Statement of the
Society of Gynecologic Oncology
to the
Food and Drug Administration's
Obstetrics and Gynecology Medical Devices Advisory Committee
Concerning Safety of Laparoscopic Power Morcellation
July 10-11, 2014

The Society of Gynecologic Oncology (SGO) thanks the Food and Drug Administration for the opportunity to submit comments to the Obstetrics and Gynecology Medical Advisory Committee concerning its deliberations on the safety of laparoscopic power morcellation. The SGO is a medical society comprised of 1,800 members including primarily gynecologic oncologists, as well as other physicians, PhD researchers, trainees, and advanced practice providers. Our mission is to promote and ensure the highest quality of comprehensive clinical care through excellence in education and research in gynecologic cancers. Our vision is to eradicate gynecologic cancer.

Minimally invasive surgery (MIS) has had a major impact in the treatment of both benign gynecologic conditions and gynecologic malignancies. Multiple studies, including prospective randomized trials, have shown that compared to traditional laparotomy, the MIS approach results in a substantial reduction in morbidity, including significant reduction in blood loss, transfusion, pulmonary compromise, surgical site infection, venous thrombosis, length of hospital stay, and postoperative pain. In addition, quality of life, body image and return to base line function are significantly

improved with an MIS approach. This clinical benefit for American women has been demonstrated with Level I evidence.

Hysterectomy is one of the most common gynecologic surgical procedures performed in the U.S. Each year approximately 600,000 of these surgical procedures are performed. According to the American Cancer Society a fraction of these cases, or about 52,000 hysterectomies, will be performed in 2014 for uterine cancer; and only 1,600 of these cases will be done for uterine sarcoma. When MIS is performed for hysterectomy, the specimen can be removed through the vagina, through a mini-laparotomy or through the port sites. Gynecologists commonly use a variety of techniques to divide the surgical specimen into small enough pieces to avoid a laparotomy and thus avoid the morbidity of "open" surgery. Power morcellation, which cuts up the specimen within the abdomen, does have the potential to disseminate uterine tissue throughout the peritoneal cavity. It also has the potential to disseminate an otherwise contained malignancy.

For this reason, the SGO asserts that morcellation is generally contraindicated in the presence of documented or highly suspected malignancy. Women being considered for minimally invasive surgery performed by laparoscopic or robotic techniques that might require morcellation should first be evaluated for coexisting uterine or cervical malignancy. Morcellation may also be inadvisable for women with premalignant conditions or who are undergoing cancer risk-reducing surgery, in which there is some risk of occult malignancy.

Thus the SGO does advise caution when using any morcellation technique. But the SGO is not supportive of any overt restriction of power morcellation. As surgical tools, power morcellators allow thousands of women the opportunity to have minimally invasive surgery.

In its April 17, 2014, Safety Communication, the FDA discouraged the use of laparoscopic power morcellation for the removal of the uterus or uterine fibroids. The internal FDA data analysis suggested that power morcellation resulted in a significant risk for spreading unsuspected cancerous tissues, notably uterine sarcoma. The FDA analysis estimated the risk of spreading unsuspected sarcoma at the time of hysterectomy or myomectomy could be as high as 1/352 or 0.28%.

The SGO has independently reviewed the studies the FDA used to formulate its risk assessment and recommendations. Our primary concerns about the analysis and conclusions are listed below.

1. The studies used by the FDA to formulate their recommendation were retrospective case series with low-quality evidence. The FDA would not approve a device using such low quality retrospective data and so it is concerning that the FDA would now consider banning a device with a similar low level of evidence.
2. Not all of the studies used for the FDA analysis were published in manuscript form, and four of the nine were conducted outside the U.S. (Japan, India, Brazil and France).
3. Most of the studies were from large referral centers, which not only manage a greater number of cancers overall but also manage more complex cases, such as patients with extremely large-size fibroids. These studies will lead to a false elevation in the estimated risk of sarcoma in women with fibroids.
4. The studies used for the analysis included patients as far back as the early 1980s when routine preoperative imaging was either not performed or of low quality. Several studies include patients who presented emergently with hemorrhage or were well past menopause, yet were classified by the authors as having an "unsuspected sarcoma." These women were inappropriately included in the numerator when calculating the risk of incidental sarcoma.
5. Large numbers of women treated in these retrospective series were treated with abdominal hysterectomy and so it is not clear that they would have been candidates for MIS or morcellation.

All of these concerns lead the SGO to conclude that the risk of occult sarcoma calculated by the FDA (as high as 1:352) is questionable. In addition, these studies do not address the risk of malignancy in the most relevant patients: premenopausal women with otherwise benign-appearing symptomatic fibroids who are candidates for MIS using power morcellation.

Most of the retrospective studies cited by the FDA also suggest that morcellation of a uterine sarcoma worsens prognosis. We agree that this is a practice that should be avoided, but this conclusion is also based on poor quality retrospective data. In most of the case reports and case series evaluating survival with and without morcellation, the morcellations were done by myomectomy, mini-laparotomy or trans-vaginally, again calling into question how applicable these studies are to the issue of power morcellation and prognosis for uterine sarcoma. To date there is insufficient prospective data to prove that morcellation results in a decrease in progression free and overall survival. Finally, as gynecologic oncologists we know that even when uterine sarcomas are removed intact there is still a very poor prognosis with these aggressive malignancies.

The FDA has indicated that there are a number of additional treatment options available instead of morcellation for symptomatic fibroids, including traditional laparotomy for hysterectomy or myomectomy, vaginal hysterectomy or non-surgical options. Any oncologist would point out that non-surgical options for an unsuspected sarcoma would probably not be any better than morcellation.

The question comes down to this: Is it better to expose about 1,000 women to increased morbidity and potential mortality by doing an abdominal hysterectomy to avoid morcellation of one unsuspected sarcoma? Or: How do we weigh the proven benefit of MIS based on high quality Level I data against the potential and very low risk of disseminating a sarcoma through morcellation? As a society, we feel there needs to be a careful and rational assessment of the risks and benefits to both MIS and traditional laparotomy. And any assessment must recognize that the overwhelming majority of hysterectomies and myomectomies done in the U.S. are done for benign fibroids. In these circumstances intracorporeal morcellation has benefited hundreds of thousands of women. It is especially beneficial for the two-thirds of American women who are obese, and in whom laparotomy increases both morbidity and mortality. It would be a disservice to deny these or any women this surgical option.

As physicians we know we must strive to never harm any one of our patients. But banning morcellation may cause more harm to more women. Thus, the Society of Gynecologic Oncology's position is that power morcellation with appropriate informed

consent should remain available in the United Sates. (www.sgo.org/newsroom/position-statements-2/morcellation/)