

42. Presta LG, Chen H, O'Connor SJ, Chisholm V, Meng YG, Krummen L, et al. Humanization of an anti-vascular endothelial growth factor monoclonal antibody for the therapy of solid tumors and other disorders. Cancer Res 1997; 57(20):4593-9.
43. Burger RA, Sill M, Monk BJ, Greer BE, Sorosky J. Phase II trial of bevacizumab in persistent or recurrent epithelial cancer or peritoneal primary cancer: a Gynecologic Oncology Group study. Proc Am Soc Clin Oncol 2005; 23(14S): Abst#5009.
44. Zanotti KM, Rybicki LA, Kennedy AW, Belinson JL, Webster KD, Kulp B, Peterson G, Markman M: Carboplatin skin testing: a skin-testing protocol for predicting hypersensitivity to carboplatin chemotherapy. J Clin Oncol 2001; 19:3126-3129.
45. Rose PG, Fusco N, Smrekar M, Mossbruger K, Rodriguez M: Successful administration of carboplatin in patients with clinically documented carboplatin hypersensitivity. Gynecol Oncol 2003; 89:429-433.
46. Robinson JB, Singh D, Bodurka-Bevers DC, Wharton JT, Gershenson DM, Wolf JK: Hypersensitivity reactions and the utility of oral and intravenous desensitization in patients with gynecologic malignancies. Gynecol Oncol 2001; 82:550-558.
47. Markman M: Hypersensitivity reactions to carboplatin. Gynecol Oncol 2002; 84:353-354.
48. Lee CW, Matulonis UA, Castells MC: Rapid inpatient/outpatient desensitization for chemotherapy hypersensitivity: Standard protocol effective in 57 patients for 255 courses. Gynecol Oncol 2005;
49. Markman M, Kennedy A, Webster K, Elson P, Peterson G, Kulp B, Belinson J: Clinical features of hypersensitivity reactions to carboplatin. J Clin Oncol 1999; 17:1141.
50. Shepherd FA, Pereir JR, Ciuleanu T, Tan EH, Hirsh V, Thongprasert S, Campos D, Maoleekoonpiroj S, Smylie M, Martins R, van Kooten M, Dediu M, Findlay B, Tu D, Johnston D, Bezjak A, Clark G, Santabarbara P, Seymour L for the National Cancer Institute of Canada Clinical Trials Group. Erlotinib in previously treated non-small-cell lung cancer. The New England Journal of Medicine, 353: 123-132, 2005.
51. Miller KD, Chap LI, Holmes FA, Cobleigh MA, Marcom K, Fehrenbacher L, Dickler M, Overmoyer BA, Reimann JD, Sing AP, Langmuir V, Rugo HS. Randomized Phase III trial of capecitabine compared with bevacizumab plus capecitabine in patients with previously treated metastatic breast cancer. Journal of Clinical Oncology 23: 792-799, 2005.
52. Hurwitz H, Fehrenbacher L, Novotny W, Cartwright T, Hainsworth J, Heim W, Berlin J, Baron A, Griffing S, Holmgren E, Ferrara N, Fyfe G, Rogers B, Ross R, Kabbinavar F. Bevacizumab plus irinotecan, fluorouracil, and leucovorin for metastatic colorectal cancer. The New England Journal of Medicine, 350: 2335-2342, 2004.

53. Basen-Engquist K, Bodurka-Bevers D, Fitzgerald MA, Webster K, Cella D, Hu S, Gershenson DM. Reliability and validity of the Functional Assessment of Cancer Therapy – Ovarian (FACT-O). J Clin Onc 19(6): 1809-1817, 2001.
54. Stewart AL, Ware JE, Jr. Measuring functioning and well-being. Durham, NC: Duke University Press, 1992.
55. Ware JE, Sherbourne CD. The MOS 36-item short form health survey (SF36): II. Psychometric and clinical tests of validity in measuring physical and mental health constructs. Medical Care 31:247-263, 1993.
56. Hays, RD. Rand-36 Health Status Inventory. San Antonio: The Psychological Corporation, Harcourt Brace & Company, 1998.
57. McHorney CA, Ware JE, Raczek AE. The MOS 36-item short form health survey (SF36): II. Psychometric and clinical tests of validity in measuring physical and mental health constructs. Medical Care 30:247-263, 1993.
58. Mangione CM, Goldman L, Orav J, Marcantonio ER, Pedan A, Ludwig LE, Donaldson MC, Sugarbaker DJ, Poss R, Lee TH. Health-related quality of life after elective surgery. Journal of General Internal Medicine 12:686-697, 1997.
59. Nguyen NT, Goldman C, Rosenquist CJ, Arango A, Cole CJ, Lee SJ, Wolfe BM. Laparoscopic versus open gastric bypass: A randomized study of outcomes, quality of life, and costs. Annals of Surgery 234:279-291, 2001.
60. Velanovich V. Comparison of symptomatic and quality of life outcomes of laparoscopic versus open antireflux surgery. Surgery 126:782-789, 1999.
61. Cella D. Manual of the Functional Assessment of Chronic Illness Therapy (FACIT) Scales. Evanston, IL: Center on Outcomes, Research and Education (CORE), Northwestern Healthcare and Northwestern University, 1997.
62. Golub TR, Slonim DK, Tamayo P, Huard C, Gaasenbeek M, Mesirov JP, Coller H, Loh ML, Downing JR, Caligiuri MA, Bloomfield CD, Lander ES. Molecular classification of cancer: class discovery and class prediction by gene expression monitoring. Science 286(5439): p.531-7, 1999.
63. Alizadeh AA, Eisen MB, Davis RE, Ma C, Lossos IS, Rosenwald A, Boldrick JC, Sabet H, Tran T, Yu X, Powell JI, Yang L, Marti GE, Moore T, Hudson J Jr, Lu L, Lewis DB, Tibshirani R, Sherlock G, Chan WC, Greiner TC, Weisenburger DD, Armitage JO, Warnke R, Levy R, Wilson W, Grever MR, Byrd JC, Botstein D, Brown PO, Staudt LM. Distinct types of diffuse large B-cell lymphoma identified by gene expression profiling. Nature 403(6769): p.503-11, 2000.
64. Boulikas T, Vougiouka M. Cisplatin and platinum drugs at the molecular level (Review). Oncol Rep 10(6): p.1663-82, 2003.

65. Orr GA, Verdier-Pinard P, McDaid H, Horwitz SB. Mechanisms of Taxol resistance related to microtubules (Review). Oncogene 22(47): p.7280-95, 2003.
66. Crum CP, Drapkin R, Kindelberger D, et al: Lessons from BRCA: The Tubal Fimbria Emerges as an Origin for Pelvic Serous Cancer. Clin Med Res 5:35-44, 2007
67. Longacre TA, Oliva E, Soslow RA: Recommendations for the reporting of fallopian tube neoplasms. Hum Pathol, 2007
68. Pectasides D, Pectasides E, Economopoulos T: Fallopian tube carcinoma: a review. Oncologist 11:902-12, 2006
69. Pocock, SJ and Simon R. Sequential treatment assignment with balancing for prognostic factors in the controlled clinical trial. Biometrics 31:103-115 1975.
70. Dunnett, CW. A multiple comparison procedure for comparing several treatments with a control. JASA 50(272): 1096-1121 1955.
71. Lan KKG and DeMets DL. Discrete sequential boundaries for clinical trials. Biometrika 70:659-663 1983.
72. O'Brien PC and Fleming TR. A multiple testing procedure for clinical trials. Biometrics 35:549-556 1979.
73. Aghajanian C, Blank SV, Goff BA, et al., OCEANS: A randomized, double-blind, placebo-controlled phase III trial of chemotherapy with or without bevacizumab in patients with platinum-sensitive recurrent epithelial ovarian, primary peritoneal, or fallopian tube cancer. J Clin Oncol 2012; Apr 23, ePub ahead of print

FIGO STAGE GROUPING FOR PRIMARY CARCINOMA OF THE OVARY

(1985)

These categories are based on findings at clinical examination and/or surgical exploration. The histologic characteristics are to be considered in the staging, as are results of cytologic testing as far as effusions are concerned. It is desirable that a biopsy be performed on suspicious areas outside the pelvis.

<u>Stage I</u>	Growth limited to the ovaries.
<u>Stage IA</u>	Growth limited to one ovary; no ascites. No tumor on the external surface; capsule intact.
<u>Stage IB</u>	Growth limited to both ovaries; no ascites. No tumor on the external surfaces; capsules intact.
<u>Stage IC*</u>	Tumor either Stage IA or IB but with tumor on the surface of one or both ovaries; or with capsule ruptured; or with ascites present containing malignant cells or with positive peritoneal washings.
<u>Stage II</u>	Growth involving one or both ovaries with pelvic extension.
<u>Stage IIA</u>	Extension and/or metastases to the uterus and/or tubes.
<u>Stage IIB</u>	Extension to other pelvic tissues.
<u>Stage IIC*</u>	Tumor either Stage IIA or IIB but with tumor on the surface of one or both ovaries; or with capsule(s) ruptured; or with ascites present containing malignant cells or with positive peritoneal washings.
<u>Stage III</u>	Tumor involving one or both ovaries with peritoneal implants outside the pelvis and/or positive retroperitoneal or inguinal nodes. Superficial liver metastasis equals Stage III. Tumor is limited to the true pelvis but with histologically verified malignant extensions to small bowel or omentum.
<u>Stage IIIA</u>	Tumor grossly limited to the true pelvis with negative nodes but with histologically confirmed microscopic seeding of abdominal peritoneal surfaces.
<u>Stage IIIB</u>	Tumor of one or both ovaries with histologically confirmed implants of abdominal peritoneal surfaces, none exceeding 2 cm in diameter. Nodes negative.
<u>Stage IIIC</u>	Abdominal implants >2 cm in diameter and/or positive retroperitoneal or inguinal nodes.
<u>Stage IV</u>	Growth involving one or both ovaries with distant metastasis. If pleural effusion is present there must be positive cytologic test results to allot a case to Stage IV. Parenchymal liver metastasis equals Stage IV.

* In order to evaluate the impact on prognosis of the different criteria for allotting cases to Stage IC or IIC, it would be of value to know if rupture of the capsule was (1) spontaneous or (2) caused by the surgeon and if the source of malignant cells detected was (1) peritoneal washings or (2) ascites.

SECONDARY CYTOREDUCTIVE SURGICAL PROCEDURE

Purpose : Maximum resection of recurrent ovarian cancer.

Timing: Surgical exploration should be undertaken within 4 weeks of study entry.

Content of Procedure:

- 1.0 The abdominal incision must be adequate to explore the entire abdominal cavity and allow safe cytoreductive surgery. A vertical incision is recommended but not required.
- 2.0 All peritoneal surfaces including the undersurface of both diaphragms and the serosa and mesentery of the entire gastrointestinal tract will be visualized and palpated for evidence of metastatic disease.
- 3.0 Visible metastatic abdominal and pelvic disease should be resected or ablated completely, if possible.
- 4.0 Diaphragmatic recurrent disease should be resected. Ablation of disease with electrocautery (e.g. Argon Beam Coagulator) is acceptable.
- 5.0 Surgical evaluation of the pelvic and paraortic node bearing areas requires resection if not performed on initial staging/debulking procedure. If incomplete nodal resection was previously documented, unresected areas should be excised.
- 6.0 Solid organ metastases (spleen and liver) should be considered for resection. Treatment by Radio Frequency Ablation (RFA) is acceptable.

Goal: Surgical goal of cytoreduction is to reduce volume of residual disease to smallest quantity possible (no visible residual).

Reporting: The size (two dimensions) and location of residual disease will be recorded.

Specimen Procedures for GOG-0213 (1/3/11)

Section	Table of Contents	Page
I.	Quick Scan Summary of Specimen Requirements for GOG-0213	1
II.	Obtaining a GOG Bank ID for Any GOG Protocol	1
III.	Requesting Specimen Kits for GOG-0213	1
IV.	Submitting Archival Primary or Metastatic Tumor for GOG-0213	2
V.	Fixing and Freezing Recurrent Tumor and Normal Tissue for GOG-0213	3
VI.	Preparing Frozen Serum and Plasma for GOG-0213	7
VII.	Preparing Whole Blood for GOG-0213	10
VIII.	Submitting Form SP for GOG-0213	11
IX.	Shipping Specimens for GOG-0213	11
X.	Banking Specimens for GOG-0213	14
XI.	Distributing Specimens for Laboratory Testing for GOG-0213	16
XII.	Distributing Specimens for Future Research	17

I. Quick Scan Summary of the Specimen Requirements for GOG-0213.

Refer to Section 7.31 of the Protocol for a copy of the Quick Scan Summary Table.

II. Obtaining a GOG Bank ID for Any GOG Protocol (1/3/11)

Only one GOG Bank ID (#### - ## - G###) is assigned per patient, and all specimens and accompanying paperwork for each patient must be labeled with this coded and confidential tracking number. A GOG Bank ID can be obtained online via the Tissue Bank Portal on the GOG website under Tools on the Web Menu page.

Obtain the GOG patient study ID for any GOG protocol with specimen requirements other than GOG-0136 (specimen banking protocol) before requesting a GOG Bank ID from the Tissue Bank Portal.

Please contact the User Support Department at the GOG Statistical and Data Center at support@gogstats.org or by phoning 716-845-7767 or the staff in the GOG Tissue Bank by phoning 866-464-2262 or faxing 614-722-2897 if you need assistance.

III. Requesting Specimen Kits for GOG-0213

A. Ordering Specimen Kits for GOG-0213

1. A Dual-Chamber Specimen Kit can be ordered for each GOG-0213 patients who are randomized to the surgery arm of this study from the GOG Tissue Bank using the GOG Tissue Bank's Kit Management application. This application can be accessed via the GOG Web Menu. Plan ahead so that the kits can be shipped by ground transportation whenever possible. **This kit must only be used for the submission of the GOG-0213 pre-op serum and pre-op plasma specimens and the recurrent tumor and normal tissue collected during secondary cytoreductive surgery.** Please submit the archival formalin-fixed and paraffin-embedded primary or metastatic tumor specimen (block or 16 unstained sections) in your own container. For shipping information, please see Section IX. (8/29/2011)
2. Replacement kits can be ordered as needed based on the number of patients enrolled by your institutions on this protocol and randomized to have secondary cytoreductive surgery. Always try to have replacements available.

B. Materials Provided in the Specimen Kit for GOG-0213

Each Specimen Kit for GOG-0213 will consist of a dual-chamber shipping container for shipping the frozen pre-op serum (SB01), frozen pre-op plasma (PB01), frozen recurrent tumor (RR01) and frozen normal tissue (RN01) on one side and the formalin-fixed recurrent tumor (FR01) and formalin-fixed normal tissue (FN01) on the other side. The following supplies will also be provided within each GOG-

Revised 7/27/11

0213 kit: foil to wrap the two frozen tissue specimens if snap frozen, two truncated OCT embedding molds if the two types of tissue are OCT-embedded and frozen, two 15-ml screw-cap polypropylene conical tube, two plastic disposable transfer pipette for mixing the serum and plasma specimens, two sets of five 1.8 ml screw-cap cryogenic vials (cryotubes) for the serum aliquots, two sets of five 1.8 ml screw-cap cryogenic vials (cryotubes) for the plasma aliquots, two 15 ml formalin jars for two types of fixed tissue, four plastic zip-lock bags for the frozen specimens, two secondary shipping envelopes with absorbent material, a dry ice label (UN1845), an Exempt Human Specimen Sticker and a pouch for the shipping label. (8/29/2011)

If there are supplies required to satisfy the specimen requirements for this protocol that are not in provided in the GOG-0213 Specimen Kit or are not available in your clinic, department or institution, please contact the staff at the GOG Tissue Bank by phoning 866-464-2262 (866-GOG-BANC) who will try to help you obtain these additional supplies when possible.

C. Unused Materials or Unused Specimen Kits for GOG-0213

Unused materials or unused Specimen Kits for GOG-0213 will need to be returned to the GOG Tissue Bank. Contact the GOG Tissue Bank if you have any question about the return of unused material.

IV. Submitting Archival Primary or Metastatic Tumor for GOG-0213

A. Requirement

Archival formalin-fixed and paraffin embedded (FFPE) primary or metastatic tumor tissue (FT01) will only be required from women on GOG-0213 who undergo secondary cytoreductive surgery and give permission for their tissue (tumor and/or normal tissue) to be submitted and used for this research study. Patients may participate in this treatment protocol even if they don't give permission for their tissue to be submitted and used for this research study. If tumor can not be submitted for GOG-0213, please indicate the reason in item 5 on the SP Form such as patient refused, not enough tumor for research, or referring site won't release tumor.

B. Purpose

The GOG Tissue Bank will collaborate with the GOG Statistical and Data Center and the GOG Tissue Utilization Subcommittee to design and create a series of tissue microarrays (TMAs) for GOG-0213 to study markers of recurrence, survival and treatment response or resistance, and prepare sections from conventional blocks and TMAs as needed. Unstained sections from conventional blocks and TMAs will then be distributed to Dr. Michael Birrer at MGH Cancer Center and/or a CEM-approved investigator for biomarker, proteomic and genomic analyses. Laser-capture microdissection will be performed as need to examine cell type-specific expression profiles. The exact choice of the biomarkers and profiles to be evaluated and the assays to be performed in this specimen will be reevaluated based on evolving data in the field.

C. Time Point

The archival formalin-fixed and paraffin-embedded primary or metastatic tumor tissue must have been collected prior to initiating primary chemotherapy. There may be certain patients who receive neoadjuvant chemotherapy prior to surgery, and these details will need to be declared in item 15 of the SP Form for this specimen including agent names with treatment start and stop dates.

D. Format for Labeling the Specimen

Label the archival primary or metastatic tumor specimen (formalin-fixed and paraffin-embedded) with the GOG protocol number (GOG-0213), GOG Bank ID (#####-##-G####), specimen code (FT01 for archival formalin-fixed tumor tissue), and collection date (mm/dd/yyyy). This specimen may also be labeled with the pathology accession number and block identifier, but must not be labeled with personal identifiers like patient name or initials.

Revised 7/27/11

E. Instructions for Submitting the Archival Primary or Metastatic Tumor Tissue

- 1. Identify an Appropriate Tumor Specimen.** Every attempt should be made to provide a tumor block for this research study. Primary tumor is the first choice and metastatic tumor is the second choice. If both can be submitted the primary tumor should be labeled FT01 and the metastatic tumor should be labeled FT02. If it is not possible to provide a block on a permanent or temporary basis, the back-up option will be to provide sixteen unstained sections, 5 micrometer in thickness, on charge glass slides suitable for a standard immunohistochemistry assay. If your institution can not permanently provide a tumor block for this research study, please urge the Pathology Department to allow a tumor block to be submitted to the GOG Tissue Bank on a temporary basis. In this case, please state in field 15 on the SP Form for FT01 that the tumor block must be returned after the unstained sections and cores for TMA creation are obtained.
- 2. Label Tumor Specimen.** Label the primary or metastatic tumor specimen (block or unstained sections) with the GOG protocol number, the GOG Bank ID, the Specimen Code and the collection date.
 - * *Use FT01 for the formalin-fixed primary or metastatic tumor tissue. If both are submitted, use FT01 for the primary tumor and FT02 for the metastatic tumor. The SP Form for FT02 would be considered an optional form for this protocol. In this event, please contact the GOG Statistical and Data Center to have the additional SP Form for FT02 added to the patient form schedule.*
- 3. Complete the Form SP.** Complete a GOG Specimen Form (Form SP) as specified in Section VIII. Submit a copy of Form SP with the specimen when it is shipped to the GOG Tissue Bank, submit a copy to the GOG Statistical and Data Center online or by fax, and retain a copy in your files.
 - * *The type of tumor tissue (primary or metastatic) and specimen (block or sections) will need to be specified on the specimen transmittal form (Form SP) submitted for FT01 for GOG-0213. If sections are submitted instead of a tumor block, the reason must be stated in field 15 on the SP Form for this specimen (i.e., the Pathology Department at your institution is prohibited by local or state law from releasing blocks on a permanent or temporary basis for any reason). There may be certain patients who receive neoadjuvant chemotherapy prior to surgery, and these details will need to be declared in item 15 of the SP Form for this specimen including agent names with treatment start and stop dates.*
- 4. Ship the Tissue Specimen(s).** Ship the archival tumor specimen(s) (block or unstained sections) to the GOG Tissue Bank in your own shipping container as described in Section IX. The archival tumor may also be included in the dual chamber kit if available when the other specimens are ready to ship to the Bank.

V. Fixing and Freezing Recurrent Tumor and Normal Tissue for GOG-0213

A. Requirement

The recurrent tumor will be excised during secondary cytoreductive surgery and a portion will need to be FFPE or fixed in formalin whereas the remainder will need to be frozen (either snap-frozen or OCT-embedded and frozen). Normal tissue is an optional high priority specimen and if collected can either be FFPE or fixed in a jar with formalin whereas the remainder will need to be frozen (either snap-frozen or OCT-embedded and frozen).

Fixed recurrent tumor (FR01) will be required for all patients who give consent for some of their tumor tissue to be used for this research study and are randomized to have secondary cytoreductive surgery. A paraffin block of FFPE recurrent tumor (1st choice) or a piece of recurrent tumor in a jar with formalin (2nd choice) will need to be submitted to satisfy the FR01 requirement.

Frozen recurrent (RR01) will be required for all patients who give consent for some of their tumor tissue to be used for this research study and are randomized to have secondary cytoreductive surgery. A piece of recurrent tumor snap frozen and wrapped in foil or frozen in an OCT mold will need to be submitted to satisfy the RR01 requirement.

Fixed normal tissue (FN01) will be an **optional yet high priority requirement** for all patients who give consent for some of their normal tissue to be used for this research study and are randomized to have secondary cytoreductive surgery. A paraffin block of FFPE normal tissue (1st choice) or a piece of normal tissue in a jar with formalin (2nd choice) will need to be submitted to satisfy the FN01 requirement.

Frozen normal tissue (RN01) will be an **optional yet high priority requirement** for all patients who give consent for some of their normal tissue to be used for this research study and are randomized to have secondary cytoreductive surgery. A piece of normal tissue snap frozen and wrapped in foil or frozen in an OCT mold will need to be submitted to satisfy the RN01 requirement.

B. Purpose

The GOG Tissue Bank will create paraffin blocks from the formalin-fixed recurrent tumor and normal tissue, core appropriate paraffin blocks to create the GOG-0213 tissue microarrays (TMAs), and prepared sections from conventional blocks and TMAs as needed. Unstained sections from conventional blocks and TMAs will then be distributed to Dr. Michael Birrer at MGH Cancer Center and/or a CEM-approved investigator for biomarker, proteomic and genomic analyses. Laser-capture microdissection will be performed as need to examine cell type-specific expression profiles. The exact choice of the biomarkers and profiles to be evaluated and the assays to be performed in these specimens will be reevaluated based on evolving data in the field.

C. Time Point

The fixed and frozen recurrent tumor tissue and normal tissue will be collected during secondary cytoreductive surgery.

D. Format for Labeling the Specimen

Label the tissue specimens from the secondary cytoreductive surgery procedure with the GOG protocol number (GOG-0213), the GOG Bank ID (#####-##-G####), the specimen code (see below) and the collection date (mm/dd/yyyy).

- FR01 for the fixed recurrent tumor tissue
- RR01 for the frozen recurrent tumor tissue
- FN01 for the fixed normal tissue
- RN01 for the frozen normal tissue

E. Recommendations for Preparing Fixed or Frozen Tissue Specimens

How quickly should tissue be fixed or frozen? The tissue should be fixed or frozen as quickly as possible. Ideally within 30-60 minutes but certainly within 4 hours of excision from the patient. The faster these specimens can be fixed or frozen, the more valuable the specimens are for research. It may be appropriate to hold occasional meetings of surgical, laboratory, and clinical personnel to emphasize the urgency of processing these specimens rapidly.

What type of freezing method should be used? There are two types of freezing methods provided for your consideration: snap-freezing or OCT-embedding and freezing. When preparing the tissue specimens from the secondary cytoreductive surgical procedure, the choice of freezing method is not mandated for GOG-0213.

How much frozen tissue should be submitted? **Please submit as much frozen tissue as possible for research. Gram quantities with individual pieces ranging from 1 to 5 cm³ are ideal.** Larger amounts of tissue will allow for replicate laboratory testing and permit validation testing to be performed.

Any suggestions for how to coordinate these efforts? It may be helpful to have meetings among the staff members at your institution such as the GOG surgeons, GOG pathologists, general pathologist, operating room team, nurses, clinical research coordinators and/or tissue procurement specialist that will participate in procuring the tissue specimens for this component of GOG-0213 and a protocol like GOG-0136. These

Revised 7/27/11

types of meetings can help clarify responsibilities and communication methods for keeping the appropriate individuals apprised as to when their services will be needed to satisfy the tissue requirements for this protocol. Sharing operating schedules and providing updates on how the surgery is progressing may help ensure that the members of the team are available when needed thus improving the working relationship among the team and the quality of the tissue specimens submitted for this protocol.

F. Procedures For Excising Tissue For Research

1. Excising recurrent tumor tissue during secondary cytoreductive surgery.
 - a. The surgeon should send the excised recurrent tumor tissue from each GOG-0213 patient randomized to undergo surgery to the surgical pathology suite and arrange for immediate tissue sampling within 30-60 minutes of excision when possible.
 - b. **Submit as much tumor tissue for research as possible. Gram quantities with individual pieces ranging from 1 to 5 cm³ are ideal. There is a minimum requirement of 500 mg or 0.5 cm³ (slightly larger than a pencil eraser).**
 - c. The tumor tissue for submission to the GOG Tissue Bank will undergo various types of laboratory testing and should be as clean and as free from necrosis as possible.
 - d. Promptly following the dissection of the tumor sample, a piece of the recurrent tumor tissue must be formalin-fixed (FR01), and another piece must be snap-frozen or OCT-embedded and frozen (RR01) as described below.
2. Excising normal tissue during surgery.
 - a. The surgeon should also try to excise a piece of normal tissue from each GOG-0213 patient randomized to undergo surgery and send it with the tumor tissue when it is sent to the surgical pathology suite so that tissue sampling can be performed within 30-60 minutes of excision when possible. **Normal tissue can be any normal epithelial tissue including non-involved ovary, fallopian tube, uterus, cervix, or skin. When normal epithelium is not available, please submit non-involved peritoneal surface, residual omentum, or retroperitoneal muscle.** Please try to submit normal epithelium whenever possible as this type of tissue will serve as the most appropriate control for the laboratory testing to be performed for this protocol. **Note for the pathologist**, in the unlikely event that any tumor tissue is subsequently identified within the normal tissue submitted for research, the Pathology Department at the treating institution will be informed and the material will be immediately returned for diagnostic purposes.
 - b. Please submit **gram quantities with individual pieces ranging from 1 to 5 cm³ when possible and a minimum of 500 mg or 0.5 cm³ of normal tissue (slightly larger than a pencil eraser).**
 - d. Promptly following the dissection of the normal tissue specimen, a piece of the normal tissue must be formalin-fixed (FN01) and another piece must be snap-frozen or OCT-embedded and frozen (RN01) as described below.

G. Procedure For Formalin-Fixing A Tissue Specimen

1. **Label the Formalin-Jar(s).** Label the formalin jar(s) provided in the specimen kit distributed by the GOG Tissue Bank for this protocol. Label each 15 ml formalin jar with the GOG protocol number, GOG Bank ID Number, appropriate Specimen Code, and collection date.
** Use FR01 for the formalin-fixed recurrent tumor tissue and FN01 for the formalin-fixed normal tissue.*
2. **Transfer the Tissue into the Formalin-Jar.** Promptly following resection of the tissue, use forceps to transfer the tissue sample to the pre-labeled jar with 15 ml of 10% buffered formalin, securely fasten the lid, and wrap a piece of parafilm around the cap and lid several times.
3. **Store the Tissue in the Fixative.** Store tissue in the fixative in a 4°C refrigerator until the fixed specimen is shipped to the GOG Tissue Bank (see below for shipping instructions). Please keep in mind that the formalin-fixed tissue specimen should undergo standard histologic processing and paraffin-embedding at the GOG Tissue Bank within 1-3 business days of collecting the tumor specimen when possible to avoid problems associated with excessive fixation that modify antigenicity and reduce the usefulness of the tissue specimen. **If the formalin-fixed tissue can't be shipped to the GOG Tissue Bank within 3 days of the surgery, please have your Pathology Department paraffin-embed this research specimen to preserve the usefulness of this specimen for research purposes. Pathologist review of this embedded tissue is not required, as this material has been**

Revised 7/27/11

designated for research. Alternatively, the formalin-fixed tissue can undergo standard histologic processing and be embedded in a paraffin block.

4. **Complete Form SP.** Complete a GOG Specimen Form (Form SP) as specified in Section VIII. Include a copy of Form SP with the specimen when it is shipped to the GOG Tissue Bank, and retain a copy in your files.
 - * *Indicate if the tissue is recurrent tumor or normal tissue in field 22 on Form SP. If normal tissue, please specify the type of normal tissue that is being submitted in the comment field (item 15 on Form SP) such as normal ovary, Fallopian tube, uterus, cervix, skin, non-involved peritoneal surface, residual omentum, or retroperitoneal muscle.*
5. **Ship the Tissue Specimen(s).** Ship the fixed tissue specimen(s) either in a jar(s) of formalin or embedded in a paraffin block to the GOG Tissue Bank as described in Section IX.

H. Instructions for Preparing the Snap-Frozen Tissue

1. **Label Zip-Lock Bag.** Using a waterproof marker, label a zip-lock bag supplied in the Dual-Chamber Specimen Kit distributed by the GOG Tissue Bank with the GOG protocol number, GOG Bank ID Number, the Specimen Code, and the collection date.
2. **Snap-Freeze Tissue.** Using forceps place the appropriate tissue specimen on a piece of foil supplied in the Single-Chamber Specimen Kit distributed by the GOG Tissue Bank, wrap the foil so that the specimen is completely covered and then immerse the tissue wrapped in foil in liquid nitrogen or a suitable substitute until the tissue is frozen solid.
3. **Transfer Snap-Frozen Tissue to Zip-Lock Bag.** Using forceps transfer the foil-wrapped frozen tissue specimen into the zip-lock baggie labeled with the GOG Bank ID Number, the appropriate Specimen Code and the collection date.
4. **Immediately Store Snap-Frozen Tissue.** Store the snap-frozen tumor in an appropriate ultra cold storage space such as an ultra cold freezer ($\leq -70^{\circ}\text{C}$), in liquid nitrogen (liquid or vapor phase) or in direct contact with excess dry ice until the specimens are shipped to the GOG Tissue Bank. A regular freezer (-20°C) is not adequate. A cryostat is also not appropriate.
5. **Complete the SP Form.** Complete a GOG Specimen Form (Form SP) as specified in Section VIII. Submit a copy of Form SP with the specimen when it is shipped to the GOG Tissue Bank, submit a copy to the GOG Statistical and Data Center online or by fax, and retain a copy in your files.
 - * *Indicate that the item being shipped is a piece of snap frozen tumor in field 9 on Form SP. Alternatively, if a snap-frozen piece and an OCT-mold are both being submitted, select "Other" and enter "OCT-mold and piece" in the specify field. Also indicate if the tissue is recurrent tumor or normal tissue in field 22 on Form SP, and then specify the type of normal tissue that is being submitted in the comment field (item 15 on Form SP) such as normal ovary, Fallopian tube, uterus, cervix, skin, non-involved peritoneal surface, residual omentum, or retroperitoneal muscle.*
6. **Ship the Tissue Specimen(s).** Ship the frozen tissue specimen(s) to the GOG Tissue Bank as described in Section IX.

I. Instructions for Preparing the OCT-Embedding and Freezing Tissue

1. **Label OCT-mold and Zip-Lock Bag.** Using a cryomarker, label a truncated OCT mold and Zip-Lock Bag supplied in the Single-Chamber Specimen Kit distributed by the GOG Tissue Bank with the GOG protocol number, GOG Bank ID Number, the Specimen Code, and the collection date. If more than 0.75 grams or 0.75 cm³ of tissue is available for freezing, please split the tissue into two molds, each of which can be labeled with the same specimen code.
2. **OCT-Embed and Freeze the Tissue.** Cover the bottom of the mold with OCT embedding medium, and holding the mold with forceps place the mold in the vapor phase (not the liquid phase) of liquid nitrogen or a suitable substitute until the OCT becomes opaque and is no longer transparent. Do not allow the gel to become frozen solid. Using forceps place the appropriate tissue specimen into the thickened OCT pushing the specimen to the bottom of the mold. Add additional OCT to cover the tissue completely and to fill the mold approximately three-fourths full. Holding the mold with forceps, gradually immerse the entire mold into liquid nitrogen or a suitable substitute until the OCT and tissue are completely solid.

3. **Transfer Frozen OCT-Embedded Tissue to a Zip-Lock Bag.** Using forceps transfer the frozen OCT-embedded tissue specimen to the zip-lock bag labeled with the GOG Bank ID Number, the appropriate Specimen Code and the collection date.
4. **Immediately Store Frozen OCT-Embedded Tissue.** Store the frozen OCT-embedded tumor in an appropriate ultra cold storage space such as an ultra cold freezer ($\leq -70^{\circ}\text{C}$), in liquid nitrogen (liquid or vapor phase) or in direct contact with excess dry ice until the specimens are shipped to the GOG Tissue Bank. A regular freezer (-20°C) is not adequate. A cryostat is also not appropriate.
5. **Complete the SP Form.** Complete a GOG Specimen Form (Form SP) as specified in Section VIII. Submit a copy of Form SP with the specimen when it is shipped to the GOG Tissue Bank, submit a copy to the GOG Statistical and Data Center online or by fax, and retain a copy in your files.
 - * *Indicate that the item being shipped is an OCT-mold in field 9 on Form SP. Alternatively, if an OCT-mold and a snap-frozen piece are both being submitted, select "Other" and enter "OCT-mold and piece" in the specify field. Also indicate if the tissue is recurrent tumor or normal tissue in field 22 on Form SP, and then specify the type of normal tissue that is being submitted in the comment field (item 15 on Form SP) such as normal ovary, fallopian tube, uterus, cervix, skin, non-involved peritoneal surface, residual omentum, or retroperitoneal muscle.*
6. **Ship the Tissue Specimen(s).** Ship the frozen tissue specimen(s) to the GOG Tissue Bank as described in Section IX.

VI. Preparing Frozen Serum and Plasma for GOG-0213

A. Requirements and Purpose

A pre-op serum specimen and a pre-op plasma specimen will be an optional high-priority requirement for women who are randomized to undergo secondary cytoreductive surgery and consent to allow their serum and plasma to be prepared and used it for this research study.

- The pre-op serum specimen will need to be prepared after obtaining consent for this research study but prior to undergoing secondary cytoreductive surgery from 10 ml of blood drawn into a **plain red-top Vacutainer® tube** as described in Section VI-G, and shipped to the GOG Tissue Bank as described in Section IX.
- The pre-op plasma specimen will need to be prepared after obtaining consent for this research study but prior to undergoing secondary cytoreductive surgery from 10 ml of blood drawn into a **purple-top Vacutainer® tube** with the anti-coagulant EDTA as described in Section VI-H, and shipped to the GOG Tissue Bank as described in Section IX.

Patients may participate in this treatment protocol even if they don't give permission for some of their blood to be used for this research study. **If the serum or plasma specimens can not be submitted for GOG-0213, please indicate the reason in item 5 on the SP Form, such as patient refused, tried but not able to draw blood, or Non-US site logistically infeasible.**

B. Purpose

Serum and plasma will first be shipped to the GOG Tissue Bank in Columbus Ohio and then aliquots of the pre-op serum specimen and the pre-op plasma specimen will be distributed in batches to Dr. Michael Birrer at MGH Cancer Center and/or a CEM-approved investigator for biomarker and proteomic analyses. The exact choice of the biomarkers and proteomic profiles to be evaluated and the assays to be performed in this specimen will be reevaluated based on evolving data in the field.

C. Time Point

To pre-op serum specimen and the pre-op plasma specimen must be prepared after obtaining consent for this research study but prior to undergoing secondary cytoreductive surgery.

D. Format for Labeling the Specimen

Label the serum specimens with the GOG protocol number (GOG-0213), the GOG Bank ID (#####-##-G####), the specimen code (SB01 for the pre-op serum), and the collection date (mm/dd/yyyy).

Revised 7/27/11

Label the plasma specimens with the GOG protocol number (GOG-0213), the GOG Bank ID (####-##-G###), the specimen code (PB01 for the pre-op plasma), and the collection date (mm/dd/yyyy).

E. Equipment and Supplies Needed for Preparing Serum Specimens

In addition to the materials provided in each of the Specimen Kits for GOG-0213, you will need gloves, plain red-top Vacutainer® tube(s), tube rack, purple-top Vacutainer® tube with EDTA, a permanent marker, dry ice, a centrifuge, a refrigerator or a bucket with wet ice, and access to appropriate freezing/storage space to collect each serum specimen. *If you do not have access to a plain red-top Vacutainer® tube and/or a purple-top Vacutainer® tube with EDTA, at your institution, please inform the staff at the GOG Tissue Bank who will try to provide you with these tubes when possible.*

F. Guidelines and Recommendations for Preparing Serum and Plasma Specimens

Ideally, the serum and plasma will be processed within 2 hrs from the time the blood is drawn to freezing when possible and must be frozen within 4 hrs of the blood draw. The faster the serum and plasma can be processed from blood draw to freezing the better. Serum and plasma processed within 1-2 hrs is the highest quality; serum and plasma processed within 2-4 hrs is a lower quality. Serum and plasma processed more than 4 hrs after drawing the blood is the poorest-quality serum and plasma for testing. Tracking the serum and plasma processing time is also critical in assessing specimen quality and suitability for testing.

Ideally, the serum and plasma will be frozen in an ultra-cold freezer ($\leq -70^{\circ}\text{C}$), in liquid nitrogen (liquid or vapor phase), or by direct exposure with excess dry ice. If ultra-cold freezing conditions are not available at your site, a non-cycling -20°C freezer can be used; however, the amount of time the serum and plasma is kept in this type of freezer should be kept to a minimum because this temperature is not cold enough to achieve a frozen solid state (water-based liquids will be frozen solid at $\leq -56^{\circ}\text{C}$). A non-cycling freezer is a freezer that will build up frost and requires defrosting by hand. Serum and plasma kept in a non-cycling -20°C freezer should be surrounded with excess dry ice to allow the serum and plasma to achieve and then maintain a frozen solid state. Storage of serum and plasma in a frost-free -20°C freezer will repeatedly damage the specimen each time the freezer cycles (that is, as the freezer thaws and then refreezes). Serum and plasma frozen under ultra-cold conditions represents the highest quality specimen suitable for all types of laboratory testing. Serum and plasma frozen in a non-cycling -20°C provides a lower-quality specimens suitable for restricted types of laboratory testing. Serum and plasma frozen in a frost-free -20°C freezer provides the lowest-quality specimens which has limited usefulness for research purposes. Tracking the freezing conditions for each serum and plasma specimen is of critical importance to assess specimen quality and suitability for testing.

G. Instructions for Preparing Serum

1. **Label Cryotubes.** Label the screw-cap cryotubes for each time point with the GOG protocol number, the GOG Bank ID, the Specimen Code and the collection date.
 - * *For GOG-0213, label ten 1.8 ml screw-cap with the GOG protocol number (GOG-0213), the GOG Bank ID (##-##-G###), the Specimen Code (SB01) and the collection date (mm/dd/yyyy).*
2. **Draw Blood.** Draw 10 ml of blood into a **plain red-top** Vacutainer® tube not a serum separator tube.
3. **Allow Blood to Clot.** Allow the blood to **clot upright at room temperature for 30 minutes.**
 - * *If the blood cannot be centrifuged immediately (next step), store the clotted blood at 4°C or in a bucket with excess wet ice for no longer than 3 hrs from the time of the blood draw. The faster the blood can be centrifuged after the 30 min clotting step, the better.*
4. **Centrifuge Blood.** Centrifuge the blood to separate the serum (clear straw-colored liquid) from the fibrin clot and the blood cells.
 - * *The optimal centrifugation conditions are $\sim 3,500 \times g$ at 4°C for 10 min. The minimal centrifugation conditions are $\sim 1000 \times g$ at room temperature for 15 minutes. The longer centrifugation time compensates for the slower speed. Avoid centrifugations without refrigeration longer than 15 min because excess heat may build up in the unit and damage the serum.*
5. **Mix and Aliquot Serum.** Remove the caps from the blood tube, the 15 ml conical tube and the cryotubes. Transfer the serum into the 15 ml conical tube and gently mix the serum. Dispense

Revised 7/27/11

(aliquot) the serum evenly into as many of the labeled screw-cap cryotubes as possible. Cap the cryogenic vials securely.

* *Fill each cryotube with a minimum of 0.25 ml (cc) to a maximum of 1.7 ml (cc) of serum. It is better to separate the serum into more cryotubes with a smaller volume than into fewer cryotubes with a larger volume.*

6. **Freeze Serum.** Freeze the serum in the cryotubes immediately in an upright position, when possible, using an appropriate type of freezing/storage space as described in section with guidelines and recommendations for preparing serum and plasma specimens.
7. **Complete the Form SP.** Complete a GOG Specimen Form (Form SP) as specified in Section VIII. Include a copy of Form SP with the specimen when it is shipped to the GOG Tissue Bank, and retain a copy in your files.
 - * *The type of storage condition prior to shipment (ultra-cold freezer/liquid nitrogen [N₂]/dry ice) and type of blood collection tube (red-top) must be specified on the specimen transmittal form (Form SP) for the serum specimen.*
8. **Ship the Serum.** Ship the frozen serum to the GOG Tissue Bank as described in Section IX.

H. Instructions for Preparing Plasma

1. **Label Cryotubes.** Label the screw-cap cryotubes for each time point with the GOG protocol number, the GOG Bank ID, the Specimen Code and the collection date.
 - * *For GOG-0213, label ten 1.8 ml screw-cap cryotubes with the GOG protocol number (GOG-0213), the GOG Bank ID (##-##-G###), the Specimen Code (PB01) and the collection date (mm/dd/yyyy).*
2. **Draw Blood.** Draw 10 ml of blood into a **purple-top (lavender-top)** Vacutainer® tube with the anticoagulant EDTA until the vacuum is exhausted.
3. **Allow Blood to Clot.** Mix the blood with the anticoagulant by **gently inverting the tube 5-10 times.**
 - * *If the next (centrifugation) step cannot be conducted immediately, store the blood at 4°C in a refrigerator or in a bucket with excess wet ice for no longer than 3 hrs from the time of the blood draw. The faster the blood can be centrifuged after it is mixed with the anticoagulant the better.*
4. **Centrifuge Blood.** Centrifuge the blood to separate the plasma (clear straw-colored liquid) from the blood cells.
 - * *Ideally, centrifuge the blood at ~3,500 x g at 4°C for 10 min. When the ideal equipment is not available, the minimum centrifugation requirements will be ~1000 x g at room temperature for 15 minutes. The longer centrifugation time will compensate for the slower speed. Avoid centrifugations without refrigeration longer than 15 min because excess heat may build up in the unit and damage the plasma.*
5. **Mix and Aliquot Plasma.** Remove the caps from the blood tube, the 15 ml conical tube and the cryotubes. Transfer the plasma into the 15 ml conical tube and gently mix the plasma. Dispense (aliquot) the plasma evenly into as many of the labeled screw-cap cryotubes as possible. Cap the cryogenic vials securely.
 - * *Fill each cryotube with a minimum of 0.25 ml (cc) to a maximum of 1.7 ml (cc) of plasma. It is better to separate the plasma into more cryotubes with a smaller volume than into fewer cryotubes with a larger volume.*
6. **Freeze Plasma.** Freeze the plasma in the cryotubes immediately in an upright position, when possible, using an appropriate type of freezing/storage space as described in section with guidelines and recommendations for preparing serum and plasma specimens.
7. **Complete the Form SP.** Complete a GOG Specimen Form (Form SP) as specified in Section VIII. Include a copy of Form SP with the specimen when it is shipped to the GOG Tissue Bank, and retain a copy in your files.
 - * *The type of storage condition prior to shipment (ultra-cold freezer/liquid nitrogen [N₂]/dry ice) and type of blood collection tube (EDTA) must be specified on the specimen transmittal form (Form SP) for the plasma specimen.*
8. **Ship the Plasma to the GOG Tissue Bank.** Ship the frozen plasma to the GOG Tissue Bank as described in Section IX.

VII. Preparing Whole Blood for GOG-0213

Revised 7/27/11

A. Requirement

An amendment has been approved to collect a whole blood specimen from new patients on GOG-0213 as well as women who have already been enrolled on GOG-0213 regardless of randomization and treatment. Patients already enrolled on GOG-0213 will need to be re-consented. Blood must only be collected from women who give permission for their blood to be submitted and used for this research study.

If the patient gives permission, 10 ml blood will need to be drawn into a purple-top Vacutainer® tubes with the anti-coagulant EDTA at one time point. The whole blood will need to be collected as described in Section VII-D and shipped to the GOG Tissue Bank as described in Section IX.

Patients may participate in this treatment protocol even if they don't give permission for their blood to be used for research or if the submitting institution is a Non-US site and submission of blood is logistically infeasible. **If blood cannot be submitted for GOG-0213, please indicate the reason in item 5 on the SP Form, such as patient refused, tried but not able to draw blood, or Non-US site logistically infeasible.**

B. Time Point

Whole blood will need to be collected prior to or after starting treatment on this phase III trial or at any time during follow up. Although the collection time point is flexible, we encourage sites to try and collect the blood as soon as possible to remove this requirement from your patient's form schedule. If you need to get an extension for submitting the whole blood specimen, please contact a Translational Research Scientist at 716-845-5702.

C. Purpose

The translational research objective of this protocol is to bank DNA from whole blood for research and evaluate the association between single nucleotide polymorphisms (SNPs) and measures of clinical outcome including overall survival, progression-free survival and adverse events.

D. Instructions for Preparing Whole Blood

- 1. Label the Purple-Top Vacutainer® Tube.** Label the 10-ml Purple-Top Vacutainer® tube with EDTA for this protocol with the GOG protocol number (GOG-0213), GOG Bank ID Number (####-##-G###), the Specimen Code (WB01 for whole blood), and the collection date (mm/dd/yyyy).
- 2. Draw Blood.** Draw 10 ml of blood into the Purple-Top Vacutainer® tube with EDTA until the vacuum is exhausted.
*** For GOG-0213, do not collect blood the day before a holiday** as staff will not be available at the Bank to receive or process the blood.
- 3. Mix Blood with the EDTA.** Mix the blood with the anticoagulant (EDTA) by gently inverting the tube 5-10 times.
- 4. Store the Blood at Room Temperature.** Store the blood at room temperature until the specimen can be shipped to the GOG Tissue Bank.
- 5. Complete the Form SP.** Complete the GOG Specimen Form (Form SP) online using SEDES as specified in Section VIII. Submit a copy of Form SP with the specimen when it is shipped to the GOG Tissue Bank, and retain a copy in your files.
*** Please remember to indicate the Specimen Type is "Whole blood" in item 8, the Items Shipped is "Tube/Vial" in item 9, the quantity shipped is "1" in Item 10, the "Storage Type" is "Room Temperature", the "Type of blood collection tube" is "EDTA", and "Platelet count required" is "No".**
- 6. Ship the Blood.** Ship the blood for a given GOG-0213 patient the day the blood is drawn to the GOG Tissue Bank as described in Section IX.
*** Please note that the blood specimen must be shipped the day the blood is drawn for delivery the next morning as this specimen must undergo immediate processing upon receipt to extract high quality DNA.**

VIII. Submitting Form SP for GOG-0213

Revised 7/27/11

A. Form SP Requirements for Each GOG-0213 Patient

One Form SP must be completed and electronically submitted to the GOG Statistical and Data Center (SDC) *for each specimen* required for the protocol regardless of the specimen submission status using the SDC Electronic Data Entry System (SEDES). Specific instructions for completing Form SP are available via SEDES by scrolling down to the SP Forms for GOG-0213.

B. Instructions for Submitting Form SP Online

Form SP must be submitted to the GOG SDC online using SEDES which is available on the GOG Web Menu under *Registration/Data Entry*. To access Form SP for online submission, log onto the GOG Web Menu and use SEDES to electronically enter Form SP data. Any questions about access or problems should be directed to the User Support Department at the GOG Statistical and Data Center at support@gogstats.org or by phoning 716-845-7767. Retain a printout of the completed form for your records and include a copy of the completed form when the specimen is shipped to the GOG Tissue Bank. It is not necessary to send a completed Form SP to the GOG Tissue Bank when the specimens are not submitted.

IX. Shipping Specimens for GOG-0213

A. All specimens will be shipped to the GOG Tissue Bank at the following address:

GOG Tissue Bank – Protocol GOG-0213
Nationwide Children's Hospital
700 Children's Drive, WA1340
Columbus, OH 43205
Phone: (614) 722-2865
Fax: (614) 722-2897
E-mail: gogbank@nationwidechildrens.org

B. Archival Primary or Metastatic Tumor - Block or Sections (Mandatory Specimen)

An archival primary or metastatic tumor specimen (FT01) either a block or unstained sections must be shipped to the GOG Tissue Bank within 8 weeks of study enrollment **using your own shipping container** at the address provided using the US Postal Mail at your own expense. If shipping slides, please pack slides in a plastic slide cassette labeled with the GOG protocol code, Bank ID, specimen code and collection date. Tape the slide cassette shut and wrap in bubble wrap in bubble wrap or another type of padded material before shipment. This specimen may also be included in the dual chamber Specimen Kit for GOG-0213 if it was available when the recurrent tumor, pre-op serum and/or normal tissue are ready to be shipped to the GOG Tissue Bank.

C. Fixed Recurrent Tumor and Frozen Recurrent (Mandatory Specimens) as well as the Pre-Op Serum, Pre-Op Plasma, Formalin-Fixed Normal Tissue and Frozen Normal Tissue (Optional but High Priority Specimens)

To satisfy the specimen requirement(s) for patients who are enrolled at GOG or CTSU Institutions, are randomized to have secondary cytoreductive surgery and give permission for their serum and/or tissue to be used for this research study, the mandatory fixed recurrent tumor (FR01) and frozen recurrent tumor (RR01) specimens and any of the optional specimens (pre-op serum – SB01, pre-op plasma – PB01, fixed normal tissue – FN01 and frozen normal tissue – RN01) will need to be shipped to the GOG Tissue Bank **using the dual-chamber Specimen Kit** within 3 days of surgery when possible. If this is not possible, please ship them to the GOG Tissue Bank at your earliest convenience. The SP Forms for these specimens, however, must be received at the GOG Statistical and Data Center within 7 days of surgery.

Instructions for Shipping Fixed and Frozen Specimens (8/29/2011)

1. **Bag the Fixed Tissue Specimens.** Transfer the fixed recurrent tumor and/or normal tissue in a jar(s) of formalin or embedded in a paraffin block(s) into a plastic biohazard secondary envelope containing absorbent material, and then put the secondary envelope into the Tyvek envelope. Expel as much air as possible before sealing both envelopes.
2. **Pack the Fixed Tissue Specimens into the Kit.** Place the Tyvek envelope containing the fixed tissue specimens into one chamber of the Dual-Chamber Specimen Kit.
3. **Pre-Fill Kit with Dry Ice.** Layer dry ice into the other chamber of the Dual-Chamber Specimen Kit until it is about 1/3 full.
4. **Transfer Frozen Specimens into Individual Zip-Lock Bags.** Transfer the frozen recurrent tumor, frozen normal tissue, cryotubes of frozen serum and/or cryotubes of frozen plasma from each patient into individual zip-lock bags. Expel as much air as possible before sealing the bag.
5. **Transfer the Bags of Frozen Specimens into a Secondary Envelope and a Tyvek Envelope.** Transfer the zip-lock bags with the frozen recurrent tumor tissue, frozen normal tissue, the cryotubes of frozen serum and/or the cryotubes of frozen plasma into a plastic biohazard secondary envelope containing absorbent material, and then put the secondary envelope into the Tyvek envelope. Expel as much air as possible before sealing both envelopes.
6. **Pack Specimens and Dry Ice into the Specimen Kit .** Place the Tyvek envelope containing the frozen specimens into the chamber and then fill the kit to the top with dry ice.
7. **Insert SP Forms.** Insert a copy of the SP Forms for each specimen packed in this Specimen Kit in the space between internal chambers and the outside plastic holder.
8. **Seal Kit Securely.** Place the styrofoam cover on top of the Kit and then seal the kit securely with filament or other durable sealing tape.
9. **Print and Attach Shipping Label.** Access the GOG Tissue Bank's Kit Management application via the GOG Web Menu to obtain a shipping label. Once in the application select "Shipping Label" from the tool bar at the top of the screen in order to print a Federal Express shipping label.
10. **Complete and Attach Other Labels.** After completing the Dry Ice Label (UN1845), attach the Dry Ice Label and an Exempt Human Specimen Sticker to the side of the box.
11. **Arrange for Pick-Up.** Make arrangements for Federal Express pick-up through your usual institutional procedure or by calling 1-800-238-5355.
12. **Ship Specimens.** Ship the fixed and frozen specimens with the accompanying SP Forms to the GOG Tissue Bank via Federal Express Priority Overnight delivery Please ship specimens Monday through Thursday for a Tuesday through Friday delivery.

D. Submission of Whole Blood for GOG-0213.

A whole blood specimen will be required for all patients who give permission for their blood to be submitted and used for this research study.

Although the GOG Tissue Bank will not provide a specimen kit for shipping this whole blood specimens to the GOG Tissue Bank for GOG-0213, your institution will still be required to comply with International Air Transportation Association (IATA) standards (www.iata.org).

To ship whole blood specimens to the GOG Tissue Bank at ambient temperature you will need the following: (1) sturdy shipping container (e.g., a FedEx Box or another type of cardboard or Styrofoam box), (2) biohazard bag with absorbent material, (3) puncture and pressure resistant envelope (e.g. Tyvek envelope), (4) Exempt Human Specimen Sticker, and (5) blank *FedEx Express US Airbill*.

If you do not have these materials available at your Institution, you may order them from any supplier. Biohazard bag and absorbent material can be ordered from Saf-T-Pak (Phone: 800-814-7484; Website: www.saftpak.com).

- STP-710 Disposable 2-Part Secondary Pressure Vessel, Medium (i.e., secondary shipping envelope)
- STP-151 100 mL Absorbent Strip – 6 inches (i.e., absorbent material)

Cardboard FedEx shipping boxes are available from FedEx at no charge. If you do not have a FedEx pick-up and supply center at your Institution, you can request that your Driver bring extra boxes to you at your next pick-up. FedEx Customer Service can be reached at 800-Go-FedEx (800-463-3339).

If your Institution has a small number of patients on GOG trials or has limited funding to purchase supplies, please consider “cost sharing” with other GOG institutions or your parent institution.

Instructions for Shipping Whole Blood Specimens For DNA Extraction Using Your Own Shipping Container (8/29/2011)

Special reminder: The whole blood specimens for this protocol must be shipped to the GOG Tissue Bank at ambient (room) temperature the day the blood is drawn. These blood specimens must be drawn in a 10-ml purple-top (EDTA) tube and can be shipped on a Monday through Friday schedule for Tuesday through Saturday morning delivery. Bank staff will be available for immediate processing of the blood specimens upon receipt. Bank staff do not work holidays and will not be available to process the blood so **do not collect blood for GOG-0213 the day before a holiday**. Please make other arrangements to collect this blood specimen on a different day. **Please note that you can place up to 4 different blood specimens in one biohazard bag.**

1. **Place the Whole Blood Tube(s) into a Biohazard Bag with Absorbent Material.** Place the whole blood specimen labeled with the protocol code, Bank ID, specimen code (WB01) and collection data into a biohazard bag with an absorbent strip. Expel as much air as possible before sealing the bag.
2. **Place the Blood Tube(s) into a Tyvek Envelope.** Next place the blood wrapped in padding into a Tyvek envelope. Expel as much air as possible before sealing the envelope.
3. **Place the Tyvek Envelope into a Sturdy Cardboard Box and include Bubble Wrap or Other Padding as Needed.** Place the Tyvek envelope containing up to 4 whole blood specimens into a sturdy cardboard box like the smallest cardboard FedEx box. If you are using a larger cardboard box, you can batch ship blood in more than one Tyvek envelope each containing up to 4 tubes of blood. Include bubble wrap or other padding as needed to secure the Tyvek envelope(s) inside the box.
4. **Place the SP Form(s) into the Cardboard Box.** Insert a print out of the SP Form(s) for the whole blood specimen(s) into the cardboard box.
5. **Tape the Cardboard Box.** Seal the cardboard box with filament or other durable sealing tape.
6. **Print and Attach a Shipping Label.** Access the GOG Tissue Bank’s Kit Management application via the GOG Web Menu to obtain a shipping label. Once in the application select “Shipping Label” from the tool bar at the top of the screen in order to print a Federal Express shipping label. If blood is collected on a Friday, please select “Saturday Delivery”. Saturday delivery is **only available** for the shipment of whole blood.
7. **Complete and Attach Other Labels.** Attach the Exempt Human Specimen Sticker to the side of the cardboard box.
8. **Arrange for Federal Express Pick-Up.** Make arrangements for Federal Express pick-up through your usual institution procedure or by calling 1-800-238-5355.
9. **Ship the Specimens to the GOG Tissue Bank.** Ship the whole blood specimen(s) and the SP Form(s) at ambient temperature to the GOG Tissue Bank at the address provided above on a Monday through Friday schedule for a Tuesday through Saturday morning delivery.

X. Banking Specimens for GOG-0213

The GOG Tissue Bank staff will be responsible for all of the general activities associated with receiving, banking and distributing the clinical specimens submitted for GOG-0213. The Bank staff will also be responsible for preparing and distributing Dual-Chamber Specimen Kits with the materials specified in Section III for this protocol. The cost of shipping the GOG-0213 specimens from the GOG participating institutions to the GOG Tissue Bank will be billed to the GOG Tissue Bank Federal Express account.

Upon receipt of any shipments containing specimens for GOG-0213, the GOG Tissue Bank staff will immediately assess the type, quantity, and condition of the specimens received; complete the appropriate fields in the GOG Specimen Form; enter the specimens into their database system; and store the specimens under the appropriate conditions. The GOG Tissue Bank staff will complete the bottom part of Form SP for each

Revised 7/27/11

specimen and submit the data to the GOG Statistical and Data Center electronically within 3 business days of receiving any clinical specimens for this protocol. A copy of the completed Form SP for each specimen will be retained in the files kept at the GOG Tissue Bank. In addition, the GOG Tissue Bank will work with the GOG Statistical and Data Center to reconcile specimen identifiers, information, condition, and quality as needed.

A. Archival Formalin-Fixed and Paraffin-Embedded Tumor and Normal Tissue

Archival or formalin-fixed tissue will be received as a paraffin block, sections (sixteen unstained sections, 5 micrometer in thickness, on charged slides suitable for standard immunohistochemistry assays) or in a formalin-jar. Staff at the GOG Tissue Bank will make sure that each block, slide or formalin-jar is labeled with the GOG protocol number (GOG-0213), GOG Bank ID, the appropriate specimen code and the collection date. FT01 will be used for archival primary or metastatic tumor. If both are submitted, ideally FT01 will be used for archival primary tumor and FT02 will be used for archival metastatic tumor. If this is not the case, the staff at the GOG Tissue Bank should not relabel these specimens. Formalin-fixed recurrent tumor should be labeled with the specimen code FR01 whereas formalin-fixed normal tissue should be labeled with the specimen code FN01. When research specimens undergo pathology review, if the type of tissue in the research specimen does not match up with the electronic data in item 22 on the SP Form (type of tissue), staff at the GOG Tissue Bank will need to inform the GOG Statistical and Data Center and the GOG Institution so that item 22 on Form SP can be amended.

1. **Block.** If a paraffin block is received, each block will be stored under vacuum and protected from light until sections need to be prepared and/or blocks need to be cored to prepare tissue microarrays (TMAs) for this protocol.
 - a. **Unstained Sections.**

Just before distribution of these specimens for laboratory testing, sections will be prepared as needed based on the type of testing to be performed. Individual slides will be labeled with the identifiers indicated above. The slides will then distributed wax-dipped, stored under vacuum, and protected from light.
 - b. **Tissue Microarrays (TMAs).**

The GOG Tissue Bank will collaborate with the GOG Statistical and Data Center and the GOG Tissue Utilization Subcommittee to design and create a series of TMAs for GOG-0213 to study markers of recurrence, survival and treatment response or resistance. The specific types of the TMAs that can be created will depend on the paraffin block submissions for this protocol and the clinical outcomes observed for these cases. For example, one TMA could contain matched cores of tumor collected prior to initiating first line and second-line therapy with adjacent normal tissue from secondary cytoreductive surgery whereas another TMA could represent tumor cores from patients who experienced short survival, intermediate survival or long survival or include tumor cores from patients treated on a specific treatment arm who experienced short, intermediate or long progression-free survival. Ideally, each TMA will contain 250 cores with 200 individual cases and 50 controls. Since three to four cores from the same paraffin block are needed to reflect staining in a conventional tissue section, each of GOG-0213 TMAs will be generated in quadruplicate. Each quadruplicate TMA block will contain 200 independent cases with the same 50 controls. This will allow one set to be used for screening or exploratory analyses and the other for validation. The controls will include: 15 human cell lines with known molecular profiles, 20 gynecologic tissues [normal and cancer], and 15 non-gynecologic tissue [normal and cancer]. Incorporation of the same controls on each of these TMAs will allow investigators to evaluate the performance of the individual arrays and allow inferences to be drawn across arrays when certain criteria are satisfied. The Bank will position the cores in fixed positions in the quadruplicate blocks. Each core will be 1 mm in diameter and 2 mm in depth whenever possible. In cases where lesion size is a limitation, 0.8 mm x 2 mm cores will be obtained. Core loss during sectioning will increase with the number of sections into the block and statistical sections will build in an average estimated loss of 15%. GOG pathologists will identify the highest quality cases for inclusion on the TMA, select the exact sites within a block to be cored for the TMA, and evaluate the quality of the TMA sections generated including a light microscopic examination of core integrity and loss as well as neoplastic cellularity. Immunohistochemical staining for markers that are sensitive to fixation conditions and oxidation including p27 and androgen receptor may be used to identify

tissues suitable for coring. Each TMA section will be wax dipped, vacuum sealed and protected from light to protect the antigenicity of the tissue prior to distribution for laboratory testing.

2. **Unstained Sections.** When tissue specimens are received as unstained sections, the slides will be wax-dipped, stored under vacuum, and protected from light.
3. **Pieces of Tissue in a Formalin-Jar.** When tissue specimens are received in a formalin-jar, the tissue will undergo standard histologic processing and be embedded in a paraffin block. The blocks will be stored under vacuum, and protected from light until sections need to be prepared and/or blocks need to be cored to prepare tissue microarrays (TMAs) for this protocol.

B. Frozen Recurrent Tumor and Normal Tissue Specimens

Frozen recurrent tumor and normal tissue will be received snap frozen or OCT-embedded and frozen. Staff at the GOG Tissue Bank will make sure the tumor specimen (actually the zip-lock bag and/or the OCT mold) is labeled with the GOG protocol number (GOG-0213), GOG Bank ID, the appropriate specimen code (RR01 for recurrent tumor and RN01 for normal tissue) and the collection date. The frozen tissue specimen will be stored at the Bank in an ultra-cold freezer ($\leq -70^{\circ}\text{C}$) or in a liquid nitrogen storage tank.

C. Pre-Op Serum

Frozen pre-op serum will be received as aliquots in up to 10 screw-cap cryogenic vials. Staff at the GOG Tissue Bank will make sure that each aliquot of pre-op serum is labeled with the GOG protocol number (GOG-0213), GOG Bank ID, the appropriate specimen code (SB01) and the collection date. These aliquots will be stored at the Bank in an ultra-cold freezer ($\leq -70^{\circ}\text{C}$) or in a liquid nitrogen storage tank. In order for serum to be considered as satisfactory for GOG-0213, the processing time in Item 11 on Form SP should be "< 4 hours", the type of storage condition in Item 12 on Form SP should be "Ultracold freezer/liquidN2/dry ice", the type of type of blood collection in Item 16 on the SP Form should be "Red top", and the serum should arrive at the Bank frozen solid in contact with visible dry ice.

D. Pre-Op Plasma

Frozen pre-op plasma will be received as aliquots in up to 10 screw-cap cryogenic vials. Staff at the GOG Tissue Bank will make sure that each aliquot of pre-op plasma is labeled with the GOG protocol number (GOG-0213), GOG Bank ID, the appropriate specimen code (PB01) and the collection date. These aliquots will be stored at the Bank in an ultra-cold freezer ($\leq -70^{\circ}\text{C}$) or in a liquid nitrogen storage tank. In order for plasma to be considered as satisfactory for GOG-0213, the processing time in Item 11 on Form SP should be "< 4 hours", the type of storage condition in Item 12 on Form SP should be "Ultracold freezer/liquidN2/dry ice", the type of type of blood collection in Item 16 on the SP Form should be "EDTA", and the plasma should arrive at the Bank frozen solid in contact with visible dry ice.

E. Whole Blood

Each whole blood specimen will need to be processed immediately upon receipt to extract DNA, assess the DNA concentration and quality, and then to store the DNA in an ultra-cold freezer in aliquots labeled with the GOG protocol code, Bank ID, specimen code (WB01-DNA) and collection date. Ideally the blood will be received in a liquid state in a purple-top Vacutainer® tube with EDTA. Staff at the GOG Tissue Bank will need to document the date of DNA extraction using the format mm/dd/yyyy, DNA concentration in [brackets] and 260/280 ratio in (parenthesis) in item 30 on Form SP and to note comments regarding specimen condition in item 31 on Form SP.

XI. Distributing Specimens for Laboratory Testing for GOG-0213

Chairs of the GOG Committee for Experimental Medicine and the GOG Tissue Utilization Subcommittee will coordinate to make decisions regarding when specimens will be distributed to approved-investigators for approved laboratory testing. The GOG Statistical and Data Center and the GOG Tissue Bank will work together to coordinate the physical distribution of the specific specimens for select patients to the approved investigators for laboratory testing. Specimen selection will be based on information regarding specimen