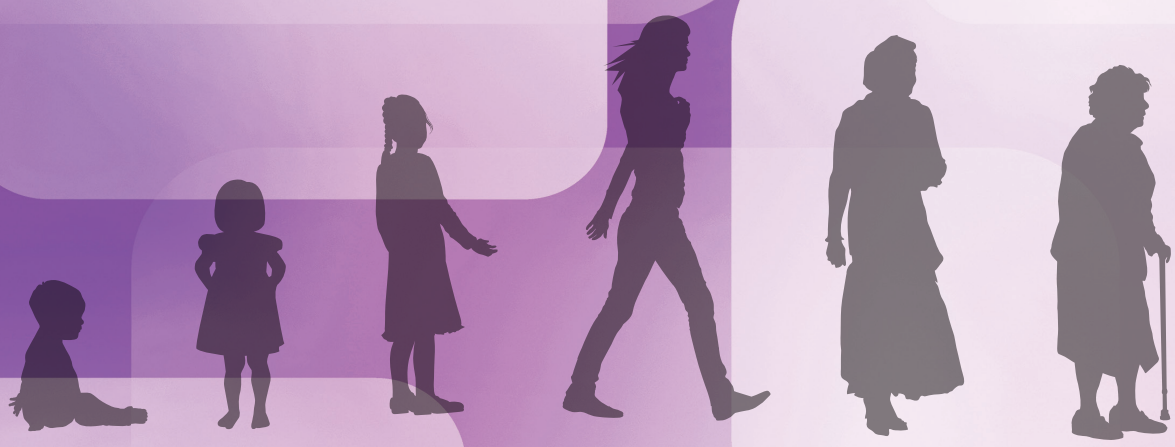
Volume 65 · Number 4 · July 2022

eISSN 2287-8580

Obstetrics & Gynecology Science



Korean Society of Obstetrics and Gynecology
Korean Society of Maternal Fetal Medicine
Korean Society of Gynecologic Endocrinology
Korean Society of Gynecologic Endoscopy and Minimally Invasive Surgery
Korean Society of Ultrasound in Obstetrics and Gynecology
Korean Society of Contraception and Reproductive Health
Korean Urogynecologic Society
Korean Society of Endometriosis

www.ogscience.org

정식품 Dr.Chung's Food

아기가 6개월이 되면 동물성과 식물성 영양균형이 중요해요!

베지밀 인펀트/토들러는 식물성 영양을 공급하여
한쪽으로만 치우칠 수 있는 우리 아기의 영양이 균형 잡힐 수 있도록 도와줍니다.

식물성 영양 | 성장기용 조제식 | 빈틈 없는 영양설계 | 간편한 액상타입

성장기용 조제식 베지밀 인펀트
돌 이전에도 안심하고 먹이실 수 있습니다!

• 미국 소아과학회 지침서 • Cow's milk, goat's milk, soy beverages (not soy formula), and low-iron formulas should not be used during the first year.
돌 이전에 생우유, 산양유, 콩으로 만든 영·유아식이 아닌 일반 콩 음료, 철분 함량이 낮은 유아식은 권장하지 않는다. [출처 : Bright futures, AAP, 2017]

돌 이전에는 성장기용 조제식 '베지밀 인펀트'를 주세요.

제품 선택 시 식품의 유형을 꼭 확인하세요!

	일반 조제식 (6~12개월)	베지밀 인펀트
제품	조제식	인펀트 프리미엄 1, 인펀트 우리콩 1
식품의 유형	성장기용 조제식	

돌 이후에는 균형영양을 위해 '베지밀 토들러'를 주세요.

식물성 단백질을 기초로 하여
성장, 발육에 필요한 영양을 꽉꽉 채웠습니다.

	일반 우유	베지밀 토들러
제품	MILK	토들러 프리미엄 2, 토들러 프리미엄 3, 토들러 우리콩 2, 토들러 우리콩 3
주요 원재료	동물성 단백질	식물성 단백질
	원유	대두

| 주문처 | 전국어디서나 1577-0426 쇼핑 트러스트 www.edaymall.com **| 문 의 |** 고객상담실 080-930-8888, 02)553-8888 www.vegemil.co.kr

● 서울·경기 : · 동부영업소 (031)592-6907 · 북부영업소 (031)861-3782 · 남부영업소 (031)281-5535 · 강남영업소 (031)283-8581 · 서부영업소 (032)514-2315 ● 강원영업소 (033)764-8801
● 충청영업소 (042)623-8601 ● 전북영업소 (063)214-5731 ● 전남영업소 (062)941-5001 ● 경북영업소 (053)559-3441 ● 경남영업소 (055)231-8581 ● 경주영업소 (054)751-8331 ● 부산영업소 (051)204-8581

Angeliq®

For HCP

BAYER

Menopause
for Me no pause

The Angeliq®

- is a low dose continuous combined HT that is effective for the treatment of menopausal symptoms[1]
- prevents salt and water retention elicited by estrogens, and thereby has the potential to maintain a stable body weight[2]

References: 1. van de Weijer PH et al. *Maturitas* 2007;56:231–48 **2.** J.-M. Foidart *CLIMACTERIC* 2005;8(Suppl3):28-34

[제품명] 안젤릭정 **[주성분]** 1정 중 드로스피레논 2.000밀리그램, 에스트라디올반수화물 1.033밀리그램(에스트라디올로서 1.000밀리그램) **[효능·효과]** 1. 폐경 후 일년이 지난 여성의 에스트로겐 결핍증에 대한 호르몬 대체 요법 2. 골다공증 예방으로 허가 받은 다른 약제에 불내성이거나 금기이고 골절 가능의 위험성이 증가된 폐경 후 여성의 골다공증 예방 **[용법·용량]** 중단 없이 1일 1정씩 경구투여 한다. 호르몬 대체 요법을 하지 않던 여성 또는 다른 연속 복합 제제로부터 이 약으로 바꾸는 여성의 경우는 언제든지 복용을 시작할 수 있다. 주기적, 순차적으로 복용하는 복합 호르몬 대체 요법 치료를 받던 여성은 이전의 치료법이 완전히 끝난 다음 날부터 이 약의 복용을 시작하도록 한다. (자세한 내용은 제품설명서를 참고하시기 바랍니다) **[사용상의 주의사항]** 1. 경고 1) 이 약은 관상동맥 심질환의 예방을 위해서는 쓰이지 않으며 이를 위해 사용해서는 안된다. 치료를 지속할 때 나타나는 위험성에 대한 고려를 포함하여, 호르몬 대체요법(HRT)의 유익성 및 위험성을 신중히 고려하도록 한다. 심혈관계 질환, 유방암 및 정맥성 혈전색전증 질환의 위험성 증가 가능성이 있으므로, 이 약은 각 여성의 치료목적 및 위험성을 고려하여 최단기간으로 제한되어야 하며, 정기적으로 재평가 받아야 한다. 폐경후 골다공증의 예방을 위해 단독으로 사용하는 경우에는 대체요법을 주의깊게 고려하도록 한다. 2) 심혈관계의 위험성 에스트로겐 대체요법(ERT) 또는 호르몬 대체요법(HRT)은 정맥혈전증, 폐색전증(정맥성 혈전색전증 또는 VTE) 뿐만 아니라 심근경색증, 뇌졸중과 같은 심혈관계 질환의 위험성 증가와 관련되어 있다. 혈전성 질환에 대한 위험인자를 지닌 환자는 주의깊게 관찰하여야 한다. ①관상동맥 심질환 및 뇌졸중 ②정맥성 혈전색전증: WHI연구로부터 위약 투여군에 비해 에스트로겐/프로게스틴 복합투여군에서 심부정맥혈전증 및 폐색전증을 포함하는 정맥성 혈전색전증(VTE)의 비율이 2배 높은 것으로 나타났다. 가능하면 혈전색전증의 위험이 큰 수술전이나 장기간 움직이지 못하는 경우에는 적어도 4~6주동안 에스트로겐의 투여를 중지하여야 한다. 3) 악성종양 ① 유방암: 에스트로겐 대체요법(ERT) 및 호르몬 대체요법(HRT)이 장기사용은 유방암의 위험성 증가와 관련되어 있다. 따라서 모든 여성은 매년 의료전문가에 의한 유방검사를 받아야 하며 매월 유방암 자가진단을 실시하여야 한다. 또한 환자 연령 및 위험인자를 바탕으로 유선조영술을 통한 검사를 계획하여야 한다. ② 자궁암: 에스트로겐과 프로게스틴 복합요법을 받는 여성에 대해서는 임상적 감독이 중요하다. 진단되지 않은 지속적 또는 재발성의 비정상적 질 출혈인 경우, 악성종양을 예방하기 위해 자궁내막 샘플링을 포함한 적절한 진단방법이 필요하다. ③ 난소암: 52개의 역학 연구들에 대한 메타 분석 결과, 전반적으로 난소암으로 진단될 위험성은 호르몬 대체요법 제품을 한 번도 복용하지 않은 여성에 비하여 복용자에서 경미하게 증가된 것으로 나타났다. (자세한 내용은 제품설명서를 참고하시기 바랍니다) 2. 다음 환자에는 투여하지 말 것 1) 진단되지 않은 생식기 출혈 2) 유방암이거나, 또는 병력이 있거나 의심이 되는 경우 3) 에스트로겐 의존성 악성 종양이 있거나 의심이 되는 경우(예, 자궁내막암) 4) 치료되지 않은 자궁내막 증식증 5) 이전에 특발성으로 또는 현재 정맥 혈전색전증이 있는 경우(예, 심부 정맥 혈전증, 폐색전증) 6) 활동성 또는 최근의 동맥 혈전색전성 질환(예, 협심증, 심근경색증) 및 급성 동맥 혈전색전증(예, 심근경색증, 뇌졸중) 7) 급성 간질환, 또는 간질환의 병력이 있고 간기능 검사 결과 정상으로 회복되지 않은 경우 및 중증의 간질환 환자 8) 포르피린증 9) 정상기능으로 돌아오지 못하는 중증의 신기능저하 또는 급성 신부전 10) 중증의 고중성지방혈증 11) 임신 또는 수유 12) 이 약의 주성분 또는 첨가제의 성분에 과민증이 있는 경우 13) 간 종양(양성 또는 악성) 또는 그 병력이 있는 환자 14) 정맥 또는 동맥 혈전증의 고위험군 15) 이 약은 유당을 함유하고 있으므로, 갈락토오스 불내성(galactose intolerance), Lapp 유당분해효소 결핍증(Lapp lactase deficiency) 또는 포도당-갈락토오스 흡수장애(glucose-galactose malabsorption 등의 유전적인 문제가 있는 환자 **[주요 이상반응]** 1) 가장 흔하게 보고된 이 약의 이상반응(사용자들의 6%이상)은 유방통, 여성 생식기 출혈, 위장관 및 복부 통증이다. 2) 불규칙적인 출혈은 일반적으로 치료를 지속함에 따라 줄어들고, 출혈의 빈도도 시간이 지남에 따라 감소한다. 3) 중대한 이상반응은 유방암과 동맥 및 정맥 혈전색전 사례이다. **[전문의약품] [수입 및 판매자]** 바이엘코리아㈜ **[개정년월일]** 2017.08.07 **보다 자세한 사항은 제품설명서 전문 또는 바이엘 웹사이트, http://www.bayer.co.kr/를 참고하시기 바랍니다.**

Bayer Korea Co., Ltd.
Parc 1, Tower 2, 108, Yeoui-daero, Yeongdeungpo-gu, Seoul 07335
Tel +82-2-829-6600 http://www.bayer.co.kr/

Obstetrics & Gynecology Science

eISSN 2287-8580
www.ogscience.org

Vol. 65 • No. 4 • July 2022
Published on 15 July

Aims and Scope

Obstetrics & Gynecology Science (NLM title: Obstet Gynecol Sci) is an international peer-review journal that published basic, translational, clinical research, and clinical practice guideline to promote women's health and prevent obstetric and gynecologic disorders. The journal has an international editorial board and is published in English on the 15th day of every other month. Submitted manuscripts should not contain previously published material and should not be under consideration for publication elsewhere.

The journal has been publishing articles since 1958. The aim of the journal is to publish original articles, reviews, short communications, letters to the editor, and video articles that have the potential to change the practices in women's health care.

The journal's main focus is the diagnosis, treatment, prediction, and prevention of obstetric and gynecologic disorders. Because the life expectancy of Korean and Asian women is increasing, the journal's editors are particularly interested in the health of elderly women in these population groups. The journal also publishes articles about reproductive biology, stem cell research, and artificial intelligence research for women; additionally, it provides insights into the physiology and mechanisms of obstetric and gynecologic diseases.

Obstetrics & Gynecology Science is the official journal of the following academic societies in Korea:
- Korean Society of Obstetrics and Gynecology
- Korean Society of Maternal Fetal Medicine
- Korean Society of Gynecologic Endocrinology
- Korean Society of Gynecologic Endoscopy and Minimally Invasive Surgery
- Korean Society of Ultrasound in Obstetrics and Gynecology
- Korean Society of Contraception and Reproductive Health
- Korean Urogynecologic Society
- Korean Society of Endometriosis

Abstracted/Indexed in

Scopus, PubMed, PubMed Central, KoreaMed, KoreaMed Synapse, Korea Citation Index, DOI/Crossref, DOAJ

Background

Obstetrics & Gynecology Science continues in 2013 Korean Journal of Obstetrics & Gynecology (pISSN:2233-5188, eISSN: 2233-5196), which was first published in 1958.

Open Access

Subscription Information

Full text PDF files are available at the official website (http://www.ogscience.org). To order a subscription to Obstet Gynecol Sci, please contact our editorial office.

Publisher
Joong Shin Park, MD, PhD (Chairman of the Board, Korean Society of Obstetrics and Gynecology)

Editor-in-Chief
Young Ju Kim, MD, PhD (Ewha Womans University, Seoul, Korea)

Editorial Office
Korean Society of Obstetrics and Gynecology
4th Floor, 36 Gangnam-daero 132-gil, Gangnam-gu, Seoul 06044, Korea
Tel: +82-2-3445-2262 Fax: +82-2-3445-2440
Homepage: www.ogscience.org E-mail: journal@ogscience.org

Edited by Jin Publishing & Printing Co.
49-2 Chungmu-ro, Jung-gu, Seoul 04550, Korea
Tel: +82-2-2271-6789 Fax: +82-2-2277-5194

This journal was supported by the Korean Federation of Science and Technology Societies Grant funded by the Korean Government.
This journal has been published electronic only since 2021.

Editorial Board

Vol. 65 • No. 4 • July 2022

Obstetrics & Gynecology Science

eISSN 2287-8580

Obstetrics & Gynecology Science

Vol. 65 • No. 4 • July 2022

Review Articles

Original Articles

eISSN 2287-8580

Obstetrics & Gynecology Science

Vol. 65 • No. 4 • July 2022

Obstetrics & Gynecology Science

Instructions for Authors

Enacted in January 1958
Revised in March 2022

Aims and Scope

Obstetrics & Gynecology Science (NLM title: Obstet Gynecol Sci) is an international peer-review journal that published basic, translational, clinical research, and clinical practice guideline to promote women's health and prevent obstetric and gynecologic disorders. The journal has an international editorial board and is published in English on the 15th day of every other month. Submitted manuscripts should not contain previously published material and should not be under consideration for publication elsewhere.

The journal has been publishing articles since 1958. The aim of the journal is to publish original articles, reviews, short communications, letters to the editor, and video articles that have the potential to change the practices in women's health care.

The journal's main focus is the diagnosis, treatment, prediction, and prevention of obstetric and gynecologic disorders. Because the life expectancy of Korean and Asian women is increasing, the journal's editors are particularly interested in the health of elderly women in these population groups. The journal also publishes articles about reproductive biology, stem cell research, and artificial intelligence research for women; additionally, it provides insights into the physiology and mechanisms of obstetric and gynecologic diseases.

Obstetrics & Gynecology Science is the official journal of the following academic societies in Korea:

- Korean Society of Obstetrics and Gynecology
- Korean Society of Maternal Fetal Medicine
- Korean Society of Gynecologic Endocrinology
- Korean Society of Gynecologic Endoscopy and Minimal Invasive Surgery
- Korean Society of Ultrasound in Obstetrics and Gynecology
- Korean Society of Contraception and Reproductive Health
- Korean Urogynecologic Society
- Korean Society of Endometriosis

Open Access

Obstetrics & Gynecology Science (OGS) is an open access journal. Articles are distributed under the terms of the Creative Commons Attribution License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited. Permission must be requested from the Editorial Office of OGS to use tables or figures appearing in the journal in other periodicals, books, or media for scholarly and educational purpose. This procedure is in accordance with the Budapest Open Access Initiative definition of open access.

The journal also follows the open access policy of PubMed Central at United States National Library of Medicine (http://www.ncbi.nlm.nih.gov/pmc/).

All contents of the journal are available immediately upon publication without embargo period.

Archiving Policy

The full text of OGS has been archived in PubMed Central (https://www.ncbi.nlm.nih.gov/pmc/journals/2215/) from the volume 56, 2013. According to the deposit policy (self-archiving policy) of Sherpa/Romeo (http://www.sherpa.ac.uk/), authors cannot archive pre-print (i.e., pre-refereed) versions, but they can archive post-print (i.e., final draft, post-refereed) versions. Authors can archive the publisher's version/PDF. OGS provides the electronic backup and preservation of access to the journal content in the event the journal is no longer published by archiving in PubMed Central.

Readership

It is primarily for obstetricians & gynecologists. They will be able to obtain tailored information to adopt the information for their patients care. Its readership can be expanded to other positions:

- Researchers can get the cases for research projects and rationale of their researches;
- Clinicians in the other fields can get the recent progress of obstetrics and gynecology so that they can refer their patients for more specific consultation to obstetricians & gynecologists.
- Administrators of the hospital or health center can access recent info and adopt a variety of data in the management of the institutes.
- Medical health students can understand the recent innovation and trends of obstetrics and gynecology so that they are able to learn those information during their study.
- Policy makers may be able to reflect the results of the articles to

the health policies especially for maternal health.
- The public will be able to read the advancement in the obstetrics and gynecology fields that they have a confidence in visiting obstetricians & gynecologists to consult their health problem.

Editorial Office

Korean Society of Obstetrics and Gynecology
4th Floor, 36 Gangnam-daero 132-gil,
Gangnam-gu, Seoul 06044, Korea.
Tel: +82-2-3445-2382 Fax: +82-2-3445-2440
Homepage: https://ksog.org/
E-mail: office@ksog.org or journal@ogscience.org

Ethical Considerations

1. Research Ethics

All of the manuscripts should be prepared based on strict observation of research and publication ethics guidelines recommended by the Council of Science Editors (http://www.councilscienceeditors.org/), International Committee of Medical Journal Editors (ICMJE, http://www.icmje.org/), World Association of Medical Editors (WAME, http://www.wame.org/), and the Korean Association of Medical Journal Editors (KAMJE, http://www.kamje.or.kr/intro.php?body=eng_index). All studies involving human subjects or human data must be reviewed and approved by a responsible Institutional Review Board (IRB). Please refer to the principles embodied in the Declaration of Helsinki (https://www.wma.net/policies-post/wma-declaration-of-helsinki-ethical-principles-for-medical-research-involving-human-subjects/) for all investigations involving human materials. Animal experiments also should be reviewed by an appropriate committee (IACUC) for the care and use of animals. Also studies with pathogens requiring a high degree of biosafety should pass review of a relevant committee (IBC). The approval should be described in the Methods section. The editor of OGS may request submission of copies of informed consents from human subjects in clinical studies or IRB approval documents. The OGS will follow the guidelines by the Committee on Publication Ethics (COPE, http://publicationethics.org/) for settlement of any misconduct.

2. Conflict of Interest

The corresponding author of an article is asked to inform the Editor of the authors' potential conflicts of interest possibly influencing the research or interpretation of data. A potential conflict of interest should be disclosed in the cover letter even when the authors are confident that their judgments have not been influenced in preparing the manuscript. Such conflicts may include financial support or private connections to pharmaceutical companies, political pressure from interest groups, or academic problems. Disclosure form shall be same with ICMJE Uniform Disclosure Form for Potential Conflicts of Interest (http://www.icmje.org/coi_disclosure.pdf). The Editor will decide whether the information on the conflict should be included in the published paper. In particular, all sources of funding for a study should be explicitly stated. The OGS asks referees to let its Editor know of any conflict of interest before reviewing a particular manuscript.

Statement of Informed Consent

Copies of written informed consent and institutional review board (IRB) approval for clinical research should be retained for reference as necessary. Please insert a sentence in the Materials and Methods section stating that the study was approved or exempt from approval and include the name of the IRB.

Statement of Human and Animal Rights

All human investigations must be conducted according to the principles expressed in the Declaration of Helsinki. All studies involving animals must state that guidelines of the authors' institution, or any applicable national law, regarding the use and care of laboratory animals were followed.

Selection and Description of Participants

Clearly describe the selection of observational or experimental participants (healthy individuals or patients, including controls), including eligibility and exclusion criteria and a description of the source population. Because the relevance of such variables as age, sex, or ethnicity is not always known at the time of study design, researchers should aim for inclusion of representative populations into all study types and at a minimum provide descriptive data for these and other relevant demographic variables. Ensure correct use of the terms sex (when reporting biological factors) and gender (identity, psychosocial or cultural factors), and, unless inappropriate, report the sex and/or gender of study participants, the sex of animals or cells, and describe the methods used to determine sex and gender. If the study was done involving an exclusive population, for example in only one sex, authors should justify why, except in obvious cases, (e.g., prostate cancer)." Authors should define how they determined race or ethnicity and justify their relevance.

Originality and Duplicate Publication

All submitted manuscripts should be original; further, they should not be under consideration for publication by other scientific journals. Any part of the accepted manuscript may not be duplicated in any other scientific journal without the permission of the editorial board. If duplicate publication related to a paper in this journal is detected, the author(s) will be named in the journal, and the respective institute(s) of affiliation will be informed; additionally, there will be penalties for the author(s).

Secondary Publication

It is possible to republish manuscripts if they satisfy the conditions of secondary publication in the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals."

Data Sharing Statement

OGS accepts the ICMJE Recommendations for data sharing statement policy (http://icmje.org/icmje-recommendations.pdf). All manuscripts reporting clinical trial results should submit a data sharing statement following the ICMJE guidelines from 1 Jan 2020.

Evidence-Based Medicine

For the specific study design, such as randomized control studies, studies of diagnostic accuracy, meta-analyses, observational studies and non-randomized studies, it is recommended that the authors follow the reporting guidelines listed in the following table.

Initiative	Type of study	Source
CONSORT	Randomized controlled trials	http://www.consort-statement.org
STARD	Studies of diagnostic accuracy	http://www.stard-statement.org
PRISMA	Preferred reporting items of systematic reviews and meta-analyses	http://www.prisma-statement.org
STROBE	Observational studies in epidemiology	http://www.strobe-statement.org
MOOSE	Meta-analyses of observational studies in epidemiology	http://www.consort-statement.org/resources/downloads/otherinstruments/moose-statement-2000pdf

Registration of Clinical Trial Research

It is recommended that research dealing with a clinical trial be registered with a primary national clinical trial registration site such as https://cris.nih.go.kr/cris, or other sites accredited by the World Health Organization (WHO) or the International Committee of Medical Journal Editors.

Copyright and Licensing

All published papers become the permanent property of the Korean Society of Obstetrics and Gynecology. A copyright transfer form should be submitted to the editorial office by fax, regular mail, or e-mail upon acceptance. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. It is the responsibility of the author(s) to request permission from the publisher for any material that is being reproduced. This requirement applies to text, illustrations, and tables.

Obstetrics & Gynecology Science (OGS) is an open access journal. Articles are distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited. Permission must be requested from the Editorial Office of OGS to use tables or figures appearing in the journal in other periodicals, books, or media for scholarly and educational purpose. This procedure is in accordance with the Budapest Open Access Initiative definition of open access.

The journal also follows the open access policy of PubMed Central at United States National Library of Medicine (http://www.ncbi.nlm.nih.gov/pmc/).

All contents of the journal are available immediately upon publication without embargo period.

SUBMISSION PROCEDURES FOR PEER REVIEW

Manuscripts Submission

Manuscripts should be submitted online at (https://www.editorialmanager.com/ogs). Submission instructions are available on the website. All articles submitted to the journal must comply with these instructions. Failure to do so will result in return of the manuscript and a possible delay in publication.

Screening before Review

If the manuscript does not fit the aims and scope of the journal or does not adhere to the Instructions to Authors, it may be returned to the author immediately after receipt and without a review. Before reviewing, all submitted manuscripts are inspected by Similarity Check powered by iThenticate (https://www.crossref.

org/services/similarity-check/), a plagiarism-screening tool. If the similarity score is too high, the editorial board will conduct a more profound content screening. If the similarity rate is 15% or more, further screening is usually performed; furthermore, every manuscript may be checked for excessive similarity in specific sentences. The settings for Similarity Check screening are such that the following are excluded: quotes, bibliography, small matches (e.g., six words), small sources (1%), and the Methods section.

Preprint Policy

A preprint can be defined as a version of a scholarly paper that precedes formal peer review and publication in a peer-reviewed scholarly journal.

Obstetrics & Gynecology Science(OGS) allows authors to submit the preprint to the journal. It is not treated as duplicate submission or duplicate publication. OGS recommend authors to disclose it with DOI in the letter to the editor during the submission process. Otherwise, it may be screened from the plagiarism check program - Similarity Check (Crosscheck) or Copy Killer. Preprint submission will be processed through the same peer-review process with a usual submission. If the preprint is accepted for publication, authors are recommended to update the info at the preprint with a link to the published article in OGS, including DOI at OGS. It is strongly recommended that authors cite the article in OGS instead of the preprint at their next submission to journals.

Peer Review Process

The editor selects peer referees by recommendation of the editorial board members or from the specialist database owned by the editorial board. Acceptance of the manuscript is decided based on the quality and originality of research and its clinical and scientific significance by the referees. This journal uses a double-blind review, which means that identities of both the reviewer and author are concealed from the reviewers, and vice versa, throughout the review process. A referee's decision is given as "accept," "minor revision," "major revision," and "reject." If there is a marked discrepancy in the decisions between two referees or in opinions between the author and referee(s), the editor may send the manuscript to another referee for additional comments and a recommended decision. An initial decision will normally be made within four weeks of receipt of a manuscript, and the reviewers' comments will be sent to the corresponding authors by e-mail. Revised manuscripts must be submitted online by the corresponding author, who must indicate the alterations that have been made in response to the referees' comments item by item. Failure to resubmit the revised manuscript within eight weeks of the editorial decision is regarded as a withdrawal. If manuscripts from Editor-in-Chief or Associate Editors are submitted, it is also treated through same process with other manuscripts. However, those authors are not involved in the peer reviewer selection, review process, or final decision.

Article Processing Charges

There are no page charges for submission or publication.

MANUSCRIPT CATEGORIES

The journal focuses on clinical and experimental studies, reviews, and short communications. Any physician or researcher throughout the world can submit a manuscript if the scope of the manuscript is appropriate. However, manuscripts should be submitted in English.

[1] Original Articles

Original articles are reports of basic or clinical investigations. The maximum length of a manuscript is 3,500 words of body text, excluding the abstract, references, figures, and tables. These articles are limited to 40 references. The manuscript should be organized in the following sequence: title page, the abstract and keywords, introduction, materials and methods, results, discussion, acknowledgments, references, tables, and figures with their legends.

[2] Reviews

Reviews are invited by the editor and should be comprehensive analyses of specific topics. Authors who wish to submit unsolicited reviews should contact the editor-in-chief to determine appropriateness of reviews for publication in OGS. These articles are organized as follows: title page, the abstract and keywords, introduction, body text, conclusion, acknowledgments, references, tables, and figures with their legends. The maximum word count is 4,500 words of body text, excluding the abstract, references, tables, and figures. The editors also suggest a limit of 150 references.

[3] Short Communications

A short communication is a definitive report of highly significant findings in the field; it receives a very rapid review and, if accepted, is published within an average of 12 weeks from receipt. A manuscript should not exceed 1,500 words and must contain

an unstructured abstract of approximately 150 words, a one-paragraph introduction, an abbreviated materials and methods section, a results section, and a concise discussion section. There should be no more than 20 references and no more than two tables (including figures).

[4] Letter to the Editor

A letter to the editor provides brief comments in response to a specific published article in OGS. A letter addressing an article published in one of the three previous issues will be considered. The editor-in chief may invite the author(s) of the published article to reply in writing. A published letter is accompanied by either a reply from the original author(s) or the statement, "Reply declined." A letter must include a title page (including your affiliation, full address, and e-mail address), conflict of interest disclosure, and a Statement of Authorship signed by all authors. A letter can be signed by no more than four authors and must not exceed 1,000 words (excluding references); only one table or figure may be included (if essential). Additionally, no more than five references are allowed. Letters to the editor should deal with short clinical cases of medical interest or innovation. All letters should be recommended by the journal's editors. Please do not upload your case report as a letter on the submission website. No abstract or keywords are required, and text should be formatted in one continuous section.

[5] Video Articles

Video articles are published in full online and include the abstract, video file, and still image. Video authors have the ability to present their scientific findings through visual media. All submitted files should be properly labeled so that they directly relate to the video articles' content. The maximum file size is 350MB (after conversion to MP4) and the video should not exceed 10 minutes. Formats accepted for conversion include MPG, AVI, MOV, WMA, WMV, SWF, RM, and FLA. An audio narration in English must accompany the video without music soundtracks. Please provide a video still image file as well. It can be any frame from the video or may be a separate. There should be a manuscript submitted with the video that includes a title page, structured abstract, body of text, and disclosures, as well as references (if needed). The abstract should not exceed 250 words and must describe concisely, in a paragraph, the following: Objective, Methods, Results, and Conclusion. The body text should not exceed 1,000 words, and there should be no more than 20 references. A video file should be submitted by using a URL/URI/External Resource.

MANUSCRIPT PREPARATION

Manuscripts for submission to OGS should be prepared according to the following instructions. The journal follows the "Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication" (http://www.icmje.org/recommendations/), commonly known as "the Vancouver style," if not otherwise described below.

General Guidelines

After entering information about the authors, the manuscript title, abstract, keywords, and other details, you will be prompted to upload your files. The main document with manuscript text and tables should be prepared with in Microsoft Word.

- The main document should be organized in the following order: title page, the abstract and keywords, introduction, materials and methods, results, discussion, acknowledgments, references, tables, and figures with their legends.
- The manuscript should be written in 10-point font with double spacing on A4-sized paper (21.0×29.7 cm) with 2.5 cm margins (top, bottom, right, and left).
- Manuscript pages are to be numbered consecutively, centered at the bottom of each page and beginning without the title page as page 1.
- The use of acronyms and abbreviations is discouraged and should be kept to a minimum. Acronyms and abbreviations cannot be used in the title. When used, they are to be defined where first used, followed by the acronym or abbreviation in parentheses.
- Drug and chemical names should be stated in standard chemical or generic nomenclature. Units of measure should be presented according to the International System (SI) of units.

1) Title Page

Include the following items on the title page: title of the article, full names of authors, academic degrees, and institutional affiliations of all authors. A short running head must also be provided, consisting of fewer than 40 characters including spaces. When addresses of authors differ, begin with the name of the organization where the primary research was conducted and follow with the names of the other organizations along with the authors' names, listed in numerical order. At the bottom of the title page, identify the corresponding author and include his/her postal address and e-mail address.

2) Abstract and Keywords

The abstract should not exceed 250 words and describe concisely, in a paragraph, the following: Objective, Methods, Results, and Conclusion. Up to five keywords should be listed below the abstract as index terms. For the selection of keywords, refer to Medical Subject Headings (MeSH, http://www.ncbi.nlm.nih.gov/mesh) in Medline.

3) Introduction

Briefly describe the purpose of the investigation, including relevant background information.

4) Materials and Methods

Describe the research plan, materials (or subjects), and methods used, in that order. Explain in detail how the disease was confirmed and how subjectivity in observations was controlled. When experimental methodology is the main issue of the paper, describe the process in detail so as to recreate the experiment as closely as possible. The sources of the apparatus or reagents used should be given along with the source location (name of company, city, state, and country). Information regarding institutional review board/ethics committee approval or waiver and informed consent should be stated. Methodology for statistical analyses and criteria for statistical significance should be described.

5) Results

Results should be presented in a logical sequence in the text, tables/figures , and illustrations. Do not repeat in the text all data that appear in the tables or figures; you may, however, describe important points and trends.

6) Discussion

Observations pertaining to the results of research and other related materials should be interpreted for your readers. Emphasize new and important observations; do not merely repeat the contents of the introduction or results. Explain the meaning of observed opinions along with their limits; within the limits of the research results, connect the conclusion to the purpose of the research.

7) Acknowledgments

If necessary, persons who have made substantial contributions but who have not met the criteria for authorship are acknowledged here.

8) Ethical Approval

Clinical studies or experiments using laboratory animals or pathogens should mention approval of the studies by relevant committees in this section. The sources of special chemicals or preparations should be given along with their location (name of company, city and state, and country). Method of statistical analyses and the criteria for determining significance levels should be described. An ethics statement should be placed here when the studies are performed using clinical samples or data, and animals.

9) Patient Consent

All authors are required to follow the ICMJE requirements (http://www.icmje.org/recommendations/browse/roles-and-responsibilities/protection-of-research-participants.html) on privacy and informed consent from patients and study participants. Confirm that any patient, service user, or participant in any research, experiment, or clinical trial described in the paper has given written consent to the inclusion of material pertaining to themselves; and that authors have fully anonymized them.

10) Funding Information

All sources of funding applicable to the study, disclosure of potential conflicts of interest (including financial interests, activities, relationships, and affiliations), information on previous presentations, and any important disclaimers should be stated explicitly here.

11) References

In the text, references should be cited with Arabic numerals in brackets in the order cited. In the References section, the references should be numbered in order of appearance in the text (in English). List all authors if there are less than or equal to six authors. List the first six authors followed by "et al." if there are more than six authors. If an article has been published online but has not yet been given an issue or pages, the digital object identifier (DOI) should be supplied. Journal titles should be abbreviated in the style used in Medline. If the reference is in Korean, then provide the English version in the references list. Other types of references not described below should follow Citing Medicine: The NLM Style Guide for Authors, Editors, and Publishers (http://www.nlm.nih.gov/citingmedicine).

• ***Journal articles:***

1. Park JH, Chung D, Cho HY, Kim YH, Son GH, Park YW, et al. Random urine protein/creatinine ratio readily predicts

proteinuria in preeclampsia. Obstet Gynecol Sci 2013;56:8-14.
2. Reed SD, Newton KM, Garcia RL, Allison KH, Voigt LF, Jordan CD, et al. Complex hyperplasia with and without atypia: clinical outcomes and implications of progestin therapy. Obstet Gynecol 2010;116:365-73.

• Entire book:

3. Korean Society of Obstetrics and Gynecology. Gynecology. 4th ed. Seoul: Korean Medical Book Publisher; 2007.

• Part of a book:

4. Holschneider CH, Berek JS. Valvar cancer. In: Berek JS, Novak E, editors. Berek & Novak's gynecology. 14th ed. Philadelphia (PA): Lippincott Williams & Wilkins; 2007. p.1549-80.

• Conference paper:

5. Rice AS, Brooks JW. Canabinoids and pain. In: Dostorovsky JO, Carr DB, editors. Proceedings of the 10th World Congress on Pain; 2002 Aug 17-22; San Diego, CA. Seattle (WA): IASP Press; 2003. p.437-68.

• Online publication:

6. Dieci MV, Barbieri E, Piacentini F, Ficarra G, Bettelli S, Dominici M, et al. Discordance in receptor status between primary and recurrent breast cancer has a prognostic impact: a single-Institution analysis. Ann Oncol 2012 Sep 20 [Epub]. https://doi.org/10.1093/annonc/mds248.

• Online sources:

7. American Cancer Society. Cancer reference information [Internet]. Atlanta (GA): American Cancer Society; c2012 [cited 2012 Oct 20]. Available from: http://www.cancer.org/docroot/CRI/CRI_0.asp.
8. National Cancer Information Center. Cancer incidence [Internet]. Goyang (KR): National Cancer Information Center; c2012 [cited 2012 Oct 20]. Available from: https://www.cancer.go.kr/lay1/S1T1C504/sublink.do.

12) Tables

- Each table should have a title, begin on a new page, and be numbered with an Arabic numeral in the order in which it is cited in the text.
- The title and contents of a table should be written in concise and clear English so that the reader can understand the table without referring to the text.
- The total number of tables shall not exceed five.
- Within a table, if a non-standard abbreviation or description is necessary, elaborate with an annotation below the table. Insert lower case, superscript letters a), b), c), etc., to the right of terms that need explanation. The annotation (preceded by the respective lower case letter) should appear below the table.
- Statistical measures, such as SD or SEM, should be identified.
- Vertical or horizontal lines between entries should be omitted.

13) Figures

- Upload each figure as a separate image file.
- The figure images should be provided in EPS or TIF format—although the JPEG format is allowed for color figures—in high resolution (preferably 300 dpi for figures and 600 dpi for line art and graphs).
- If figures are not original, the author(s) must contact each publisher to request permission to reprint; include information regarding permission to reprint in a footnote below the figure.
- Figures should be numbered, using Arabic numerals, in the order in which they are cited in the text.
- In the case of multiple images within the same figure, use capital letters after the numeral to indicate the correct order (e.g., Fig. 1A, Fig. 1B).
- The total number of figures shall not exceed five.
- A figure legend should be a one-sentence description (rather than a phrase or a paragraph) in English.

Obstetrics & Gynecology Science

PROCESS FOR IDENTIFICATION OF AND DEALING WITH ALLEGATIONS OF RESEARCH MISCONDUCT

1. Step to Prevent Research Misconduct

The journal adheres to the ethical guidelines for research and publication described in "Good Publication Practice Guidelines for Medical Journals" (https://www.kamje.or.kr/board/view?b_name=bo_publication&bo_id=7&per_page=) and "Guidelines on Good Publication" (http://www.publicationethics.org/resources/guidelines). When journal faces suspected cases of research and publication misconduct such as a redundant (duplicate) publication, plagiarism, fabricated data, changes in authorship, undisclosed conflicts of interest, an ethical problem discovered with the submitted manuscript, a reviewer who has appropriated an author's idea or data, complaints against editors, and other issues, the resolution process will follow the flowchart provided by the Committee on Publication Ethics (http://publicationethics.org/resources/flowcharts). Editorial Board will discuss the suspected cases and reach a decision. The journal will not hesitate to publish erratum, corrigendum, clarifications, retractions, and apologies when needed.

2. COPE's Guideline

The resolution process will follow the flowchart provided by the Committee on Publication Ethics (http://publicationethics.org/resources/flowcharts).

PUBLICATION ETHICS

1. Authorship and Contributorship

The OGS follows the recommendations for authorship by the ICMJE, 2017 (http://www.icmje.org/icmje-recommendations.pdf) and Good Publication Practice Guidelines for Medical Journals 2nd Edition (KAMJE, 2013, https://www.kamje.or.kr/board/view?b_name=bo_publication&bo_id=7&per_page=). Authorship credit should be based on 1) Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work; 2) Drafting the work or revising it critically for important intellectual content; 3) Final approval of the version to be published; and 4) Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. Authors should meet conditions of 1, 2, 3, and 4. In addition, an author should be accountable for the parts of the work he or she has done and should be able to identify which co-authors are responsible for specific other parts of the work. Authors should have confidence in the integrity of the contributions of their coauthors. All those designated as authors should meet all four criteria for authorship, and all who meet the four criteria should be identified as authors. Those who do not meet all four criteria should be acknowledged as contributors not be authors. These authorship criteria are intended to reserve the status of authorship for those who deserve credit and can take responsibility for the work. The criteria are not intended for use as a means to disqualify colleagues from authorship who otherwise meet authorship criteria by denying them the opportunity to meet criterion #2 or 3. Therefore, all individuals who meet the first criterion should have the opportunity to participate in the review, drafting, and final approval of the manuscript.

A corresponding author should be designated when there are two or more authors. The corresponding author is primarily responsible for all issues to the editor and audience.

When a large, multicenter group has conducted the work, the group should identify the individuals who accept direct responsibility for the manuscript. When submitting a manuscript authored by a group, the corresponding author should clearly indicate the preferred citation and identify all individual authors as well as the group name. Journals generally list other members of the group in the Acknowledgments. Acquisition of funding, collection of data, or general supervision of the research group alone does not constitute authorship.

Contributorship is a concept that was applied initially to original research papers and it is sometimes difficult to define for other articles. Each contributorship statement should clarify the specific

contributions of individuals to planning, performing, and reporting the work described in the article, as well as identify one, or occasionally more, contributor(s) as being responsible for the overall content as guarantor(s).

2. Complaints and Appeal

The policy of OGS is primarily aimed at protecting the authors, reviewers, editors, and the publisher of the journal. If not described below, the process of handling complaints and appeals follows the guidelines of the Committee of Publication Ethics available from: https://publicationethics.org/appeals

Submitters, authors, reviewers, and readers may register complaints and appeals in a variety of cases as follows: falsification, fabrication, plagiarism, duplicate publication, authorship dispute, conflict of interest, ethical treatment of animals, informed consent, bias or unfair/inappropriate competitive acts, copyright, stolen data, defamation, and legal problem. If any individuals or institutions want to inform the cases, they can send a letter via the contact page on our website: https://ogscience.org/index.php?body=contact. For the complaints or appeals, concrete data

Table 1. Examples of data sharing statements that fulfill these ICMJE requirements*

Element	Example 1	Example 2	Example 3	Example 4
Will individual participant data be available (including data dictionaries)?	Yes	Yes	Yes	Yes
What data in particular will be shared?	All individual participant data collected during the trial, after deidentification.	Individual participant data that underlie the results reported in this article, after deidentification (text, tables, figures, and appendices).	Individual participant data that underlie the results reported in this article, after deidentification (text, tables, figures, and appendices).	Not available
What other documents will be available?	Study protocol, statistical analysis plan, informed consent form, clinical study report, analytic code	Study protocol, statistical analysis plan, analytic code	Study protocol	Not available
When will data be available (start and end dates)?	Immediately following publication. No end date.	Beginning at 3 months and ending at 5 years following the article publication.	Beginning at 9 months and ending at 36 months following the article publication.	Not available
With whom?	Anyone who wishes to access the data.	Researchers who provide a methodologically sound proposal.	Investigators whose proposed use of the data has been approved by an independent review committee ("learned intermediary") identified for this purpose.	Not available
For what types of analyses?	Any purpose	To achieve aims in the approved proposal.	For individual participant data meta-analysis.	Not available
By what mechanism will data be made available?	Data are available indefinitely at (link to be included).	Proposals should be directed to xxx@yyy. To gain access, data requestors will need to sign a data access agreement.	Proposals may be submitted up to 36 months following article publication. After 36 months the data will be available in our University's data warehouse but without investigator support other than deposited metadata.	Not available
		Data are available for 5 years at a third-party website (link to be included).	Information regarding submitting proposals and accessing data may be found at (link to be provided).	Not available

*ICMJE = International Committee of Medical Journal Editors.

with answers to all factual questions (who, when, where, what, how, why) should be provided.

The Editor, Editorial Board, or Editorial Office is responsible for complaints and appeals. A legal consultant or ethics editor may be able to help with the decision making. The consequence of remedy depends on the type or degree of misconduct. The consequence of resolution will follow the guidelines of the Committee of Publication Ethics (COPE).

3. Conflict-of-Interest Statement

The corresponding author must inform the editor of any potential conflicts of interest that could influence the authors' interpretation of the data. Examples of potential conflicts of interest include financial support from or connections to pharmaceutical companies, political pressure from interest groups, and related academic issues. In particular, all sources of funding applicable to the study should be explicitly stated. Disclose any potential conflicts of interest in the Acknowledgments section of the manuscript. Authors without conflicts of interest should also include a statement in the Acknowledgments section confirming that no such interests exist. When Editor-in-Chief or Deputy Editor submit the manuscripts, they are excluded from peer review process including the reviewer selection, evaluation, and final decision.

4. Clinical Data Sharing Policy

This journal follows the data sharing policy described in "Data Sharing Statements for Clinical Trials: A Requirement of the International Committee of Medical Journal Editors" (https://doi.org/10.3346/jkms.2017.32.7.1051). As of July 1, 2018 manuscripts submitted to ICMJE journals that report the results of interventional clinical trials must contain a data sharing statement as described below. Clinical trials that begin enrolling participants on or after January 1, 2019 must include a data sharing plan in the trial's registration. The ICMJE's policy regarding trial registration is explained at http://www.icmje.org/recommendations/browse/publishing-and-editorial-issues/clinical-trial-registration.html. If the data sharing plan changes after registration this should be reflected in the statement submitted and published with the manuscript, and updated in the registry record. All of the authors of research articles that deal with interventional clinical trials must submit data sharing plan of example 1 to 4 in Table 1. Based on the degree of sharing plan, authors should deposit their data after deidentification and report the DOI of the data and the registered site.

5. Ethical Oversight

All submitted manuscripts should be original; further, they should not be under consideration for publication by other scientific journals. Any part of the accepted manuscript may not be duplicated in any other scientific journal without the permission of the editorial board. If duplicate publication related to a paper in this journal is detected, the author(s) will be named in the journal, and the respective institute(s) of affiliation will be informed; additionally, there will be penalties for the author(s). Before reviewing, all submitted manuscripts are inspected by Similarity Check powered by iThenticate (https://www.crossref.org/services/similarity-check/), a plagiarism-screening tool. If a too high a degree of similarity score is found, the Editorial Board will do a more profound content screening.

6. Intellectual Property

All published papers become the permanent property of the Korean Society of Obstetrics and Gynecology. Copyrights of all published materials are owned by the Korean Society of Obstetrics and Gynecology.

7. Post-Publication Discussions

The post-publication discussion is available through letter to editor. If any readers have a concern on any articles published, they can submit letter to editor on the articles. If there founds any errors or mistakes in the article, it can be corrected through erratum, corrigendum, or retraction.

Submission Checklist

Obstetrics & Gynecology Science

The following list will be useful during the final checking of an article prior to sending it to the journal for review. Please consult this Instructions for Authors for further details of any item.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:

- E-mail address
- Full postal address

All necessary files have been uploaded, and contain:

- Abstract, keywords
- All figure captions
- All tables (including title, description, footnotes)

Further considerations

- Manuscript has been 'spell-checked' and 'grammar-checked'.
- References are in the correct format for this journal.
- All references mentioned in the Reference list are cited in the text, and vice versa.
- Permission has been obtained for use of copyrighted material from other sources (including the Web).
- Color figures are clearly marked as being intended for color reproduction on the Web (free of charge) and in print, or to be reproduced in color on the Web (free of charge) and in black-and-white in print.
- If only color on the Web is required, black-and-white versions of the figures are also supplied for printing purposes.

Conflict of Interest Form

Obstetrics & Gynecology Science

Corresponding Author Name _____

Manuscript ID No. _____

Manuscript Title _____

_____

As an integral part of the online submission process, the corresponding authors are required to confirm whether they or their co-authors have any conflicts of interest to declare, and to provide details of these. At the point of submission, Korean Society of Obstetrics & Gynecology policy requires that each author discloses any financial interests or connections, direct or indirect, or other situations that might raise the question of bias in the work reported or the conclusions, implications, or opinions stated.

Author Signed Declarations

Use more forms if needed to add names.

By signing this conflict of interest form, each and every undersigned author agrees as follows: To the best of my knowledge, I have no relevant financial relationships except as follows (please list any possible exceptions below the author name).

Author Name _____ Signed _____ Date _____

Author Name _____ Signed _____ Date _____

Author Name _____ Signed _____ Date _____

Author Name _____ Signed _____ Date _____

Author Name _____ Signed _____ Date _____

Author Name _____ Signed _____ Date _____

Copyright Transfer Agreement

Obstetrics & Gynecology Science

Manuscript ID No. _____

Manuscript Title _____

Corresponding Author Name _____

Fax _____

E-mail _____

The authors of the article hereby agree that the Korean Society of Obstetrics & Gynecology holds the copyright on all materials and the right to publish, transmit, sell, and distribute them in the journal or other media.

Signature

The authors sign for and accept responsibility for releasing this material and transferring copyright.

Author Name _____ Signed _____ Date _____

Author Name _____ Signed _____ Date _____

Author Name _____ Signed _____ Date _____

Author Name _____ Signed _____ Date _____

Author Name _____ Signed _____ Date _____

Author Name _____ Signed _____ Date _____

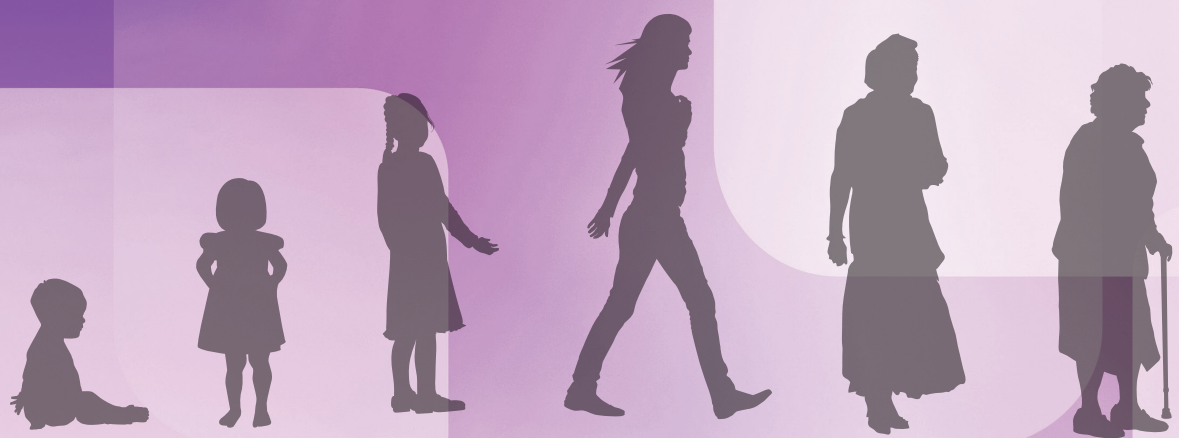
Author Name _____ Signed _____ Date _____

Author Name _____ Signed _____ Date _____

Author Name _____ Signed _____ Date _____

Obstetrics & Gynecology Science

Korean Society of Obstetrics and Gynecology
Korean Society of Maternal Fetal Medicine
Korean Society of Gynecologic Endocrinology
Korean Society of Gynecologic Endoscopy and Minimally Invasive Surgery
Korean Society of Ultrasound in Obstetrics and Gynecology
Korean Society of Contraception and Reproductive Health
Korean Urogynecologic Society
Korean Society of Endometriosis



www.ogscience.org