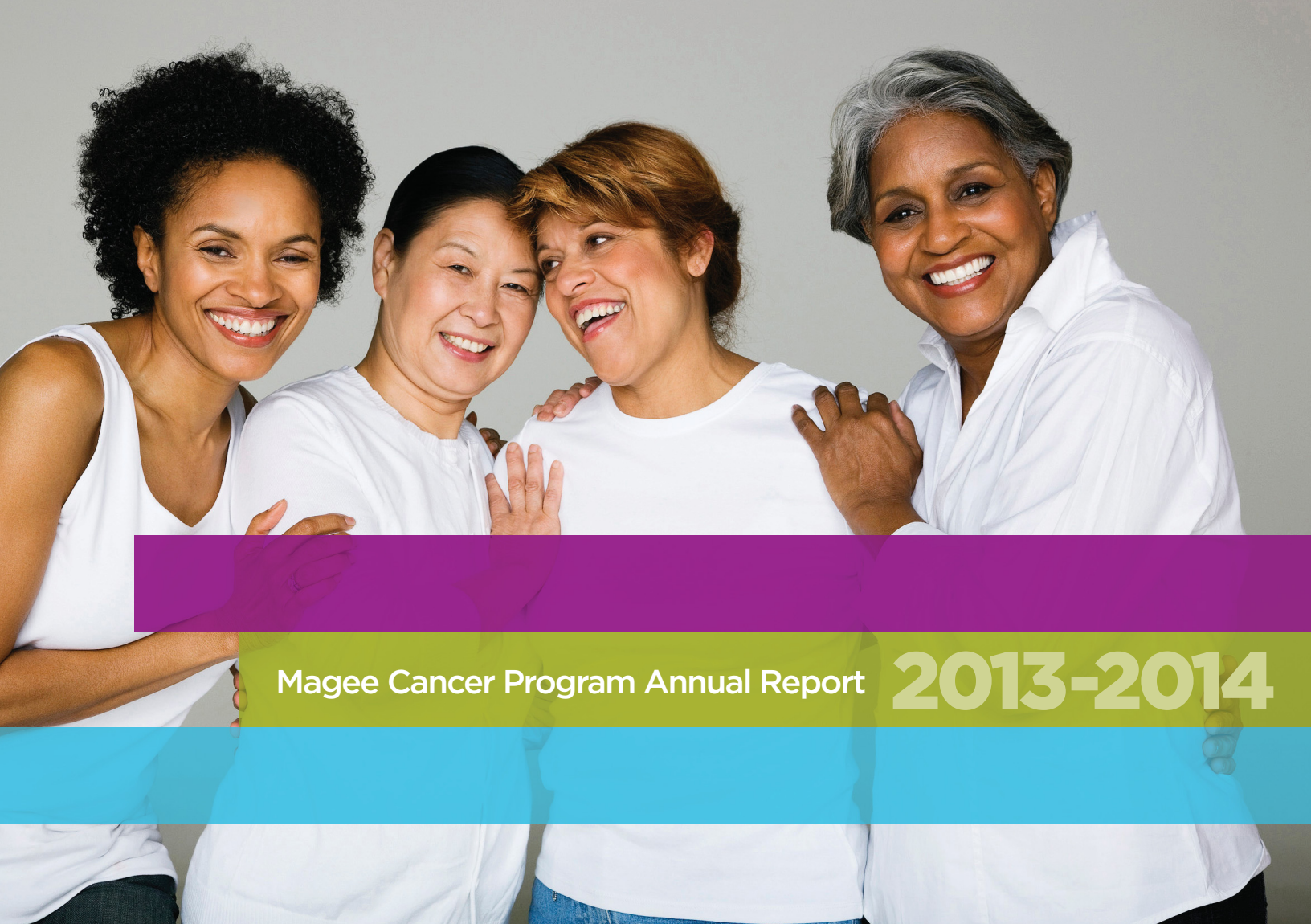


Magee Cancer Program Annual Report 2013-2014

Magee-Womens Hospital of UPMC

Introduction from

THE CHAIRMAN

Paniti Sukumvanich, MD
Chairman, Cancer Committe

Magee-Womens Cancer Program part of UPMC CancerCenter, partner with University of Pittsburgh Cancer Institute (UPCI), continues its commitment to provide comprehensive cancer care for patients through a multidisciplinary approach. State-of-the-art services provide the highest level in prevention, diagnosis, treatment, and survivorship. For the fourth year in a row, Magee-Womens Hospital of UPMC has been rated as one of the high-performing cancer programs in the country by *U.S. News and World Report*. In addition, Magee received a full three-year accreditation from the National Accreditation Program for Breast Centers in 2014.

Physicians and associated health care members team with patients and families to develop personalized treatment plans for customized care.

Physician specialists include gynecologic and breast oncologists, urologists, gastroenterologists, surgical and medical oncologists, radiation oncologists, behavioral health professionals, plastic and reconstructive surgeons, pathologists, geneticists, radiologists, and palliative care specialists. Other health care professionls include nurses, pharmacists, dietitians, social workers, sonographers, and technologists specializing in women's cancers.

Support groups, a variety of educational activities, a patient resource room, and Internet access to the Magee-Womens Hospital websites are available. Magee-Womens Hospital, Magee-Womens Research Institute, and UPCI — a National Cancer Institute-designated Comprehensive Cancer Center — offer the most current therapies and clinical trials.

A multidisciplinary team of medical staff and allied health professionals meets weekly for a breast cancer conference and a separate gynecologic oncology tumor board conference. The team discusses patient evaluations, for both prospective and continuing care, and plans for future care of selected patients with malignancies.

The Cancer Committee provides leadership and guidance to the cancer program, ensuring that the highest quality of health care continues to be provided for its patients. The committee also monitors and coordinates all cancer-related activities. The committee meets bimonthly, and consists of representatives from each department involved in cancer management and care.

The 2013-2014 Cancer Annual Report focuses on endometrial cancer statistics and outcomes.

Paniti Sukumvanich, MD
Chairman, Cancer Committe

Table 1

2013 Magee-Womens Hospital of UPMC			Gender		Class of Case		Best AJCC Stage (Analytic Cases)						
Primary Site Distribution Table	Total (#)	Total (%)	M	F	Analytic	Non - Analytic	0	I	II	III	IV	NA	UNK
BREAST	1,383	60.3%	5	1,378	1,336	47	270	570	342	117	33	0	4
FEMALE GENITAL SYSTEM	658	28.7%	0	658	572	86	6	301	54	128	68	7	8
Corpus & Uterus, NOS	321	14.0%	0	321	305	16	1	230	15	34	24	0	1
Ovary	112	4.9%	0	112	95	17	0	23	7	42	22	0	1
Cervix Uteri	100	4.4%	0	100	89	11	0	25	23	29	11	0	1
Vulva	76	3.3%	0	76	38	38	3	20	7	3	3	0	2
Fallopian Tube	27	1.2%	0	27	27	0	2	1	1	13	5	5	0
Vagina	13	0.6%	0	13	11	2	0	2	1	3	1	2	2
Peritoneum	9	0.4%	0	9	7	2	0	0	0	4	2	0	1
DIGESTIVE SYSTEM	61	2.7%	27	34	40	21	0	7	8	7	14	2	2
URINARY SYSTEM	59	2.6%	26	33	51	8	12	21	3	7	7	0	1
MALE GENITAL SYSTEM	39	1.7%	39	0	29	10	0	2	12	12	3	0	0
RESPIRATORY SYSTEM	32	1.4%	12	20	28	4	0	5	0	5	18	0	0
LYMPHOMA	20	0.9%	2	18	16	4	0	5	3	3	3	0	2
MISCELLANEOUS	9	0.4%	0	9	7	2	0	0	0	0	0	7	0
BRAIN & OTHER NERVOUS SYSTEM	8	0.3%	1	7	6	2	0	0	0	0	0	6	0
ORAL CAVITY & PHARYNX	5	0.2%	3	2	5	0	0	0	0	0	4	1	0
ENDOCRINE SYSTEM	5	0.2%	1	4	3	2	0	2	0	0	0	1	0
SKIN EXCLUDING BASAL & SQUAMOUS	4	0.2%	0	4	1	3	0	0	0	0	0	0	1
MYELOMA	4	0.2%	3	1	4	0	0	0	0	0	0	4	0
LEUKEMIA	3	0.1%	0	3	3	0	0	0	0	0	0	3	0
SOFT TISSUE (INCLUDING HEART)	3	0.1%	1	2	3	0	0	0	1	1	0	1	0
Total	**2,293**	**100.0%**	**120**	**2,173**	**2,104**	**189**	**288**	**913**	**423**	**280**	**150**	**32**	**18**

Source: Magee Womens Hospital Cancer Registry Database- 2013

INCIDENCE

Endometrial cancer is the sixth most common cancer in women worldwide (and the 12th most common cancer overall). It is mainly a disease of higher-income countries, where the highest incidence is in North America, and Central and Eastern Europe; and the lowest incidence in Middle and Western Africa. Around the world, age-adjusted incidence rates range from around 15 per 100,000 women in North America and parts of Europe, to less than 5 per 100,000 in most of Africa and Asia. (10) Cancer of the uterus is the most common reproductive cancer.

ENDOMETRIAL CANCER is the sixth most common cancer in women worldwide (and the 12th most common cancer overall).

The American Cancer Society estimated there would be approximately 49,560 new cases diagnosed in the United States during 2013. (1) More than 95% of these newly diagnosed cases being endometrial adenocarcinomas, with approximately 1,600 cases of uterine sarcoma. In Pennsylvania, the projected number of endometrial cancer cases for 2013 is 2,955. (3) At Magee-Womens Hospital of UPMC, endometrial cancer is the most common gynecologic malignancy and accounts for 14% of all cancers reported in 2013. A total of 321 endometrial cancer cases were diagnosed and/or treated at Magee-Womens Hospital shown on the 2013 Primary Site Distribution in Table 1.

GEOGRAPHIC DISTRIBUTION BY REFERRING COUNTY AND STATE

As a global leader in women's cancer research initiatives, Magee-Womens Hospital of UPMC is a large referral center providing specialized endometrial cancer treatment for many patients residing in western Pennsylvania counties (Table 3) and surrounding states (Table 2). In 2013, the overwhelming majority (40.2%) of endometrial cancer patients resided in Allegheny County. 56.4% of Magee endometrial cancer patients traveled from Westmoreland, Fayette, Cambria, and Washington counties. Out-of-state referrals comprised 3.4% of the total endometrial cancer volumes.

Table 2

County of Residence at Diagnosis	Count (N)	Percent (%)	County at Diagnosis	Count (N)	Percent (%)
PA-Allegheny	129	40.2%	PA-Clarion	4	1.25%
PA-Westmoreland	43	13.4%	PA-Indiana	4	1.25%
PA-Fayette	18	5.6%	PA-Mckean	4	1.25%
PA-Cambria	16	5.0%	PA-Somerset	4	1.25%
PA-Washington	16	5.0%	PA-Armstrong	3	0.93%
PA-Beaver	10	3.1%	PA-Clearfield	3	0.93%
PA-Blair	9	2.8%	PA-Bedford	2	0.62%
PA-Butler	9	2.8%	PA-Greene	2	0.62%
PA-Mercer	8	2.5%	PA-Centre	1	0.31%
PA-Jefferson	6	1.9%	PA-Elk	1	0.31%
PA-Venango	6	1.9%	PA-Potter	1	0.31%
PA-Erie	5	1.6%	PA-Warren	1	0.31%
PA-Lawrence	5	1.6%	Total	310	96.6%

Source: Magee-Womens Hospital of UPMC Cancer Registry database – 2013

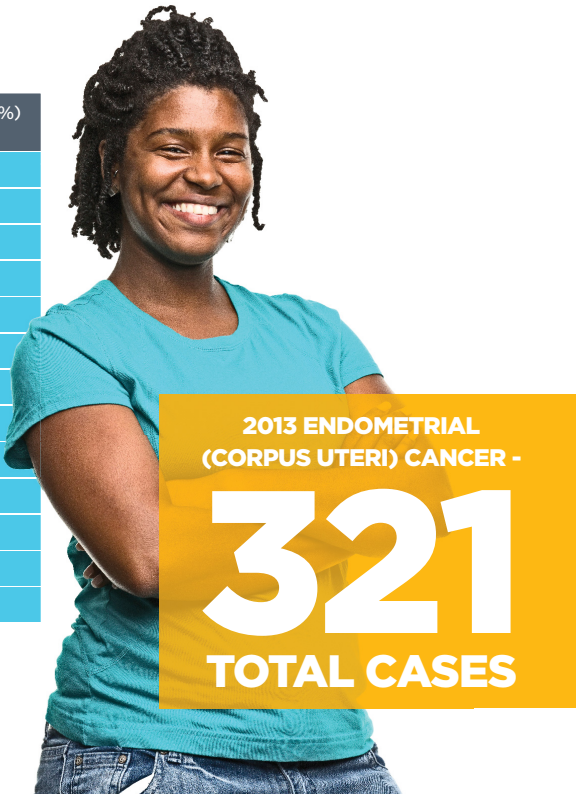


Table 3

State of Residence at Diagnosis	Count (N)	Percent (%)
Ohio	4	1.2%
West Virginia	5	1.6%
New York	1	0.3%
Virginia	1	0.3%
Total	11	3.4%

Source: Magee-Womens Hospital of UPMC Cancer Registry database – 2013

Table 4

Frequency of Uterine Cancer Cell Types	
1. Endometrioid	75%–80%
2. Mixed	10%
3. Clear cell	4%
4. Papillary Serous	<10%
5. Mucinous	1%
6. Squamous cell	<1%
7. Undifferentiated	

Source: National Institutes of Health; National Cancer Institute

CELLULAR CLASSIFICATION OF ENDOMETRIAL CANCER

Clinically, endometrial cancers fall into two categories: endometrioid (type I) and serous (type II) tumors. Type I may arise from complex atypical hyperplasia and is linked to unopposed estrogenic stimulation, obesity, and a favorable prognosis. While type II is more common in older women, develops from atrophic endometrium, is not hormonally driven, and generally has a less favorable outcome. (6)

A comprehensive genomic analysis done by the Cancer Genome Atlas Research Group of nearly 400 endometrial tumors suggests that certain molecular characteristics — such as the frequency of mutations — could complement current pathology methods and help distinguish between principal types of endometrial tumors. (9) Magee-Womens Research Institute is a large contributor of tissue and data to the Cancer Genome Atlas Project (TCGA).

With a complete analysis of the study's findings, investigators have identified four novel genomic-based subtypes of endometrial cancer, which may set the stage for new diagnostic and treatment approaches along with new clinical trials.

The most common endometrial cancer cell type seen at Magee-Womens Hospital of UPMC is endometrioid adenocarcinoma, which is composed of malignant glandular epithelial elements; an admixture of squamous metaplasia is not uncommon.

Adenosquamous tumors contain malignant elements of both glandular and squamous epithelium; clear cell and papillary serous carcinoma of the endometrium are tumors that are histologically similar to those noted in the ovary and the fallopian tube, and the prognosis is worse for these tumors. Mucinous, squamous, and undifferentiated tumors are extremely rare. (6) The overall frequency of endometrial cancer cell types follows in (Table 4).

Uterine sarcomas comprise less than 1% of gynecologic malignancies and 2% to 5% of all uterine cancers. They are much less common than endometrial cancer but have a much more aggressive clinical behavior. These cancers can spread quickly to distant sites.

The following tumors arise primarily from three distinct tissues:

- Carcinosarcomas arising in the endometrium or in other organs of mullerian origin.
- Leiomyosarcomas arising from myometrial muscle, with a peak incidence occurring at age 50.
- Sarcomas arising in the endometrial stroma, with a peak incidence occurring before menopause for the low-grade tumors and after menopause for the high-grade tumors. (6)

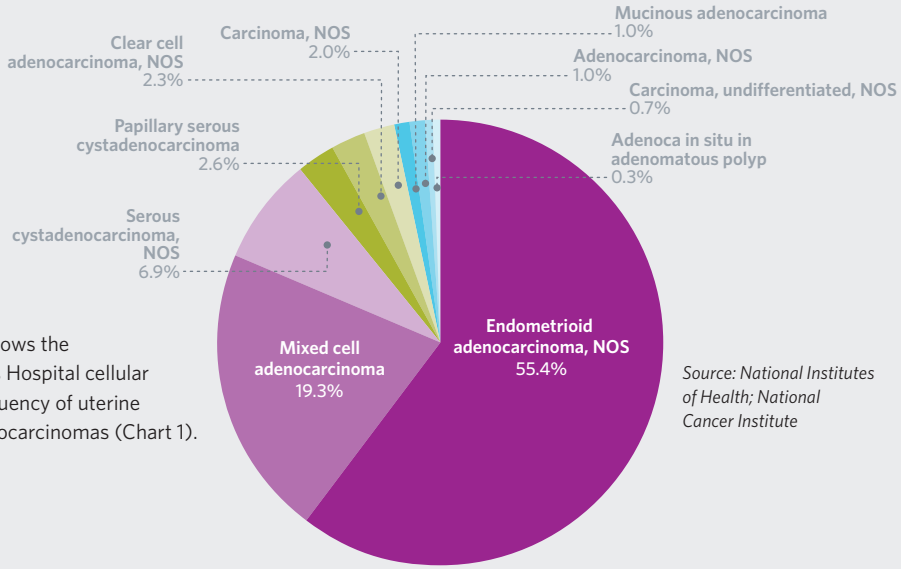
The overall frequency of uterine sarcoma cell types is as follows in Table 5.

Table 5

Uterine Sarcomas-Frequency of Uterine Sarcoma Cell Types	
Carcinosarcomas	40-50%
Leiomyosarcomas	30%
Sarcomas	15%

Source: National Institutes of Health; National Cancer Institute

Chart 1



The following chart shows the 2013 Magee-Womens Hospital cellular classification and frequency of uterine carcinoma's and adenocarcinomas (Chart 1).

Source: National Institutes of Health; National Cancer Institute

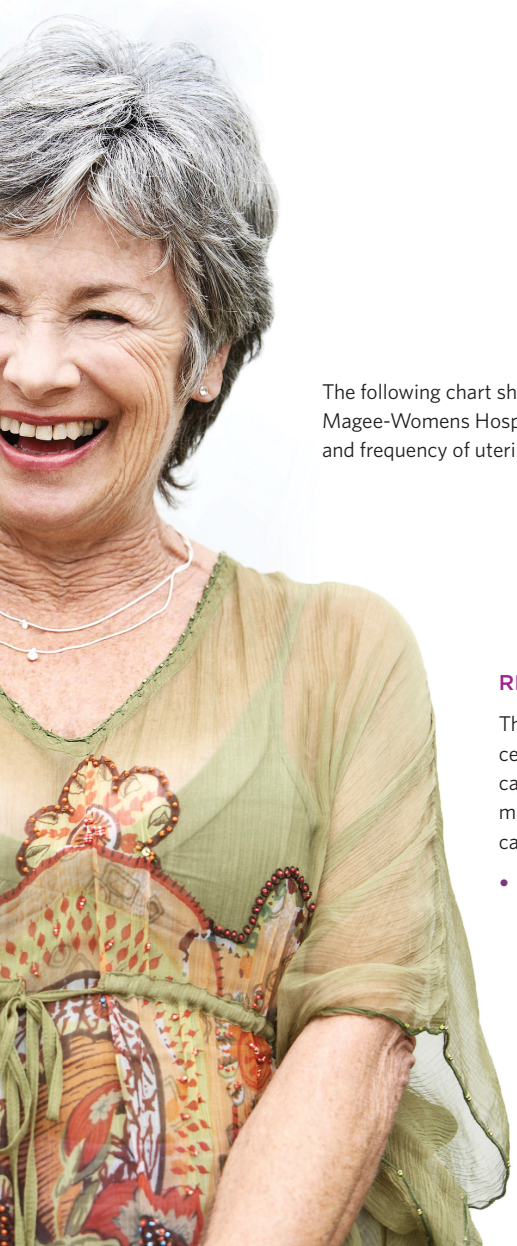
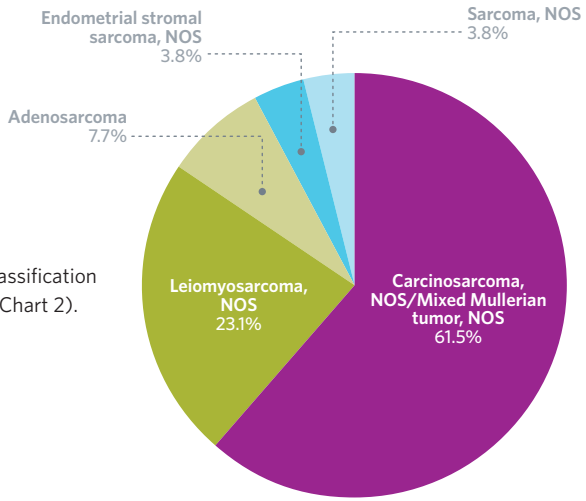


Chart 2



Source: Magee-Womens Hospital of UPMC Cancer Registry database - 2013

The following chart shows the 2013 Magee-Womens Hospital cellular classification and frequency of uterine sarcomas (Chart 2).

RISK FACTORS

There is no way to determine with certainty who will develop uterine cancer; however, several factors may increase the risk of uterine cancer: (1) (6) (8)

- **Endometrial hyperplasia:** The risk of uterine cancer is higher if a woman has endometrial hyperplasia, a precancerous condition. Hyperplasia is most common after age 40.
- **Obesity:** Greater abdominal thickness increases the risk of endometrial cancer, most likely by increasing the amount of estrogen in the body.
- **Increased estrogen exposure:** Menopausal estrogen therapy (without use of progestin).
- **Reproductive and menstrual history:** Women are at increased risk of uterine cancer if at least one of the following apply: Women who have no children, begin menstruation before 12, or enter menopause after 55, are exposed to estrogen longer and have a higher risk. Women with irregular menstrual cycles and infertility from polycystic ovarian disease (anovulation).

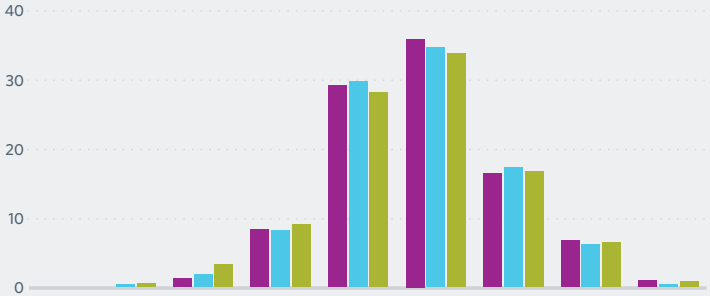
- **Tamoxifen use:** Women taking Tamoxifen to prevent or treat breast cancer have a slight increased risk of uterine cancer. This risk appears to be related to the estrogen-like effect of this drug on the uterus.
- **Family health history:** Women in families that have an inherited form of colorectal cancer (known as Lynch Syndrome or non-polyposis colon cancer) are at increased risk of uterine cancer.
- Diabetes
- Hypertension
- History of breast or colon cancer

- **Greater than age 50:** Endometrial cancer rarely occurs in women under the age of 40. Most cases are found in women age 50 and over, usually after menopause or around the time menopause begins. More than half of all endometrial cancer cases are diagnosed in the 50 to 69 age group.

Age comparison using analytic cases in 2011 from the American College of Surgeons Commission on Cancer (ACoS CoC) National Cancer Data Base (NCDB) benchmark reports and the Magee-Womens Hospital of UPMC Cancer Registry database is displayed below in Chart 3. Magee Cancer Registry data was compared to 16 Pennsylvania hospitals and 232 nationally accredited American College of Surgeons Commission on Cancer (ACoS CoC) academic comprehensive program hospitals.

Chart 3

Age group of corpus uteri cancer diagnosed in 2011
Magee-Womens Hospital of UPMC, Pittsburgh, Pa.



	20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	90 and over
MWH%		1.3%	8.4%	29.6%	36.4%	16.6%	6.8%	1.0%
PA%	0.4%	1.9%	8.3%	30.2%	35.1%	17.5%	6.2%	0.4%
U.S.%	0.5%	3.3%	9.2%	28.5%	34.3%	17.0%	6.5%	0.8%

EARLY DETECTION AND DIAGNOSIS

There is no standard or routine screening test for endometrial cancer, but women of average risk at the time of menopause should be informed about the risks and symptoms of endometrial cancer and strongly encouraged to report any unexpected bleeding or spotting to their physicians. Irregular vaginal bleeding is an early sign, the foremost symptom, and the reason why the majority of patients with the highly curable endometrial tumor are diagnosed with stage I disease. (1) (2) (8)

Specialists at the Magee-Womens Gynecologic Cancer Program perform multiple tests for the work-up of endometrial cancer:

- Pelvic exam
- Transvaginal ultrasound, CT scan, or MRI
- Biopsy - dilation and curettage and hysteroscopy
- Pipelle tumor marker studies

ENDOMETRIAL CANCER STAGING

The International Federation of Gynecology and Obstetrics (FIGO) and the American Joint Committee on Cancer (AJCC) have designated staging to define endometrial cancer. Categories in Table 6 are most commonly used for staging of endometrial (corpus uteri) cancer and is further subdivided by the histologic grade of the tumor.

Staging of endometrial cancer requires complete surgical pathologic assessment to include: ratio of depth of myometrial/stromal invasion to myometrial thickness, cervical stromal or glandular involvement, tumor size, tumor location, fallopian tube and ovary involvement, level of lymph node involvement (pelvic and para-aoritc) and distant metastasis evaluation. (5) (6)

Other factors included on pathologic assessment not used for staging are histologic subtype and grade, lymphovascular space invasion, and peritoneal washings/cytology. (5) (6)

All endometrial cancer cases receive pathologic screening at Magee-Womens Hospital of UPMC for inherited mismatch repair (MMR) gene mutations to identify familial cancer syndromes, such as Lymph syndrome - HNPCC. (6)

Table 6

Endometrial (Corpus Uteri) Carcinoma FIGO Stage	
I	Tumor confined to the corpus uteri
IA	No or less than half myometrial invasion
IB	Invasion equal to or more than half of the myometrium
II	Tumor invades cervical stroma but does not extend beyond the uterus
III	Local and/or regional spread of the tumor
IIIA	Tumor invades the serosa of the corpus uteri and/or adnexa
IIIB	Vaginal and/or parametrial involvement
IIIC	Metastases to pelvic and/or para-aortic lymph nodes
IIIC	Positive pelvic nodes
IIIC	Positive para-aortic lymph nodes with or without positive pelvic lymph nodes
IV	Tumor invades bladder and/or bowel mucosa, and/or distant metastases
IVA	Tumor invasion of bladder and/or bowel mucosa
IVB	Distant metastases, including intra-abdominal metastases and/or inguinal lymph nodes

Adapted from FIGO Committee on Gynecologic Oncology.

Either G1, G2, or G3 (G = grade).

At Magee-Womens Hospital of UPMC,

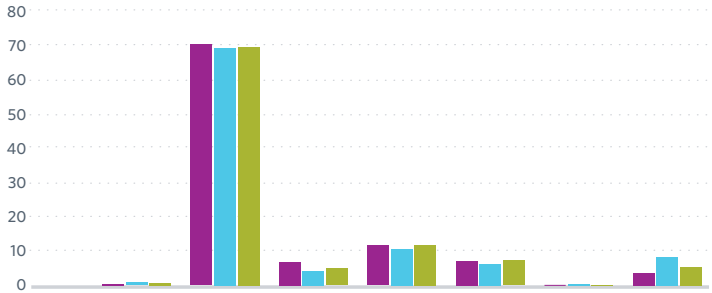
70.5% endometrial

In the United States most endometrial cancers (69.7%) are diagnosed at an early stage because of postmenopausal bleeding. At Magee-Womens Hospital of UPMC (70.5%) are diagnosed at an early stage.

Stage comparison using analytic cases in 2011 from the American College of Surgeons Commission on Cancer (ACoS CoC) National Cancer Data Base (NCDB) benchmark reports and the Magee-Womens Hospital of UPMC Cancer Registry database displayed below in Chart 4. Magee Cancer Registry data was compared to 16 Pennsylvania hospitals and 232 nationally accredited American College of Surgeons Commission on Cancer (ACoS CoC) academic comprehensive program hospitals.

Chart 4

Stage comparison of endometrial cancer diagnosed in 2011
U.S. vs PA vs MWH



	0	I	II	III	IV	NA	Unknown
MWH (%)	0.3%	70.5%	6.8%	11.7%	7.1%	.	3.6%
PA (%)	0.8%	69.5%	4.1%	10.6%	6.2%	0.4%	8.4%
U.S. (%)	0.7%	69.7%	4.9%	11.9%	7.3%	0.2%	5.4%

SURGICAL STAGING AND TREATMENT

At Magee-Womens Hospital and according to the National Comprehensive Cancer Network (NCCN) guidelines for endometrial cancer, total abdominal hysterectomy and bilateral salpingo-oophorectomy (TAH/BSO) is the main treatment of uterine -confined endometrial cancer.

Pathologic and prognostic data is gathered to form a decision on the type of adjuvant treatment. Adjuvant therapy may include the following depending on stage, histology, and grade of disease:

- **Radiation therapy (external beam/brachytherapy)**
- **Chemotherapy**
- **Hormone therapy**
- **Clinical trials**

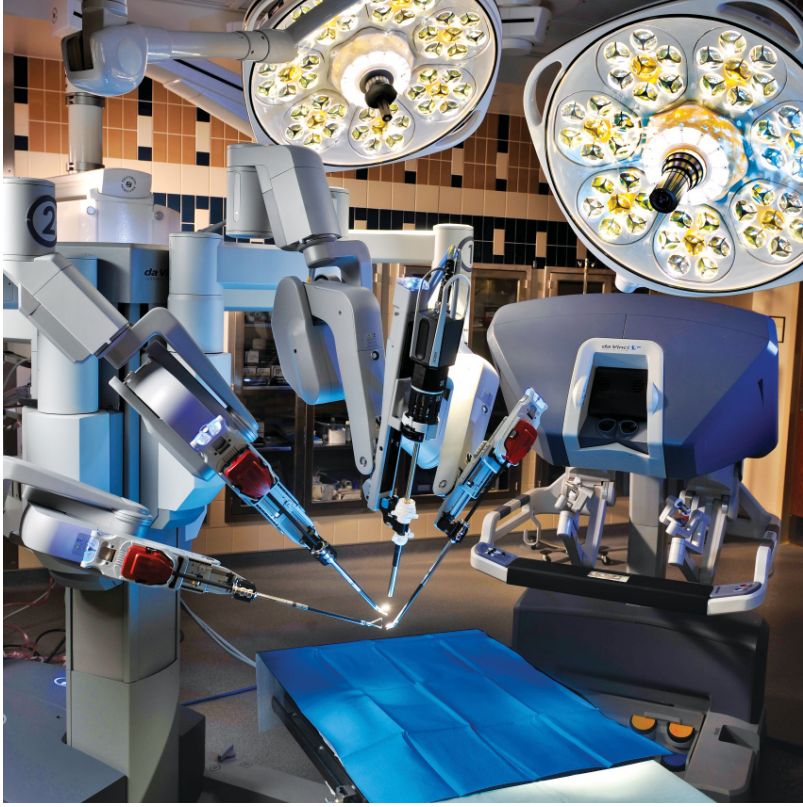
cancers are diagnosed at an early stage.

Visual examination of the peritoneal, diaphragmatic, and serosal surfaces with biopsy of any suspicious areas are performed to determine if there is any extension of disease. Pelvic node dissection of the external iliac, internal iliac, obturator, and common iliac lymph nodes are an important part of the staging procedure. While peritoneal washings or cytology does not affect FIGO or AJCC staging, it is also a part of the pathological assessment. Para-aortic nodal evaluation from the inframesenteric or infrarenal regions may also be utilized for staging of high-risk tumors.

Unfortunately, some patients are not candidates for surgery or lymph node dissection. For medically inoperable patients, tumor-directed radiation therapy may be performed. (6)

ROBOTIC-ASSISTED SURGERY

The hysterectomy may be performed through laparotomy, vaginally, or via minimally invasive techniques such as laparoscopy or robotic surgery. Due to its potential advantages over traditional laparoscopic approaches robotic surgery is rapidly becoming the preferred technique for minimally invasive surgery in endometrial cancer. Magee-Womens Hospital of UPMC was the first hospital in Pennsylvania able to offer its patients breakthrough surgical technology with the use of robotic assisted surgery and continues to provide robotic surgery proficiency. The da Vinci® Si Dual Console HD Surgical System is a sophisticated robotic platform that expands the surgeon's capabilities by enabling increased dexterity and sharpened precision for improved surgical performance.



These surgeries are performed through smaller incisions compared to traditional open laparotomy techniques. There is quicker recovery time, shorter hospital stays, decreased pain, minimal blood loss, and less scarring when compared to the traditional open laparotomy technique. (7)

First-course therapy comparison using all analytic cases in 2011 from the American College of Surgeons Commission on Cancer (ACoS CoC) National Cancer Data Base (NCDB) benchmark reports and the Magee-Womens Hospital Cancer Registry database is displayed in Chart 5. Magee Cancer Registry data was compared

to 16 Pennsylvania hospitals and 232 nationally accredited American College of Surgeons Commission on Cancer (ACoS CoC) academic comprehensive program hospitals.

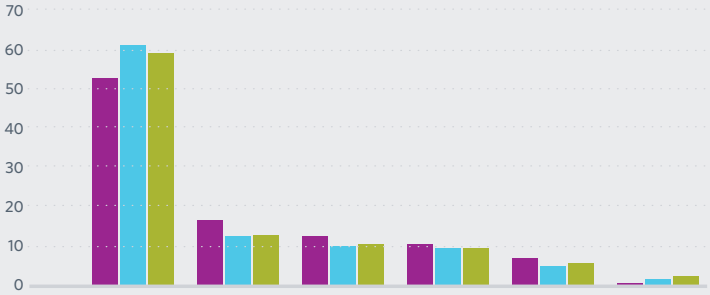
RADIATION THERAPY

The use of external beam (teletherapy) radiation continues to decline due to the results of important clinical trials including PORTEC 2 where whole-pelvic radiation was compared to vaginal brachytherapy. The results of this study favored brachytherapy for similar efficacy and reduced toxicities. This finding has resulted in the use of vaginal brachytherapy alone for most intermediate-risk endometrial cancer patients. Higher-risk patients are being evaluated by ongoing or completed GOG protocols 249 and 258 to determine if chemotherapy can replace radiation and improve survival by reducing distant recurrences while at the same time preventing local recurrences.

ADJUVANT TREATMENT

The outcome of GOG-209 non-inferiority randomized clinical trial was presented at the Society of Gynecologic Oncology in March 2012, and determined that the better-tolerated carboplatin and paclitaxel regimen was equally effective at treating metastatic endometrial cancer, and could be substituted for TAP (taxol, adriamycin, cisplatin), which was more likely to cause neuropathy.

Chart 5



	Surgery Only	Surgery & Radiation	Surgery & Chemotherapy	Surgery, Radiation & Chemotherapy	Other Specified Therapy	No 1st Course Rx
MWH(%)	52.3%	16.6%	12.7%	10.7%	7.1%	0.7%
PA(%)	60.6%	12.7%	10.0%	9.6%	5.2%	1.9%
U.S.(%)	58.6%	12.8%	10.7%	9.6%	5.9%	2.5%

OBSERVED SURVIVAL RATES

Similar to incidence, death rates for cancer of the uterine corpus have been stable in white women, but increasing slightly in African-American women by 0.4% per year from 2005 to 2009. An estimated 8,190 endometrial cancer deaths are expected in the U. S. for 2013. (1) Projected for Pennsylvania for 2013 are 495 endometrial cancer deaths. (3)

Women at the highest risk of death have a Type II cancer which include: grade 3 endometrioid cell types, serous, and clear cell carcinomas.

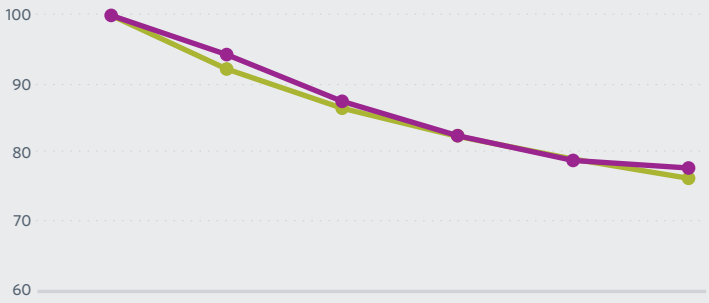
CLINICAL TRIALS

The use of targeted therapy is under active investigation in uterine cancers. The targeting of angiogenesis pathways has been successful in Phase II trials with bevacizumab, showing 36% of patients to be progression free at six months, which resulted in this agent being added to GOG-86P, a randomized Phase II trial which should be under analysis in 2014.

Another exciting pathway being studied in GOG-86P is the PI3 kinase pathway mTOR inhibitors are being investigated to take advantage of the molecular changes in endometrial cancer with response rates of 26% to 44%. Temsirolimus and everolimus are FDA approved mTOR inhibitors for other indications and are the most studied.

Metformin is being studied in GOG-268B in a placebo controlled trial in combination with carboplatin and paclitaxel for women with measurable advanced endometrial cancer or recurrent disease. This study should be open for enrollment soon.

Carcinosarcomas are being studied using ifosfamide and paclitaxel versus carboplatin and paclitaxel in GOG-261. Uterine leiomyosarcoma is currently treated with gemcitabine and taxotere, and GOG-250 did not find a benefit with adding bevacizumab. The current trial, GOG-277, is evaluating chemotherapy versus observation in women after hysterectomy with tumor only in the uterus.



	Surgery Only	Surgery & Radiation	Surgery & Chemotherapy	Surgery, Radiation & Chemotherapy	Other Specified Therapy	No 1st Course Rx
MWH(%)	52.3%	16.6%	12.7%	10.7%	7.1%	0.7%
PA(%)	60.6%	12.7%	10.0%	9.6%	5.2%	1.9%
U.S.(%)	58.6%	12.8%	10.7%	9.6%	5.9%	2.5%

Table 7

Magee-Womens Hospital of UPMC Cases Diagnosed in 2003-2005 N = 411					
Data from 1414 National Accredited Programs N = 65078					
Year	Lower 95% CI of Observed Survival	Observed Survival Rate	Upper 95% CI of Observed Survival	Standard Error of Observed Survival	Expected Survival for Age, Sex, Race
1	92	94.3	96.6	1.2	98.5
2	84.2	87.5	90.9	1.7	96.9
3	78.6	82.5	86.3	1.9	95.2
4	74.8	78.9	83.1	2.1	93.5
5	73.5	77.8	82	2.1	91.6

Source: Magee-Womens Hospital of UPMC Cancer Registry database

Table 8

American College of Surgeons Commission on Cancer National Cancer DataBase Cases Diagnosed in 2003-2005					
Data from 1414 National Accredited Programs N = 65078					
Year	Lower 95% CI of Observed Survival	Observed Survival Rate	Upper 95% CI of Observed Survival	Standard Error of Observed Survival	Expected Survival for Age, Sex, Race
1	92	92.2	92.5	0.1	98.1
2	86.2	86.5	86.8	0.1	96.2
3	82.1	82.4	82.7	0.2	94.2
4	78.8	79.1	79.5	0.2	92.1
5	76	76.3	76.7	0.2	89.9

Chart 6 shows unadjusted five-year observed survival rates comparing cases diagnosed from 2003-2005 generated from the American College of Surgeons Commission on Cancer (ACOS CoC) National Cancer Data Base (NCDB) Benchmark Survival Comparison reports.

Rates are computed by the actuarial method, compounding survival in one-month intervals from the date of diagnosis, with death from any cause as the end-point. Data from 1414 nationally accredited American College of Surgeons Commission on Cancer hospitals is compared to the Magee-Womens Hospital of UPMC Cancer Registry. Patients are known to have only one diagnosis of cancer and received all or part of their first course of therapy at the reporting cancer program.

In Chart 6 the overall one-year observed survival rate is at 92.2% in the U.S. and at Magee Womens Hospital of UPMC 94.3%. The five-year overall observed survival of 76.3% in the U.S. and 77.8% for Magee-Womens Hospital of UPMC.

Survivorship after a Diagnosis of Endometrial Cancer

It is well known that more women with the diagnosis of endometrial cancer die of other major health problems (36% cardiovascular deaths, 20% other cancers, 25% other causes) rather from their endometrial cancer (19% cause of death). (8) Supportive care intended to enhance quality of life is also important. At Magee-Womens Hospital of UPMC, therapists, social workers, clergy members, and others are available for consultation to create optimal health.

References:

1. American Cancer Society: Cancer Facts and Figures 2013. Atlanta, Ga: American Cancer Society, 2013.
2. American Cancer Society. "Cancer Prevention and Early Detection Facts and Figures 2013," Atlanta, GA: 2013.
3. Pennsylvania Department of Health, Cancer Facts and Figures Pennsylvania, 2013, Harrisburg, PA: 2013.
4. U.S. Department of Health and Human Services, National Institute of Health, National Cancer Institute, Endometrial Cancer (PDQ). http://www.cancer.gov/cancertopics/types/endometrium. Baltimore, MD: 2014.
5. American Joint Committee on Cancer: AJCC Cancer Staging Manual. 7th ed. New York, NY: Springer, 2010, Corpus Uteri. pp 403-418.
6. National Comprehensive Cancer Network, Inc., NCCN Practice Guidelines in Oncology: Uterine Neoplasms. Version 1.2015, 08/08/2014.
7. da Vinci® Surgical System. 2012 Intuitive Surgical, Inc. Retrieved October 24, 2012 from http://www.davincisurgery.com/
8. Foundation for Womens Cancer, 2013, Chicago, Illinois: 2013 State of the State of Gynecologic Cancers: Eleventh Annual Report to the Women of America.
9. The Cancer Genome Atlas Research Network. Integrated Genomic Characterization of Endometrial Carcinoma. Nature. May 2, 2013. DOI:10.1038/nature 2013.
10. World Cancer Research Fund/American Institute for Cancer Research, Continuous Update Project Report. Food, Nutrition, Physical Activity, and the Prevention of Endometrial Cancer. 2013.

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