**Table S1** Univariable and multivariable analysis of the impact of treatment groups on CSP patients with and without adverse events

| Treatment Group | Cases, n (%) | Univariable analysis | | Multivariable analysis* | |
|---|---|---|---|---|---|
| | | OR (95% CI) | P value | OR (95% CI) | P value |
| No treatment | 226 (82.9%) | 1.000 (reference) | – | 1.000 (reference) | – |
| Other treatment only | 31 (11.4%) | 3.583 (1.419–9.031) | 0.007 | 0.779 (0.135–4.509) | 0.781 |
| Any UAE/MTX use | 16 (5.9%) | 0.687 (0.861–5.474) | 0.723 | 0.346 (0.025–4.707) | 0.425 |

*, covariates: gestational age, gestational mass size, presence of a GS, RMT, localization types, RMT, exact extent of protrusion, vascularity supplying. CSP, cesarean scar pregnancy; OR, odds ratio; CI, confidence interval; UAE, uterine artery embolization; MTX, methotrexate; GS, gestation sac; RMT, minimum residual myometrial thickness.

**Table S2** Comparison of preoperative interventions effects between primary and sensitivity analyses

| Preoperative interventions | Primary multivariable model* | | Sensitivity analysis* | |
|---|---|---|---|---|
| | OR (95% CI) | P value | OR (95% CI) | P value |
| No | 1.00 (reference) | – | 1.00 (reference) | – |
| Yes | 0.634 (0.124–3.248) | 0.585 | 0.465 (0.070–3.086) | 0.428 |

*, covariates: gestational age, gestational mass size, presence of a GS, RMT, localization types, RMT, exact extent of protrusion, vascularity supplying. CI, confidence interval; CSP, cesarean scar pregnancy; GS, gestation sac; OR, odds ratio; RMT, minimum residual myometrial thickness.

**Table S3** Interaction analysis between treatment modalities

| Interaction Terms | OR (95% CI) | P value |
|---|---|---|
| Main Effects | | |
| Other treatment only (vs. none) | 0.741 (0.125–4.393) | 0.743 |
| Any UAE/MTX use (vs. none) | 0.272 (0.193–3.838) | 0.324 |
| Interaction Effects | | |
| Other treatment only × any UAE/MTX use | 1.000 | >0.05 |

OR, odds ratio; CI, confidence interval; UAE, uterine artery embolization; MTX, methotrexate; GS, gestation sac.