0 (0.0) | - | - |
| RMI | | | | | | | |
|  | No | 71 (95.9) | 29 (93.5) | 0.599 | 29 (93.5) | 18 (90.0) | 0.645 |
| Yes | 3 (4.1) | 2 (6.5) | 2 (6.5) | 2 (10.0) |
| LN metastasis | | | | | | | |
|  | No | 43 (58.1) | 26 (83.9) | 0.011 | 25 (80.6) | 16 (80.0) | 0.955 |
| Yes | 31 (41.9) | 5 (16.1) | 6 (19.4) | 4 (20.0) |

ART, adjuvant radiotherapy; LVSI, lymph vascular space invasion; PMI, parametrial involvement; RMI, resection margin involvement; LN, lymph node. a *p* for the χ2 test. b *p* for likelihood ratio test following conditional logistic regression.

Supplementary Table 4. Patients’ baseline characteristic of before and after matching for myometrial invasion ≥50%.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Characteristic | | Before matching | | | After matching | | |
| ART | non-ART | *p*a | ART | non-ART | *p*b |
| Number (%) | | 49 (55.1) | 40 (44.9) |  | 28 (50.0) | 28 (50.0) |  |
| Age, y | | | | | | | |
|  | <50 | 17 (34.7) | 16 (40.0) | 0.833 | 11 (39.3) | 10 (35.7) | 0.855 |
| 50–59 | 20 (40.8) | 14 (35.0) | 9 (32.1) | 11 (39.3) |
| ≥60 | 12 (24.5) | 10 (25.0) | 8 (28.6) | 7 (25.0) |
| Year at diagnosis | | | | | | | |
|  | 2004–2008 | 2 (4.1) | 8 (20.0) | 0.018 | 2 (7.1) | 2 (7.1) | 1.000 |
| 2009–2016 | 47 (95.9) | 32 (80.0) | 26 (92.9) | 26 (92.9) |
| Stage | | | | | | | |
|  | IB | 24 (49.0) | 18 (45.0) | 0.268 | 14 (50.0) | 14 (50.0) | 0.830 |
| IIA | 24 (49.0) | 18 (45.0) | 13 (46.4) | 12 (42.9) |
| IIB | 1 (2.0) | 4 (10.0) | 1 (3.6) | 2 (7.1) |
| Tumor size, cm | | | | | | | |
|  | ≤2 | 4 (8.2) | 3 (7.5) | 0.869 | 1 (3.6) | 2 (7.1) | 0.592 |
| 2.1–4 | 23 (46.9) | 20 (50.0) | 15 (53.6) | 13 (46.4) |
| >4 | 19 (38.8) | 13 (32.5) | 9 (32.1) | 12 (42.9) |
| Unknown | 3 (6.1) | 4 (10.0) | 3 (10.7) | 1 (3.6) |
| Histologic type | | | | | | | |
|  | Squamous cell | 39 (79.6) | 35 (87.5) | 0.322 | 26 (92.9) | 24 (85.7) | 0.388 |
| Adenocarcinoma | 10 (20.4) | 5 (12.5) | 2 (7.1) | 4 (14.3) |
| Adenosqumous | - | - | - | - |
| Grade | | | | | | | |
|  | G1 + G2 | 19 (38.8) | 21 (52.5) | 0.273 | 14 (50.0) | 14 (50.0) | 0.909 |
| G3 | 18 (36.7) | 14 (35.0) | 11 (39.3) | 10 (35.7) |
| Unknown | 12 (24.5) | 5 (12.5) | 3 (10.7) | 4 (14.3) |
| Surgical approach | | | | | | | |
|  | Laparotomy | 36 (73.5) | 29 (72.5) | 0.918 | 21 (75.0) | 20 (71.4) | 0.763 |
| Laparoscope | 13 (26.5) | 11 (27.5) | 7 (25.0) | 8 (28.6) |
| Stromal invasion depth | | | | | | | |
|  | ≤1/2 | 3 (6.1) | 4 (10.0) | 0.358 | 3 (10.7) | 2 (7.1) | 0.639 |
| >1/2 | 44 (89.8) | 36 (90.0) | 25 (89.3) | 26 (92.9) |
| Unknown | 2 (4.1) | 0 (0.0) | - | - |
| LVSI | | | | | | | |
|  | No | 28 (57.1) | 20 (50.0) | 0.501 | 15 (53.6) | 13 (46.4) | 0.593 |
| Yes | 21 (42.9) | 20 (50.0) | 13 (46.4) | 15 (53.6) |
| PMI | | | | | | | |
|  | No | 44 (89.8) | 38 (95.0) | 0.364 | 26 (92.9) | 27 (96.4) | 1.000 |
| Yes | 5 (10.2) | 2 (5.0) | 2 (7.1) | 1 (3.6) |
| RMI | | | | | | | |
|  | No | 48 (98.0) | 38 (95.0) | 0.442 | 27 (96.4) | 27 (96.4) | 1.000 |
| Yes | 1 (2.0) | 2 (5.0) | 1 (3.6) | 1 (3.6) |
| LN metastasis | | | | | | | |
|  | No | 21 (42.9) | 18 (45.0) | 0.839 | 12 (42.9) | 11 (39.3) | 0.786 |
| Yes | 28 (57.1) | 22 (55.0) | 16 (57.1) | 17 (60.7) |

ART, adjuvant radiotherapy; LVSI, lymph vascular space invasion; PMI, parametrial involvement; RMI, resection margin involvement; LN, lymph node. a *p* for the χ2 test. b *p* for likelihood ratio test following conditional logistic regression.

Supplementary Table 5. Univariate and multivariate analyses of prognostic factors for 5-year DFS and OS by Cox proportional hazards regression models after matching in the group of patients with endometrial invasion.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prognostic factor | 5-year DFS | | | | 5-year OS | | | |
| Univariate Analysis | | Multivariate Analysis | | Univariate Analysis | | Multivariate Analysis | |
| HR (95% CI) | *p* | aHR (95% CI) | *p* | HR (95% CI) | *p* | aHR (95% CI) | *p* |
| Age | 0.653 (0.232–1.839) | 0.420 |  | 0.320 | 0.411 (0.091–1.857) | 0.248 |  | 0.163 |
| Year at diagnosis | 0.241 (0.053–1.097) | 0.066 | 0.163 (0.032–0.828) | 0.029 | 0.579 (0.051–6.634) | 0.661 |  | 0.663 |
| Stage | 2.078 (0.521–8.290) | 0.300 |  | 0.814 | 0.771 (0.096–6.223) | 0.807 |  | 0.616 |
| Tumor size | 1.764 (0.756–4.118) | 0.189 |  | 0.578 | 0.722 (0.151–3.460) | 0.684 |  | 0.270 |
| Histologic type | 0.043 (0.000–NA) | 0.593 |  | 0.415 | 0.044 (0.000–NA) | 0.752 |  | 0.761 |
| Grade | 0.850 (0.225–3.212) | 0.811 |  | 0.999 | 0.665 (0.072–6.156) | 0.719 |  | 0.830 |
| Surgical approach | 0.037 (0.000–NA) | 0.501 |  | 0.512 | 0.036 (0.000–NA) | 0.621 |  | 0.520 |
| Stromal invasion depth | 0.401 (0.077–2.095) | 0.278 |  | 0.478 | 26.599 (0.000–NA) | 0.627 |  | 0.368 |
| LVSI | 9.542 (1.976–46.076) | 0.005 | 15.317 (2.503–93.714) | 0.003 | 12.825 (1.101–149.399) | 0.042 | 12.825 (1.101-149.399) | 0.042 |
| PMI | NA | NA |  | NA | NA | NA |  | NA |
| RMI | 4.344 (0.835–22.588) | 0.081 |  | 0.742 | 0.043 (0.000–NA) | 0.730 |  | 0.397 |
| LN metastasis | 5.504 (1.056–28.686) | 0.043 |  | 0.637 | 4.926 (0.441–55.045) | 0.195 |  | 0.596 |
| Adjuvant radiotherapy | 0.537 (0.119–2.421) | 0.419 |  | 0.175 | 0.416 (0.037–4.623) | 0.476 |  | 0.262 |
| Adjuvant chemotherapy | 0.021 (0.000–10.339) | 0.221 |  | 0.120 | 0.023 (0.000–395.437) | 0.449 |  | 0.380 |

Cox proportional hazards regression models for multivariable analysis. All listed covariates were not found to have multicollinearity. LVSI, lymph vascular space invasion; PMI, parametrial involvement; RMI, resection margin involvement; LN, lymph node; HR, hazard ratio; CI, confidence interval.

Supplementary Table 6. Univariate and multivariate analyses of prognostic factors for 5-year DFS and OS by Cox proportional hazards regression models after matching in the group of patients with myometrial invasion <50%.

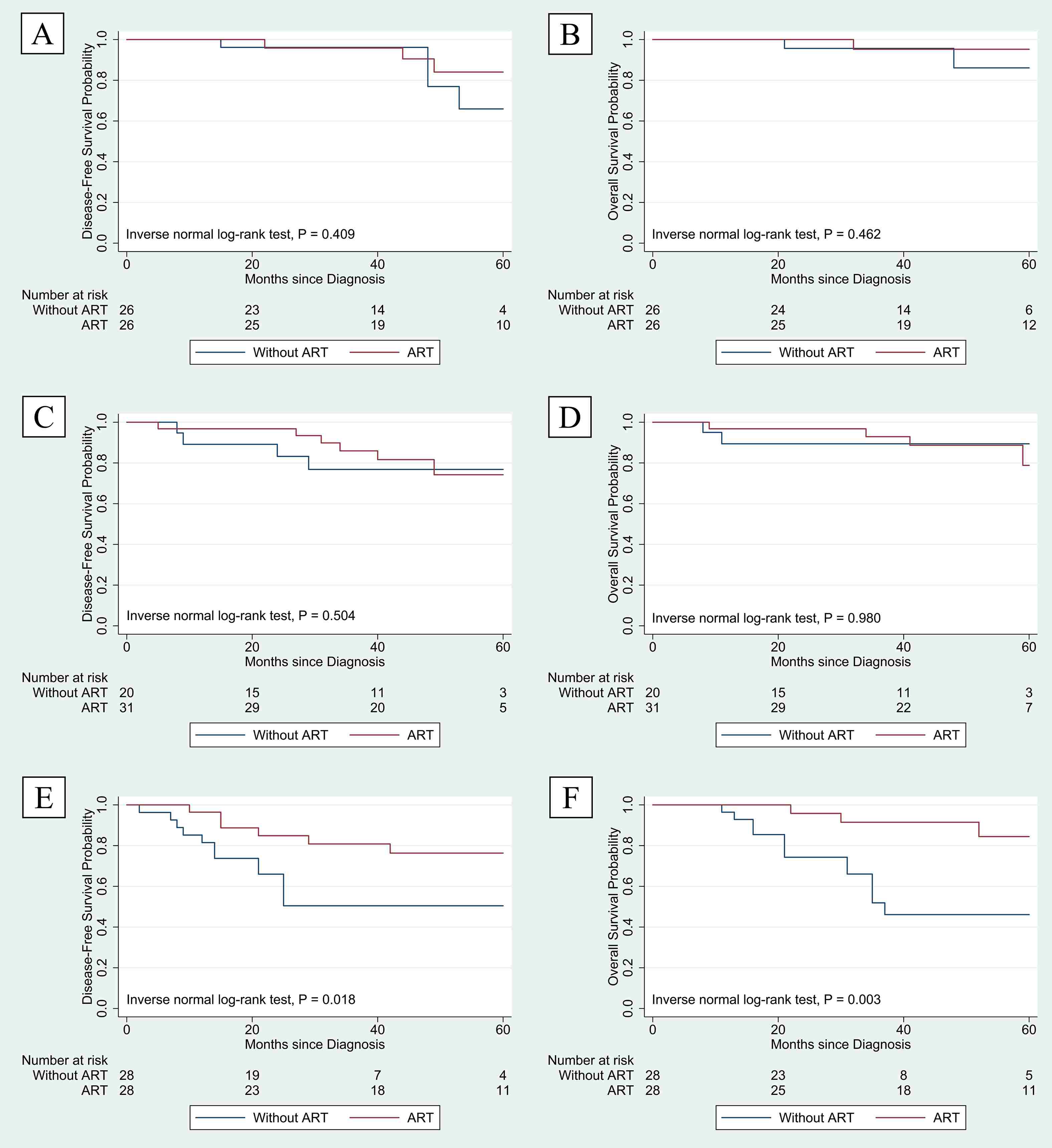
|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prognostic factor | 5-year DFS | | | | 5-year OS | | | |
| Univariate Analysis | | Multivariate Analysis | | Univariate Analysis | | Multivariate Analysis | |
| HR (95% CI) | *p* | aHR (95% CI) | *p* | HR (95% CI) | *p* | aHR (95% CI) | *p* |
| Age | 1.433 (0.577–3.558) | 0.438 |  | 0.710 | 1.681 (0.490–5.768) | 0.409 |  | 0.402 |
| Year at diagnosis | 0.219 (0.057–0.851) | 0.028 | 0.219 (0.057–0.851) | 0.028 | 0.474 (0.055–4.064) | 0.496 |  | 0.486 |
| Stage | 0.673 (0.203–2.230) | 0.517 |  | 0.410 | 0.778 (0.154–3.925) | 0.761 |  | 0.760 |
| Tumor size | 1.745 (0.823–3.699) | 0.146 |  | 0.438 | 1.464 (0.545–3.931) | 0.449 |  | 0.447 |
| Histologic type | 1.768 (0.600–5.216) | 0.302 |  | 0.412 | 2.170 (0.543–8.668) | 0.273 |  | 0.256 |
| Grade | 1.313 (0.561–3.074) | 0.530 |  | 0.710 | 1.809 (0.594–5.508) | 0.297 |  | 0.285 |
| Surgical approach | 0.436 (0.056–3.417) | 0.429 |  | 0.600 | 0.036 (0.000–NA) | 0.481 |  | 0.261 |
| Stromal invasion depth | 0.981 (0.125–7.690) | 0.985 |  | 0.776 | 0.609 (0.000–NA) | 0.609 |  | 0.431 |
| LVSI | 0.713 (0.154–3.304) | 0.666 |  | 0.621 | 1.485 (0.272–8.112) | 0.648 |  | 0.646 |
| PMI | NA | NA |  | NA | NA | NA |  | - |
| RMI | 2.860 (0.616–13.271) | 0.180 |  | 0.183 | 2.747 (0.307–23.595) | 0.366 |  | 0.346 |
| LN metastasis | 0.845 (0.182–3.911) | 0.829 |  | 0.418 | 0.697 (0.080–6.047) | 0.743 |  | 0.742 |
| Adjuvant radiotherapy | 0.668 (0.203–2.196) | 0.507 |  | 0.310 | 1.022 (0.186–5.623) | 0.980 |  | 0.980 |
| Adjuvant chemotherapy | 0.482 (0.104–2.232) | 0.351 |  | 0.366 | 0.948 (0.504–1.785) | 0.869 |  | 0.223 |

Cox proportional hazards regression models for multivariable analysis. All listed covariates were not found to have multicollinearity. LVSI, lymph vascular space invasion; PMI, parametrial involvement; RMI, resection margin involvement; LN, lymph node; HR, hazard ratio; CI, confidence interval.

Supplementary Table 7. Univariate and multivariate analyses of prognostic factors for 5-year DFS and OS by Cox proportional hazards regression models after matching in the group of patients with myometrial invasion ≥50%.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Prognostic factor | 5-year DFS | | | | 5-year OS | | | |
| Univariate Analysis | | Multivariate Analysis | | Univariate Analysis | | Multivariate Analysis | |
| HR (95% CI) | *p* | aHR (95% CI) | *p* | HR (95% CI) | *p* | aHR (95% CI) | *p* |
| Age | 0.625 (0.342–1.144) | 0.128 |  | 0.121 | 0.756 (0.395–1.446) | 0.398 |  | 0.740 |
| Year at diagnosis | 0.577 (0.134–2.492) | 0.462 |  | 0.451 | 0.447 (0.101–1.968) | 0.287 |  | 0.552 |
| Stage | 0.856 (0.407–1.800) | 0.681 |  | 0.653 | 1.044 (0.475–2.293) | 0.915 |  | 0.515 |
| Tumor size | 1.602 (0.886–2.897) | 0.119 |  | 0.057 | 1.817 (0.934–3.538) | 0.079 | 2.348 (1.033–5.338) | 0.042 |
| Histologic type | 2.758 (0.919–8.273) | 0.070 |  | 0.143 | 2.581 (0.735–9.065) | 0.139 |  | 0.452 |
| Grade | 1.010 (0.528–1.932) | 0.975 |  | 0.984 | 1.070 (0.509–2.247) | 0.859 |  | 0.685 |
| Surgical approach | 1.415 (0.541–3.705) | 0.479 |  | 0.758 | 0.951 (0.270–3.350) | 0.938 |  | 0.331 |
| Stromal invasion depth | 24.326 (0.058–NA) | 0.300 |  | 0.117 | 24.375 (0.028–NA) | 0.356 |  | 0.249 |
| LVSI | 1.442 (0.597–3.484) | 0.416 |  | 0.450 | 1.238 (0.464–3.304) | 0.670 |  | 0.685 |
| PMI | 0.920 (0.123–6.884) | 0.935 |  | 0.990 | 1.376 (0.180–10.500) | 0.758 |  | 0.652 |
| RMI | 1.710 (0.228–12.811) | 0.601 |  | 0.411 | 2.307 (0.303–17.548) | 0.419 |  | 0.036 |
| LN metastasis | 1.584 (0.631–3.976) | 0.328 |  | 0.323 | 2.004 (0.695–5.778) | 0.198 |  | 0.153 |
| Adjuvant radiotherapy | 0.336 (0.128–0.878) | 0.026 | 0.336 (0.128–0.878) | 0.026 | 0.189 (0.054–0.667) | 0.010 | 0.159 (0.044–0.577) | 0.005 |
| Adjuvant chemotherapy | 0.231 (0.031–1.734) | 0.154 |  | 0.285 | 0.035 (0.000–7.261) | 0.218 |  | 0.208 |

Cox proportional hazards regression models for multivariable analysis. All listed covariates were not found to have multicollinearity. LVSI, lymph vascular space invasion; PMI, parametrial involvement; RMI, resection margin involvement; LN, lymph node; HR, hazard ratio; CI, confidence interval.

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Supplementary Fig. 1. The 5-year DFS rate and OS following propensity score matching of cervical cancer patients with (A, B) endometrial invasion, (C, D) myometrial invasion <50%, and (E, F) myometrial invasion ≥50% within the uterine corpus.