



**Editor-in-Chief**  
Pedro T Ramirez (USA)

**Associate Editors**  
Antonio Gonzalez (Spain)  
Anna Fagotti (Italy)  
Michael Frumovitz (USA)  
Rene Pareja (Colombia)

**Video Editor**  
Luis Chiva (Spain)

**Social Media Editor**  
Ane Gerda Zahl Eriksson (Norway)

**Managing Editor**  
Lindsey Struckmeyer (USA)

**Editorial Office**  
*International Journal of Gynecological Cancer*, BMJ Journals  
Two Hudson Square, 3rd Floor,  
Hoboken, NJ 07030 USA  
E: [ijgc@jceditorial.com](mailto:ijgc@jceditorial.com)

**Senior Production Editor**  
Eleanor Naylor  
E: [production.ijgc@bmj.com](mailto:production.ijgc@bmj.com)

**Customer support**  
For general queries and support with existing and new subscriptions:  
W: [support.bmj.com](http://support.bmj.com)  
T: +44 (0)20 7111 1105  
E: [support@bmj.com](mailto:support@bmj.com)

Self-archiving and permissions  
W: [bmj.com/company/products/services/rights-and-licensing/](http://bmj.com/company/products/services/rights-and-licensing/)  
E: [bmj.permissions@bmj.com](mailto:bmj.permissions@bmj.com)

**Disclaimer:** *International Journal of Gynecological Cancer* is owned by the International Gynecologic Cancer Society (IGCS) and the European Society of Gynaecological Oncology (ESGO). The owners grant editorial freedom to the Editor of *IJGC*. *IJGC* follows guidelines on editorial independence produced by the World Association of Medical Editors and the code on good publication practice of the Committee on Publication Ethics.

*IJGC* is intended for medical professionals and is provided without warranty, express or implied. Statements in the Journal are the responsibility of their authors and advertisers and not authors' institutions, the BMJ Publishing Group, the Societies or the BMA unless otherwise specified or determined by law. Acceptance of advertising does not imply endorsement.

To the fullest extent permitted by law, the BMJ Publishing Group shall not be liable for any loss, injury or damage resulting from the use of *IJGC* or any information in it whether based on contract, tort or otherwise. Readers are advised to verify any information they choose to rely on.

**Copyright:** © 2019 IGCS and ESGO. All rights reserved; no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without prior permission.

*The International Journal of Gynecological Cancer (IJGC)* is published by BMJ Publishing Group Ltd and typeset by Exeter Premedia Services Private Limited, Chennai, India.

## Editorial

- 1084** High intermediate risk endometrial cancer. What is it?  
*P J Eifel*

## Lead Article

- 1086** A proposal for a new classification of "unfavorable risk criteria" in patients with stage I endometrial cancer  
*R Li, A Shinde, E Han, S Lee, S Berival, M Harkenrider, M Kamrava, Y-J Chen, S Glaser*

## Original Article

- 1094** Joint ENGOT and GOG Foundation requirements for trials with industry partners  
*I Vergote, R L Coleman, S Pignata, M A Bookman, C Marth, T J Herzog, A Gonzalez Martin, L J Copeland, On behalf of The European Network of Gynaecological Oncological Trial Groups (ENGOT) and The GOG Foundation, Inc*

## Vulvar Cancer

- 1098** Vulvar flap for urethral neomeatus reconstruction after radical surgery for vulvar cancer: a retrospective cohort analysis  
*M Franchi, S Uccella, P C Zorzato, A Dalle Carbonare, S Garzon, A S Laganà, J Casarin, F Ghezzi*

## Cervical Cancer

- 1105** Persistent opioid use after radiation therapy in opioid-naive cervical cancer survivors  
*K Ward, A Ramzan, J Sheeder, S Fischer, C Lefkowitz*
- 1110** Timing of robotic hysterectomy after cervical excisional procedure  
*A K Melnikoff, D W Doo, A C Cohen, E Landers, C Walters-Haygood, G McGwin, J M Straughn, Jr., K H Kim*

- 1116** Para-aortic lymph node recurrence after curative radiotherapy for cervical cancer  
*W K Cho, Y I Kim, W Park, K Yang, H Kim, H Cha*

## Uterine Cancer

- 1121** Triple tracer (blue dye, indocyanine green, and Tc99) compared to double tracer (indocyanine green and Tc99) for sentinel lymph node detection in endometrial cancer: a prospective study with random assignment  
*R Kessous, J How, J Abitbol, S Puzhakkal, L Kogan, A Yasmeen, S Salvador, W H Gotlieb, S Lau*
- 1126** Undifferentiated endometrial carcinoma: a National Cancer Database analysis of prognostic factors and treatment outcomes  
*M AlHilli, P Elson, L Rybicki, S Amarnath, B Yang, C M Michener, P G Rose*
- 1134** Secondary cytoreductive surgery in recurrent uterine leiomyosarcoma: a multi-institutional study  
*N Bizzarri, V Ghirardi, G L M Di Fiore, P De Iaco, A Gadducci, J Casarin, A M Perrone, T Pasciuto, G Scambia, A Fagotti*

## Ovarian Cancer

- 1141** Patient-reported outcomes and final overall survival results from the randomized phase 3 PENELOPE trial evaluating pertuzumab in low tumor human epidermal growth factor receptor 3 (HER3) mRNA-expressing platinum-resistant ovarian cancer  
*D Lorusso, F Hilpert, A González Martin, J Rau, P Ottevanger, E Greimel, H-J Lück, F Selle, N Colombo, J R Kroep, M R Mirza, R Berger, B Pardo, E-M Grischke, D Berton-Rigaud, J Martinez-Garcia, I Vergote, A Redondo, A Cardona, L Bastière-Truchot, A du Bois, C Kurzeder, On behalf of the PENELOPE trial investigators*

- 1148** Genetic polymorphisms in *hMSH2* and *hMLH1* genes are associated with prognosis in epithelial ovarian cancer patients  
*W Si, S Kang, H Sun, J Chen, S Cao, Y Li*

- 1156** Clinical outcomes in ovarian cancer patients receiving three versus more cycles of chemotherapy after neoadjuvant treatment and interval cytoreductive surgery  
*J S Kim, M I Liang, E N Prendergast, J Alldredge, A Datta, J A Hurteau, C V Kirschner, G Rodriguez, T J Vogel, R A Brooks, I Cass, J G Cohen, K R Penner, C E Wang, E S Diaz Moore*

- 1164** Patterns of recurrence and impact on survival in patients with clear cell ovarian carcinoma  
*L Hogen, D Vicus, S E Ferguson, L T Gien, S Nofech-Mozes, G K Lennox, M Q Bernardini*

- 1170** Comparative study of three different managements after colorectal anastomosis in ovarian cancer: conservative management, diverting ileostomy, and ghost ileostomy  
*V Lago, A Sanchez-Migallón, B Flor, P Padilla-Iserte, L Matute, Á García-Granero, M Bustamante, S Domingo*

- 1177** Low rate of intraperitoneal port placement in ovarian cancer patients, a population-based assessment  
*L Buckingham, A Koenig, E M Ko, C M Brensinger, N Latif, C Hummel, X Zhang, M A Morgan, R A Burger, R L Giuntoli II*

- 1182** Ultrasound features and clinical outcome of patients with malignant ovarian masses diagnosed during pregnancy: experience of a gynecological oncology ultrasound center  
*F Moro, F Mascilini, T Pasciuto, M Leombroni, M Li Destri, I De Blasis, S Garofalo, G Scambia, A C Testa*

---

## Fertility and Pregnancy

- 1195** Effects of in-utero exposure to chemotherapy on fetal brain growth  
*S Passera, V Contarino, G Scarfone, E Scola, C Fontana, F Peccatori, C Cinnante, S Counsell, M Ossola, S Pisoni, N Pesenti, E Grossi, F Amant, F Mosca, F Triulzi, M Fumagalli*

---

## Surgery

- 1203** Nerve-sparing radical hysterectomy: steps to standardize surgical technique  
*M Z Muallem, Y Diab, J Schouli, S Fujii*

---

## Review Article

- 1209** Feasibility of sentinel lymph node mapping of the ovary: a systematic review  
*F Dell'Orto, P Laven, M Delle Marchette, S Lambrechts, R Kruitwagen, A Buda*

---

## Clinical Trial

- 1216** Gestational Trophoblastic Neoplasia Ultrasound assessment: TITANIUM study  
*D Verri, T Pasciuto, E Epstein, R Fruscio, F Mascilini, F Moro, G Scambia, L Valentin, A C Testa*

---

## Case Study

- 1221** Endometrial cancer during pregnancy: management strategies  
*A G Eriksson, G Fallaas Dahl, A-J Nesbakken, K V Lund, F Amant*

---

## Corners of the World

- 1225** Salah Azaiez Institute of Oncology: 50 years of surgical care  
*M Ghaleb*

---

## Video Article

- 1226** Accessory polar renal artery not pre-operatively visualized at extra-peritoneal para-aortic lymphadenectomy  
*M Madsen, M Gorostidi, R Ruiz, I Jaunarena, P Cobas, A Lekuona*

---

## Letters to the Editor

- 1228** Combined vaginal and laparoscopic approach for the surgical management of cervical cancer: a historic note  
*D Querleu, E Leblanc*

---

## Miscellaneous

- 1230** Correction: *Quality of life and sexual functioning after vulvar reconstruction with the lotus petal flap*