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Annual Report of the Committee on Gynecologic Oncology, Japan Society of Obstetrics and Gynecology: Patient Annual Report for 2013 and Treatment Annual Report for 2008

Toshiaki Saito[1] and Hidetaka Katabuchi[2]

[1]*Gynecology Service, National Kyushu Cancer Center, Fukuoka and* [2]*Department of Obstetrics and Gynecology, Faculty of Life Sciences, Kumamoto University, Kumamoto, Japan*

Abstract

The Japan Society of Obstetrics and Gynecology collects and analyzes annual data on gynecologic cancers from member institutions. We present the Patient Annual Report for 2013 and the Treatment Annual Report for 2008. Data on 7280 patients with cervical cancer, 8952 with endometrial cancer, 5792 with ovarian cancer and 1903 with ovarian borderline tumor for whom treatment was initiated in 2013 were summarized in the Patient Annual Report. Stage I accounted for 56.7%, stage II for 23.4%, stage III for 9.8% and stage IV for 10.2% of all patients with cervical cancer. Stage I accounted for 71.7%, stage II for 6.5%, stage III for 14.5% and stage IV for 7.3% of all patients with endometrial cancer. Stage I accounted for 42.2%, stage II for 9.8%, stage III for 28.2% and stage IV for 8.3% of all patients with ovarian cancer. Data on the prognosis of 3658 patients with cervical cancer, 4159 with endometrial cancer and 2866 with ovarian cancer for whom treatment was initiated in 2008 were analyzed in the Treatment Annual Report. Survival was analyzed by using the Kaplan–Meier method, the log–rank test and the Wilcoxon test. The 5-year overall survival rates for patients with cervical cancer were 93.0% for stage I, 73.1% for stage II, 55.2% for stage III and 24.2% for stage IV. The equivalent rates for patients with endometrial cancer were 94.5%, 90.3%, 74.2% and 24.0%, respectively; and those for patients with ovarian cancer (surface epithelial–stromal tumors) were 90.5%, 73.5%, 48.1% and 29.4%, respectively.

Key words: annual report, cervical cancer, endometrial cancer, gynecologic cancer, Japan, ovarian cancer.

Introduction

The Japan Society of Obstetrics and Gynecology (JSOG) collects annual data on the clinicopathologic factors and prognosis of gynecologic cancers from member institutions every year and analyzes this information to investigate the trends in gynecologic cancers in Japan.

Presently, we show some of the results of the Patient Annual Report for 2013 and the Treatment Annual Report for 2008. The data presented in this paper are quoted and modified from previous reports.[1,2]

Methods

For patients whose treatment was initiated in 2013, data were collected, retrospectively analyzed and summarized in the Patient Annual Report for 2013. For patients whose treatment was initiated in 2008, data on prognosis were collected, analyzed and summarized in the Treatment Annual Report for 2008, assuming a 5-year follow-up period was necessary.

The present study was conducted with the approval of the ethics committee of JSOG.

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Correspondence: Toshiaki Saito, Gynecology Service, National Kyushu Cancer Center, Notame 3-1-1, Minami-ku, Fukuoka 811-1346, Japan.
Email: tsaitou@nk-cc.go.jp
*Hidetaka Katabuchi is Chair of the 2015 Committee on Gynecologic Oncology, Japan Society of Obstetrics and Gynecology.
Statement: The data in the present report were a part of the Patient Annual Report for 2013 and the Treatment Annual Report for 2008 in the Annual Report of the Committee on Gynecologic Oncology, Japan Society of Obstetrics and Gynecology. The full reports were published previously in Japanese in *Acta Obstet Gynaecol Jpn*, 2015.

Patient Annual Report for 2013

The subjects included 13 885 patients with cervical intraepithelial neoplasia 3 (CIN3), 7280 with stage I–IV cervical cancer, 662 with atypical endometrial hyperplasia, 8952 with stage I–IV endometrial cancer, 5792 with ovarian cancer and 1903 with borderline ovarian tumor. These patients were histopathologically diagnosed in each of the 423 member institutions of JSOG and were administered treatment between January and December 2013. The clinical stages of cervical cancer and surgical stages of endometrial cancer were based on the FIGO 2008 staging system. The surgical stages for ovarian cancer, including borderline ovarian tumor, were based on the FIGO 1988 staging system. Data on age, clinical stage, histologic type and treatment were collected for patients with cervical cancer; data on age, surgical stage, histologic type and treatment were collected for patients with endometrial cancer; and data on age, surgical stage, histologic type and treatment were collected for patients with ovarian cancer and borderline ovarian tumor. Patient information was anonymized in a linkable fashion and registered from each institution onto the website of JSOG.

Statistical analyses were performed at the Clinical Research, Innovation and Education Center, Tohoku University Hospital, Sendai, Japan.

Treatment Annual Report for 2008

In all, 228 institutions provided data on the 3-year and 5-year prognoses of patients registered in any of the member institutions of JSOG between January and December 2008 and those reported in the Patient Annual Report for 2008. These patients included 5390 with cervical cancer, 5408 with endometrial cancer and 3734 with ovarian cancer. The clinical stages of cervical cancer and surgical stages of endometrial cancer and ovarian cancer, including borderline ovarian tumor, were based on the FIGO 1988 staging system. Data from institutions in which over 20% of registered patients were untraceable were not included in the analysis of treatment outcomes and prognoses because such data would decrease the reliability of treatment outcomes and prognoses. Accordingly, data of 3658 patients with cervical cancer, 4159 with endometrial cancer and 2866 with ovarian cancer were ultimately included in the outcome analysis. Personal information was anonymized in a linkable fashion and information on prognoses was then registered on the JSOG website.

Thereafter, the data were statistically analyzed at the Clinical Research, Innovation and Education Center, Tohoku University Hospital, Sendai, Japan.

Statistical Analysis

The overall survival rates were analyzed by the Kaplan–Meier method and statistical significance was determined using the log–rank test and the Wilcoxon test.

Results

Patient Annual Report for 2013

Cervical cancer

Age distribution (Fig. 1). Patients aged 40–49, 30–39, 50–59 and 60–69 years accounted for 26.3%, 19.1%, 17.3% and 17.2% of all registered patients, respectively; these findings demonstrated that the disease predominantly affected women in their 30s and 40s.

Stages (Fig. 2). Stage I accounted for 56.7% (stage IA1, 14.7%; stage IA2, 1.9%; stage IB1, 29.6%; stage IB2, 9.0%; subclassification unknown, 1.4%), stage II accounted for 23.4% (stage IIA1, 3.1%; stage IIA2, 2.0%; stage IIB, 17.7%; subclassification unknown, 0.6%), stage III accounted for 9.8% (stage IIIA, 1.1%; stage IIIB, 8.6%; subclassification unknown, 0.1%) and stage IV accounted for 10.2% (stage IVA, 2.4%; stage IVB, 7.8%; subclassification unknown, 0.1%) of all patients.

Histologic types (Table 1). Squamous cell carcinoma was the most commonly encountered histopathologic type, accounting for 72.5% of all patients, while adenocarcinoma accounted for 24.2% of all patients. The other rare histologic types encountered are shown in Table 1.

Treatment (Fig. 3). Of the patients, 36.9% underwent just surgery, 20.0% received chemotherapy and other therapies in addition to radiotherapy, 13.9% received chemotherapy and other therapies in addition to surgery, 12.1% received just radiotherapy and 9.1% received radiotherapy and chemotherapy in addition to surgery. 'Other therapies' shown in the figure include immunotherapy and hormone therapy.

Endometrial cancer

Age distribution (Fig. 4). Patients aged 50–59, 60–69, 40–49 and 70–79 years accounted for 30.0%, 28.0%, 16.0% and 15.6%, respectively, of all patients; these findings showed that the disease predominantly affected women in their 50s and 60s. On the other hand, younger patients aged < 40 years accounted for 5.2% of all patients.

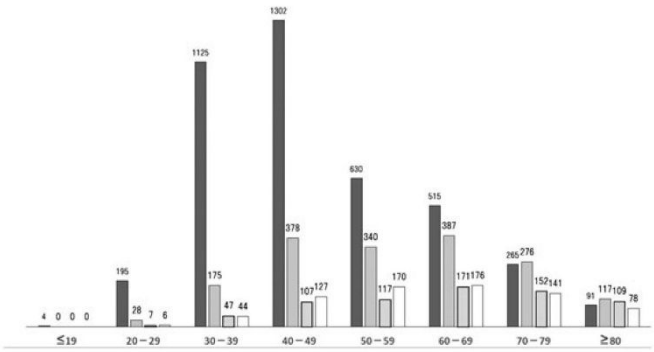

Figure 1 Age distribution by clinical stage for patients with stage I–IV cervical cancer in 2013.
Stage I; ■, Stage II; ▒, Stage III; ▨, Stage IV; □.

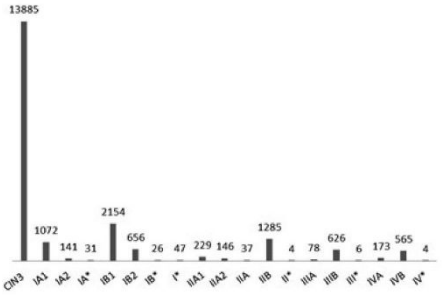

Figure 2 Distribution of clinical stages for patients with cervical cancer in 2013.
* Subclassification unknown.

Table 1 Histologic types of cervical cancer in 2013

Histologic type	Number of patients	%
Squamous cell carcinoma, classification unknown	1398	19.2
Squamous cell carcinoma, keratinizing type	913	12.5
Squamous cell carcinoma, non-keratinizing type	2033	27.9
Basaloid carcinoma	7	0.1
Verrucous carcinoma	3	0.0
Condylomatous carcinoma	16	0.2
Papillary squamous cell carcinoma	29	0.4
Lymphoepithelioma-like squamous cell carcinoma	6	0.1
Squamotransitional carcinoma	0	0.0
Microinvasive squamous cell carcinoma	939	12.9
Adenocarcinoma, classification unknown	301	4.1
Mucinous adenocarcinoma, endocervical type	689	9.5
Mucinous adenocarcinoma, intestinal type	40	0.5
Endometrioid adenocarcinoma	171	2.3
Clear cell adenocarcinoma	49	0.7
Serous adenocarcinoma	39	0.5
Mesonephric adenocarcinoma	1	0.0
Mucinous adenocarcinoma, minimal-deviation type	24	0.3
Mucinous adenocarcinoma, villoglandular type	10	0.1
Microinvasive adenocarcinoma	161	2.2
Adenosquamous carcinoma	257	3.5
Glassy cell carcinoma	22	0.3
Adenoid cystic carcinoma	2	0.0
Adenoid basal carcinoma	7	0.1
Carcinoid	1	0.0
Atypical carcinoid	0	0.0
Small cell carcinoma	71	1.0
Large cell neuroendocrine carcinoma	21	0.3
Undifferentiated carcinoma	18	0.2
Carcinosarcoma	7	0.1
Others	39	0.5
Unknown	6	0.1
Total	7280	100.0

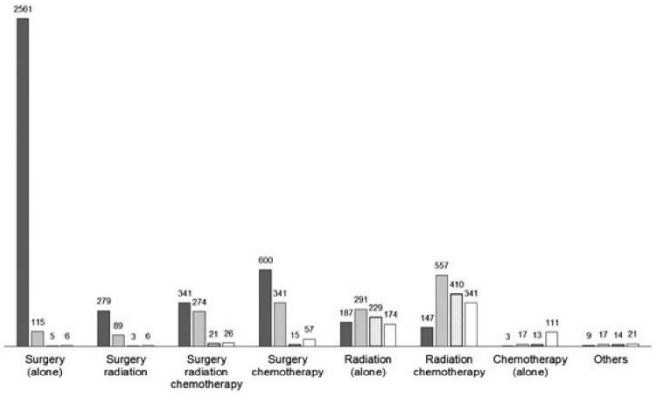

Figure 3 Distribution of treatment methods by clinical stage for patients with cervical cancer in 2013.
Stage I; ■, Stage II; ▒, Stage III; ▩, Stage IV; □.

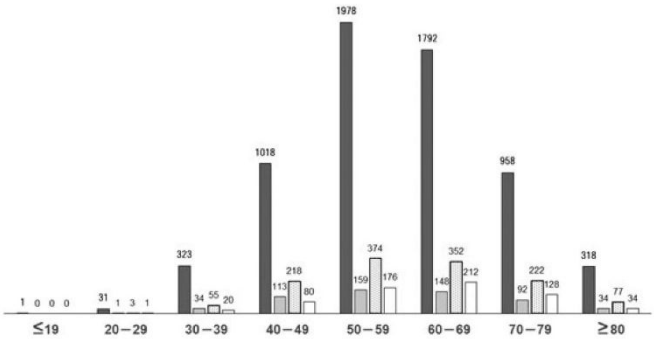

Figure 4 Age distribution by surgical stage for patients with stage I–IV endometrical cancer in 2013.
Stage I; ■, Stage II; ▒, Stage III; ▩, Stage IV; □.

Surgical stages (Fig. 5). Stage I accounted for 71.7% (stage IA, 55.5%; stage IB, 15.9%; subclassification unknown, 0.3%), stage II accounted for 6.5%, stage III accounted for 14.5% (stage IIIA, 4.1%; stage IIIB, 1.0%; stage IIIC1, 4.5%; stage IIIC2, 3.9%; subclassification unknown, 0.9%) and stage IV accounted for 7.3% (stage IVA, 0.3%; stage IVB, 6.7%; subclassification unknown, 0.3%) of all patients.

Histologic types (Table 2). Endometrioid adenocarcinoma was the most common histologic type, accounting for 82.2% of all tumors. Other histologic types included serous adenocarcinoma (4.9%), clear cell adenocarcinoma (2.2%) and mixed carcinoma (2.3%). Carcinosarcoma was observed in 4.7% of patients.

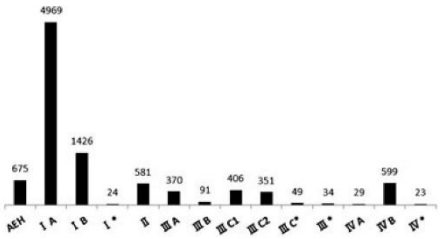

Figure 5 Distribution of surgical stages for patients with endomentrical cancer in 2013.
*Subclassification unknown.

Table 2 Histologic types of endometrial cancer in 2013

Histologic type	No. of patients	%
Endometrioid adenocarcinoma	6999	78.2
Endometrioid adenocarcinoma with squamous differentiation	354	4.0
Endometrioid adenocarcinoma, villoglandular variant	8	0.1
Endometrioid adenocarcinoma, secretory variant	0	0.0
Serous adenocarcinoma	443	4.9
Clear cell adenocarcinoma	193	2.2
Mucinous adenocarcinoma	39	0.4
Squamous cell carcinoma	19	0.2
Mixed carcinoma	207	2.3
Transitional cell carcinoma	0	0.0
Small cell carcinoma	28	0.3
Undifferentiated carcinoma	56	0.6
Carcinofibroma	1	0.0
Carcinosarcoma	425	4.7
Others	167	1.9
Classification unknown	13	0.1
Total	8952	100.0

Treatment (Fig. 6). Of the patients, 57.7% underwent just surgery; 36.6% received chemotherapy and other therapies, such as hormone therapy, after surgery; 1.0% received radiotherapy after surgery; and 2.3% received chemotherapy alone or with hormone therapy. 'Other therapies' shown in the figure include immunotherapy.

Ovarian cancer (all histologic types)

Age distribution (Fig. 7). Patients aged 60–69, 50–59 and 40–49 years accounted for 26.9%, 24.6% and 21.5%, respectively, of all patients; this indicated that the disease predominantly affected women in their 50s and 60s.

Surgical stages (Fig. 8). Stage I accounted for 42.2% (stage Ia, 16.9%; stage Ib, 0.8%; stage Ic, 24.5%), stage II accounted for 9.8% (stage IIa, 1.2%; stage IIb, 1.4%; stage IIc, 7.2%), stage III accounted for 28.2% (stage IIIa, 1.1%; stage IIIb, 3.5%; stage IIIc, 23.6%) and stage IV accounted for 8.3% of all patients. Neoadjuvant chemotherapy was administered to 10.9% of patients.

Histologic types (Table 3). Surface epithelial–stromal tumors accounted for 94.6%, serous adenocarcinoma for 35.7%, clear cell adenocarcinoma for 23.4%, endometrioid adenocarcinoma for 16.9% and mucinous adenocarcinoma for 10.7% of all tumors. Sex cord–stromal and germ cell tumors were observed in 0.2% and 3.9% of patients, respectively.

Treatment (Fig. 9). Of the patients, 78.6% received chemotherapy after surgery, 19.3% underwent just surgery and 1.1% received just chemotherapy.

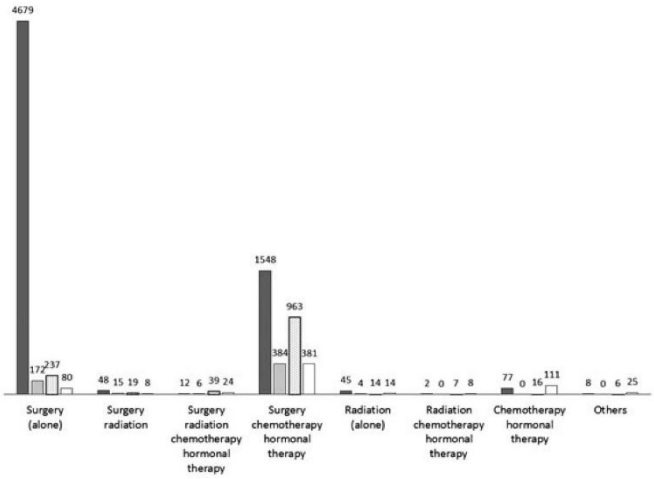

Figure 6 Distibution of treatment methods by surgical stage for patients with endometrial cancer in 2013. Stage I; ■, Stage II; ▒, Stage III; ▨, Stage IV; □.

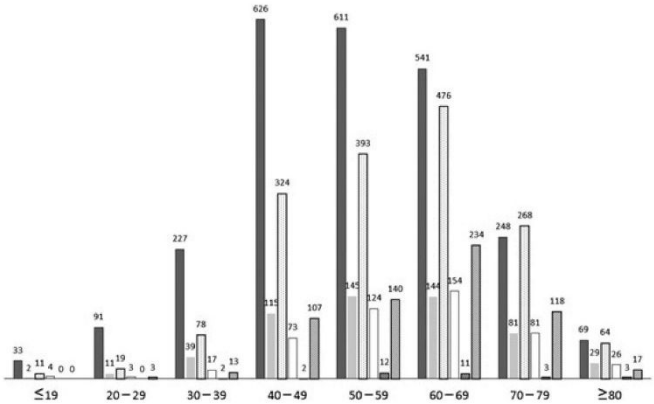

Figure 7 Age distribution by surgical stage fot patients with ovarian cancer in 2013.
Stage I; ■, Stage II; ■, Stage III; ▨, Stage IV; □, Unknown; ■, Neoadjuvant chemotherapy; ■.

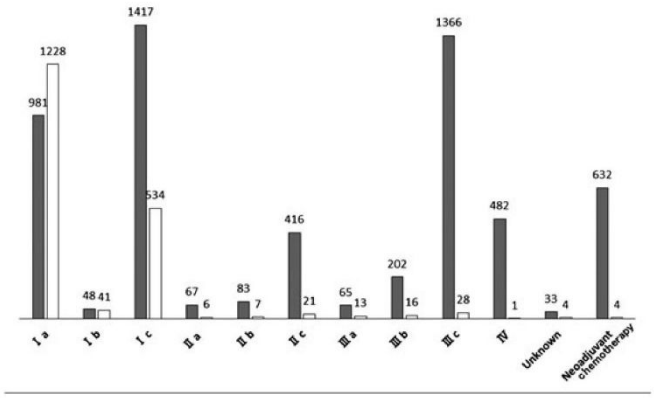

Figure 8 Distribution of surgical stages in patients with ovarian cancer and borderline ovarian tumor in 2013.
Ovarian cancer; ■, Ovarian borderline tumor; □.

Borderline ovarian tumor

Surgical stages (Fig. 8). Stage I accounted for 94.7% (stage Ia, 64.5%; stage Ib, 2.2%; stage Ic, 28.1%), stage II accounted for 1.8% (stage IIa, 0.3%; stage IIb, 0.4%; stage IIc, 1.1%), stage III accounted for 3.0% (stage IIIa, 0.7%; stage IIIb, 0.8%; stage IIIc, 1.5%) and stage IV accounted for 0.1% of patients. Neoadjuvant chemotherapy was administered to 0.2% of patients.

Histologic types (Table 4). Mucinous tumors accounted for 58.5%, serous tumors for 19.0%, endometrioid tumors for 2.2% and mixed tumors for 2.7% of all tumors. In addition, granulosa cell tumors accounted for 7.9% and immature teratomas (G1, G2) for 3.6% of tumors.

Treatment (Fig. 10). Of the patients, 94.4% underwent just surgery and 5.6% received chemotherapy after surgery.

Table 3 Histologic types of ovarian cancer in 2013

Histologic type	No. of patients	%
Serous adenocarcinoma	2066	35.7
Mucinous adenocarcinoma	619	10.7
Endometrioid adenocarcinoma	977	16.9
Clear cell adenocarcinoma	1354	23.4
Undifferentiated carcinoma	75	1.3
Mixed-type adenocarcinoma	150	2.6
Others: adenosarcoma (homologous)	18	0.3
Others: adenosarcoma (heterologous)	9	0.2
Others: mesodermal mixed tumor (homologous)	24	0.4
Others: mesodermal mixed tumor (heterologous)	30	0.5
Others: stromal sarcoma	2	0.0
Others: malignant Brenner tumor	11	0.2
Others: transitional cell carcinoma	19	0.3
Others: unclassifiable	70	1.2
Others: others	58	1.0
Sertoli-stromal cell tumor (poorly differentiated)	6	0.1
Others: fibrosarcoma	4	0.1
Others: others	1	0.0
Immature teratoma G3	29	0.5
Dysgerminoma	41	0.7
Yolk sac tumor	43	0.7
Malignant mixed germ cell tumor	0	0.0
Malignant mixed germ cell tumor: yolk sac tumor + dysgerminoma	10	0.2
Malignant mixed germ cell tumor: yolk sac tumor + immature teratoma	5	0.1
Malignant mixed germ cell tumor: others	8	0.1
Mature cystic teratoma with malignant transformation	87	1.5
Others: embryonal carcinoma	0	0.0
Others: polyembryoma	1	0.0
Others: choriocarcinoma	2	0.0
Others: others	2	0.0
Sarcoma	18	0.3
Others: carcinoma of the rete ovarii	0	0.0
Others: small cell carcinoma	12	0.2
Others: hepatoid carcinoma	1	0.0
Others: squamous cell carcinoma	20	0.3
Others: gestational choriocarcinoma	0	0.0
Others: malignant lymphoma (primary)	3	0.1
Others: unclassifiable	1	0.0
Others: tumor possibly originating from the Wolffian duct	1	0.0
Others: others	15	0.3
Total	5792	100.0

Treatment Annual Report for 2008

Cervical cancer

Overall survival by clinical stage (Fig. 11). The overall survival (OS) rates by clinical stage are shown in Figure 11. The 5-year OS rates were 93.0% for stage I (stage IA1, 99.5%; stage IA2, 100%; stage IB1, 94.1%; stage IB2, 81.1%), 73.1% for stage II (stage IIA, 77.6%; stage IIB, 71.5%), 55.2% for stage III (stage IIIA, 66.1%; stage IIIB, 54.0%) and 24.2% for stage IV patients (stage IVA, 41.2%; stage IVB, 17.3%). There were significant differences in OS between stages I and II ($P < 0.0001$), stages II and III ($P < 0.0001$) and stages III and IV ($P < 0.0001$).

OS by histologic type (Fig. 12). The OS rates by histologic type are shown in Figure 12. The 5-year OS rates were 80.0%, 73.7%, 80.0% and 52.9% in patients with squamous cell carcinoma, adenocarcinoma, adenosquamous carcinoma and other cancers, respectively. Patients with squamous cell carcinoma had a significantly better survival compared to adenocarcinoma ($P = 0.0002$) and adenosquamous cell carcinoma ($P = 0.0007$). Patients with other cancers had a significantly worse prognosis compared with those with squamous cell carcinoma ($P < 0.0001$) and adenosquamous carcinoma ($P < 0.0001$).

Endometrial cancer

OS by surgical stage (Fig. 13). The OS rates by surgical stage are shown in Figure 13. The 5-year OS rates were 94.5% for stage I patients (stage IA, 96.4%; stage IB, 94.3%; stage IC, 92.3%), 90.3% for stage II patients (stage IIA, 94.5%; stage IIB, 88.0%), 74.2% for stage III patients (stage IIIA, 81.2%; stage IIIB, 43.2%; stage IIIC, 67.3%) and 24.0% for stage IV patients (stage IVA, 36.8%; stage IVb, 23.5%). There were significant differences between patients with stages I and II ($P < 0.0001$), stages II and III ($P < 0.0001$) and stages III and IV ($P < 0.0001$).

OS by histologic type (Fig. 14). The 5-year OS rates were 94.6%, 88.2% and 80.2% for patients with G1, G2 and G3 endometrioid adenocarcinoma, respectively. Patients with G1 endometrioid adenocarcinoma had a significantly better prognosis compared with those with G2 and G3 endometrioid adenocarcinoma, serous adenocarcinoma, clear cell adenocarcinoma and carcinosarcoma ($P < 0.0001$). Patients with G2 endometrioid adenocarcinoma had a significantly better prognosis compared with those with G3 endometrioid adenocarcinoma ($P = 0.0016$), serous adenocarcinoma ($P < 0.0001$), clear cell adenocarcinoma ($P = 0.0006$) and carcinosarcoma ($P < 0.0001$). Patients with G3 endometrioid

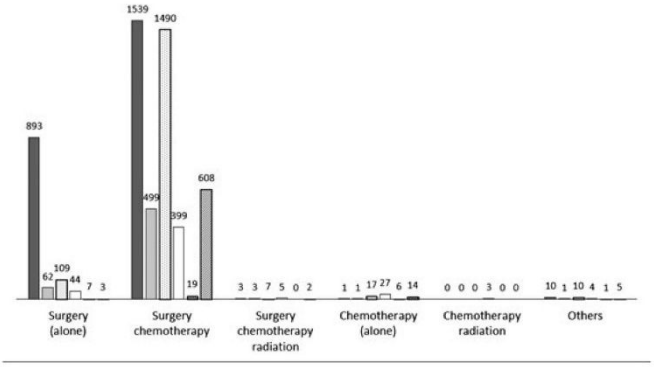

Figure 9 Distribution of treatment methods by surgical stage for patients with ovarian cancer in 2013. Stage I; ■, Stage II; ▩, Stage III; ▨, Stage IV; □, Unknown; ▩, Neoadjuvant chemotherapy; ▩.

Table 4 Histologic types of ovarian borderline tumor in 2013

Histologic type	No. of patients	%
Serous tumor	361	19.0
Mucinous tumor	1114	58.5
Others: endometrioid tumor	42	2.2
Others: clear cell tumor	24	1.3
Others: proliferating Brenner tumor	17	0.9
Others: mixed tumor	52	2.7
Others: unclassifiable	3	0.2
Others: others	4	0.2
Granulosa cell tumor	151	7.9
Sertoli-stromal cell tumor (moderately differentiated)	25	1.3
Others: gynandroblastoma	2	0.1
Others: steroid cell tumor (unclassifiable)	4	0.2
Others: others	2	0.1
Immature teratoma (G1, G2)	68	3.6
Others: carcinoid	27	1.4
Others: neuroectodermal tumor	2	0.1
Others: others	3	0.2
Tumor of borderline malignancy other than the above: gonadoblastoma	0	0
Tumor of borderline malignancy other than the above: others	2	0.1
Total	1903	100.0

adenocarcinoma had a significantly better prognosis compared with those with serous adenocarcinoma ($P = 0.0019$) and carcinosarcoma ($P = 0.0006$). Patients with clear cell adenocarcinoma had a significantly

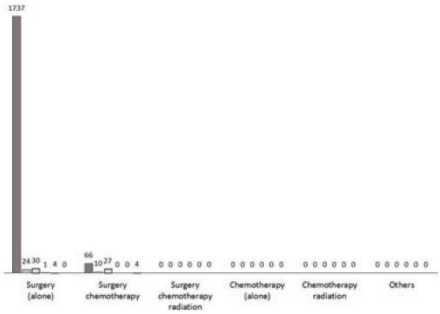

Figure 10 Distribution of treatment methods by surgical stage for patients with borderline ovarian tumor in 2013. Stage I; ■, Stage II; ▩, Stage III; ▨, Stage IV; □, Unknown; ▩, Neoadjuvant chemotherapy; ▩.

better prognosis compared with those with carcinosarcoma and serous adenocarcinoma ($P < 0.0001$).

Ovarian cancer (surface epithelial–stromal tumors)

OS by surgical stage of ovarian cancer (Fig. 15). The OS rates by surgical stage are shown in Figure 15. When compared among the stages of surface epithelial–stromal tumors, the 5-year OS rates were 90.5% in stage I patients (stage IA, 95.5%; stage IB, 76.5%; stage IC(b), 93.4%; stage IC(1), 72.9%; stage IC(2), 81.4%; stage IC(a), 79.4%), 73.3% in stage II patients (stage IIA, 83.1%; stage IIB, 65.1%; stage IIC(b), 78.6%; stage IIC(1), 50.0%; stage

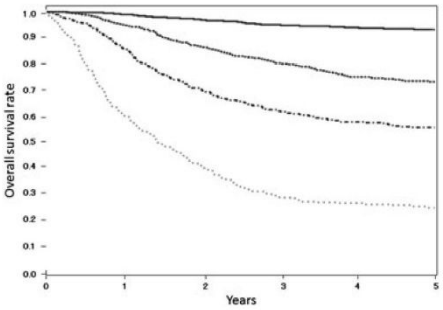

Figure 11 Overall survival in patients with stage I–IV cervical cancer by clinical stage in 2008.
FIGO stage: I (▬▬), II (▬ ▬ ▬), III (▬ · ▬ · ▬), IV (▪ ▪ ▪ ▪ ▪).

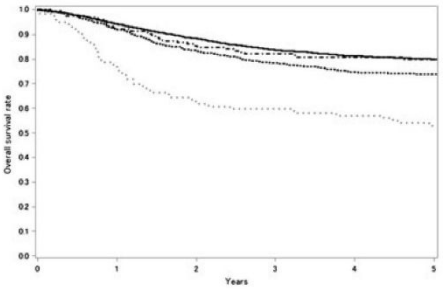

Figure 12 Overall survival by histologic type for patients with stage I–IV cervical cancer in 2008.
Histologic type: Squamous cell carcinoma (▬▬), Adenocarcinoma (▬ ▬ ▬), Adenosquamous carcinoma (▬ · ▬ · ▬), Others (▪ ▪ ▪ ▪ ▪).

IIC(2), 61.4%; stage IIC(a), 82.0%), 47.8% in stage III patients (stage IIIA, 64.4%; stage IIIB, 56.6%; stage IIIC, 45.5%) and 30.2% in stage IV patients. There were significant differences in OS between stages I and II ($P < 0.0001$), stages II and III ($P < 0.0001$), and stages III and IV ($P < 0.0001$). The above analysis did not include patients who received neoadjuvant chemotherapy; the 5-year OS rate of patients who received neoadjuvant chemotherapy was 35.9%.

OS by histologic type (Fig. 16). The OS rates by histologic type are shown in Figure 16. Patients with serous adenocarcinoma had a significantly poorer prognosis compared with those with mucinous adenocarcinoma ($P < 0.0001$), endometrioid adenocarcinoma ($P < 0.0001$) and clear cell adenocarcinoma ($P < 0.0001$).

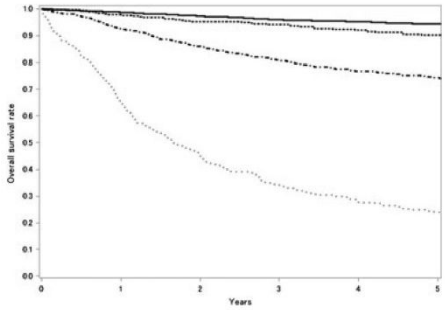

Figure 13 Overall survival by surgical stage for patients with endometrical cancer in 2008.
FIGO stage: I (▬▬), II (▬ ▬ ▬), III (▬ · ▬ · ▬), IV (▪ ▪ ▪ ▪ ▪).

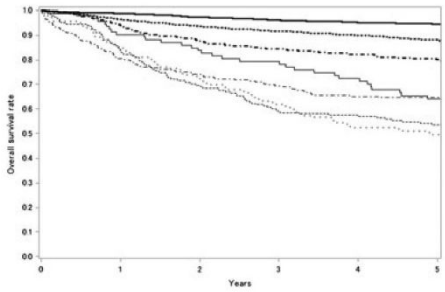

Figure 14 Overall survival by histologic type for patients with endometrical cancer in 2008.
Histologic type: Endometrioid GI (▬▬), Endometrioid G2 (▪ ▪ ▪ ▪ ▪ ▪ ▪), Endometrioid G3 (▬ ▪ ▬), Serous (▪ ▪ ▪ ▪ ▪), Clear cell (▬▬), Carcinosarcoma (▬ ▬ ▬ ▪), Others (▬ · ▬ · ▬ ·).

Discussion

In this analysis, the number of patients with cervical cancer, endometrial cancer, ovarian cancer and borderline ovarian tumor had increased from the analysis of 2012. This increase was not only influenced by the increase in patients with gynecologic cancer in Japan but also by the increase in the number of member institutions in JSOG (346 institutions in 2012 to 423 institutions in 2013). Since the Patient Annual Report in 2012, the FIGO 2008 staging classification has been adopted for the statistical analysis of cervical and endometrial cancers,

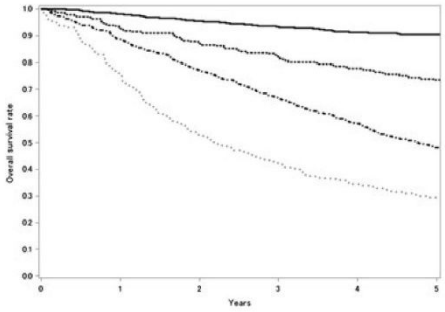

Figure 15 Overall survival by surgical stage fot patients with ovarian cancer (surface epithelial-stromal tumors) in 2008.
FIGO stage: I (——), II (– – – –), III (– · – · –), IV (▪ ▪ ▪ ▪ ▪).

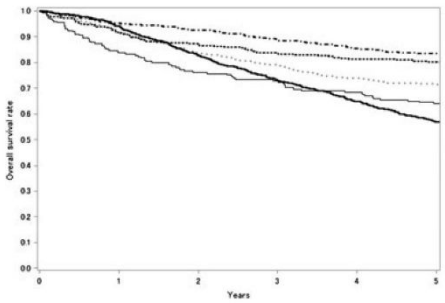

Figure 16 Overall survival by histologic type for patients with ovarian cancer (surface epithelial-stromal tumors) in 2008.
Histologic types: Serous (——), Mucinous (• • • • • • •), Endometrioid (— • — •), Clear (▪ ▪ ▪ ▪ ▪ ▪), Other (———).

while the FIGO 1988 staging classification was adopted for the statistical analysis of ovarian cancer. Carcinoma *in situ*, which was previously defined as stage 0 cervical cancer, was excluded from FIGO staging. In the Patient Annual Report, carcinoma *in situ* was included with severe dysplasia as CIN3. Atypical endometrial hyperplasia, which was previously defined as stage 0 endometrial cancer, was also excluded from FIGO staging, but the number of patients with atypical endometrial hyperplasia was reported in the present Annual Report. There were no significant differences from 2012 data in the distribution of patients by the stages and histologic types of cervical cancer, endometrial cancer, ovarian cancer and borderline ovarian tumors.

For the Treatment Annual Reports for 2008, the FIGO 1988 staging classification was adopted for this statistical analysis of cervical, endometrial and ovarian cancers. Prognosis was analyzed by the Kaplan–Meier method. As in the previous report,[3–5] information from institutions where prognoses were untraceable for ≥20% of patients was excluded from the analysis in the present study. Consequently, among patients with a known prognosis, 67.9% of cervical cancer, 76.9% of endometrial cancer and 76.8% of ovarian cancer patients were included in the analysis of prognosis. However, it may be possible that this selection of cases was influenced by a selection bias and that prognoses appeared better than they actually were in this study. In particular, the prognosis of stage IV cervical cancer, stage III/IV endometrial cancer and stage II/IV may be susceptible to some bias because the number of cases was limited. Actually, no significant differences in the prognoses of these cancers were observed in 2008 compared with those in 2007.

We have thus presented the Patient Annual Report for 2013 and the Treatment Annual Report for 2008 on gynecologic tumors (cervical, endometrial and ovarian cancers and borderline ovarian tumor) in Japan. We hope the information will contribute to the future analysis of these gynecologic cancers.

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Disclosure

There are no conflicts of interest to declare.

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