Subject ID: LM00027

Pathology Report Date: 9/26/01 Pathology Report Summary

SPECIMEN: 1. Uterine fibroid.

2. Uterus bilateral tubes and ovaries,

3. Appendix

CLINICAL DATA: Status post left breast cancer, uterine leiomyomata.

## **GROSS DESCRIPTION:**

All three specimens are received in formalin-filled containers labeled with the patient's demographic information.

- 1. The specimen is designated "uterine fibroid." The specimen is allowed to fix overnight for further fixation before dissection. The specimen consists of three fragments of gray-tan tissue, the largest of which measures 23 x 20 x 14 cm and weighs approximately 2.5 kg. The other two fragments in aggregate measure 10.0 x 5.0 x 5.0 cm and weigh 120 grams. The largest fragment is covered by serosa, which shows extensive fibrous adhesions. Sectioning through this largest lesion reveals gray-white, whorled-like parenchyma with extensive hemorrhage and necrosis in the center of the lesion. Sectioning of the other fragments also reveals same grey-white, whorled-like parenchyma without necrosis.
- 2. The specimen is designated "uterus, bilateral tubes and ovaries." The specimen consists of a uterus with cervix and attached bilateral adnexal structures. Marked distortion of the uterine fundus is noted, but enough anatomic landmarks are present to help orient the specimen. The uterus and cervix measure 16 X 10 x 10 cm. Much of the uterine wall has been removed as specimen number 1. Away from this area of previous section, serosal surface is generally smooth and glistening. Cervical portion measures 4 cm in length x 2.5 cm in diameter. With adnexal structures removed, uterus and cervix weigh 703 grams.

Cervical os is open and slitlike measuring 1.4 cm. Opening the uterus reveals a furrowed endocervical mucosa without polypoid or infiltrative lesion. Fundic cavity is difficult to determine due to the marked distortion of the uterine fundus. There is an endometrial mucosa seen, which is gray-yellow in color and about 0.1 cm thick. The underlying myometrium has a fibrous pink-white consistency. Sectioning also reveals gray-white whorl-like nodules, the largest of which measures a maximal 8.0 cm in dimension. This nodule shows a number of areas of hemorrhage, but no distinct necrosis or myxoid focus is identified. A smaller nodule measures 2 cm in diameter and demonstrates extensive calcification upon sectioning.

The right fallopian tube is 8.0 cm long x 0.5 cm in diameter. The ovary is flattened, cerebriform and gray-yellow measuring 4.0 x 2.0 x 1.5 cm. Sectioning through the ovary reveals a fibrous gray-yellow parenchyma without nodule or tumor.

Left tube measures 5.0 cm in length x 0.6 cm in diameter. The ovary is cerebriform gray-yellow, measuring  $2.0 \times 3.0 \times 1.0 \text{ cm}$ . Sectioning through the ovary reveals a fibrous gray-yellow parenchyma without nodule or tumor,

3. The specimen is designated "appendix". The specimen consists of a vermiform appendix measuring 5.5 cm in length x 0.5 cm in diameter. Serosal surface is smooth and glistening. No perforation or exudata is identified. The specimen is serially sectioned to reveal a tiny lumen without purulent material.

Slides prepared from tissue blocks IA - G and all identify the presence of a smooth muscle stromal neoplasm that is characterized by a mitotic rate of 5 per T10 high power fields, moderate to severe nuclear atypia, and tumor exhibits foci of both coagulative and hyaline necrosis. Initial consideration by YPMG reviewers favor leiomyosarcoma.

All other findings, which are confirmed by microscopic examination, are as per diagnosis.

## DIAGNOSIS:

- 1. Uterine fibroid: Leiomyosarcoma
- 2. Uterus and cervix with bilateral ovaries and fallopian tubes
  - A. Cervix: Chronic cervicitis with reactive epithelial changes. No atypia present.
  - B. Endometrium: Atrophic pattern. No atypia present.
  - C. Myometrium: Leiomyosarcoma, 8 cm diameter mass as per gross description.
  - D. Right and left ovaries with fallopian tube: Atrophic changes. No atypia or malignant changes present.
- 3. Vermiform appendix: Fibrous obliteration of lumen. No atypia present.

Subject ID: LM00027

Pathology Report Date: 10/04/01 Pathology Report Summary

CLINICAL HISTORY: This patient is a 58 year old female who recently underwent a total abdominal hysterectomy, bilateral salpingo-oophorectomy, and appendectomy.

Histologic sections from the uterus demonstrate a cellular smooth muscle neoplasm with pronounced cytologic atypia. Enlarged, pleomorphic, hyperchromatic nuclei are identified throughout the neoplasm. In addition, the smaller background nuclei within cells comprising the majority of the specimen are also worrisome in that the chromatin is more heavily stippled than one would expect for a benign smooth muscle neoplasm. Throughout the lesion we identify numerous possible mitotic figures, but not all fit the exact criteria and while we definitely identify hyaline necrosis (unusual for a leiomyosarcoma) there are also foci of necrotic cells which we think represent coagulative tumor cell necrosis. In these areas islands of viable tumor around vessels are surrounded by coagulative necrosis. On the other hand, some of these areas contain what appears to be hyaline. As this patient has multiple smooth muscle neoplasms and we do not identify definitive infi1trating margins or large numbersof classic mitotic figures. There remains a bit of uncertainty with respect to this tumor's classification; nonetheless, in our opinion, the most appropriate diagnosis is leiomyosarcoma.

## **DIAGNOSIS:**

Uterus, myometrium, hysterectomy Leiomyosarcoma