Supplementary material

Supplementary Table 1. Eligibility criteria.

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| Inclusion Criteria |
| 1. Histologically confirmed primary cancer of the uterine cervix, uterine corpus, ovary and fallopian tube2. FIGO stage2.1 Cervical cancer: FIGO stage IA2–IIA22.2 Uterine cancer: FIGO stage I–III2.3 Ovarian and fallopian tubal cancer: FIGO stage I–IIIB3. Patients undergoing surgery, including pelvic or para-aortic lymph node dissection4. Patients with adequate bone marrow, renal, and hepatic function:4.1 WBC >3000 cells/mcl4.2 Platelets > 100,000/mcl4.3 Creatinine <2.0 mg/dL4.4 Bilirubin <1.5× normal and SGOT or SGPT <3× normal5. American Society of Anesthesiology Physical Status: 0–16. Performance status of ECOG: 0–27. Patient must be a suitable candidate for surgery8. Patients who have signed an approved informed consent9. Females, aged ≥20 years |
| Exclusion criteria |
| 1. Patients with a history of pelvic or abdominal radiotherapy2. Patients who are pregnant3. Patients with contraindications to surgery4. Patients who are unfit for surgery: serious concomitant systemic disorders incompatible with the study (at the discretion of the investigator)5. Patient’s compliance and geographic proximity that do not allow adequate follow-up6. Patients who undergo only lymph node sampling |

Supplementary Table 2. Quality of life outcomes.

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| Outcomes | Time | FloSeal Group(n = 20) | Non-FloSeal Group(n = 18) | *p* value\* |
| Mean | SE | Mean | SE |
| EORTC QLQ-C30 | Global | QL2 | Baseline | 47.50 | 4.49 | 44.58 | 4.49 | 0.9297 |
| V1 | 33.24 | 4.21 | 39.72 | 3.89 | 0.0053 |
| V2 | 50.78 | 4.86 | 43.79 | 4.75 | 0.3923 |
| V3 | 48.48 | 4.47 | 50.34 | 5.37 |  |
| Functional | PF2 | Baseline | 77.67 | 3.28 | 81.67 | 3.28 | 0.9282 |
| V1 | 53.85 | 4.73 | 56.45 | 4.37 | <0.0001 |
| V2 | 72.94 | 5.04 | 65.09 | 4.91 | 0.3302 |
| V3 | 68.97 | 4.91 | 71.67 | 6.01 |  |
| RF2 | Baseline | 71.67 | 4.65 | 82.50 | 4.65 | 0.6012 |
| V1 | 41.74 | 7.52 | 42.64 | 7.02 | <0.0001 |
| V2 | 58.19 | 6.82 | 55.39 | 6.65 | 0.5828 |
| V3 | 69.98 | 5.56 | 74.95 | 6.63 |  |
| EF | Baseline | 68.75 | 5.05 | 73.33 | 5.05 | 0.4861 |
| V1 | 73.41 | 4.65 | 69.65 | 4.35 | 0.6916 |
| V2 | 77.51 | 4.36 | 70.48 | 4.25 | 0.4428 |
| V3 | 78.10 | 3.52 | 71.45 | 4.18 |  |
| CF | Baseline | 86.67 | 3.41 | 85.83 | 3.41 | 0.9877 |
| V1 | 75.93 | 4.79 | 82.43 | 4.42 | 0.1276 |
| V2 | 78.83 | 5.37 | 79.02 | 5.22 | 0.4402 |
| V3 | 89.05 | 4.34 | 82.93 | 5.25 |  |
| SF | Baseline | 65.83 | 6.51 | 75.00 | 6.51 | 0.3899 |
| V1 | 62.86 | 6.26 | 68.63 | 5.94 | 0.292 |
| V2 | 73.25 | 6.03 | 72.79 | 5.93 | 0.7401 |
| V3 | 68.42 | 5.15 | 76.11 | 5.74 |  |
| Symptom | FA | Baseline | 37.78 | 4.85 | 32.22 | 4.85 | 0.9374 |
| V1 | 51.67 | 5.93 | 49.54 | 5.48 | 0.0165 |
| V2 | 44.13 | 4.66 | 46.01 | 4.50 | 0.4919 |
| V3 | 35.71 | 5.18 | 43.10 | 6.26 |  |
| NV | Baseline | 12.50 | 2.96 | 5.00 | 2.96 | 0.6642 |
| V1 | 19.45 | 4.07 | 10.26 | 3.79 | 0.0726 |
| V2 | 8.21 | 5.98 | 28.47 | 5.78 | 0.0066 |
| V3 | 12.40 | 4.00 | 15.09 | 4.89 |  |
| PA | Baseline | 16.67 | 4.56 | 15.83 | 4.56 | 0.9775 |
| V1 | 49.44 | 6.52 | 50.53 | 5.97 | <0.0001 |
| V2 | 36.66 | 6.90 | 30.90 | 6.70 | 0.8564 |
| V3 | 27.29 |  | 32.18 | 8.59 |  |
| DY | Baseline | 18.33 | 5.66 | 15.00 | 5.66 | 0.6012 |
| V1 | 22.17 | 5.20 | 23.17 | 4.75 | 0.2606 |
| V2 | 12.29 | 6.31 | 18.67 | 6.07 | 0.7436 |
| V3 | 9.83 | 5.25 | 15.85 | 6.62 |  |
| SL | Baseline | 33.33 | 5.95 | 23.33 | 5.95 | 0.7794 |
| V1 | 62.43 | 7.96 | 43.27 | 7.21 | 0.0035 |
| V2 | 30.49 | 6.52 | 37.42 | 6.44 | 0.0713 |
| V3 | 28.00 | 6.19 | 43.55 | 7.52 |  |
| AP | Baseline | 5.00 | 4.70 | 11.67 | 4.70 | 0.6139 |
| V1 | 40.93 | 6.40 | 40.83 | 5.91 | <0.0001 |
| V2 | 33.30 | 6.82 | 22.79 | 6.61 | 0.1555 |
| V3 | 16.52 | 5.99 | 30.89 | 7.31 |  |
| CO | Baseline | 20.00 | 4.46 | 20.00 | 4.46 | 0.7251 |
| V1 | 31.31 | 6.68 | 37.04 | 6.13 | 0.0048 |
| V2 | 34.89 | 6.36 | 35.14 | 6.15 | 0.931 |
| V3 | 25.69 | 5.37 | 27.32 | 6.82 |  |
| DI | Baseline | 16.67 | 3.59 | 3.33 | 3.59 | 0.0061 |
| V1 | 46.10 | 6.24 | 29.97 | 5.69 | <0.0001 |
| V2 | 34.52 | 6.61 | 21.57 | 6.44 | 0.6794 |
| V3 | 25.28 | 4.06 | 20.27 | 5.00 |  |
| FI　 | Baseline | 21.67 | 6.70 | 23.33 | 6.70 | 0.8099 |
| V1 | 31.60 | 5.57 | 28.31 | 5.32 | 0.0944 |
| V2 | 27.90 | 7.21 | 26.08 | 7.10 | 0.9649 |
| V3 | 24.02 | 4.79 | 21.28 | 5.44 |  |
| EORTC QLQ-OV28 | GI | Baseline | 20.19 | 3.01 | 18.73 | 2.95 | 0.9277 |
| V1 | 48.16 | 4.38 | 44.35 | 4.03 | <0.0001 |
| V2 | 31.96 | 3.24 | 32.02 | 3.19 | 0.8487 |
| V3 | 22.57 | 4.42 | 26.56 | 5.30 |  |
| PN | Baseline | 19.00 | 3.67 | 12.22 | 3.59 | 0.5392 |
| V1 | 33.06 | 5.32 | 26.19 | 4.89 | 0.004 |
| V2 | 24.77 | 5.96 | 25.55 | 5.72 | 0.49 |
| V3 | 24.11 | 3.90 | 25.60 | 4.84 |  |
| CH | Baseline | 13.15 | 2.68 | 11.55 | 2.62 | 0.298 |
| V1 | 23.78 | 3.42 | 26.20 | 3.16 | 0.0003 |
| V2 | 18.10 | 3.62 | 24.66 | 3.63 | 0.633 |
| V3 | 18.74 | 3.01 | 24.06 | 3.46 |  |
| HM | Baseline | 11.18 | 3.75 | 18.33 | 3.67 | 0.7978 |
| V1 | 36.84 | 5.24 | 26.87 | 4.77 | 0.0027 |
| V2 | 30.21 | 5.26 | 27.66 | 5.07 | 0.2016 |
| V3 | 23.06 | 5.85 | 32.68 | 7.43 |  |
| BI | Baseline | 33.52 | 6.79 | 15.83 | 6.72 | 0.6177 |
| V1 | 34.72 | 6.48 | 31.79 | 6.38 | 0.0089 |
| V2 | 26.88 | 6.87 | 28.10 | 6.68 | 0.1646 |
| V3 | 23.16 | 5.12 | 27.76 | 5.58 |  |
| AT　 | Baseline | 59.18 | 6.49 | 47.78 | 6.35 | 0.8103 |
| V1 | 58.06 | 4.39 | 52.21 | 4.16 | 0.0007 |
| V2 | 44.29 | 6.11 | 53.61 | 5.90 | 0.0075 |
| V3 | 32.68 | 4.86 | 45.98 | 5.90 |  |
| EORTC QLQ-CX24 | SF2 | Baseline | 3.18 | 1.93 | 5.42 | 1.83 | 0.942 |
| V1 | 0.92 | 0.89 | 1.01 | 0.88 | 0.0096 |
| V2 | 7.69 | 4.25 | 4.23 | 3.97 | 0.6237 |
| V3 | 3.11 | 2.05 | 4.87 | 2.28 |  |
| SE1 | Baseline | 13.98 | 1.85 | 13.33 | 1.85 | 0.7981 |
| V1 | 30.98 | 3.44 | 32.14 | 3.19 | <0.0001 |
| V2 | 19.41 | 3.50 | 23.01 | 3.44 | 0.7891 |
| V3 | 17.00 | 2.47 | 15.81 | 3.02 |  |
| BI1 | Baseline | 18.89 | 5.98 | 14.44 | 5.98 | 0.2411 |
| V1 | 40.54 | 5.79 | 23.42 | 5.47 | 0.0059 |
| V2 | 34.46 | 6.40 | 24.51 | 6.33 | 0.0742 |
| V3 | 21.73 | 4.69 | 24.93 | 5.44 |  |
| L1 | Baseline | 8.33 | 3.73 | 8.33 | 3.73 | 0.8391 |
| V1 | 30.80 | 5.57 | 29.27 | 5.10 | 0.0002 |
| V2 | 30.26 | 6.05 | 23.32 | 5.98 | 0.4983 |
| V3 | 18.91 | 4.12 | 23.91 | 4.94 |  |
| PN1 | Baseline | 15.00 | 4.38 | 10.00 | 4.38 | 0.621 |
| V1 | 37.13 | 5.54 | 30.82 | 5.06 | 0.0006 |
| V2 | 23.05 | 4.42 | 20.03 | 4.29 | 0.7969 |
| V3 | 24.51 | 6.74 | 29.55 | 8.36 |  |
| MS1 | Baseline | 15.00 | 5.37 | 13.33 | 5.37 | 0.5519 |
| V1 | 37.76 | 4.11 | 31.03 | 3.79 | 0.0002 |
| V2 | 34.79 | 5.61 | 29.61 | 5.38 | 0.7614 |
| V3 | 41.13 | 5.90 | 44.05 | 7.43 |  |
| SW1　 | Baseline | 16.67 | 6.07 | 10.00 | 6.07 | 0.4412 |
| V1 | 13.54 | 7.61 | 12.92 | 7.24 | 0.961 |
| V2 | 22.28 | 6.61 | 6.42 | 6.26 | 0.2742 |
| V3 | 14.99 | 5.50 | 17.82 | 6.90 |  |

\*There are three *p* values in each item: upper, difference between groups; middle, treatment and time effect; lower, interaction of treatment and time.

EORTC QLQ, European Organization for Research and Treatment of Cancer Quality of Life Questionnaire; QL2, global health status/quality of life; PF2, physical functioning; RF2, role functioning; EF, emotional functioning; CF, cognitive functioning; SF, social functioning; FA, fatigue; NV, nausea and vomiting; PA, pain; DY, dyspnea; SL, insomnia; AP, appetite loss; CO, constipation; DI, diarrhea; FI, financial difficulties; GI, abdominal/gastrointestinal symptoms; PN, peripheral neuropathy; CH, other chemotherapy side-effects; HM, hormonal/menopausal symptoms; BI, body image; AT, attitude to disease and treatment; SF2, sexual functioning; SE1, symptom experience; BI1, body image; SVF1, sexual/vaginal functioning; L1, lymphedema; PN1; peripheral neuropathy; MS1, menopausal symptoms; SW1, sexual worry.