The Global Impact of the Gynecologic Cancer InterGroup in Enhancing Clinical Trials in Ovarian Cancer

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Abstract: The Gynecologic Cancer InterGroup (GCIG) has developed from a small network of ovarian cancer researchers to a large international forum addressing multiple issues related to research in gynecologic cancers. Member groups of the GCIG have collaboratively conducted pivotal clinical trials in cancers of the ovary, endometrium, and cervix. The participation of operational and statistical personnel from the GCIG member groups has facilitated a collegial approach to international differences and restrictions.

One of the powerful initiatives of the GCIG is the facilitation of the Ovarian Cancer Consensus Conference every few years. The 4th Ovarian Cancer Consensus Conference was held in Vancouver, Canada, in June 2010, and the resulting publications (herein) provide an invaluable resource to researchers in the field of gynecologic oncology.

Key Words: Gynecologic Cancer InterGroup, Ovarian Cancer Consensus Conference

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UPDATE OF THE OVARIAN CANCER CONSENSUS CONFERENCES

The first Ovarian Cancer Consensus Conference (OCCC) was held in Elsinore, Denmark, in 1993, and the second OCCC, 5 years later, in Bergen aan Zee, The Netherlands. Both conferences resulted in the publication of consensus statements on a number of key issues in ovarian cancer.[1,2] It was recognized in the literature, after the second OCCC, that the strength of international collaboration and participation in ovarian cancer research in moving forward with globally applicable results in a timely and coherent fashion.[3,4] After the third OCCC, which was held by the Gynecologic Cancer InterGroup (GCIG), September 5–9, 2004, in Baden-Baden, Germany, in addition to the consensus statements,[5] a history of the GCIG, methods of the conference consensus process, and outstanding issues to be considered in ovarian cancer were all published the following year.[6–8] Building on this momentum, the GCIG has grown considerably, from 13 international gynecologic cancer research groups to 23 full member groups and now includes an additional number of interested/observer organizations (Table 1). Full member groups must have a published record of independently conducting meaningful phase 3 randomized trials in populations of women affected by gynecologic cancer.

In June 2010, the fourth OCCC was held in Vancouver, Canada. The resulting series of articles published in this journal reflect not only the degree to which consensus was reached but also the enormous commitment to global collaboration among the current members of the GCIG.

BACKGROUND OF THE GCIG

After the successful international collaboration between European and Canadian investigators in 2 ovarian cancer clinical trials,[9,10] it was determined by the leaders of the EORTC Gynecological Cancer Group, the NCI Canada Clinical Trials Group (CTG), the Nordic Society of Gynecologic Oncology (NSGO), the Scottish Gynecological Cancer Trials Group (SGCTG), the Southwestern Oncology Group (SWOG), and the Arbeitsgemeinschaft Gynaekologische Onkologie studiengruppe (AGO) that further cooperation in a

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TABLE 1. GCIG member groups 2010

Full member groups	
ACRIN (2007)	American College of Radiology Imaging Network
AGO-Au (2005)	Arbeitsgemeinschaft Gynaekologische Onkologie Austria
AGO-De (1993)	Arbeitsgemeinschaft Gynaekologische Onkologie Germany (+ NOGGO)
ANZGOG (1999)	Australia and New Zealand Gynecological Oncology Group
DGOG (2009)	Dutch Gynecologic Oncology Group
EORTC-GCG (1993)	European Organization for Research and Treatment of Cancer – Gynecologic Cancer Group (and ENGOT)
GEICO (2001)	Grupo Espanol de Investigacion en Cancer de Ovario
GINECO (1999)	Group d'Investigateurs Nationaux pour l'Etude des Cancers Ovariens (France)
GOG (1999)	Gynecologic Oncology Group (USA)
JGOG (2002)	Japanese Gynecologic Oncology Group
KGOG (2008)	Korean Gynecologic Oncology Group
MaNGO (2006)	Mario Negri Gynecologic Oncology
MITO (2005)	Multicentre Italian Trials in Ovarian Cancer
MRC/NCRI (1999)	Medical Research Council/National Cancer Research Institute (UK)
NCIC-CTG (1993)	NCI Canada, Clinical Trials Group
NSGO (1993)	Nordic Society of Gynecologic Oncology
RTOG (2001)	Radiation Therapy Oncology Group (USA)
SGCTG (1993)	Scottish Gynaecological Cancer Trials Group
SWOG (1993–1998; 2008)	SouthWest Oncology Group (USA)
Provisional member groups	
COGI (2010)	Cooperative Ovarian Cancer Group for Immunotherapy
GICOM (2010)	Mexico
ICORG (2010)	Irish Cooperative Oncology Research Group
Government member	
NCI-US (1999)	National Cancer Institute of the USA
Interested government groups	NCI France, EMEA
Observer groups	TRSGO (2008) (Turkey), SGOG (2010) (Shanghai), GTD Society (ISSTD)
Pharma/Biotech partners	TAIHO (2007), Eli Lilly (2008), AstraZeneca (2008), Pharmamar (2010), Boehringer-Ingelheim (2010), GSK (2010), Amgen (2010), OrthoBio/JnJ (2010), Roche (2010)
Interested parties	TGCS (Thailand), GSGO (Georgia), SASGO (South Africa), IGOG (India), Lithuania, Romania, India, Brazil, Poland, Czech Republic, Taiwan, Belarus, Bosnia/Herz, Bulgaria, Croatia, Greece, Israel, Latvia, Russia, Serbia, Slovenia, Uganda

more structured manner would be mutually beneficial. Initial meetings were convened in conjunction with the American Society of Clinical Oncology (ASCO) conferences in 1993 and 1994, with the intention of sharing strategic directions, planning, development and implementation of clinical trials in the field of gynecologic cancer. Originally, this "Ovarian Cancer Trials Intergroup Network" met annually, with discussions leading to the birth of the GCIG, which was formalized in 1997, and guidelines developed for participation in this international collaboration.

Since 2003, the GCIG has been led by an Executive Board consisting of chairpersons (past-chair, chair, chair-elect), secretariat (operations manager and Webmaster), and a representative from each member group. National groups with a research track record, who agree to pay dues and comply with the statutes, can be selected. Less experienced groups can be accepted with observer status and then potentially with provisional member status.

The GCIG is a cooperative of national gynecologic cancer clinical trials groups, each of which is allowed 6 representatives; typically 3 or 4 clinical investigators, a statistician, and a trials manager. The GCIG Membership Committee is formed from the 3 most recent past-chairs and follows strict criteria in review of applications and recommendations to the Executive Board. Member groups are reviewed every 2 years concerning participation in GCIG

studies, representation at GCIG meetings, compliance with good clinical practice, and payment of dues.

UPDATE OF THE GCIG (2010)

Member groups of GCIG have collaboratively conducted a number of pivotal phase 3 clinical trials that have ultimately defined the standard of care for women with gynecologic cancers. In addition to the fore-mentioned trials,[9,10] others include the evaluation of intraperitoneal chemotherapy in primary treatment of ovarian cancer,[11] paclitaxel,[12] and liposomal doxorubicin[13] in the treatment of recurrent disease, the addition of anthracycline (epirubicin) to standard therapy in ovarian cancer,[14,15] platinum-based chemoradiation for cancer of the cervix,[16] and systemic chemotherapy for endometrial cancer.[17] Data from clinical trials conducted by GCIG groups have been used to support licensing applications for paclitaxel,[9] gemcitabine,[18] and topotecan[19] in the treatment of ovarian cancer.

Ovarian cancer chemotherapy trials have dominated GCIG activity, but during recent years, the GCIG has been working to develop trials in cervical and endometrial cancer. In 2006, a GCIG workshop was convened to review the research areas of need for endometrial cancer to follow the ASTEC/EN5 and PORTEC 1 and 2 trials, and as a result, collaborative GCIG trials addressing systemic therapy are now underway, for example, PORTEC 3. In 2009, a similar platform dedicated to cervical cancer was conducted by the GCIG. Because there was particular emphasis on achieving greater involvement by groups from developing countries, a "cervix cancer research network" is currently being established under the GCIG umbrella. A number of trials are under development, led by GCIG groups with participation from the cervix cancer research network. These trials include induction chemotherapy and consolidation chemotherapy before and after chemoradiation for advanced disease and radical versus less radical surgery for early cervical cancer. As one of the GCIG aims is to maintain a portfolio of surgical trials, currently these too are under development, including trials in surgery for recurrent ovarian cancer and lymphadenectomy for endometrial and ovarian cancer.

Each disease site (ovary, endometrial [including gestational trophoblastic disease] and cervix [including vagina and vulva]) has a standing committee where investigators discuss and develop collaborative trial concepts and protocols. The Harmonization standing committee has proven to be an invaluable resource in facilitating international collaboration, tackling the challenges of conducting trials through the efforts of the operational and statistician representatives. The Translational Research standing committee has likewise proved invaluable, addressing the challenges of tissue collection provided by clinical trial participants, which becomes increasingly important in an era of personalized medicine where biomarker led trials will become the criterion standard for targeted therapy.

Working groups in the GCIG are formed as deemed necessary by the Executive Board; some with defined projects such as the Screening/Prevention, Classifications, Federation Internationale Gynecologie et Obstetrique (FIGO) review, Response and Progression, and Education working groups; whereas others involve long-term initiatives, such as the Rare Tumors and Symptom Benefit working groups.

The GCIG has evolved as a forum for communication and exchange of ideas and provides the means by which international intergroup collaborations and consensus can be fostered. GCIG criteria have become the standard for evaluating treatment response[20,21] and, as of the fourth OCCC, end points have been agreed on for incorporation into GCIG clinical trials.

The GCIG meets face to face twice a year, spring in North America and autumn in Europe, generally in conjunction with other major (gynecologic) cancer conferences. The Executive Board and subgroups convene by teleconference throughout the year as needed, ensuring business is conducted year-round.

With a clear mission statement to promote and conduct high-quality clinical trials to improve outcomes for women with gynecologic cancers, the GCIG has become a highly successful and respected organization. This is achieved through international collaboration, a strong sense of common purpose, shared expertise, and mutual respect among members.

Through an enormous volunteer commitment by many experts in the field who recognize the need for collaborative international work and the increasing interdependence of research groups, the foci of the GCIG are to:

1. promote international cooperation,
2. promote clinical research,
3. perform studies in rare tumors,
4. stimulate evidence based medicine, and
5. support educational activities.

Currently, the GCIG Web site (www.gcig.igcs.org) is the major source for resources and up-to-date information.

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