



# TAOG 2025

The 64<sup>th</sup> Annual Congress &  
The 11<sup>th</sup> International Symposium of  
Taiwan Association of  
Obstetrics and Gynecology

2025 **3**.22~23

高雄萬豪酒店

Kaohsiung Marriott Hotel



*The 64<sup>th</sup> Annual Congress &  
The 11<sup>th</sup> International Symposium of  
Taiwan Association of Obstetrics and Gynecology*

*Program & Abstract*

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*March 22-23 (Sat.-Sun.), 2025*

*Kaohsiung Marriott Hotel, Kaohsiung, Taiwan*



Program HandBook\_QR Code



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## Message from the President of TAOG

It is with great appreciation that having the 23<sup>rd</sup> member representatives, board directors and supervisors' support, Taiwan Association of Obstetrics and Gynecology (TAOG) has been established for 62 years. The declining birth rate crisis in Taiwan may cause concern and largely affects national society. Yet with the efforts done by previous leaders of TAOG, we are gratified that many outstanding students choose Ob-Gyns for future clinical work and research. We will enhance their training and practice courses, as well as promoting the development of realistic training models. Recently, there has been a situation where we have not been able to recruit enough, so we still need to continue our efforts. The goal is to help women who want to conceive and give birth achieve better outcomes, strive for better treatment, and encourage young doctors to join our ranks.



It is with great appreciation that having all members and the 23<sup>rd</sup> representatives of members, the board of directors and supervisors, the Secretary-General, the Taiwan association of Obstetrics and Gynecology (TAOG) has been established for 63 years, and the former leaders have opened a new page. However, the impact of declining birth rate and the ever-rising medical issues have left hospitalized doctors in a difficult position. Fortunately, with everyone's efforts, we have continued to fight for the payment of health insurance from the National Health Administration, and promoted the birth accident relief system, so that the inpatient doctors in the obstetrics and gynecology department can be close to full recruitment in recent years, and the outstanding talents are willing to enter and continue to thrive. Young doctors, whether they stay in teaching hospitals or serve at the local hospitals, can be the best helpers and provide the safe care for women and children. However, there have been cases of failure to recruit recently, so we still have to continue to work how to make the women who want to give birth achieve the goal of pregnancy and childbirth, and strive for better treatment, so that young doctors can join us more heavily.

In March 2024, the 63<sup>rd</sup> Annual Conference was held in Taipei, and the academic exchange of young scholars from Japan, South Korea and Taiwan was hosted by us. We arranged a lot of rich courses and exchanges, and the results of the young doctors were reported and rewarded very well, and a week of getting along with each other also established deep friendships with each other.

In April 2024, under the careful arrangement and planning of Secretary General Huang, the team led by President Chen went to participate in the 76<sup>th</sup> JSOG on behalf of the TAOG. The team included Academician Su, Ho, Hsieh, chief supervisor Tsai, Director Chen, Deputy Secretary-General Liu, and family members, and representatives of the new generation of doctors include Dr. Zhu and Dr. Wang, making a contribution to the inheritance of international academic exchanges and international friendship. In addition, a number of members and prospective members

from Taiwan took the initiative to register to come to Japan to present their academic achievements and won outstanding paper awards.

In May 2024, we went to Busan, South Korea to attend the meeting of the AOFOG, led by President Chen, with the assistance of Secretary General Huang, as well as Academician Yang, Tsai, Su, Hsieh, Huang, chief supervisor Tsai, Vice president Zhang, Deputy Secretary General Liu, and a number of directors, members and family members to participate. Our big Taiwan team had more confidence and did a good job in international academic and friendly exchanges. This year's election of the president for the 2024-2026 term is John Tait of New Zealand, and the election of Academician Su as president elect. He is a glory for Taiwan. At the same time, we are striving to hold the 30th AOFOG conference in Taipei by 2028.

In June 2024, the 3rd America-Taiwan (A-T) International Women's Science Symposium was held in Taipei, and the participants were many. Through the efforts of the Past Presidents of the American College of Obstetrics and Gynecology (ACOG), including Professors Jeanne Conry, Thomas Gellhaus, Verda Hicks, and Mark DeFrancesco, the academic and friendship between our two countries has been deepened. Outstanding speaker line-ups, including ACOG current President Professor Stella Dantas on the importance of community medicine, Vice President Professor Steven Fleischman on artificial intelligence in health care, Dr. Erin Bradley at Harvard Medical School on public health care in the Obstetrics and Gynecology, and Professor Daniel Gomez of Johns Hopkins University on natural orifice microinvasive surgery for laparoscopy; and TAOG Academician Su to give a lecture on the new progress of pelvic cavity prolapse surgery. The whole lectures were full of rich knowledge and exchange of ideas, which will be of great help to Taiwan's academic standards and international status.

In September 2024, the annual tour of members of the TAOG, this time by cruise, to Okinawa and Ishigaki Island. Members and family members from all over Taiwan participated very aggressively, indicating that they have a centripetal force for the TAOG. The members have worked hard to take care of Taiwan's women for many years, and it is a very good opportunity to be able to find time to spend time with their families for leisure and entertainment, and also to get together with friends.

In November 2024, under the careful arrangement and planning of Secretary General Huang, the team led by President Chen went to South Korea to participate in the 110th KSOG, including Academician Yang, Su, Hsieh, Huang, chief supervisor Tsai, vice president Zhang, Deputy Secretary General Liu and their families. In order to inherit international academic exchanges and international friendship, we did our best to let the academic science of TAOG shine in Asia and the world.

Continuing education in 2024 is very abundant, and including breast ultrasound training courses, robotic surgery training courses, advanced prenatal care education, sexual health education,

pregnancy mental illness screening and treatment, pregnant women and high-risk groups influenza vaccination education, menopause online professional training courses, obstetric hepatitis B and C infectious disease prevention and treatment education, birth accident rescue seminars, and Da Vinci mechanical arm assisted surgery doctor certification course. We believe that through the seminars in the northern, central and southern regions, everyone will pool their wisdom and benefits, so that the care of the maternity and gynecology department can be more complete. And we also hope that the number of health insurance points for future production can be increased, and the follow-up care after childbirth can be included in the fourth part of pregnancy of the mother's handbook, benefiting pregnant women all over the country.

In 2024-2025, under the resident training chairmanship of Academician Huang, the number of resident doctors and young attending physicians continue to participate teaching program, reaching more than 400. The content is very practical and has made young doctors gain a lot. It is very helpful for studies and future clinical services.

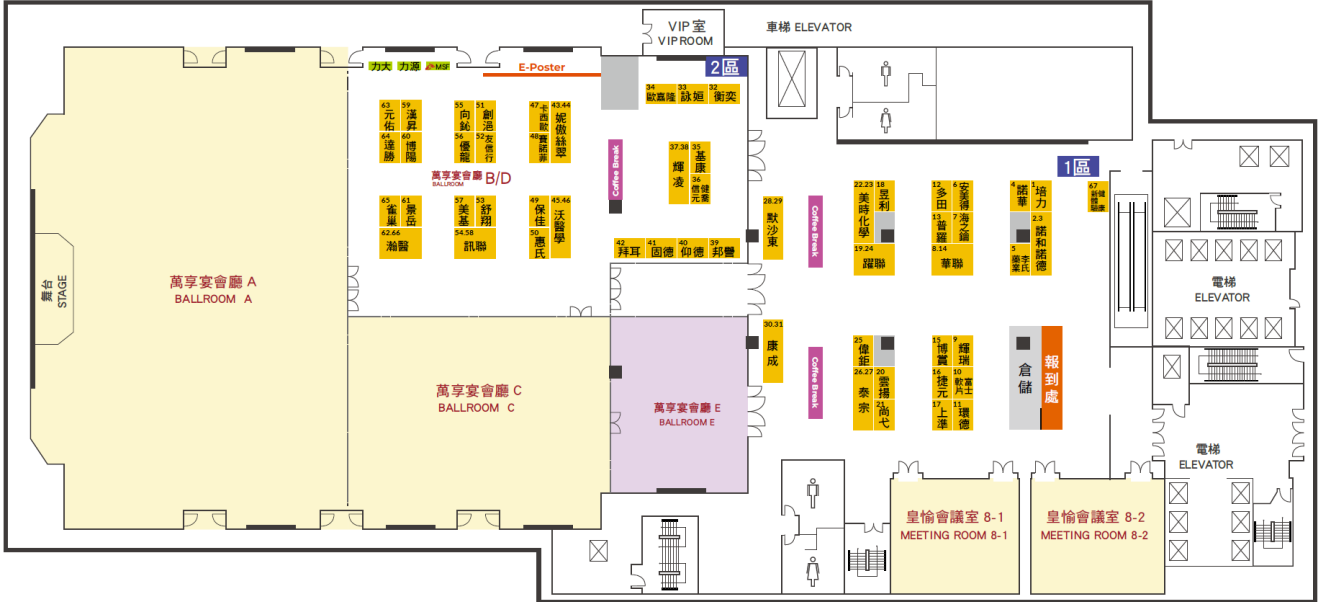
There were two Sunday mornings in February 2025, and the resident doctors of each teaching hospital will talk about special cases for 10 minutes each, so there are quite a lot of cases, and there are teachers to score them to compare, and the top ones will be presented awards at the dinner of the annual meeting. It allows resident doctors to join the big family of TAOG as soon as possible, so that they can discuss and learn from each other, so that they can have a centripetal force for learning earlier and learn more knowledge and technology.

The 64th Annual Conference of 2025 will be held on March 22 and 23 at the Kaohsiung Marriott Hotel, and this year we will invite many foreign and domestic scholars to give wonderful speeches, invite a number of scholars from FIGO, ACOG, RCOG, AOFOG, Japan, and South Korea, and arrange rich courses and exchanges. Thanks to all of you for your efforts, contributions, and participation in the conference, I believe that this year's annual meeting will certainly bring Taiwan's academic and international status to a higher level.

Shee-Uan Chen, MD  
President of TAOG

# Floor Information of Kaohsiung Marriott Hotel

## 8F



### 萬享A廳 Ballroom A

3 / 22	• 婦癌oral
	• 午餐會報
	• 一般婦科oral

### 萬享C廳 Ballroom C

	• 產科Oral
	• 午餐會報
	• 產科Symposium

### 皇愉8-1 Meeting Room 8-1

	• 婦女泌尿oral
	• 午餐會報
	• 婦癌Symposium

### 皇愉8-2 Meeting Room 8-2

	• AFOG Session
	• Invited Speaker Lecture
	• J-K-T Session

3 / 23	• Plenary Lecture
	• 午餐會報
	• 醫療倫理法律

	• 一般婦科Symposium
	• 更年期醫學Symposium
	• 午餐會報
	• 住院醫師教育訓練

	• 年輕醫師英文演講
	• 午餐會報
	• 婦女泌尿Symposium

	• 年輕醫師英文演講
	• 婦女泌尿oral
	• 午餐會報
	• 生殖內分泌oral

## 攤位區域表

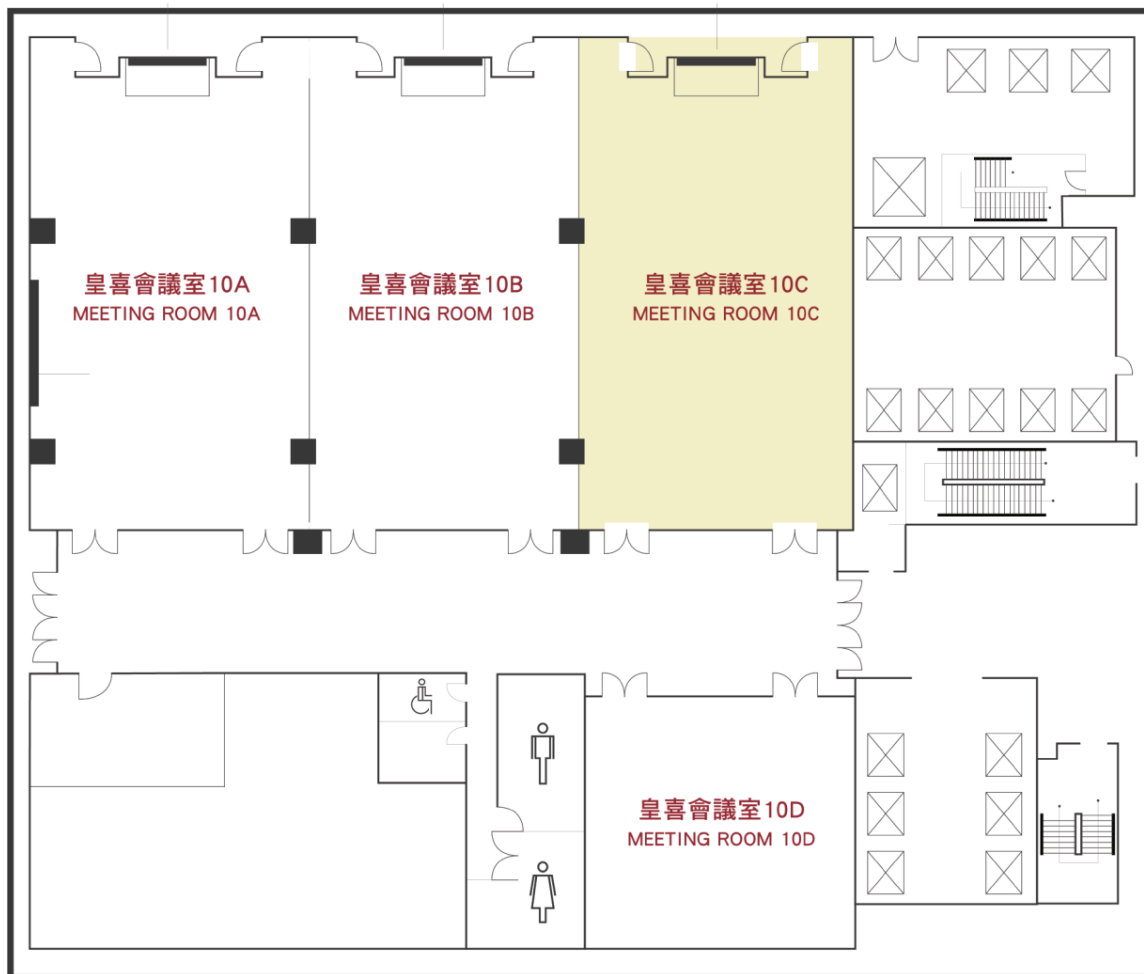
### 2區

達勝	基康	邦譽	力大圖書
漢昇	雀巢	固德	元佑
歐嘉隆	創滄	妮傲絲翠	友信
輝凌	博賞	保住生物	卡西歐
衡奕	惠氏	拜耳	永揚
優龍	景岳	美基	仰德
賽諾菲	舒翔	訊聯	向鈞
瀚醫	詠姮	健喬信元	沃醫

### 1區

普羅	泰宗	上準	諾和諾德
華聯	海之鑰	多田	富士軟片
雲揚	偉鉅	安美得	默沙東、羅氏
輝瑞	培力	李氏藥業	健康新體驗
躍聯	康成	尚弋	
諾華	捷元	昱利	
環德	博陽	美時化學	

# 10 F



## 皇喜10C Meeting Room 10C

3  
/  
22

- 內視鏡oral
- 內視鏡Symposium

3  
/  
23

- 生殖內分泌Symposium
- 午餐會報
- 會員代表大會

2025 **3**.22~23



*The 64<sup>th</sup> Annual Congress  
of Taiwan Association of Obstetrics and Gynecology 2025*

*Program*





March 22, 2025 (Sat.)

AOFOG Session		
(8F) Meeting Room 8-2		
Moderator: Yu-Shih Yang 楊友仕 (Fellow of TAOG), Joong Shin Park (Immediate Past Chairperson of the Board, KSOG), Kazunori Ochiai (HF of TAOG, Japan)		
IS1	08:30-09:00	<b>How Legislative Change Has Affected Abortion Services in NZ (online)</b> <i>Speaker: <u>John Tait</u> (President, AOFOG, New Zealand)</i>
IS2	09:00-09:30	<b>Implementation of evidence-based medicine in reproductive health: A role of Cochrane systematic review</b> <i>Speaker: <u>Pisake Lumbiganon</u> (Immediate Past President, AOFOG, Thailand)</i>
IS3	09:30-10:00	<b>Redefining Intrapartum Care Based on Recent Evidence</b> <i>Speaker: <u>Rohana Haththotuwa</u> (Secretary General, AOFOG, Sri Lanka)</i>
	10:00-10:30	Coffee Break
Invited Speaker Lecture		
(8F) Meeting Room 8-2		
Moderator: Hong-Nerng Ho 何弘能 (Fellow of TAOG), Joo-Hyun Nam (HF of TAOG, Korea), Mitsutoshi Iwashita (HF of TAOG, Japan)		
IS4	10:30-11:00	<b>Preconception to Infancy (online)</b> <i>Speaker: <u>Jeanne Conry</u> (Jeanne Conry, Immediate Past President, FIGO, USA)</i>
IS5	11:00-11:30	<b>Perinatal care from the perspective of preventive medicine</b> <i>Speaker: <u>Hisashi Masuyama</u> (Congress President of the 77<sup>th</sup> Annual Congress, JSOG, Japan)</i>
IS6	11:30-12:00	<b>Targeting Lipid Metabolism for Chemosensitivity in Epithelial Ovarian Cancer-Updated</b> <i>Speaker: <u>Wei-Chun Chang</u> 張維君 (Vice President, TAOG, Taiwan)</i>
	12:00-13:20	Lunch Time

## Program / Day 1

March 22, 2025 (Sat.)

J-K-T Session		
(8F) Meeting Room 8-2		
<b>I. Maternal Fetal Medicine</b> Moderator: Ming-Song Tsai 蔡明松 (Chairman of Supervisor, TAOG), Hiroaki Kajiyama (Editor-in-Chief of JOGR, JSOG), Young-Han Kim (Secretary General, KSOG)		
J1	13:30-13:50	<b>Changing the standardized obstetric care by expanded carrier screening and counselling: a multicenter prospective cohort study</b> <i>Speaker: Shin-Yu Lin 林芯玕 (National Taiwan University Hospital, Taiwan)</i>
J2	13:50-14:10	<b>Newer insights into fetal growth and body composition</b> <i>Speaker: Satoru Ikenoue (Keio University School of Medicine, Japan)</i>
J3	14:10-14:30	<b>Impact of Pre-pregnancy Fasting Glucose on Neonatal Outcomes and Early Childhood Neurodevelopment: Analysis of Non-diabetic Maternal Populations</b> <i>Speaker: Jae Eun Shin (The Catholic University, Korea)</i>
<b>II. Reproductive Endocrinology &amp; Infertility</b> Moderator: Horng-Der Tsai 蔡鴻德 (Fellow of TAOG), Mei-Jou Chen 陳美州 (Director of TAOG), Tomoyuki Fujii (HF of TAOG, Japan)		
J4	14:30-14:50	<b>Novel Regulatory Mechanism of Decidualization Mediated by Nuclear F-actin Formation</b> <i>Speaker: Isao Tamura (Yamaguchi University School of Medicine, Japan)</i>
J5	14:50-15:10	<b>Common Menstrual Complaints in Pediatric and Adolescent Gynecology Clinics</b> <i>Speaker: Bo Hyon Yun (Yonsei University College of Medicine, Korea)</i>
J6	15:10-15:30	<b>Novel Strategies for Optimizing Embryo Selection to Improve IVF Outcomes</b> <i>Speaker: Chun-I Lee 李俊逸 (Chung Shan Medical University Hospital, Taiwan)</i>
	15:30-16:00	<b>Break Time</b>
<b>III. Gynecological Oncology</b> Moderator: Wei-Chun Chang 張維君 (Vice President, TAOG), Young-Tak Kim (HF of TAOG, Korea), Noriaki Sakuragi (HF of TAOG, Japan)		
J7	16:00-16:20	<b>The Role of Anti-Inflammatory Modulation as a Therapeutic Strategy in Ovarian Cancer Treatment</b> <i>Speaker: Yoo-Young Lee (Sungkyunkwan University School of Medicine, Korea)</i>
J8	16:20-16:40	<b>Advancing Endometrial Cancer Care: Sentinel Lymph Node Mapping- A Single-Center Perspective</b> <i>Speaker: Chia-Yen Huang 黃家彥 (Cathay General Hospital, Taiwan)</i>
J9	16:40-17:00	<b>Elucidation of Pathophysiology in Gynecologic Cancers through Multi-Omics Analysis</b> <i>Speaker: Kosuke Yoshida (Nagoya University, Japan)</i>
	18:00~21:00	<b>Banquet</b> <span style="float: right;">(8F) Ballroom A</span>

March 23, 2025 (Sun.)

Plenary Lecture		
(8F) Ballroom A		
	08:25-08:30	<b>Opening Remarks</b> (President of TAOG)
Moderator: Maw-Sheng Lee 李茂盛 (Fellow of TAOG), Ryan Shiue 薛瑞元 (HF of TAOG)		
P1	08:30-09:00	<b>The Cross-Generational Challenge in Public Health Policy</b> Speaker: <u>Ching-Yi Lin 林靜儀</u> (Deputy Minister, Ministry of Health and Welfare, Taiwan)
Moderator: Su-Cheng Huang 黃思誠 (Fellow of TAOG), Yutaka Osuga (Vice Chairperson of the Executive Board, JSOG)		
P2	09:00-09:30	<b>Development of novel therapies for treatment-resistant endometrial cancer</b> Speaker: <u>Kiyoko Kato</u> (Chairperson of the Executive Board, JSOG, Japan)
Moderator: Toshiharu Kamura (HF of TAOG, Japan), Jae Kwan Lee (Chairperson elect of the board, KSOG)		
P3	09:30-10:00	<b>Surgical and oncologic outcomes in endometrial cancer: Population-based cohort study comparing robotic, laparoscopic, and open surgery</b> Speaker: <u>Young-Tae Kim</u> (Chairperson of the Board, KSOG, Korea)
	10:00-10:30	<b>Coffee Break</b>
Moderator: Ming-Chao Huang 黃閔照 (Fellow of TAOG), Ravi Chandran (Honorary Secretary, FIGO/ HF of TAOG, Malaysia)		
P4	10:30-11:00	<b>Future of Maternofetal Medicine</b> Speaker: <u>Frank Louwen</u> (President Elect, FIGO, Germany)
Moderator: Tsung-Hsien Su 蘇聰賢 (Fellow of TAOG), Ahm Kim (President, KSOG)		
P5	11:00-11:30	<b>Management of Obstetric Anal Sphincter Injuries (OASIS)</b> Speaker: <u>Ranee Thakar</u> (President, RCOG, U.K.)
Moderator: Ching-Hung Hsieh 謝卿宏 (Fellow of TAOG), Fung-Wei Chang 張芳維 (Executive Supervisor, TAOG)		
P6	11:30-12:00	<b>Osteoporosis: Prevention, Screening, Diagnosis and Management</b> Speaker: <u>Steven J. Fleischman</u> (President Elect, ACOG, USA)

## Program / Day 2

March 23, 2025 (Sun.)

### Young Doctors Session ( I )

(8F) Meeting Room 8-1

Moderator: 何信頤、陳宜雍

Y1	08:30-08:40	<b>Which is the best approach for embryo transfer with biopsied embryos: biopsy-fresh transfer, biopsy-freeze FET, or freeze-biopsy FET?</b> <i>Speaker: Tian-Jeau Huang 黃天爵 (Changhua Christian Hospital)</i>
Y2	08:40-08:50	<b>Clinical Outcomes of Mosaic Embryos Transfer</b> <i>Speaker: Yu-Tung Hsieh 謝雨彤 (Chi Mei Medical Center)</i>
Y3	08:50-09:00	<b>Does the interval between two consecutive cycles of oocyte retrieval have an impact on the outcomes?</b> <i>Speaker: Yung Huang 黃詠 (National Taiwan University Hospital)</i>
Y4	09:00-09:10	<b>Conservative treatment for early-stage endometrial cancer conservative treatment: single-center real-life data and Parallel Artificial Reproductive Treatment (P-ART protocol)</b> <i>Speaker: Ting-Chien Lin 林廷謙 (National Cheng Kung University Hospital)</i>
Y5	09:10-09:20	<b>Transarterial Embolization for Post-Oocyte Retrieval Hemorrhage: A Case Series</b> <i>Speaker: Yi-Hsuan Ho 何宜軒 (China Medical University Hospital)</i>
Y6	09:20-09:30	<b>Recombinant Follicle-stimulating hormone and Luteinizing hormone Enhance Mitochondrial Function and Metabolism in Aging Female Reproductive Cells</b> <i>Speaker: Jie Sung 宋潔 (Kaohsiung Veterans General Hospital)</i>
Y7	09:30-09:40	<b>The predictability of serum anti-Müllerian level for cumulative live birth rates in women aged over 40 years receive IVF/ICSI</b> <i>Speaker: Hsin-Tze Hwang 黃信慈 (Mackay Memorial Hospital)</i>
Y8	09:40-09:50	<b>Clinical and sonographic risk factors for developing pre-eclampsia refractory to aspirin prophylaxis</b> <i>Speaker: Ming-Ju Wang 王敏如 (Mackay Memorial Hospital)</i>
Y9	09:50-10:00	<b>The benefit of routine 2nd trimester screening of anemia</b> <i>Speaker: Yu-Wei Chang 張祐維 (Mackay Memorial Hospital)</i>

March 23, 2025 (Sun.)

## Young Doctors Session (II)

(8F) Meeting Room 8-2

Moderator: 洪滿榮、黃文助

Y10	08:30-08:40	<b>Comparison between MUS concurrent with PRS and MUS after PRS in treating stress urinary incontinence</b> <i>Speaker: Chia-Hsuan Yang 楊佳璇 (Linkou Chang Gung Memorial Hospital)</i>
Y11	08:40-08:50	<b>Outcomes on mid-urethral sling for urodynamic stress incontinence following extensive pelvic reconstructive surgery</b> <i>Speaker: Chien-Chien Yu 游千千 (Linkou Chang Gung Memorial Hospital)</i>
Y12	08:50-09:00	<b>Voiding Dysfunction in Patients with Advanced Pelvic Organ Prolapse and Bladder Outlet Obstruction Following Pelvic Reconstructive Surgery: Urodynamic Profile and Predictive Risk Factors</b> <i>Speaker: Yi-Chi Chen 陳昱綺 (Linkou Chang Gung Memorial Hospital)</i>
Y13	09:00-09:10	<b>Predictors of Surgical Failure following Sacrospinous Ligament Fixation using Anchorsure device</b> <i>Speaker: Chieh-Ju Lin 林潔如 Kaohsiung Medical University Hospital)</i>
Y14	09:10-09:20	<b>In Vitro and In Vivo Morphology and Mechanical Properties of Three-Dimensional (3D) Polycaprolactone Stem Cells Coated Compound Mesh: Invention for Pelvic Floor Reconstructive Surgery</b> <i>Speaker: Aileen Ro 羅艾琳 (Linkou Chang Gung Memorial Hospital)</i>
Y15	09:20-09:30	<b>Risk factors of persistent de Novo SUI following TVM surgery and how to treat it?</b> <i>Speaker: Yu-Ling Tu 涂育綾 (Kaohsiung Medical University Hospital)</i>
Y16	09:30-09:40	<b>Modified Surelift anterior-apical transvaginal mesh for advanced urogenital prolapse: Retrospective surgical, functional and sonographic outcomes at 3 years</b> <i>Speaker: Chien-Tung Lin 林建棟 (Chang Gung Memorial Hospital)</i>
Y17	09:40-09:50	<b>Efficacy and Safety of Solifenacin with Local Estrogen Versus Combination Treatment with Mirabegron and Solifenacin for Refractory Overactive Bladder in Menopausal Women: A Randomized Clinical Trial</b> <i>Speaker: Han-Ni Li 李函妮 (Mackay Memorial Hospital)</i>

## Program / Day 2

March 23, 2025 (Sun.)

### Young Doctors Session (III)

(8F) Meeting Room 8-1

Moderator: 林武周、翁嘉穗

Y18	10:30-10:40	<b>The oncologic and reproductive outcomes after fertility-sparing surgery in ovarian and endometrial cancers</b> <i>Speaker: Tzu-Ya Wang 王姿雅 (Taipei Veterans General Hospital)</i>
Y19	10:40-10:50	<b>Anti-B and T lymphocyte Attenuator (BTLA) can be a Potential Target of Immunotherapy in Epithelial Ovarian Cancer (EOC)</b> <i>Speaker: Tyan-Shin Yang 楊恬欣 (National Taiwan University Hospital)</i>
Y20	10:50-11:00	<b>Real-World Analysis of Pembrolizumab in Gynecologic Cancer: Efficacy, Adverse Events and Correlation with Clinical and Pathological Features</b> <i>Speaker: Chien-Hsiang Kao 高健祥 (Kaohsiung Chang Gung Memorial Hospital)</i>
Y21	11:00-11:10	<b>Should early-stage grade 3 endometrial endometrioid adenocarcinoma be treated as 2023 FIGO stage IIC?</b> <i>Speaker: Hao-Yang Chang 張皓揚 (Mackay Memorial Hospital)</i>
Y22	11:10-11:20	<b>Gravity versus Pump Infusion of Distending Media for Hysteroscopic Myomectomy: A Retrospective Cohort Study</b> <i>Speaker: Ta-Cheng Lee 李大成 (Far Eastern Memorial Hospital)</i>
Y23	11:20-11:30	<b>The Therapeutic Effect of Monopolar Radiofrequency Therapy on Urinary Symptoms and Sexual Function</b> <i>Speaker: I-Chieh Sung 宋怡潔 (Kaohsiung Medical University Hospital)</i>
Y24	11:30-11:40	<b>Extracorporeal shockwave therapy for women's pelvic floor myofascial pain: A retrospective cohort study</b> <i>Speaker: Ya-Chu Wu 吳雅筑 (Hualien Tzu Chi Hospital)</i>

2025 **3**.22~23





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*The 64<sup>th</sup> Annual Congress  
of Taiwan Association of Obstetrics and Gynecology 2025*

*Abstract*

*AOFOG Session*

**【IS1-3】**

2025 **3**.22~23



*John Tait*  
*(IS1)*



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## CURRICULUM VITAE

### John Tait

(New Zealand)

- 2024-2026     President of AOFOG
- 2022         Officer New Zealand Order of Merit ONZM  
                Chair of the Perinatal and Maternal Mortality Review Committee  
                Member of the National Maternity Monitoring Group
- 2015-2021   Vice President RANZCOG
- 2015-2022   Chief Medical Officer CCHVd
- 1986-present   Obstetrician and Gynaecologist

## How Legislative Change Has Affected Abortion Services in NZ

*John Tait,  
President of AOFOG*

History of abortion law in NZ.

The change in law and the effect in NZ and Australia.

The rise in medical abortion

*Pisake Lumbiganon*  
(IS2)



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**CURRICULUM VITAE**

Pisake Lumbiganon, MD, MS(Penn), FRCOG(ad eundem)

- Immediate Past President, Asia Oceania Federation of Obstetrics and Gynecology (AOFOG)
  - Professor of Obstetrics and Gynecology, Convenor of Cochrane Thailand and Director of the WHO Collaborating Centre on Research Synthesis in Reproductive Health based at Faculty of Medicine, Khon Kaen University, Thailand.
  - Received research grants from many international organizations including IDRC, WHO, Wellcome Trust, European Commission, Thailand Research Fund.
  - He has published more than 200 papers in various international peer-reviewed journals including many Cochrane reviews.
- 
- 2009-2013      Dean of the Faculty of Medicine at Khon Kaen University.
  - 2016-2018     President of the Royal Thai College of Obstetricians and Gynecologists.
  - 2019            Fellow ad eundem of the Royal College of Obstetricians and Gynaecologists.  
Main areas of interest include maternal and perinatal health, evidence based practices, systematic review and meta-analysis.

## Implementation of evidence-based medicine in reproductive health: A role of Cochrane systematic review

*Pisake Lumbiganon, MD, MS (Penn),  
FRCOG (ad eundem)*

Evidence-Based Medicine (EBM) is the process of finding, appraising and using Research findings as the basis for clinical decisions. EBM involves making decisions about the care of individual patients based on the best research evidence available rather than personal opinions or common practices which may not always be evidence based.

The results of a particular research study cannot be interpreted with any confidence unless they have been considered together with the results of other studies addressing the same or similar questions. Research synthesis is the process through which two or more research studies are assessed with the objective of summarizing the evidence relating to a particular question. Research synthesis is needed not only to reflect the cumulative nature of science, but also because the volume of research is overwhelming, the quality of research is very variable, access to reports of research is haphazard, and often biased and most studies are too small. Research synthesis consists of two important steps, systematic review with or without meta-analysis. Research synthesis is now widely considered to be the highest quality of evidence.

Cochrane, previously known as the Cochrane Collaboration, was founded in 1993 under the leadership of Iain Chalmers in response to Archie Cochrane's call for up-to-date, systematic reviews of all relevant randomized controlled trials in the field of healthcare. Cochrane produces systematic reviews of primary research in human health care and policy and publishes them in the Cochrane Library. Each Cochrane Review addresses a clearly formulated question. Cochrane work is internationally recognized as the benchmark for high-quality information about the effectiveness and harm of health care interventions.

HRP (the UNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction) is the main instrument within the United Nations system for research in human reproduction. HRP is based at the WHO headquarters in Geneva, Switzerland. It supports and coordinates research on a global scale, synthesizes research through systematic reviews of literature, builds research capacity in low-income countries and develops dissemination tools to make efficient use of ever-increasing research information. HRP regularly produces and updates WHO Recommendations on various sexual and reproductive issue, e.g. antenatal care, intra-partum care, postpartum care, postpartum haemorrhage, etc. Research syntheses mainly from Cochrane Systematic review are usually the main sources of evidence for these recommendations.



*Rohana Haththotuwa*  
(IS3)



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CURRICULUM VITAE

Rohana Haththotuwa

- Founder Chairman, Ninewells CARE Mother & Baby Hospital
- Secretary General AOFOG
- Immediate Past President South Asian Federation of Obstetrics & Gynaecology (SAFOG)
- Immediate Past President, South Asian Federation of Menopause Societies
- Immediate Past President, World Gestoses Organisation
- Past Chair, Menstrual Disorders Committee FIGO
- Past President Sri Lanka College of O & G
- Past President Sri Lanka Menopause Society
- Member, WHO MPDSR Technical Working Group

## Redefining Intrapartum Care Based on Recent Evidence

*Rohana Haththotuwa, Secretary General AOFOG*

Recent evidence has highlighted the need to redefine intrapartum care to improve maternal and fetal outcomes. This can be achieved through three key objectives:

1. **Enhancing the Management of Labor** to improve clinical outcomes.
2. **Strengthening Fetal Surveillance and Neonatal Resuscitation.**
3. **Improving the Prevention and Management of Postpartum Hemorrhage (PPH).**

### Intrapartum Care Bundle

To ensure better maternal and fetal outcomes, an intrapartum care bundle has been recommended. This includes:

- Continuous presence of a **birth companion** during labor.
- Utilizing the **WHO Intrapartum Care Guide** for labor management.
- Practicing **intelligent intermittent auscultation** with a graphic display Doppler rather than continuous cardiotocography.
- Administering **prophylactic heat-stable oxytocin** to manage the third stage of labor.
- Implementing **active neonatal resuscitation** when needed, followed by early breastfeeding and **Kangaroo Mother Care**.

### Advancements in the Prevention and Management of Postpartum Hemorrhage (PPH) Key Findings from Recent Studies

The CHAMPION trial identified **late detection of PPH** as a major challenge. Even when blood loss reached **500 ml**, only **26% of women received a uterotonic drug**. Shockingly, among those who lost **1 liter of blood**, **30% did not receive auterotonic treatment**.

To address this, a **Care Bundle Approach** was recommended by the WHO Technical Consultation Group in 2019, moving away from the traditional sequential management of PPH.

### The E-MOTIVE Trial: Early Detection and Rapid Response

Professors Arri Coomaraswamy and Ioannis Gallos from the University of Birmingham conducted the **E-MOTIVE trial**, which focused on **early detection of PPH** and treatment using the **WHO MOTIVE "first response" bundle**.

- Conducted across **80 health facilities**, with **40 using the E-MOTIVE approach** and **40 continuing standard care**.
- Results showed a **65% reduction in laparotomies for bleeding** and a significant decrease in **maternal mortality due to hemorrhage**.

### Challenges with Oxytocin and the Role of Heat-Stable Carbetocin

In resource-limited settings, Oxytocin has been found to be **ineffective** due to challenges in maintaining a **cold-chain transport and storage system**.

- A **new formulation of Carbetocin** has been developed, which is **stable at room temperature** with a **shelf life of 24 months at 30°C and 75% humidity**.
- The **WHO CHAMPION study** concluded that **heat-stable, long-acting Carbetocin is as effective as Oxytocin** in preventing PPH.
- In 2018, WHO recommended the use of **Carbetocin (100 mcg IM/IV)** for the **prevention of PPH** in all births.

### The WOMAN Trial: Impact of Tranexamic Acid on PPH

The **WOMAN trial** investigated the effects of **early administration of Tranexamic Acid (TXA)** for PPH and found:

- Administering TXA **within 3 hours of delivery** reduced **maternal deaths by 30%**.
- Other causes of maternal mortality, such as **pulmonary embolism, sepsis, and organ failure**, were similar between the TXA and placebo groups.

Additionally, the trial analyzed **483 maternal deaths following PPH** and concluded that while **Tranexamic Acid significantly reduces bleeding-related mortality**, but achieving survival rates comparable to high-income countries requires:

- **Early recognition and treatment of PPH.**
- Addressing **maternal anemia** before delivery.
- **Ensuring availability of blood transfusion services.**
- **Strengthening healthcare infrastructure.**

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### Conclusion

Recent advancements in intrapartum care and PPH management highlight the importance of **early detection, standardized treatment approaches, and the use of effective uterotonic drugs**. The adoption of an **intrapartum care bundle, heat-stable Carbetocin, and timely administration of Tranexamic Acid** can significantly improve maternal and neonatal survival rates, especially in resource-limited settings.

*Invited Speaker Lecture*

**【IS4-6】**



2025 **3**.22~23



*Jeanne Conry*  
*(IS4)*



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## CURRICULUM VITAE

### Jeanne Ann Conry, MD, PhD

President, The Environmental Health Leadership Foundation (EHLF)

Past President, The International Federation of Gynecology and Obstetrics

Past President, The American College of Obstetricians and Gynecologists

Past Chair California District IX ACOG

### Executive Board Member:

P2i Preconception to Infancy and The Forum Institute

Retired OBGYN from Kaiser Permanente, Northern California

MD University of California, Davis, PhD University of Colorado, Boulder, BA California State

University, Chico

Fellow of the American College of Obstetricians and Gynecologists

### Honorary Fellowship:

AOFOG, Canada, France, EBCOG, Germany, India, Ireland, Japan, Philippines, RCOG, Taiwan.

### HONORED by:

The United States House of Representatives for accomplishments in women's health with a commendation into the Congressional Record, The Visionary Leadership Award from the University of California,

Environmental Protection Agency: The Pacific Southwest Region Children's Environmental Health Champion Award. Placer County California.

## Preconception to Infacy (Preconception to Infancy)

*Jeanne Ann Conry, MD, PHD*

To invest in the health of the next generation we must see an investment in the health and well-being of women across their lifespan. It has been conventional wisdom that to improve children' s health, we must look at the first 1000 days. Preconception to Infancy (P2i) would argue that our investment must include more than 1300 days: enough time to improve the health of women so if and when a pregnancy is planned medical problems are addressed and optimized. The investment includes safe and respectful maternity care. Preconception to Infancy AMPLIFIES these important messages around the globe. However, P2i truly brings global awareness of the impact environmental factors can have on the health of women, on the fetus, and on our children. P2i starts with the risks women face by taking prenatal vitamins contaminated with lead, mercury and arsenic! P2i suggests that we can measure body burden to help women understand their contamination with environmental toxicants—and then change our behaviors to decrease impacts. The National Institute of Health suggests that 60% of respiratory disorders are environmental, and autism—once thought to be a genetic disorder has a strong environmental factor. OBGYNs can take the lead, protect patients and improve women and children' s health



## *Hisashi Masuyama* (IS5)



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### CURRICULUM VITAE

#### Hisashi Masuyama, MD, PhD

##### Professional Position

- Executive Board Member and Chairperson of Education Committee of Japan Society of Obstetrics and Gynecology, Congress President of the 77th Annual Congress of JSOG in 2025
- Professor and Chairperson, Department of Obstetrics and Gynecology, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences
- Vice director, Okayama University Hospital
- Director, Department of Obstetrics and Gynecology, and Perinatal Center, Okayama University Hospital

##### Education

1987 M.D., Okayama University School of Medicine  
1995 Ph.D., Okayama University Graduate School

##### Experience

1995-1997 Postdoctoral Fellow, St. Louis University, St. Louis, Missouri.  
1997 Instructor, Dept of OB/GYN, Okayama University Medical School.  
2000-2001 Research fellow, Case Western Reserve University, Ohio, supported by the research program from the Ministry of Education, Culture, Sports, Science and Technology of Japan.  
2006 Assistant professor, after return to Japan.  
2008 Associate professor

##### Current Positions

2017- Chairperson and professor, Dept of OB/GYN, Okayama University Graduate School of Medicine, Dentistry and Pharmaceutical Sciences.  
2019- Vice director, Okayama University Hospital.  
23-25/05/2025 Congress president, the 77th Annual Congress of JSOG, Okayama, Japan.

##### Recent clinical and basic research

Maternal and fetal medicine, especially preeclampsia, glucose intolerance, and intergenerational health care.

##### Awards and Fellowships

1997 Young Investigator Award, 10th Workshop on Vitamin D, Strasbourg, France.  
2001 Young Investigator Award, the Endocrine Society's 83rd Annual Meeting at Denver, USA.  
2004 Yagi Award, Okayama University Medical Award (Hayashibara Award)  
2005 Okayama Medical Association Award (Yuki Award)  
2016 APSselect Award (The American Physiology Society)  
2017 Outstanding reviewer award (Journal of Reproductive Immunology)

## **Perinatal care from the perspective of preventive medicine**

Perinatal care is not only about pregnancy, delivery, and puerperium, but also includes elements of preventive medicine such as preventing pregnancy complications and the aggravation of underlying diseases, improving pregnancy prognosis, and even preventing future maternal diseases, and is a field that is related to women's lifelong health.

In recent years, the Ministry of Health, Labor, and Welfare of Japanese government has clearly stated that it will establish a preconception care to support health management during pregnancy, delivery and puerperium, and the importance of preventive medical intervention has been recognized. The frequency of thinness and obesity in young Japanese women is increasing, and it has been suggested that this is a risk factor for pregnancy complications such as gestational diabetes and hypertensive disorder of pregnancy. It is also becoming clear that pregnancy complications are related to the development of lifestyle-related diseases such as diabetes, hypertension, and dyslipidemia in middle-aged and elderly people.

Moreover, the deterioration of the intrauterine environment due to pregnancy complications in the mother leads to fetal overnutrition and overgrowth or malnutrition and growth retardation, both of which increase the child's risk of developing obesity and lifestyle-related diseases in the future.

We are required to expand our role to perinatal care from the perspective of maternal health management throughout a woman's life stages, as well as the impact on the healthcare of the next generation.

*Wei-Chun Chang* 張維君  
(IS6)



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CURRICULUM VITAE

**Wei-Chun Chang**

China Medical University and Hospital, Vice President of the Taiwan Association of Obstetrics and Gynecology, Taiwan

**Professional Position**

Professor of Obstetrics and Gynecology, School of Medicine, CMU at Taichung

Director, Section of Gynecology Oncology, Department OB/Gyn, CMUH

Vice President, Taiwan Association of Obstetrics and Gynecology

**Education**

- |                 |  |
|-----------------|--|
| 2021.08-        | Professor, School of Medicine, CMU   |
| 2015.01-        | Director, Section of Gyn. Oncology, CMUH   |
| 2006.09-2009.06 | Ph.D., Institute of Medicine, Chung-Shan Medical University, Taiwan              |
| 2001.09         | EBM workshop, University of Durham, UK   |
| 1999.09-2001.06 | M.H.A. Institute of Health Care Management, China Medical University, Taiwan     |
| 1993.01-1993.07 | Gyn. Oncology fellow Lin-Ko Medical Center, Chang-Gung Memorial Hospital, Taiwan |
| 1980.09-1987.06 | M.D. School of Medicine, China Medical College, Taiwan                           |

**Faculty Appointments**

- |          |  |
|----------|--|
| 2021.08- | Professor, Obstetrics and Gynecology, School of Medicine, CMUH, Taichung |
|----------|--|

**Editorial Boards**

- |          |  |
|----------|--|
| 2016.10- | Taiwanese Journal of Obstetrics & Gynecology |
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## Targeting Lipid Metabolism for Chemosensitivity in Epithelial Ovarian Cancer-Updated

*We-Chun Chang MD, MHA, PhD;  
CMU and Hospital, Taichung, Taiwan*

Lipid metabolism plays a significant role in the progression of epithelial ovarian cancer (EOC) by providing essential resources for tumor growth, survival, and metastasis. Understanding lipid metabolic alterations can lead to the development of novel therapeutic and biomarkers researches. EOC cells increase their lipid stores through enhanced uptake using lipoprotein receptors, e.g., LDLR, LRP8, or LSR. Our previous work demonstrated that LDLR expression affects cisplatin sensitivity in EOC subtypes. High LDLR levels are associated with reduced sensitivity to platinum-based therapies in endometrioid and clear-cell EOCs. In addition to the non-autonomous entry of lipid metabolites to EOC progression, our recent work also had described a critical lipid metabolite autonomously produced by EOC cells to reduce chemo-sensitivity. We found ether-linked phosphatidylethanolamine (PE O- ) is the critical lipid metabolite that enhances chemo-insensitivity, promotes cell growth and migration, and affects patient prognosis in EOC patients. Its role in EOC progression highlights the importance of lipid metabolism in cancer therapy and prognosis. Based on the effort accumulated in the team, we' ve utilized the know-how gained during research to conducted translational researches. Bearing the nature of lipoprotein as natural nanoparticle, we' ve implemented a lipoprotein-mimicking nanoparticle drug as therapeutics. In this talk, we will also demonstrate the potentials of lipoprotein receptor targeting Lipid-Polymer Nanoparticle (LPN) drug in the EOC experimental model. In all, our work represents a systemic and comprehensive translational approach toward combating EOC.

2025 **3**.22~23



*J-K-T Session*

**【J1-9】**



2025 **3**.22~23





*Shin-Yu Lin* 林苙仔  
(J1)



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## CURRICULUM VITAE

Shin-Yu Lin

### Current Academic and Hospital Appointment

- Visiting staff, Department of Obstetrics and Gynecology, National Taiwan University Hospital.
- Associate professor, College of Medicine, National Taiwan University.

### Education

9/1996-6/2003	M.D., College of Medicine, National Taiwan University
9/2006-6/2008	Master, Institute of Clinical Medicine, College of Medicine, National Taiwan University
9/2008-6/2014	PhD, Institute of Clinical Medicine, College of Medicine, National Taiwan University

### TRAINING

7/2003-6/2007	Resident, Dept. of Obstetrics and Gynecology, National Taiwan University Hospital, Taipei, Taiwan
7/2007-6/2009	Fellow, Dept. of Medical Genetics, National Taiwan University Hospital, Taipei, Taiwan
7/2009-6/2011	Fellow, High Risk Pregnancy and Prenatal Diagnosis, Dept. of Obstetrics and Gynecology, National Taiwan University Hospital, Taipei, Taiwan

### Specialty

- 1) Prenatal genetic diagnosis
- 2) Ultrasound of fetal anomaly
- 3) High risk pregnancy
- 4) DNA methylation in GDM

## Changing the standardized obstetric care by expanded carrier screening and counselling: a multicenter prospective cohort study

*Shin-Yu, Lin*

*National Taiwan University Hospital*

**Background:** Expanded genetic screening before conception or during prenatal care can provide a more comprehensive evaluation of heritable fetal diseases. This study aimed to provide a large cohort to evaluate the significance of expanded carrier screening and to consolidate the role of expanded genetic screening in prenatal care.

**Methods:** This multicentre, retrospective cohort study was conducted between 31 December 2019 and 21 July 2022. A screening panel containing 302 genes and next-generation sequencing were used for the evaluation. The patients were referred from obstetric clinics, infertility centres and medical centres. Genetic counsellors conducted consultation for at least 15 min before and after screening.

**Results:** A total of 1587 patients were screened, and 653 pairs were identified. Among the couples who underwent the screening, 62 (9.49%) had pathogenic variants detected on the same genes. In total, 212 pathogenic genes were identified in this study. A total of 1173 participants carried at least one mutated gene, with a positive screening rate of 73.91%. Among the pathogenic variants that were screened, the gene encoding gap junction beta-2 (GJB2) exhibited the highest prevalence, amounting to 19.85%.

**Conclusion:** Next-generation sequencing carrier screening provided additional information that may alter prenatal obstetric care by 9.49%. Pan-ethnic genetic screening and counselling should be suggested for couples of fertile age.

*Satoru Ikenoue*  
(J2)



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CURRICULUM VITAE

**Satoru Ikenoue, M.D., Ph.D.**

Assistant Professor, Department of Obstetrics and Gynecology,  
Keio University School of Medicine, Tokyo, Japan

**Profession**

- |           |   |
|-----------|---|
| 2007      | Graduated from Keio University School of Medicine, Tokyo, Japan   |
| 2007-2009 | Resident, Kagoshima City Hospital, Kagoshima, Japan   |
| 2009-2013 | Senior Resident, Department of Obstetrics and Gynecology,<br>Keio University School of Medicine, Tokyo, Japan                     |
| 2013-2017 | Post-graduate student, Post-graduate School of Medicine,<br>Keio University School of Medicine, Tokyo, Japan                      |
| 2014-2016 | Research fellow<br>Development, health and disease research program<br>Department of Pediatrics, University of California, Irvine |
| 2016-2017 | Department of Obstetrics and Gynecology,<br>Keio University School of Medicine, Tokyo, Japan                                      |
| 2017-2018 | Department of Obstetrics and Gynecology, Saitama City Hospital,<br>Saitama, Japan   |
| 2018-2023 | Department of Obstetrics and Gynecology,<br>Keio University School of Medicine, Tokyo, Japan                                      |
| 2023-     | Assistant Professor, Department of Obstetrics and Gynecology,<br>Keio University School of Medicine, Tokyo, Japan                 |

## Newer insights into fetal growth and body composition

*Satoru Ikenoue*

*Department of Obstetrics and Gynecology, Keio University School of Medicine, Tokyo, Japan*

Based on epidemiological and experimental evidence, the origins of childhood obesity and early onset metabolic syndrome can be extended back to developmental processes during intrauterine life. It is necessary to actively investigate antecedent conditions that affect fetal growth by developing reliable measures to identify variations in fetal fat deposition and body composition. Recently, the resolution of ultrasonography has remarkably improved, which enables better tissue characterization and quantification of fetal fat accumulation. In addition, fetal fractional limb volume has been introduced as a novel measure to quantify fetal soft tissue volume, including fat mass and lean mass. Detecting extreme variations in fetal fat deposition may provide further insights into the origins of altered fetal body composition in pathophysiological conditions (i.e., fetal growth restriction or fetal macrosomia), which are predisposed to the metabolic syndrome in later life. Further studies are warranted to determine the maternal or placental factors that affect fetal fat deposition and body composition. Elucidating these factors may help develop clinical interventions for altered fetal growth and body composition, which could potentially lead to primary prevention of the future risk of metabolic dysfunction.

*Jae Eun Shin*  
(J3)



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## CURRICULUM VITAE

### Jae Eun Shin

Assistant professor,  
Catholic University of Korea, Bucheon St. Mary's hospital

### Education

- 03/1996 – 02/2000 Bachelor's degree, Korea University, College of life sciences & biotechnology  
03/2000 – 02/2004 Bachelor's degree, Ewha women's university, College of medicine  
08/2006 – 08/2015 Doctor's degree, Catholic university of Korea, College of medicine

### Experience

- 03/2004 – 02/2005 Intern, Catholic University of Korea, Catholic medical center  
03/2005– 02/2009 Resident, Catholic University of Korea, Catholic medical center, Department of Ob & Gy  
03/2009– 02/2010 Fellowship, Catholic University of Korea, Seoul St. Mary's hospital, Department of Ob & Gy  
03/2010– 02/2013 Fellowship, Catholic University of Korea, Yeouido St. Mary's hospital, Department of Ob & Gy  
03/2013– 02/2023 Associate professor, Catholic University of Korea, Bucheon St. Mary's hospital, Department of Ob & Gy  
03/2023- now Assistant professor, Catholic University of Korea, Bucheon St. Mary's hospital, Department of Ob & Gy

## Impact of Pre-pregnancy Fasting Glucose on Neonatal Outcomes and Early Childhood Neurodevelopment: Analysis of Non-diabetic Maternal Populations

*Jae Eun Shin<sup>1</sup>, Sung Won Har<sup>2</sup>, Soo Bin Lee<sup>2</sup>, Min-Jeong Oh<sup>2</sup>, and Geum Joon Cho<sup>3</sup>*

<sup>1</sup>*Department of Obstetrics and Gynecology, College of Medicine, The Catholic University of Korea, Seoul, Korea*

<sup>2</sup>*School of Industrial Management Engineering, Korea University, Seoul, Korea*

<sup>3</sup>*Department of Obstetrics and Gynecology, College of Medicine, Korea University, Seoul, Korea*

**Background:** Maternal pre-pregnancy glucose regulation plays a crucial role in pregnancy outcomes, yet the impact of fasting glucose levels within normoglycemic ranges on neonatal outcomes and neurodevelopmental outcomes remains unclear.

**Methods:** This population-based retrospective cohort study analyzed 114,655 deliveries between 2015 and 2016 using the Korea National Health Insurance database. Women were categorized into seven groups based on pre-pregnancy fasting glucose levels (<75, 75-79, 80-84, 85-89, 90-94, 95-100, and >100 mg/dL). We examined associations between glucose categories and birth outcomes, adjusting for maternal age, BMI, and other confounders.

**Results:** Higher glucose categories were associated with increased maternal age at delivery ( $32.73 \pm 3.99$  years in Category 7 vs.  $31.78 \pm 3.77$  years in Category 1,  $p < 0.001$ ) and cesarean delivery rates (42.23% vs. 37.37%,  $p < 0.001$ ). Multivariate analysis showed that higher glucose categories had significantly increased adjusted odds ratios for macrosomia and large-for-gestational-age births, while showing decreased risks for low birth weight and small-for-gestational-age births compared to the lowest glucose category. No significant differences were observed between glucose categories in other neonatal outcomes or neurodevelopmental outcomes after adjustment for confounders.

**Conclusions:** Pre-pregnancy fasting glucose levels, even within normal ranges, significantly influence birth weight outcomes but not other neonatal or neurodevelopmental outcomes. These findings suggest the importance of optimizing pre-pregnancy glucose levels primarily for birth weight outcomes and may inform guidelines for preconception care and pregnancy monitoring.

**Keywords:**

Pre-pregnancy fasting glucose; Birth weight; Pregnancy outcomes; Neurodevelopment; Population cohort study

*Isao Tamura*  
*(J4)*



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## CURRICULUM VITAE

### Isao Tamura

Assistant Professor, Yamaguchi University Graduate School of Medicine

### Education

- 2007-2011 Post-graduate, Department of Obstetrics and Gynecology,  
Yamaguchi University School of Medicine, Japan
- 2004 M.D., Yamaguchi University School of Medicine, Japan

### Professional Training and Employment

- 2016-present Assistant professor, Department of Obstetrics and Gynecology,  
Yamaguchi University Graduate School of Medicine
- 2014-2016 Research Associate, Salk Institute for Biological Studies
- 2011-2014 Assistant professor, Department of Obstetrics and Gynecology,  
Yamaguchi University Graduate School of Medicine
- 2007-2011 Post-graduate, Department of Obstetrics and Gynecology,  
Yamaguchi University School of Medicine, Japan
- 2006 M.D., Department of Obstetrics and Gynecology,  
Yamaguchi Grand Medical Center
- 2004-2005 Resident, Yamaguchi Grand Medical Center
- 2004 Graduated from Yamaguchi University School of Medicine, Japan

### Awards

- 2024 ASRM Scientific Congress Award
- 2021 Japan Medical Association Encouragement Award for Medical Research
- 2021 JSOG Congress Encouragement Award
- 2021 Japan Endocrine Society Encouragement Award for Research
- 2021 Japan Society of Obstetrics and Gynecology Encouragement Award
- 2019 Japan Society of Reproductive Medicine Encouragement Award

## Novel Regulatory Mechanism of Decidualization Mediated by Nuclear F-actin Formation

*Isao Tamura*

*Assistant Professor, Yamaguchi University Graduate School of Medicine*

Human endometrial stromal cells (ESCs) undergo cyclic changes during the menstrual cycle in response to changing levels of steroid hormones. Especially, ESCs morphologically and functionally change their cellular states for preparing pregnancy, referred to as decidualization. Decidualization is essential for implantation and maintenance of pregnancy. During decidualization, ESCs dramatically change their fibroblast-like morphology into the epithelial-like state with the dynamic rearrangement of cytoplasmic actin. Interestingly, this cytoskeletal actin dynamics not only morphologically, but also functionally regulate decidualization. Recent reports have suggested that actin dynamically alters its polymerized state (filamentous actin; F-actin) upon external stimuli not only in the cytoplasm, but also in the nucleus. However, nuclear actin dynamics during decidualization of human ESCs have not been elucidated. This study investigated the nuclear actin dynamics and its role in decidualization of human ESCs. For visualizing nuclear actin dynamics, ESCs expressing nuclear actin-GFP probe were established. Cells were treated with cAMP (0.5 mM) to induce decidualization. Time-lapse imaging revealed a dynamic formation of nuclear F-actin during decidualization. This was disassembled following the withdrawal of the decidualization stimulus, suggesting its reversible process. To investigate whether nuclear F-actin formation is involved in the regulation of decidualization, nuclear F-actin formation was inhibited by overexpressing the nuclear actin mutant (actinR62D). This significantly reduced the number of cells exhibiting the nuclear F-actin induced by decidualization and suppressed the expressions of decidualization markers (IGFBP-1 and PRL). Therefore, nuclear F-actin formation was essential event for decidualization. In order to investigate how the nuclear F-actin formation is involved in decidualization, we performed RNA-sequence analysis. Among the 618 genes that should be repressed in the course of decidualization, the downregulation of 304 genes was not observed when cells were overexpressed actinR62D. These genes were defined as nuclear actin-regulated genes and were related to the regulation of cell proliferation. Overexpression of actinR62D suppressed the decidualization-induced decrease in cell number. Considering that ESCs have to exit the cell cycle for accomplishing their differentiation process towards the decidualized state, nuclear F-actin formation contributes to decidualization through the suppression of cell proliferation. Furthermore, upstream analysis was performed on nuclear actin-regulated genes to identify factors regulating nuclear F-actin formation, which predicted C/EBP  $\beta$  as an upstream factor. Knockdown of C/EBP  $\beta$  suppressed nuclear F-actin formation, cell cycle arrest, and expression of decidualization markers, indicating that C/EBP $\beta$  induces the cell cycle arrest through the regulation of nuclear F-actin formation during decidualization. In conclusion, we revealed that actin exists in the nucleus of human ESCs and nuclear F-actin formation is induced by C/EBP  $\beta$  during decidualization. This induces cell cycle arrest to differentiate into decidualized ESCs, which is a novel mechanism for the regulation of decidualization.



*Bo Hyon Yun*  
(J5)



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## CURRICULUM VITAE

### Bo Hyon Yun

Associate professor

#### Organization

- Division of Reproductive Endocrinology and Infertility, Department of Obstetrics and Gynecology, Yonsei University College of Medicine, Seoul, South Korea
- Department of Pediatric and Adolescent Gynecology, Severance Children' s Hospital, Yonsei University College of Medicine, Seoul, South Korea

#### Education

2003.3-2007.2 M.D., Yonsei University College of Medicine, Seoul, South Korea.  
2011.9-2014.8 M.S., The Graduate School, Yonsei University, Seoul, South Korea.  
2016.8-2019.8 PH.D. Yonsei University College of Medicine, Seoul, South Korea.

#### Postgraduate Training

2007.3 – 2008.2 Intern, Department of Education and Training, Severance Hospital, Yonsei University College of Medicine, Seoul, Korea  
2009.3 – 2013.2 Residency, Department of Obstetrics and Gynecology, Severance Hospital, Yonsei University College of Medicine, Seoul, Korea  
2013.3 – 2015.2 Fellow, Division of reproductive endocrinology and infertility, Department of Obstetrics and Gynecology, Severance Hospital, Yonsei University College of Medicine, Seoul, Korea

#### Position Held & Faculty Appointment

2015.3-2017.2 Clinical assistant professor, Division of Reproductive Endocrinology & Infertility, Department of Obstetrics and Gynecology, Severance Hospital, Yonsei University College of Medicine  
2017.3-2022.2 Assistant professor, Division of Reproductive Endocrinology & Infertility, Department of Obstetrics and Gynecology, Severance Hospital, Yonsei University College of Medicine

- 2021.1-2021.12 Visiting scholar, Pediatric Adolescent Gynecology, Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)/National Institutes of Health (NIH), Bethesda, MD USA.
- 2022.3- Current Associate professor, Division of Reproductive Endocrinology & Infertility, Department of Obstetrics and Gynecology, Severance Hospital, Yonsei University College of Medicine

### Specialized fields

Reproductive endocrinology & infertility, Minimally invasive surgery, Pediatric and adolescent gynecology

### Research Interests

Endometriosis; oxidative stress and pathophysiology  
Pediatric and Adolescent Gynecology  
Fertility preservation in adolescents and young adults.

### Honors & Awards

- 2016.9 The Best Investigator award (Good Moonhwa award-Reproductive endocrinology & infertility) – The Korean Society of Obstetrics and Gynecology.
- 2017.11 The Best Paper Award – The Korean Society of Menopause
- 2018.9, 2019.9 The Best Reviewer Award– Obstetrics and Gynecology Science
- 2020 KSRM- MERCK Best Reviewer Award

### Membership

The North American Society for Pediatric and Adolescent Gynecology (NASPAG)-member  
The European Society of Human Reproduction and Embryology – International member  
The American Society for Reproductive Medicine – Member  
The Korean Association of Obstetrics and Gynecology – Member  
The Korean Society of Menopause – Member  
The Korean Society of Gynecologic Endocrinology – Member  
The Korean Society for Reproductive Medicine – Member

## Common Menstrual Complaints in Pediatric and Adolescent Gynecology Clinics

*Bo Hyon Yun*

*Associate professor, Yonsei University College of Medicine, Seoul, South Korea*

In today' s talk, we will focus on evaluating and managing common menstrual disorders in pediatric and adolescent gynecology, presenting common cases, mainly. The physiological basis of menstruation, from hormonal regulation to endometrial breakdown, is contrasted with the unique aspects of menarche and early menstrual cycles in adolescents. In adolescents, either amenorrhea or abnormal uterine bleeding is two significant parts of popularity.

Disorders like primary and secondary amenorrhea are addressed, with guidelines for initial workup, including hormonal assays, pelvic imaging, and clinical assessments. Various experiences enlighten, excluding the differential diagnoses in the complicated algorithm of the final diagnosis.

Abnormal uterine bleeding (AUB), characterized by heavy, prolonged, or frequent bleeding, is emphasized as a common adolescent issue, often stemming from the immaturity of the hypothalamic-pituitary-ovarian axis. Management goals for AUB include cessation of bleeding, anemia prevention, and restoring menstrual regularity through hormonal therapies such as combined oral contraceptives or progestins. Emphasis is placed on individualizing treatment based on the underlying etiology and patient-specific factors.

This presentation underscores the importance of timely diagnosis and treatment to ensure optimal reproductive health outcomes, including adequate sexual development, endometrial protection, and bone health. To promote awareness among adolescents and caregivers, recommendations for tracking menstrual cycles and indications for seeking medical evaluation are provided.

*Chun-I Lee* 李俊逸  
(J6)



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## CURRICULUM VITAE

Chun-I Lee, M.D.

### Ducation/Training

2001-2008 M.D., Medicine, National Defense Medical Center, Taiwan.

### Emploment

2021- Assistant Professor, Department of Obstetrics and Gynecology, Chung Shan Medical University, Taiwan.  
2018- Attending Physician, Department of Obstetrics and Gynecology, Chung Shan Medical University Hospital, Taiwan.  
2021-2022 Deputy Director, Reproductive Medicine Center, Chung Shan Medical University Hospital, Taiwan.  
2017-2019 Director, Delivery Ward, Daqing Branch, Chung Shan Medical University Hospital, Taiwan.  
2015-2017 Fellow Resident, Division of Reproductive Endocrinology and Infertility, National Taiwan University Hospital, Taiwan.  
2014-2015 Attending physician, Division of Reproductive Endocrinology and Infertility, Chung-Shan Medical University Hospital, Taiwan.  
2010-2014 Resident, Obstetrics and Gynecology doctor of Tri-service General Hospital, Taiwan.

### Research Interests and Expertise

Reproduction,  
Endocrinology,  
Assisted Reproductive,  
Technology Embryo Biotechnology

## Novel Strategies for Optimizing Embryo Selection to Improve IVF Outcomes

Advances in embryo selection are transforming IVF by enhancing precision, efficiency, and personalization. Traditional morphological scores, based on visual assessment, have been essential for identifying viable embryos but are limited by subjectivity and an inability to predict outcomes like implantation or live births. Innovative tools like KIDScore employ time-lapse imaging and advanced algorithms to objectively rank embryos, reducing subjectivity and improving decision-making. Similarly, AI-powered systems such as iDAScore analyze growth trends and morphology across large datasets, enabling fully automated, non-invasive assessments with consistency and reproducibility. Personalized platforms like OPAL combine embryo-specific data with oocyte characteristics, such as shape and zona pellucida features, to predict blastocyst development with high accuracy. By utilizing machine learning and big data, OPAL optimizes outcomes for individual patients. These advanced tools integrate traditional methods with cutting-edge AI technologies, significantly improving IVF success rates while reducing emotional and financial burdens on patients. Future efforts should focus on refining predictive algorithms, expanding datasets to include diverse populations, and validating these innovations in clinical practice. Together, these advancements promise to revolutionize reproductive care and offer new hope to patients.

*Yoo-Young Lee*  
(J7)



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## CURRICULUM VITAE

### **Yoo-Young Lee, M.D., Ph.D.**

Professor

Co-Chair, Education Committee, Asian Society of Gynecologic Oncology

Principal Editor, Journal of Gynecologic Oncology

Gynecologic Oncologist, Gynecologic Cancer Center

Department of Obstetrics and Gynecology

Samsung Medical Center

Sungkyunkwan University School of Medicine Seoul, Korea

Tel: 82-2-3410-3544 Fax: 82-2-3410-0630

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ORCID: 0000-0001-5902-9877

### **Area of Expertise**

Gynecologic Oncology

Maximal cytoreductive surgery for advanced/recurrent gynecologic cancers

Minimally invasive surgery for early gynecologic cancers

Fertility preservation treatments for young patients with gynecologic cancers

Chemotherapy and target agents

### **Education**

2011.3 – 2013.2 Ph.D., Chung-Ang University, College of Medicine

2004.3 – 2006.8 M.S.D., Kyungpook National University, College of Medicine

1994.3 – 2000.2 M.D., Kyungpook National University, College of Medicine

### **Professional Training**

2016.7 – 2018.2 Clinical Fellowship training, University of Toronto, Princess Margaret

## ■ J-K-T Session

### Cancer Centre/ Sunnybrook Health Science Centre

- 2008.5 – 2012.2 Clinical Fellowship, Samsung Medical Center  
2001.3 – 2005.2 Residency, Samsung Medical Center

### Work Experience

- 2021.3 – present Professor, Sungkyunkwan University School of Medicine,  
Samsung Medical Center  
2015.3 – 2021.2 Clinical Associate Professor, Samsung Medical Center  
2012.3 – 2015.2 Clinical Assistant Professor, Samsung Medical Center

### Awards and Honors

- 2000 The Best Intern of the Year, Samsung Medical Center, Seoul, South Korea  
2008 Best Oral Presentation, Asian-Pacific Association for Gynecologic Endoscopy and  
Minimally Invasive Therapy  
2011 The most productive scientist of the year, Good Moonhwa Award, Korean Society of  
Obstetrics and Gynecology  
2017 Best Poster Presentation, Society of Gynecologic Oncology, Canada  
2019 QI project award , Samsung Medical Center  
2020 Global Leading Doctor, International Health Center, Samsung Medical Center

Yoo-Young Lee is a gynecologic oncologist at Samsung Medical Center, Seoul, Korea. His major clinical interests include surgery and enhanced recovery after surgery in gynecologic cancers, particularly in ovarian cancer. Dr. Lee' s research focuses on clinical research related to the role of maximal cytoreductive surgery for advanced/recurrent gynecologic cancers and minimally invasive surgery for early stage disease including fertility preservation treatments. Also Dr. Lee' s major interest of translational research includes investigating new treatment target for refractory gynecologic cancers using patient-derived xenografts model.

## **The Role of Anti-Inflammatory Modulation as a Therapeutic Strategy in Ovarian Cancer Treatment**

*Yoo-Young Lee, Professor,  
Sungkyunkwan University School of Medicine, Samsung Medical Center*

Ovarian cancer is a leading cause of death among gynecologic malignancies, characterized by late-stage diagnosis, high recurrence rates, and resistance to standard therapies. Recent research highlights the pivotal role of inflammation in ovarian tumor development, progression, and metastasis. The inflammatory tumor microenvironment (TME), enriched with cytokines, chemokines, and other inflammatory mediators, contributes to tumor proliferation, angiogenesis, and immune suppression, presenting an opportunity for therapeutic intervention.

This review examines the rationale for targeting inflammatory pathways as a novel therapeutic strategy in ovarian cancer. Anti-inflammatory agents, such as nonsteroidal anti-inflammatory drugs (NSAIDs) and COX-2 inhibitors, have shown promise in preclinical studies for reducing tumor-promoting inflammation and slowing disease progression. These agents exert their effects by suppressing key inflammatory mediators like prostaglandins, which are known to enhance tumor cell survival and invasion. Additionally, targeting components of the TME, including tumor-associated macrophages (TAMs) and other inflammatory cell subsets, offers potential for disrupting the inflammatory signaling that fuels tumor growth.

Preclinical and early-phase clinical trials have provided encouraging data on the efficacy of combining anti-inflammatory agents with conventional therapies such as chemotherapy and anti-angiogenic treatments. By reducing inflammation-driven resistance mechanisms, these combinations may enhance the therapeutic response and delay disease recurrence. Moreover, the ability of anti-inflammatory strategies to mitigate chemotherapy-induced inflammation further supports their potential to improve treatment outcomes and patient quality of life.

This review underscores the need for further research to refine the application of anti-inflammatory therapies in ovarian cancer, focusing on identifying optimal combinations and patient populations likely to benefit. By addressing the pro-tumorigenic effects of inflammation, anti-inflammatory modulation represents a promising avenue for improving survival and long-term outcomes in ovarian cancer management.



*Chia-Yen Huang* 黃家彥  
(J8)



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## CURRICULUM VITAE

### Chia-Yen Huang

Cathay General Hospital, Taipei, Taiwan

#### Professional Position

- Director, Gynecology and Gynecologic Oncology Center, Department of Women's Medicine, Cathay General Hospital, Taipei, Taiwan
- Associate Professor, School of Medicine, Fu-Jen Catholic University, New Taipei City, Taiwan
- Director, Taiwan Association of Gynecologic Oncologists (TAGO)
- Director, Taiwan Society of Cancer Registry (TSCR)

#### Education

- 2000 M.D., School of Medicine, National Taiwan University
- 2007 MS Graduate Institute of Clinical Medicine, National Taiwan University
- 2020 Ph.D., Department of Biological Science and Technology, National Chiao-Tung University

#### Faculty Appointments:

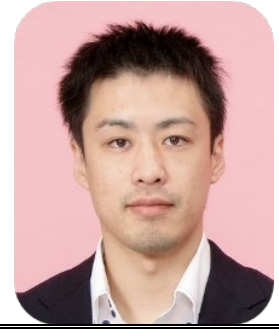
- 2022- Associate Professor, School of Medicine, Fu-Jen Catholic University, New Taipei City, Taiwan
- 2016- Assistant Professor, School of Medicine, Fu-Jen Catholic University, New Taipei City, Taiwan

**Advancing Endometrial Cancer Care: Sentinel Lymph Node Mapping  
– A Single-Center Perspective**

*Chia-Yen Huang,  
Cathay General Hospital*

This presentation explores advancements in endometrial cancer care, focusing on the application and impact of sentinel lymph node (SLN) mapping. Based on insights from a single-center experience, it highlights the implementation process, clinical workflow, and the advantages of SLN mapping in accurate tumor staging and reducing surgical morbidity. The talk will present data supporting SLN mapping as a minimally invasive alternative to complete lymphadenectomy, demonstrating its potential to lower postoperative complications while maintaining high diagnostic accuracy. Challenges encountered in clinical practice, innovative solutions, and implications for future therapeutic strategies will also be discussed. This session aims to enhance the understanding of SLN mapping and encourage its broader adoption in the management of endometrial cancer.

*Kosuke Yoshida*  
(J9)



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## CURRICULUM VITAE

### Kosuke Yoshida,

Assistant Professor,

Dept. of Obstetrics and Gynecology, Nagoya University Graduate School of Medicine,  
65 Tsuruma-cho, Showa-ku, Nagoya, 466-8550, Japan.

E-mail: yoshida.kosuke.n7@f.mail.nagoya-u.ac.jp

### EXPERIENCE

- 04/2023-Present     Assistant Professor. Dept. of OBGYN, Nagoya University Graduate School of Medicine, Nagoya, Japan
- 10/2022-03/2023     Medical staff. Dept. of OBGYN, Chubu Rosai Hospital, Nagoya, Japan
- 11/2020-10/2022     Assistant Professor. Dept. of OBGYN, Nagoya University Graduate School of Medicine, Nagoya, Japan
- 04/2020-10/2023     Postdoctoral Researcher. Laboratory of Integrative Oncology, National Cancer Center Research Institute, Tokyo, Japan
- 04/2015-03/2018     Fellow. Dept. of OBGYN, Nagoya University Graduate School of Medicine, Nagoya, Japan
- 04/2013-03/2015     Resident. Suwa Red Cross Hospital, Nagano, Japan

### EDUCATION

- 03/2020     Ph.D. Nagoya University Graduate School of Medicine, Nagoya, Japan
- 03/2023     M.D. Nagoya University, Nagoya, Japan

### PERSONAL STATEMENT

I am a medical doctor and a board-certificated obstetrics and gynecology clinician by the Japan Society of Obstetrics and Gynecology. After I got a doctorate degree from Nagoya University (Nagoya Japan), I worked as a postdoctoral researcher at National Cancer Center Research Institute (Tokyo, Japan), supervised by Dr. Yusuke Yamamoto. Then, I worked as a physician-scientist at Nagoya University (assistant professor) and studied gynecologic cancers using next-generation sequencing.

**HONORS**

- 2023 Best Paper Award at Japanese Society of Obstetrics and Gynecology, Japan
- 2023 Research Award Nagoya Global Retreat, Nagoya University Graduate School of Medicine, Japan
- 2022 11th Ishida Award, Nagoya University, Japan
- 2022 74th JSOG Congress Encouragement Award, Japanese Society of Obstetrics and Gynecology, Japan
- 2019 61st JSCO Congress Award, Japan Society of Clinical Oncology, Japan
- 2019 71st JSOG Congress Encouragement Award, Japanese Society of Obstetrics and Gynecology, Japan

**SELECTED PUBLICATIONS**

1. Yokoi A, Yoshida K, et al. Spatial exosome analysis using cellulose nanofiber sheets reveals the location heterogeneity of extracellular vesicles. *Nat Commun* 2023;14(1):6915.
2. Yoshida K, et al. Aberrant activation of cell cycle-related kinases and the potential therapeutic impact of PLK1 or CHEK1 inhibition in uterine leiomyosarcoma. *Clin Cancer Res* 2022;28(10):2147– 2159.
3. Yoshida K, et al. Expression of the chrXq27.3 miRNA cluster in recurrent ovarian clear cell carcinoma and its impact on cisplatin resistance. *Oncogene* 2021;40(7):1225– 1268.

## Elucidation of Pathophysiology in Gynecologic Cancers through Multi-Omics Analysis

*Kosuke Yoshida*

*Dept. of Obstetrics and Gynecology, Nagoya University Graduate School of Medicine*

Next-generation sequencing (NGS) has become an essential technology in molecular biological research. This presentation highlights our recent findings across four areas:

1. RNA-seq: Identification of novel therapeutic targets for uterine leiomyosarcoma (ULMS)
2. Spatial Transcriptomics: Mechanisms of PARP inhibitor resistance in high-grade serous ovarian carcinoma (HGSOC)
3. miRNA-seq: Key miRNAs in recurrent ovarian clear cell carcinoma (OCCC)
4. Extracellular Vesicle (EV) Analysis: Micro-volume ascites assessment using EV sheets

### < RNA-seq: Identification of Therapeutic Targets for ULMS >

ULMS is a highly aggressive gynecologic malignancy with no established standard treatment. RNA-seq of six ULMS and three myoma samples revealed 512 differentially expressed genes and significant activation of cell cycle-related pathways in ULMS. Inhibitors targeting these pathways showed potent anti-cancer effects in vitro using leiomyosarcoma cell lines (SK-UT-1, SK-LMS-1, and SKN). In vivo, PLK1 and CHEK1 inhibitors suppressed tumor growth in SK-UT-1-bearing mice. These results suggest that cell cycle-related factors are promising therapeutic targets for ULMS.

### < Spatial Transcriptomics: PARP Inhibitor Resistance in HGSOC >

PARP inhibitors, such as olaparib, are widely used in the treatment of ovarian cancer, but resistance to PARP inhibitors remains a significant clinical challenge. We performed spatial transcriptomics analysis on FFPE samples from four olaparib-sensitive and four resistant cases using 10x Genomics Visium. Gene expression profiles identified 13 clusters categorized into cancer and stromal cells. Stromal-to-cancer signaling analysis revealed midkine pathway activation in three resistant cases. In vitro studies demonstrated that midkine contributes to olaparib resistance, highlighting the pathway's potential as a therapeutic target.

### < miRNA-seq: Key miRNAs in Recurrent OCCC >

MicroRNAs (miRNAs) are small non-coding RNAs that regulate gene expression post-transcriptionally and play crucial roles in various biological processes, including cancer progression and drug resistance. We investigated miRNA profiles in recurrent OCCC through

miRNA-seq. We included ten patients with stage I OCCC who eventually experienced the recurrence, and five of them performed surgery after the recurrence. Moreover, we included ten patients with stage I OCCC without recurrence as control. miRNAs in the chrXq27.3 cluster, including miR-509-3p and miR-509-3-5p, were significantly downregulated in recurrent OCCC. Functional analyses in ES-2 cells showed that these miRNAs enhance cisplatin sensitivity by downregulating YAP1, a protein upregulated in recurrent OCCC tissues. These findings indicate that the chrXq27.3 miRNA cluster contributes to cisplatin resistance and may play a role in OCCC progression.

**< EV Analysis: Micro-Volume Ascites Assessment Using EV Sheets >**

EVs are membrane-bound particles secreted by cells that play a critical role in intercellular communication by transferring bioactive molecules, such as proteins, lipids, and nucleic acids, including miRNAs. Our team developed a novel EV sheet technology, which enables the efficient capture and analysis of EVs from as little as 10  $\mu$ L of body fluid. The EV sheets are made from cellulose nanofibers, and this technology allows for the assessment of micro-volume ascites by attaching the organ surface. Using EV sheets, we collected samples from multiple intraperitoneal sites in seven cases. Then, EV-miRNA-seq revealed the spatial diversity of the micro-volume ascites, and especially, the liver surface exhibited distinct characteristics. In the ovarian cancer development, we found that liver surface metastasis was less frequently observed. Hence, we evaluated the roles of liver surface EV-miRNAs on the ovarian cancer progression. In vitro analyses showed that the liver-surface specific EVs inhibited ovarian cancer cell attachment, migration, and invasion in vitro. These miRNAs may serve as a barrier to ovarian cancer progression, providing a foundation for the development of novel therapeutic strategies.

In conclusion, NGS technologies have greatly advanced our understanding of gynecologic malignancies. In particular, mRNAs and miRNAs show promise as therapeutic targets and biomarkers, paving the way for novel strategies in treatment and diagnosis.

2025 **3**.22~23



# *Plenary Lecture*

**【P1~6】**





2025 **3**.22~23



# Ching-Yi Lin

(P1)



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## CURRICULUM VITAE

### Ching-Yi Lin

Ministry of Health and Welfare, Deputy Minister, Taiwan

### Professional Position

- 2022.01-2024.01 Legislator, Legislative Yuan, Taiwan.
- 2020.08-2022.01 Director, International Medical Service Center of Chung Shan Medical University Hospital
- 2020.06-2021.12 Ambassador at large, Ministry of Foreign Affairs, Taiwan
- 2016.04-2010-2014 Member, Human Rights Committee, Liberal International Gynecologist, Director, mobile medical mission, Taiwan Health Corps (north India, Nepal, Kyrgyz)
- 2013.01-2013.02 Coordinator, Taiwan Medical Mission in Tuvalu, implementing a nationwide cervical cancer screening program and serving as a resident staff member for the Taiwan Medical Mission in Tuvalu.
- 2012.06-2015.07 Chief Executive Officer, International Medical Service Center of Chung Shan Medical University Hospital
- 2012.08-2014.07 Director, Obstetrics department of Chung Shan Medical University Hospital
- 2012.12-2016.12 Vice Secretary-General, Taiwan Society of Perinatology
- 2008.05-2011.05 Gynecologist, Taiwan ICDF's mobile medical mission (Tuvalu, north India)
- 2007.04-2011.3 Member, Committee of Women's Rights Promotion, Executive Yuan

### Education

- 2009.09-2020.06 Doctor of Philosophy of Chung Shan Medical University, Institute of Medicine
- 2003.09-2005.06 Master of National Taiwan University, Institute of Molecular Medicine
- 1999.09-2001.06 Master of Chung Shan Medical University, Institute of Medicine
- 1992.09-1999.06 Doctor of Medicine of Chung Shan Medical College

## The Cross-Generational Challenge in Public Health Policy

*Ching-Yi Lin,*

*Deputy Minister, Ministry of Health and Welfare, Taiwan*

Taiwan faces critical health challenges shaped by an aging population, low birth rates, and the sustainability of National Health Insurance (NHI) system. These issues demand innovative solutions to balance the accessibility of healthcare across generations.

The NHI, rising medical costs and a shrinking working-age population that may potentially cause the loss of income is a wake-up call for the reforms (e.g. co-payment mechanisms) which are essential to ensure its financial stability. Meanwhile, the super-aged society increases demand for long-term care, home-based medical care and chronic disease management. Expanding community-based care and leveraging technologies like telemedicine are vital steps.

Low birth rates exacerbate these issues, facing the challenges of the future labor force and social support systems are needed. Thus, intergenerational equity must also be prioritized to ensure the health coverage of all generations and just allocation of health resources.

# Kiyoko Kato

(P2)



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## CURRICULUM VITAE

Kiyoko Kato, M. D., Ph. D

### Current Position

Professor,  
Department of Obstetrics and Gynecology, Graduate School of Medical Science,  
Kyushu University, Japan

### Other Position

2023~present Chairperson of the Executive Board of Japan Society of Obstetrics and Gynecology (JSOG)  
2015~2023 Editor-in Chief, Journal of Obstetrics and Gynaecology (JOGR)  
2018~2023 Vice President of the Japan Society for Menopause and Women's Health (JMWH)

### Eudcation

1986.3 M.D. graduate from Medical School of Medicine, Kyushu University (Japan)  
1995.1 Ph.D. Medical School of Medicine, Kyushu University (Japan)

### Positions

1986-1989 Medical Doctor of the department of Obstetrics and Gynecology, Kyushu University  
1989-1992 Research fellow of La Jolla Cancer Research Foundation (USA)  
1992-2009 Medical doctor in Medical Insitute of Bioregulation, Kyushu University  
1992-1998 Assistant Professor  
1998-2009 Associate Professor (lectuler)  
2009 - 2012 Associate Professor, Department of Obstetrics and Gynecology, Faculty of Medicine, Juntendo University  
2012-present Professor, Department of Obstetrics and Gynecology, Graduate School of Medical Sciences, Kyushu University (Japan)

### Research Topics

Gynecologic Oncology  
Cancer stem cell  
Signal transduction via Ras-Estrogen pathway  
Molecular cancer biology

## Development of novel therapies for treatment-resistant endometrial cancer

*Kiyoko Kato*

*Department of Obstetrics and Gynecology, Kyushu University*

The incidence of endometrial cancer has tripled in the last 15 years in Japan and is one of the most urgent gynecological cancers to be addressed. The prognosis is defined by stage and histology, with poorly differentiated carcinoma, serous carcinoma, and carcinosarcoma, especially in advanced stages, being refractory to treatment. Immune checkpoint inhibitors and molecularly targeted drugs have recently been applied clinically, but the prognosis for recurrent and advanced cancer is poor.

The presence of cancer stem cells in the cancer tissue is thought to be a factor in the resistance to treatment. Stem cells are defined as cells that have the capacity for self-renewal and multilineage differentiation. Recently, it has been reported that cancer stem cells have plasticity and diversity and interact with the surrounding cancer microenvironment, multifaceted therapeutic strategies to overcome each of these are needed.

We have analyzed endometrial cancer stem cells and reported the importance of epithelial-mesenchymal transition (EMT) and SPARC-fibronectin secreted by cancer stem cells in the acquisition of invasive and metastatic potential and the surrounding microenvironment.

In addition, YBX2 gene, which has been reported to be expressed in embryonic cells and cancer cells, was successfully introduced into cancer cells and de-differentiated to induce undifferentiated cancer stem cells, indicating that YBX2 is involved in plasticity. Using this approach, they also found that DUSP6, an ERK phosphorylation inhibitor, is important for cancer stem cell trait maintenance, and CT45A5, a cancer testis antigen, is important for treatment resistance and cancer stem cell plasticity.

DUSP6 inhibits ERK phosphorylation but enhances AKT phosphorylation, which may be related to a pathway mediated by RAS, one of the driver genes of uterine cancer.

CT45A5 is also suggested to be involved in immune function as a cancer testis antigen.

In this lecture, we will report on these our results to date and introduce the development of new therapies targeting DUSP6 and CT45A5.

# Young-Tae Kim (P3)



## CURRICULUM VITAE

Young Tae KIM, M.D., Ph, D.

### Affiliation and Address

**Professor,**

Division of Gynecologic Oncology, Department of Obstetrics and Gynecology,  
Yonsei University College of Medicine  
CPO Box 8044, Seoul 120-752, Korea

Phone : 82-2-2228-2230

E-mail : [ytkchoi@yuhs.ac](mailto:ytkchoi@yuhs.ac)

### Personal History

Mar. 1982- Feb. 1986	M.D. degree from Yonsei University College of Medicine, Seoul, Korea.
Jul. 1997- Sep. 1997	Visiting fellow, University of Copenhagen, Copenhagen, Denmark.
Sep. 2000-Oct. 2001	Visiting scholar, University of Arizona, Tucson, Arizona, U.S.A.
Mar. 2007- Present	Professor & Director of Obstetrics and Gynecology, Yonsei University College of Medicine, Seoul, Korea.
Oct. 2020- Present	President of Korean Society of Gynecologic Endoscopy, President of Korean Society of Gynecologic Oncology

### Top Publications

- **Perioperative Outcomes of 3-Arm Versus 4-Arm Robotic Radical Hysterectomy in Patients with Cervical Cancer.**  
*Yim GW, Eoh KJ, Chung YS, Kim SW, Kim S, Nam EJ, Lee JY, Kim YT. (Corresponding author) J Minim Invasive Gynecol. 2018; 25(5):823-831. PMID: 29287717 IF: 3.061*
- **Upregulation of homeobox gene is correlated with poor survival outcomes in cervical cancer**  
*Eoh KJ, Chung YS, Kim SW, Kim S, Nam EJ, Lee JY, Kim YT (Corresponding author) Oncotarget. 2017; 8:84396-84402. PMID: 29137433 IF: 5.168*
- **Robot-assisted staging using three robotic arms for endometrial cancer: Comparison to laparoscopy and laparotomy at a single institution**  
*Jung YW, Kim YT. (Corresponding author) Journal of Surgical Oncology. 2010;101:116-121 IF: 2.158*
- **Robotic radical hysterectomy with pelvic lymphadenectomy for cervical carcinoma: A pilot study**  
*Kim YT, Kim SW, Hyung WJ, Lee SJ, Nam EJ, Lee WJ. Gynecol Oncol. 108(1):312-316. (2008). (Awarded by Chien-Tien Hsu Fellowship 2011)*

And other 140 SCI (E) articles.

## **Surgical and oncologic outcomes in endometrial cancer: Population-based cohort study comparing robotic, laparoscopic, and open surgery**

*Young Tae Kim, MD, Ph.D.*

*Division of Gynecologic Oncology, Department of Obstetrics and Gynecology, Yonsei University College of Medicine, Seoul, Korea*

Endometrial carcinoma is the most common female cancer of reproductive tract in developed countries. Surgical intervention is the first step in the management of this malignancy, and the outcomes of surgery can guide the choice of postoperative adjuvant treatment. Various surgical methods including robotic surgery (RS), laparoscopic surgery (LS), and open surgery (OS) have been introduced as option to treat endometrial cancer. Clinical impact of surgical techniques of minimally invasive surgery (MIS) including LS, 3-arm RS, and 4-arm RS has also been studied recently.

Compared to the OS, the LS provides equivalent oncologic outcomes with reduced surgical and postoperative morbidity. However, the steep learning curve associated with the LS restricts its widespread application as a surgical treatment for endometrial cancer. The introduction of robotic surgery (RS) with a relatively shallower learning curve has encouraged more gynecologic oncologists to employ MIS over the OS when treating endometrial cancer, and this has resulted in approximately 80% of patients undergoing hysterectomy for cancer by the RS in the United States.

Therefore, in this presentation, we will discuss studies to compare the perioperative and oncologic outcomes of different surgical approaches with the aim of evaluating the advantages of the RS in the staging of endometrial cancer.



*Frank Louwen*  
(P4)



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CURRICULUM VITAE

**Frank Louwen, M.D., Ph, D.**

2011 Honorary Doctorate (Dr. h.c.) of the Russian Academy of Sciences

Professor & Head Division Obstetrics and Fetomaternal Medicine  
University of Frankfurt/ Main & University Hospital  
60590 Frankfurt/Main, Germany

**Positions**

**1994-2002 University and University Hospital Muenster, Germany**  
1989-1994 Residency in Gynecology and obstetrics, Medical School, Thesis "Diagnostic criteria of HELLP-Syndrome" summa cum laude  
1996 Specialist Gynecology and Obstetrics, Fellowship in Special Obstetrics and Perinatology  
1997 Physician and Head Division of Obstetrics, Prenatal Medicine and Reproductive Medicine  
1998 Deputy Director Department of Gynecology and Obstetrics.  
2002- **University Hospital Frankfurt Goethe-University**  
Full Professor and Director, Department of Obstetrics and Prenatal Medicine, Medical School and University Hospital, Goethe University Frankfurt, Germany

**Academical, social and other Functions**

2023/11- President, European Board and College of Obstetrics and Gynaecology EBCOG  
2023/10- President elect, International Federation of Gynecology and Obstetrics FIGO  
**Past and Founding President:** German-Israel Society for Gynecology and Obstetrics  
Member board quality management of the government of the Federal Republic of Germany  
President, German Women's Health Foundation

**Awards/Honors**

2019 Fellow (ad eundem), RCOG, UK  
2022 Honorary membership AOG, Ukraine  
2022 Honorary membership SOG, Israel  
2022 Active Fellow, AGOS, USA  
2023 Fellow (hon) FOGSI, India  
2023 Fellow (hon) RCPI, Ireland  
2023 Fellow (hon) MOGSI, India  
2024 Fellow (hon) CNGOF, France

## Future of Fetomaternal Medicine

*Frank Louwen  
President Elect, FIGO*

The future of maternofetal medicine will be determined by advances in technology, molecular and cell biology and digital developments. Another factor is the impact of increasing obesity and the growing number of patients with cesarean section status. Obesity and malnutrition will influence the proportion of foetal malformations, pre-eclampsia, glucose metabolism disorders, transmission, induction of labour and, through intrauterine imprinting and epigenetics, complications in childhood and subsequent generations. In pregnancy monitoring, the influence of AI on the evaluation of laboratory diagnostics, particularly in the RNA spectrum, foetal sonography and clinical study development, will be relevant.

Further education and training will be highly relevant in order to reduce complication rates of vaginal deliveries, make inductions more effective and provide safe concepts in diagnosis and treatment for placental disorders.

## *Ranee Thakar* (P5)



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### CURRICULUM VITAE

#### Ranee Thakar, MD

Ranee Thakar MD FRCOG became President of the RCOG on 9 December 2022. She is a Consultant Obstetrician and Urogynaecologist at Croydon University Hospital and an Honorary Senior Lecturer at St George's University of London. In recognition of her leadership, she was awarded the President's Award for Outstanding Leadership by the British Association of Physicians of Indian Origin in 2023. She is the past President of the International Urogynecological Association and was awarded the Distinguished Service Award in 2022. She has received several honorary fellowships from the Indian College of Obstetricians and Gynaecologists, the Royal College of Physicians of Ireland, the Bangladesh College of Physicians and Surgeons and the Japanese College of Obstetrics and Gynaecology.

Ranee has a long-standing commitment to the RCOG, having fulfilled a number of important roles including Secretary of the British Society of Urogynaecology, honorary director of conferences, and Council representative for South Asia.

Most recently, Ranee was Senior Vice President for Global Health, from 2019-2022. Under her leadership, the RCOG global health team secured funding to implement the Essential Gynaecology Skills programme in Bangladesh and she also led the Making Abortion Safe programme, which promotes safe abortion and contraception in five sub-Saharan countries. Maintaining these programmes and expanding the RCOG's global initiatives, to improve the health of women and girls globally is a priority for Ranee

Ranee has a proven track record for supporting colleagues and has made ensuring racial equity within the specialty one of her Presidential priorities. She has led to the delivery of several essential initiatives including an e-learning module on tackling racism, a tool kit on differential attainment and a coaching programme to develop champions who will provide continuing support to the RCOG membership. Ranee continues to lead the RCOG's work to tackle inequalities across women's health.

Ranee has an impressive academic profile with over 200 publications and has made a significant contribution to improving perineal trauma outcomes by training obstetricians and midwives to provide safer maternity care for women globally. She was the clinical lead of the national obstetric anal sphincter injuries (OASI) Care Bundle Project. Regionally, Ranee leads the Perinatal Pelvic Health Project and Urogynaecology network for South-West London, developing multi-disciplinary collaboration with urologists, midwives, physiotherapists, nurses and GPs.

## Management of Obstetric Anal Sphincter Injuries (OASIS)

*Miss Rane Thakar, MD, FRCOG,  
President of the Royal College of Obstetricians and Gynaecologists, Consultant Urogynaecologist, Croydon  
University Hospital, Croydon UK*

Perineal trauma is a highly prevalent condition. The short- and long-term morbidity associated with perineal repair can lead to major physical, psychological, and social problems. Although it would be impossible to completely prevent perineal trauma, it could be minimised. Proven strategies include the practice of perineal massage in the antenatal period, the use of warm perineal compresses in the second stage of labour, restrictive use of episiotomy, preference for a correctly performed mediolateral over a midline episiotomy, and the use of a vacuum extractor instead of forceps for instrumental delivery. Recent years have witnessed a growing interest in the technique of manual perineal protection as a means to reduce anal sphincter trauma. It is possible that one intervention on its own may not be as beneficial as a combination of interventions, and therefore, “care bundles” have been suggested.

To standardise the classification of perineal trauma, the Royal College of Obstetricians and Gynaecologists (RCOG) has adopted a classification that is also recommended by the International Consultation on Incontinence. Prior to repair correct diagnosis of the tear is vitally important. To enable accurate diagnosis a systematic vaginal and rectal examination should be carried out on all women who have a vaginal delivery. The external anal sphincter (EAS) (striated muscle) is a distinct red coloured muscle while the internal anal sphincter (IAS) (smooth muscle) is pale in colour. Repair is carried out according to the grade of tear. The sphincter muscles are repaired with 3-0 polydioxanone (PDS) dyed sutures. When the internal anal sphincter is torn, it should be repaired using an end-to-end repair with interrupted or preferably mattress 3-0 PDS sutures. When the EAS is only partially torn (grade 3a and some 3b), then an end-to-end repair should be performed using two or three mattress sutures instead of haemostatic figure-of-eight sutures. If there is a full-thickness EAS tear (some 3b, 3c, or fourth-degree), either an overlapping or end-to-end method can be used with an equivalent outcome. After the sphincter has been repaired, the perineal muscles should be sutured in a systematic manner to reconstruct the perineal body.

A rectovaginal examination should confirm adequate repair, ensure no additional injuries have been missed, and ensure that all packs or swabs have been removed. Intravenous broad-spectrum antibiotics such as cefuroxime 1.5 g plus metronidazole 500 mg or co-amoxiclav 1.2 g should be commenced intra-operatively and continued orally for at least 3 days. Severe perineal discomfort, particularly following instrumental delivery, is a known cause of urinary retention and is more likely after regional anaesthesia, as it can take up to 12 hours before the return of bladder sensation. A Foley catheter should be inserted for about 24 hours. Detailed notes should be made of the findings and the repair. As the passage of a large bolus of hard stool may disrupt the repair, a stool softener (lactulose 15 mL bd) is prescribed for up to 10 days postoperatively.

*Steven J. Fleischman*  
(P6)



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**CURRICULUM VITAE**

**Steven J. Fleischman**, MD, MBA, FACOG

Associate Chief, Department of Obstetrics & Gynecology, Yale New Haven Hospital

Associate Clinical Professor, Yale University Department of Obstetrics, Gynecology and Reproductive Sciences

**ORGANIZATIONS AND ACTIVITIES**

1997-	American College of Obstetricians and Gynecologists
2024-	President Elect
2022-2024	National Treasurer
2020-Present	Finance Committee Member
2018-2021	Executive Board Member
2022-Present	Executive Board Member
2018-2021	Chair, District I
2021-2024	Member, MFM Division Search Committee
2021-2022	Member, Residency Program Director Search Committee
2017-2018	Member, Reproductive Endocrinology and Infertility Division Chief Search,
2005-2006	President, New Haven County Medical Association
2000-	New Haven Obstetrical Society
2000-	American College of Physician Executives
2007-2008	President, Ob-Gyns for Women's Health
2019-2020	Chair, Woodbridge Board of Education
2016-2019	Chair, Jewish Foundation of Greater New Haven
2020-2022	President, Jewish Federation of Greater New Haven

**AWARDS/HONORS**

2024	Jewish Federation President's Award
2020	ACOG District I Mentor Award
2006	Business New Haven "Top Forty under Forty"
2000	Resident Research Award

## Osteoporosis: Prevention, Screening, Diagnosis and Management

*Steven Fleischman*

Osteoporosis, characterized by reduced bone mineral density and structural deterioration, leads to increased bone fragility and a higher risk of fractures, particularly in the spine, hip, and wrist. Often referred to as the "silent disease," it remains undetected until a fracture occurs, with postmenopausal women being particularly at risk. This presentation highlights the prevalence, risk factors, and strategies for prevention, screening, diagnosis, and management of osteoporosis. Screening through DXA scans and risk assessment tools like FRAX are essential for early diagnosis and fracture prevention. Adequate calcium and vitamin D intake, regular physical activity, and pharmacotherapy, including bisphosphonates and anabolic agents, are key components in managing the disease. Public health initiatives, education, and policy support are critical to improving awareness and access to care. Effective interventions can significantly reduce fracture risk and improve the quality of life for those at risk.

2025 **3**.22~23



2025 **3**.22~23





2025 **3**.22~23



*Young Doctors Session ( I )*

**【 Y1~9 】**



2025 **3**.22~23



*Tian-Jeau Huang* 黃天爵  
(Y1)



**Which is the best approach for embryo transfer with biopsied embryos:  
biopsy-fresh transfer, biopsy-freeze FET, or freeze-biopsy FET?**

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<sup>2</sup> *Women's Health Research Laboratory, Department of Medical Research, Changhua Christian Hospital, Changhua, Taiwan*

<sup>3</sup> *Department of Post-Baccalaureate Medicine, College of Medicine, National Chung Hsing University, Taichung, Taiwan*

**Objective:** To evaluate which clinical outcome is superior for embryo transfer with biopsied embryos: biopsy-fresh transfer, biopsy-freeze FET, or freeze-biopsy FET?

**Materials and Methods:** This retrospective cohort study included all embryo transfer cycles involving biopsied embryos between 2021/01/01 to 2023/12/31 at the ART center in Changhua Christian Hospital, Taiwan. All cycles underwent trophectoderm biopsy for qPCR or array-CGH. Cycles were categorized into three groups based on biopsy and embryo transfer timing: Group A: Embryos cultured to the expanded blastocyst stage, biopsied on day 5 or 6, followed by fresh embryo transfer on the next day after biopsy. Group B: Embryos cultured to the expanded blastocyst stage, biopsied on day 5 or 6, followed by cryopreservation, and thawed embryos-FET. Group C: Freeze all blastocysts, and then thawed embryos for biopsy, and embryo transfer on the next day after biopsy. The primary outcome was the biochemical pregnancy rate. Clinical and ongoing pregnancy rates, miscarriage rates, embryo grading at biopsy and transfer, and the rate of discontinued ET cycles were also evaluated.

**Result:** A total of 426 embryo transfer cycles with biopsied embryos were recorded. After excluding cycles involving donated eggs and untransferred embryos, 304 cycles were included in the study. Embryo morphology before transfer was significantly better in Groups A and C compared to Group B (70.3% vs. 74.78% vs. 41.13%,  $P < 0.05$ ). Chemical, clinical, ongoing pregnancy rates, and miscarriage rates per cycle in Groups B and C showed a better trend compared to Group A, but these differences were not statistically significant.

When comparing Groups B and C, Group C had better embryo morphology before transfer (74.78% vs. 41.13%,  $P < 0.05$ ) with no significant differences in pregnancy or miscarriage rates.

The rate of discontinued embryo transfer cycles did not differ significantly among the three groups (40% vs. 28.3% vs. 25.9%,  $p=0.181$ ).

**Conclusion:** For embryo transfer with biopsied embryos, clinical outcomes are similar across biopsy-fresh transfer, biopsy-freeze FET, or freeze-biopsy FET approaches. Therefore, the most appropriate approach should be based on individual patient circumstances. However, we must consider that Group C had a 25.9% rate of prepared endometrium, but no embryos were transferred.

*Yu-Tung Hsieh* 謝雨彤  
(Y2)



**Clinical Outcomes of Mosaic Embryos Transfer**

*Yu-Tung Hsieh, Yi-Ting Chen, Yi-Lun Lin, Jen-Yu Wen, Yung-Chieh Tsai  
Center for Reproductive Medicine, Department of Obstetrics and Gynecology, Chi Mei Medical Center, Tainan,  
Taiwan*

**Objective:** This study aims to share our experience with mosaic embryo transfers over the past six years. Clinical outcomes and their effects on fetal development will be detailed in this report.

**Materials and methods:** This retrospective study was conducted at a single medical center over a period from August 2018 to November 2024, including all cycles involving mosaic embryo transfer. Mosaicism in embryos was identified using next-generation sequencing (NGS), defined as the presence of intermediate copy number levels (20%– 80% between whole numbers) in a whole chromosome or sub-chromosomal segment. Following thorough counseling and informed consent, patients underwent single embryo transfer with mosaic embryos. The range of mosaicism in the transferred embryos was between 20% and 79%, including cases of partial or segmental deletions. For pregnancies progressing to a gestational age of 16 to 18 weeks, amniocentesis was performed for karyotyping in all cases. The viability of mosaic embryos was assessed by analyzing pregnancy and neonatal outcomes. Key measures include clinical pregnancy rates, ongoing pregnancy rates, live birth rates, and miscarriage rates before 20 weeks of gestation. Neonatal outcomes include birthweight, sex, 1-minute and 5-minute Apgar score, neonatal complications, admission to a neonatal intensive care unit (NICU), congenital malformations, and neurodevelopmental delay.

**Result:** Totally, 15 women underwent single embryo transfer with mosaic embryos. The clinical pregnancy rate was 66.7% (10/15), with no miscarriage reported, ongoing pregnancy rate 66.7% (10/15), and live birth rate 60% (9/15; one on going). The karyotyping results acquired from amniocentesis of all ongoing pregnancies revealed no aneuploidy. The live births were all delivered after term pregnancy (ranged from 37 to 40 weeks of gestation), with mean birthweight 3187.89 gram. There was no preterm delivery or neonatal mortality reported. One newborn required NICU admission due to newborn respiratory distress syndrome, and recovered after nasal CPAP (continuous positive airway pressure) ventilation support. No congenital malformations were noted at birth, nor was there any neurodevelopmental delay observed during subsequent follow-up.

**Conclusion:** The introduction of next-generation sequencing (NGS) in preimplantation genetic testing for aneuploidy (PGT-A) has greatly increased the detection of mosaicism in trophoctoderm (TE) biopsies. Based on six years of follow-up, our findings indicate that transferring mosaic embryos can result in healthy outcomes. However, it remains uncertain whether this is due to the embryo's ability to self-correct or an overestimation of mosaicism by PGT-A. Larger studies are needed to further investigate and clarify these findings.

*Yung Huang* 黃詠  
(Y3)



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**Does the interval between two consecutive cycles of oocyte retrieval have an impact on the outcomes?**

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**Objective:** To assess the association of the interval between two consecutive cycles of oocyte retrieval and the oocyte retrieval outcomes.

**Materials and Methods:** This is a retrospective cohort study, including 1481 patients from 1989 to 2019 in NTUH. All patients who underwent at least two cycles of oocyte retrieval were selected, and the first two cycles of these patients were analyzed. Only those with an interval less than 180 days were included (N=1481), to minimize the effect of aging. Oocyte donors/recipients and those with canceled cycles were excluded. Patients with an interval between cycles <90 days (N=829) were compared to those with an interval 90-180 days (N=652). The primary outcome is the number of retrieved oocytes.

**Results:** The number of retrieved oocytes significantly increased in the consecutive retrieval cycles when the interval was <90 days (1<sup>st</sup> vs. 2<sup>nd</sup> cycles: 5.95 vs. 6.80, p<0.001). Meanwhile, the number of retrieved oocytes in two consecutive cycles was statistically similar when the interval was 90-180 days (1<sup>st</sup> vs. 2<sup>nd</sup> cycles: 8.01 vs. 8.26, p=0.176). In addition, among the patients with interval <90 days, the increment of retrieved oocytes was significant only in those who had <4 oocytes retrieved (1<sup>st</sup> vs. 2<sup>nd</sup> cycles: 1.85 vs. 3.30, p<0.001), or 4-9 oocytes retrieved (1<sup>st</sup> vs. 2<sup>nd</sup> cycles: 5.93 vs. 6.93, p<0.001), but not those who had >9 oocytes retrieved (1<sup>st</sup> vs. 2<sup>nd</sup> cycles: 14.07 vs. 13.41, p=0.052) in their first retrieval cycles. Our study is the largest cohort to date to evaluate the impact of time interval on oocyte retrieval outcomes.

**Conclusion:** An interval < 90 days between two consecutive cycles of oocyte retrieval was associated with an increment of retrieved oocytes in the second cycle, in whom <9 oocytes were retrieved in the first cycle. Although the underlying mechanism remained to be elucidated, it could be one of the possible reasons that the oocyte retrieval operation in the first cycle may serve as a mechanical disturbance of ovarian extracellular matrix, leading to increased hormone sensitivity and therefore increased oocyte numbers. Our study results could provide valuable information for patients who require two consecutive retrieval cycles.



*Ting-Chien Lin* 林廷謙  
(Y4)



**Conservative treatment for early-stage endometrial cancer conservative treatment:  
single-center real-life data and Parallel Artificial Reproductive Treatment (P-ART protocol)**

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<sup>2</sup> *Department of Gynecology and Obstetrics, Kuo General Hospital, Tainan, Taiwan*

**Objective:** To present the experience of conservative treatment for early-stage endometrial cancer, and to report a new protocol for fertility-preserving purpose

**Materials and Methods:** We collected patients with early-stage endometrial cancer that have received conservative treatment from January 2017 to December 2021. Patients with endometrial cancer, endometrioid adenocarcinoma, stage 1A, grade 1-2 were included. Treatment options includes either single regimen or a combination of Medroxyprogesterone (MPA), Leuprorelin, or Levonorgestrel intrauterine device (LNS-IUD). Treatment response is evaluated by hysteroscopic surgery (HSC) or dilatation and curettage (D&C) every three months, and is assigned to stable disease (SD), partial response (PR), or complete remission (CR). Pathological reported as complex atypical hyperplasia or epithelial intraepithelial neoplasm is assigned to PR group. While disease recurred, it is counted as different treatment courses. A complete treatment course is defined until complete remission, or the patient received total abdominal hysterectomy (TAH), loss follow up or expired.

We analysis the treatment response of these patients, including treatment protocol, response rate between different protocol, time to response and time to recurrence. Time to recurrence is defined as an interval between stopping medical treatment and next pathologic confirmed recurrence.

We analyzed patients receiving assisted reproductive technology (ART) at our hospital during conservative treatment, and the fertility outcome of receiving LNS-IUD treatment parallel to ovulation induction for ART, so called P-ART protocol. Time interval was calculated between complete remission and ART.

**Results:** Total 40 patients with early-stage endometrial cancer received conservative treatment. Mean age was 36.2 years old, ranging from 29 to 53 years old. While 11 patients experienced recurrence and 2 of them had twice recurrence, there were total 52 treatment courses. Five treatment courses were ongoing, and 47 treatment courses were completed. The CR rate was 90.4% (47), while 5 patients had stable disease (SD) despite treatment. Of the patients with poor treatment response, three of them received TAH, one loss followed up and one passed away due to disease progression. Mean time to CR was 7.72 months, and mean time to recurrence was 18.9 months. Fifty percents of patients recurred within one year after stopping medical treatment.

After conservative treatment, five patients were conceived. Three of them had given birth, one is currently pregnant, and one had abortion in the first trimester. Eleven patients received ART at our hospital, including 4 of the 5 pregnant patients. Of the seven patients receiving ART after completed conservative treatment, 5 out of 9 complete treatment courses had recurrence during ART course. Two patients had conceived with embryo transfer. One of them gave birth and the other had an abortion. Total five patients received P-ART. One patient had disease progression during treatment and eventually passed away. Of the other four patients who achieved complete remission, 3 of them received embryo transfer in 3 months, and one patient had just completed her treatment course recently. Two of them conceived successfully. One had given birth while the other pregnancy is ongoing.

**Conclusion:** In our retrospective analysis, the reproductive outcome of P-ART protocol was better than receiving ART after stopping conservative treatment, with less recurrence and more successful pregnancy.



*Yi-Hsuan Ho* 何宜軒  
(Y5)



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**Transarterial Embolization for Post-Oocyte Retrieval Hemorrhage: A Case Series**

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**Introduction:** Traditionally, post-oocyte retrieval hemorrhage patients would undergo emergency laparoscopic exploration to identify and control the bleeding site. In these three cases, we opted for conservative treatment, and the outcomes were satisfactory. We aim to preserve the maximum reproductive potential. The conservative management involved extensive blood transfusions, fluid resuscitation, and transcatheter arterial embolization (TAE)

**Result:** All three cases showed a favorable recovery. On the third day after undergoing transcatheter arterial embolization (TAE), the patients were able to walk without any symptoms. On the fourth day, follow-up ultrasound confirmed the status of ascites, and by the fifth day, the patients were stable and discharged. During a follow-up outpatient visit one week later, bedside ultrasound demonstrated that most of the blood clots had been absorbed, and clinical symptoms had fully resolved. One of the cases subsequently achieved a successful pregnancy and delivery.

**Conclusion:** In the cases we encountered, transcatheter arterial embolization (TAE) was successfully employed to control the hemorrhage, including in patients experiencing hypovolemic shock and disseminated intravascular coagulation (DIC). This successful application of TAE in managing severe hemorrhage post-oocyte retrieval demonstrates its potential benefit and supports its use in similar future cases.

*Jie Sung* 宋潔  
(Y6)



## Recombinant Follicle-stimulating hormone and Luteinizing hormone Enhance Mitochondrial Function and Metabolism in Aging Female Reproductive Cells

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<sup>6</sup> Department of Obstetrics and Gynecology, Taipei Veterans General Hospital, Taipei 112, Taiwan;

<sup>7</sup> Department of Medicine, Tri-Service General Hospital, National Defense Medical Center, Taipei 114, Taiwan.

**Background:** Ovarian aging significantly impacts female fertility, with mitochondrial dysfunction emerging as a key factor. This study investigated the effects of recombinant follicle-stimulating hormone (FSH) and luteinizing hormone (LH) on mitochondrial function and metabolism in aging female reproductive cells, particularly granulosa cells.

**Methods:** Human granulosa cells (HGL5) were treated with FSH/LH or not. Mitochondrial function was assessed through various assays including mitochondrial mass, membrane potential, ROS levels, and ATP production. Mitochondrial dynamics and morphology were analyzed using MitoTracker staining. Cellular respiration was measured using a Seahorse Bioenergetics Analyzer. Metabolic reprogramming was evaluated through gene expression analysis and metabolite profiling. In vivo effects were studied using aging mouse oocytes.

**Results:** FSH/LH treatment significantly improved mitochondrial function in aging granulosa cells, increasing mitochondrial mass and membrane potential while reducing ROS levels. Mitochondrial dynamics showed a shift towards fusion and elongation. Cellular respiration, ATP production, and spare respiratory capacity were enhanced. FSH/LH induced favorable alterations in cellular metabolism, favoring oxidative phosphorylation. In aging mouse oocytes, FSH/LH treatment improved in vitro maturation and mitochondrial health.

**Conclusions:** FSH/LH supplementation ameliorates age-related mitochondrial dysfunction and improves cellular metabolism in aging female reproductive cells. These findings suggest potential clinical applications for enhancing oocyte quality and reproductive outcomes in aging women undergoing assisted reproductive technologies.

*Hsin-Tze Hwang* 黃信慈  
(Y7)



**The predictability of serum anti-Müllerian level for cumulative live birth rates in women aged over 40 years**

*Hsin-Tze Hwang<sup>1</sup>, MD, Shan-Chi Chiu<sup>1</sup>, MD, Ming-Huei Lin<sup>1</sup>, MD, Guo-Guang Li<sup>1</sup>, MD, Kuan-Sheng Lee<sup>1</sup>, MD*

*<sup>1</sup>Department of Obstetrics and Gynecology, Mackay Memorial Hospital, Taipei, Taiwan*

**Objective:** To investigate the impact of age and anti-Müllerian hormone (AMH) levels on in vitro fertilization (IVF) outcomes in women aged  $\geq 40$  years, focusing on cumulative live birth rates (CLBR) and clinical predictors of success.

**Materials and Methods:** This retrospective study included 459 women aged  $\geq 40$  years undergoing IVF treatment, stratified into three age groups: Group 1 (40– 41 years,  $n = 270$ ), Group 2 (42– 43 years,  $n = 131$ ), and Group 3 ( $\geq 44$  years,  $n = 58$ ). Key parameters analyzed included AMH levels, oocyte retrieval rates, clinical pregnancy rates, live birth rates, and CLBR per intention-to-treat (ITT). Statistical analyses identified predictive markers of IVF outcomes.

**Results:** AMH levels and oocyte retrieval rates significantly declined with age ( $P < 0.001$ ). Clinical pregnancy rates per cycle start were 25.2% (Group 1), 17.3% (Group 2), and 7.0% (Group 3,  $P = 0.001$ ). Live birth rates per embryo transfer also declined: 21.3% (Group 1), 10.2% (Group 2), and 1.8% (Group 3,  $P < 0.001$ ). CLBR per ITT decreased significantly with age: 28.9% (Group 1), 11.0% (Group 2), and 1.8% (Group 3,  $P < 0.001$ ). AMH demonstrated moderate predictive performance for CLBR (AUC = 0.646). No live births were observed in women aged  $\geq 42$  years with AMH  $\leq 0.2$  ng/mL. Regression analysis confirmed a strong correlation between AMH levels and CLBR. For women aged  $\geq 42$  years with AMH  $\leq 0.3$  ng/mL, CLBR after three IVF cycles was only 2.8%. Two predictive markers of poor outcomes were identified: (1) age 42– 43 years with AMH  $< 0.925$  ng/mL, and (2) AMH  $< 0.27$  ng/mL, which was associated with no live births.

**Conclusion:** Age and AMH levels are significant predictors of IVF outcomes in women aged  $\geq 40$  years. Particularly poor prognoses were noted in women aged  $\geq 42$  years with low AMH levels. These findings highlight the importance of individualized counseling and treatment strategies for this population.

*Ming-Ju Wang* 王敏如  
(Y8)



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## Clinical and sonographic risk factors for developing pre-eclampsia refractory to aspirin prophylaxis

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<sup>a</sup> Department of Obstetrics and Gynecology, MacKay Memorial Hospital, Taipei, Taiwan  
<sup>b</sup> Department of Medicine, MacKay Medical College, New Taipei City, Taiwan

**Objective:** Identify risk factors for development of preeclampsia refractory to aspirin prophylaxis in women at high-risk of preeclampsia.

**Materials and Methods:** A retrospective cohort study analyzed 206 women identified as high-risk for preeclampsia through first-trimester screening and prescribed aspirin prophylaxis. We compared maternal characteristics, medical history, biochemical markers, and uterine artery Doppler indices between those with and without preeclampsia.

**Result:** Women with preeclampsia had significantly higher rates of chronic hypertension (54.3% vs. 8.2%), higher first-trimester mean arterial pressure (MAP, 109.6 vs. 95.4 mmHg), and higher body mass index (BMI 27.6 vs. 24.9) compared to controls. Second-trimester MAP and mean uterine artery pulsatility index (UtA-PI) were also significantly elevated in the preeclampsia group (103.3 mmHg and 1.39, respectively) compared to controls (89.7 mmHg and 1.05). ROC curve analysis identified an optimal second trimester UtA-PI cut-off 1.36 for predicting preeclampsia, with sensitivity of 49% and specificity of 87.1%. When using a cut-off value of 1.36 for predicting preeclampsia, with sensitivity of 49% and specificity of 87.1%. When using a cut-off value of 0.77 for the second-to-first trimester UtA-PI ratio, the sensitivity and specificity were 60% and 90.6%, respectively.

**Conclusion:** Chronic hypertension, high first and second trimester MAP, higher BMI and elevated second trimester UtA-PI or the ratio of second to first trimester UtA-PI may be a promising tool for identifying women who do not respond to aspirin.

*Yu-Wei Chang* 張祐維  
(Y9)



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## The benefit of routine 2nd trimester screening of anemia

*Yu-Wei Chang*

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**Objective:** To investigate the impact of mid-trimester anemia screening on the improvement of anemia at delivery and its correlation with adverse fetal outcomes.

**Methods:** A retrospective review was conducted on 1,000 women with documented hemoglobin levels at their first prenatal visit at Taipei Mackay Memorial Hospital (2018– 2022). Anemia was defined as hemoglobin <11.0 g/dL in the first and third trimesters and <10.5 g/dL in the second trimester. Hemoglobin levels were measured at 8– 12 weeks, 24– 28 weeks, and at delivery.

**Results:** Anemia in the third trimester was significantly associated with low 5-minute Apgar scores ( $p=0.04$ ), neonatal hospitalization, ICU admission, and mortality ( $p=0.03$ ). Logistic regression revealed that during the second trimester, the "Hb  $\leq 10$  g/dL" group had a higher risk of low Apgar scores compared to the "Hb  $> 11$  g/dL" group ( $p=0.04$ ). After excluding preterm births, a significant association was found between anemia combined with vitamin D deficiency and neonatal hospitalization, ICU admission, or mortality ( $p=0.046$ ).

**Conclusion:** A significant correlation exists between anemia in late pregnancy and adverse neonatal outcomes, particularly low Apgar scores (<5) and increased neonatal hospitalization.

*Young Doctors Session ( II )*

**【 Y10-17 】**



2025 **3**.22~23





*Chia-Hsuan Yang* 楊佳璇  
(Y10)



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**Comparison between MUS concurrent with PRS and MUS after PRS in treating stress urinary incontinence**

*Chia-Hsuan Yang MD<sup>1</sup>, Tsia-Shu Lo MD<sup>1,2</sup>, Wu-Chiao Hsieh MD<sup>1</sup>, Yi-Hao Lin MD<sup>1,2</sup>, Alex C Wang MD<sup>1</sup>*

*<sup>1</sup>. Dept. of Obs. and Gyn., Keelung, /Taipei/, Linko, Chang Gung Memorial Hospital, Taiwan*

*<sup>2</sup> Chang Gung University, School of Medicine, Taiwan*

**Introduction:** The goal of this study was to assess the outcomes of patients with symptomatic POP and SUI who underwent either a combined surgery or POP repair first, followed by SUI repair as a second stage. As far as we know, no large-scale study has been performed so far to answer this question.

**Material and Methods:** This was a comparative retrospective study, performed in a tertiary referral center. The medical records of 2,876 patients with symptomatic advanced POP (POP-Q stage III and IV) were reviewed. The cohort included two groups: first, patients with who were treated with PRS and MUS at the same time. Second, patient who underwent extensive PRS surgery only. According to their post-operative clinical and subjective findings, they underwent secondary MUS. Patients with previous pelvic surgeries or prior mesh installment, or those who were medically unfit for surgery, were excluded. The TVM types include Perigee, Avaulta, PROLIFT, Elevate A, Uphold, Surelift and Calistar-S. The MUS procedures included Gynecare TVT, Monarc, Obtryx, KIM Miniarc, Ophira, Ajust or Solyx. The primary outcome was objective and subjective cure rates after one year follow-up. Secondary outcome included quality of life, presence of lower urinary tract symptoms (LUTS) and surgical complications.

**Results:** A total of 478 patients included in the combined-surgery group and 82 were included in the 2-staged group. The objective cure rate in the combined group was 90%, whereas the subjective cure rate was 89.1%. The objective and subjective cure rates in the staged group were lower: 81.7% and 79.3%, respectively. The pre-operative occult SUI sub-group outperformed the overt sub-group in terms of objective cure rate (92.1% vs. 85.8%, respectively,  $p = 0.03$ ) and subjective cure rate (91.8% vs. 84.0%, respectively,  $p = 0.012$ ). Patients in the Staged group were younger and had a higher BMI. Patients in that group had a higher degree of SUI, as evidenced by lower MUCP and FL values, a higher rate of ISD, higher Pad test (27.6 grams vs. 11.8 grams,  $p < 0.001$ ) and worse findings in the urodynamic study (UDS). Patients in the staged group scored lower on the UDI-6, IIQ-7, and POPDI-6 questionnaires, indicating a substantial difference in pre-operative subjective appraisal. However, it was not visible after surgery.

**Conclusions:** This study shows that combined surgery for treatment of POP and SUI is more efficient than staged one, in 12-months follow-up period. Furthermore, patients with occult SUI had better outcome than those with overt SUI.

*Chien-Chien Yu* 游千千  
(Y11)



**Outcomes on mid-urethral sling for Urodynamic stress incontinence following extensive pelvic reconstructive surgery**

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**Introduction and Hypothesis:** To assess the outcomes of mid-urethral sling (MUS) procedures for urodynamic stress incontinence (USI) following extensive pelvic reconstructive surgery (PRS) and identify risk factors for persistent USI (P-USI).

**Methods:** This retrospective study analysed eighty-four women who underwent staged approach of MUS for USI after PRS for advanced pelvic organ prolapse (POPQ III and IV). The primary outcome was objective cure rate, defined by negative urine leakage on UDS and a 1-hour pad test weight of <2 grams. Subjective cure rate was through negative response to question 3 of UDI-6.

**Results:** The overall objective cure rate was 81.0%. The highest cure rate was observed in de novo USI (MUS-D) (89.7%) compared to women with persistent USD (MUS-P). Patients with overt SUI exhibited lower cure rates than those with occult SUI. Predictive factors for persistent USI were lower preoperative maximum urethral closure pressure (MUCP) ( $p = 0.031$ ) and higher BMI in the MUS-P group compared to the MUS-D group ( $p = 0.008$ ). Subjective improvement was noted especially in the MUS-D group, with a subjective cure rate of 78.6%. Those with MUS-D reported a higher impact on patient well-being post-surgery. No complications observed after MUS surgery at follow up.

**Conclusions:** Overt USI, low MUCP and high BMI are independent predictors for persistent USI after staged MUS approach after pelvic reconstructive surgery.

**Keywords:** Mid-urethral sling, pelvic reconstructive surgery, pelvic organ prolapse, de novo stress urinary incontinence, persistent urinary incontinence

*Yi-Chi Chen* 陳昱綺  
(Y12)



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## Voiding Dysfunction in Patients with Advanced Pelvic Organ Prolapse and Bladder Outlet Obstruction Following Pelvic Reconstructive Surgery: Urodynamic Profile and Predictive Risk Factors

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**Study Objective:** To determine the outcome of voiding function 1 year following Pelvic Reconstructive Surgery (PRS) in women with Bladder Outlet Obstruction (BOO).

**Design:** Retrospective cohort study

**Setting:** Tertiary Referral Hospital

**Patients:** One thousand eight hundred and ninety-four (1894) women underwent PRS for advanced Pelvic Organ Prolapse (POP) stage III-IV with urodynamic findings of BOO

**Interventions:** Pelvic Reconstructive Surgery

**Measurements:** The primary outcome measured was the resumption of normal voiding function, defined clinically and with multichannel urodynamic (UDS) testing at one year post-operatively. The secondary outcomes are to identify the different risk factors for persistence voiding dysfunction 1 year after PRS.

**Main Results:** Total of 431 women with POP-Q Stage III and IV, UDS of Qmax <15 ml/s and PdetQmax >20cmH20 were included. Resumption of normal voiding function were found in 91% (n=392/431), while 9% (n=39/431) remains to have voiding dysfunction (VD) 1 year post operatively. Those with persistent VD, 20.5%(n=8/39) remains having urodynamic diagnosis of BOO. Univariate and multivariate logistic regression reveals factors associated with post-operative VD are pre-operative maximal cystometric capacity (MCC) >500 ml and PVR > 200ml.

**Conclusion:** Voiding Dysfunction may persist in women with BOO following PRS, particularly in those with pre-operative MCC >500ml and post-void residual volume >200ml.

Chieh-Ju Lin 林潔如  
(Y13)



## Predictors of Surgical Failure following Sacrospinous Ligament Fixation using Anchorsure device

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**Objective:** To identify the factors associated with pelvic organ prolapse (POP) recurrence after sacrospinous ligament fixation using Anchorsure device

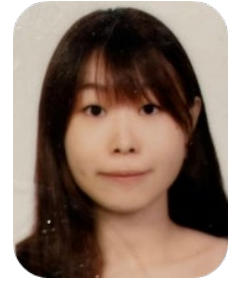
**Study design:** Ninety-two women with symptomatic POP stage II to IV were scheduled for Sacrospinous Ligament Fixation. All subjects underwent urinalyses and pelvic examination using the POP quantification (POP-Q) staging system before and after surgery.

**Results:** Seven (7.6%) of 92 women reported POP recurrence after follow-up time of 12-34 months. We performed a univariate analysis of patients' characteristics to identify the predictors of surgical failure after TVM. There was no difference between two groups as to body mass index, POP stage, hysterectomy, and preoperative urinary symptoms ( $P > 0.05$ ). However, we found the functional advanced cystocele ( $P = 0.01$ ), rectocele ( $P = 0.007$ ), and POP-Q point Bp of  $> 1$  ( $P = 0.019$ ) were significant predictors of surgical failure. Multivariate logistic regression showed similar results.

**Conclusions:** Advanced cystocele, rectocele, and POP-Q point Bp of  $> 1$  were significant predictors of surgical failure following sacrospinous ligament fixation with Anchorsure device. POP recurrence remains a risk in untreated compartments following apical suspension, regardless of surgical experience.

**Key words:** Pelvic organ prolapse, recurrence, surgical failure, sacrospinous ligament fixation, apical prolapse

*Aileen Ro* 羅艾琳  
(Y14)



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## In Vitro and In Vivo Morphology and Mechanical Properties of Three-Dimensional (3D) Polycaprolactone Stem Cells Coated Compound Mesh: Invention for Pelvic Floor Reconstructive Surgery

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**Objective:** The usage of transvaginal mesh to restore anatomical structure in the treatment of pelvic floor dysfunction carries significant long-term complications. In the search of an ideal mesh suitable for pelvic reconstructive surgery, this study aimed to develop a biocompatible substitute to improve the tissue function using a printed 3D polycaprolactone (PCL) mesh cultivated with human amniotic fluid stem cells (hAFSC) as a scaffold.

**Material and Methods:** The longer degradation properties of PCL is chosen to serve as a scaffold and reservoir for hAFSC, in the attempt to achieve a mesh complex with good biocompatibility, biodegradable, with adequate mechanical strength and tissue generation. The PCL mesh was seeded with hAFSC, and its metabolic activity were evaluated in vitro.

**Results:** Implantation of PCL-hAFSC mesh and PCL mesh were conducted on Sprague-Dawley rats reveals cell viability and proliferation of hAFSC presents throughout study. There was no local inflammatory reaction to surrounding tissue suggesting its biocompatibility. The biomechanical properties of tissue-mesh complex tension-strength declined over time, showing highest tension strength on the first month, with mesh seeded with hAFSC providing higher strength compared to mesh stand-alone.

**Conclusions:** This study shed potential of 3D printed PCL cultivated with hAFSC as an ideal mesh for the surgical treatment in pelvic reconstructive surgery.

*Yu-Ling Tu* 涂育綾  
(Y15)



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**Risk factors of persistent de Novo SUI following TVM surgery and how to treat it?**

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**Objective:** To investigate risk factors of persistent de novo SUI post TVM surgery.

**Materials and Methods:** Fifty women with symptomatic POP stages II to IV defined by the POP quantification (POP-Q) staging system developed de novo SUI after receiving TVM procedures at our hospital. Amongst them, SUI condition of fifteen women resolved by itself six months later while others remained. The Preoperative and postoperative assessments included POP-Q parameters, multiple validated questionnaires and urodynamic studies were compared between the two groups.

**Result:** 30% (15/50) of de novo SUI will cure without treatment. POP duration, preoperative pad test and concomitant posterior mesh repair ( $P < 0.05$ ) were risk factors associated with persistent de novo SUI six months following surgery. Only 4% of women with persistent de novo SUI require further sling surgery.

**Conclusion:** Only 4% of women with persistent de novo SUI need additional sling surgery. Vaginal laser may be an alternative method for persistent de novo SUI.

*Chien-Tung Lin* 林建棟  
(Y16)



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**Modified Surelift anterior-apical transvaginal mesh for advanced urogenital prolapse: Retrospective surgical, functional and sonographic outcomes at 3 years**

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**Objective:** This study evaluates the outcomes of modified transvaginal mesh (TVM) Surelift in managing advanced pelvic organ prolapse (POP) over a 3-year follow-up period, focusing on surgical success, functional improvement, and sonographic findings.

**Methods:** A retrospective review was conducted on 99 women who underwent Surelift System surgery for advanced POP Stage III and IV between July 2018 to January 2020. Objective evaluation included Pelvic Organ Prolapse Quantification (POP-Q), multichannel urodynamic (UDS), and introital 2D ultrasonographic measurement. Subjective evaluation uses validated questionnaires of Incontinence Impact Questionnaire-7(IIQ-7), Urogenital Distress Inventory-6(UDI-6), Pelvic Organ Prolapse Distress Inventory 6(POPDI-6), Colorectal Anal Distress Inventory-8(CRADI-8) and Pelvic organ prolapse/ Urinary Incontinence Sexual Questionnaire (PISQ-12). Outcomes were examined at 3 months, yearly and at 3 years postoperative. Secondary outcome included de novo or persistent urodynamic stress incontinence (USI) and surgical complications.

**Results:** Eighty-five women were included in the final analysis. At 3 years postoperative, the objective cure rate was 94.1 % and subjective cure rate of 91.8 %. Ultrasonography revealed initial mesh elongation and thickening at first year, resolving by the third year, while the distance between the bladder neck and mesh remained stable. Significant improvement in POP-Q components (Aa,Ba,C,Ap,Bp and TVL of  $p < 0.001$ ), UDS ( $p < 0.001$ ) and all validated Quality of Life (QoL) questionnaires ( $p < 0.001$ ) were seen. De Novo USI and persistent USI occurred in 31.5 %. Complications included vaginal mesh exposure requiring excision in 4.7 % of patients, and one intra operative bladder injury corrected promptly.

**Conclusion:** The Surelift System TVM demonstrates safety and efficacy in treating advanced anterior-apical POP, achieving high cure rates, secured mesh placement, and minimal complications at 3 years post-operative.



*Han-Ni Li* 李函妮  
(Y17)



## Efficacy and Safety of Solifenacin with Local Estrogen Versus Combination Treatment with Mirabegron and Solifenacin for Refractory Overactive Bladder in Menopausal Women: A Randomized Clinical Trial

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**Objective:** Refractory OAB may require multidrug treatments, which can lead to poor compliance due to side effects. This study aimed to compare the outcomes of solifenacin combined with mirabegron or local estrogen for refractory OAB in menopausal women. We hypothesize that topical estrogen can be an effective alternative.

**Methods:** This randomized clinical trial was conducted between January 2024 and June 2024. Patients who failed to respond to monotherapy were recruited and randomly assigned (1:1) to one of two 12-week treatments: solifenacin 5 mg once daily plus mirabegron 25 mg (Group A) or solifenacin 5 mg once daily plus 0.5 g conjugated estrogen intravaginal cream (0.625 mg/g) twice weekly (Group B). OAB symptoms and quality of life were assessed before and after treatment. Primary endpoints included urgency, frequency, nocturia, and incontinence episodes within 24 hours. Quality of life was evaluated using the short forms of the Incontinence Impact Questionnaire (IIQ-7), Urogenital Distress Inventory (UDI-6), and Overactive Bladder Symptom Score (OABSS). Adverse events were also analyzed. Continuous variables were compared using Student's t-tests, while categorical variables were assessed with Fisher's exact test or chi-square test. Paired t-tests were used to compare continuous variables before and after treatment.

**Results:** A total of 90 women were enrolled, with 67 (74%) completing the 12-week treatment. Group A (solifenacin + mirabegron, n=37) showed significant improvements in quality of life (IIQ-7:  $9.8 \pm 6.4$  vs.  $7.5 \pm 6.3$ ,  $p=0.015$ ; OABSS:  $9.2 \pm 3.3$  vs.  $6.5 \pm 3.8$ ,  $p=0.004$ ) and OAB symptoms, including micturition ( $10.0 \pm 4.6$  vs.  $7.1 \pm 4.8$ ,  $p=0.004$ ), nocturia ( $3.1 \pm 1.5$  vs.  $2.1 \pm 1.5$ ,  $p=0.002$ ), and urgency incontinence ( $2.9 \pm 3.0$  vs.  $1.5 \pm 1.7$ ,  $p=0.021$ ). Group B (solifenacin + estrogen, n=30) showed improvements in UDI-6 ( $6.9 \pm 3.8$  vs.  $5.3 \pm 4.1$ ,  $p=0.006$ ) and IIQ-7 ( $7.7 \pm 5.9$  vs.  $5.7 \pm 5.3$ ,  $p=0.013$ ), with marginal improvements in OABSS ( $7.9 \pm 3.5$  vs.  $6.6 \pm 3.8$ ,  $p=0.051$ ) and micturition ( $9.2 \pm 3.7$  vs.  $7.7 \pm 4.1$ ,  $p=0.058$ ). No significant differences were found in treatment satisfaction or adverse events between the groups.

**Conclusion:** Topical estrogen may be a safe and effective alternative to combination treatment for menopausal women with refractory overactive bladder.



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*Young Doctors Session (Ⅲ)*

**【Y18-24】**



2025 **3**.22~23



*Tzu-Ya Wang* 王姿雅  
(Y18)



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The oncologic and reproductive outcomes after fertility-sparing surgery in ovarian and endometrial cancers

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**Objective:** To evaluate the oncological and reproductive outcomes of fertility preservation in reproductive-aged patients diagnosed with ovarian cancer (OC) and endometrial cancer (EC).

**Background:** Ovarian cancer (OC) and endometrial cancer (EC) are common gynecological malignancies diagnosed in reproductive-aged individuals. Surgery is the definitive procedure for staging and treatment of both OC and EC. However, for patients desiring future pregnancies, it is crucial to provide oncological treatment while preserving fertility whenever feasible.

**Methods:** A retrospective cohort study was conducted on women under the age of 45 diagnosed with OC or EC who underwent fertility-sparing surgery (FSS) between January 2019 and December 2023 at Taipei Veterans General Hospital, a national medical center in Taiwan. The study evaluated treatment outcomes, including fertility preservation strategies, oncological outcomes (recurrence rates and recurrence-free survival [RFS] following recurrence), and fertility outcomes, such as the number of oocytes retrieved, fertilization rates, and clinical pregnancy rates.

**Results:** A total of 165 patients aged 18 to 45 years at the time of initial diagnosis were reviewed. Among these, 25.5% (23/90) of patients with EC and 34.6% (26/75) of patients with OC underwent fertility-sparing surgery (FSS). FSS was considered for patients with stage IA EC, stage I OC, and borderline ovarian tumors. Among those who underwent FSS, ten patients utilized assisted reproductive technologies, including eight who underwent oocyte cryopreservation and three who opted for embryo cryopreservation. Five patients achieved pregnancy, and three had live births.

**Conclusion:** Fertility-sparing surgery may be a viable option for patients with early-stage ovarian and endometrial cancers who wish to preserve fertility. However, this approach carries a risk of recurrence. Therefore, a thorough understanding of the associated risks and benefits, along with a well-structured follow-up plan, is essential prior to surgery.

*Tyan-Shin Yang* 楊恬欣  
(Y19)



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**Anti-B and T lymphocyte Attenuator (BTLA) can be a Potential Target of Immunotherapy in Epithelial Ovarian Cancer (EOC)**

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**Objective:** Analyzing peripheral blood mononuclear cells (PBMCs) to assess the effect of BTLA in immunotherapy for advanced epithelial ovarian cancer. (EOC)

**Methods:** Preoperative PBMCs from 69 advanced EOC cases were collected to analyze the correlation between IC-expressing immune cells and survivals of patients. The co-expression of various ICs on T lymphocytes from these patients was assessed using the t-distributed stochastic neighbor embedding algorithm. The activation potential of programmed cell death 1 (PD-1)+ herpes virus entry mediator (HVEM)+ T cells in PBMCs from healthy donors, as well as the tumoricidal capabilities of PBMCs treated with various immune checkpoint inhibitors (ICIs), were evaluated in vitro. The effects of the respective ICIs on T cell activation in PBMCs were investigated as well.

**Results:** The percentages of PD-1+ helper and cytotoxic T cells in the PBMCs of patients were positively associated with both disease-free survival and overall survival. The co-expression of HVEM on these PD-1+ T lymphocytes was distinctly characterized. Prediction potential for overall survival based on the subpopulations of PD-1+ helper or cytotoxic T cells surpassed that of other parameters. The PD-1+HVEM+ helper and cytotoxic T cells exhibited features of an activated phenotype in response to activation signals. PBMCs treated with anti-B and T lymphocyte attenuator (BTLA) along with anti-cytotoxic T lymphocyte antigen 4 (CTLA-4) or anti-PD-1 antibodies demonstrated strong tumor-killing capabilities. Anti-BTLA antibodies can promote T cells within the PBMCs toward an effector status.

**Conclusions:** Percentages of PD-1+ T cells in the PBMCs could predict survivals of EOC patients. Targeting HVEM-BTLA axis may be considered for current ICI treatment of EOCs. The percentages of PD-1+ T cells in PBMCs could predict the survival of patients with EOC. Targeting the HVEM-BTLA axis may be a viable consideration for current ICI treatment of EOCs.

*Chien-Hsiang Kao* 高健祥  
(Y20)



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**Real-World Analysis of Pembrolizumab in Gynecologic Cancer: Efficacy, Adverse Events and Correlation with Clinical and Pathological Features**

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**Objective:** This study aims to present our real-world analysis of pembrolizumab including efficacy, adverse events and correlation with clinical and pathological features in gynecologic cancer.

**Materials and Methods:** The study included patients who had received pembrolizumab treatment at Kaohsiung Chang Gung Memorial Hospital from May 2017 to July 2024 and who were pathologically diagnosed with gynecological malignancies. In addition to clinical parameters, pathologic features and treatment outcomes as well as immune-related adverse events (irAEs) and the management were documented. Correlations between these would be analyzed.

**Result:** Eighty-three patients were identified in this analysis. The best overall response of an objective response rate (ORR) was 40.9%. IrAE of any grade occurred in around half of patients with the most common was dermatitis followed by hypothyroidism and hyperthyroidism. Among all patients, 7% of them presented with grade 3 adverse events. There were no documented fatalities attributed to irAEs, and no grade 4 irAEs were identified within our cohort. Furthermore, patient with irAEs had significantly better objective response rate compared to those without irAEs.

**Conclusion:** The observed efficacy of pembrolizumab and incidence of irAEs in gynecology oncologic patients undergoing pembrolizumab treatment was comparable to that reported in previous studies. Our experience with irAEs underscores the importance of timely identification, a comprehensive understanding of management, and early intervention in immunotherapy.



*Hao-Yang Chang* 張皓揚  
(Y21)



**Should early-stage grade 3 endometrial endometrioid adenocarcinoma be treated as 2023 FIGO stage IIC?**

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According to the FIGO 2023 staging system for endometrial cancer, grade 3 endometrioid was classified as aggressive type which involved traditional type 2 endometrial cancer. Historically, grade 3 endometrioid adenocarcinoma was managed with local treatment, whereas type 2 endometrial cancer required the addition of systemic treatment. Some study emphasized the importance of addition systemic treatment for grade 3 endometrioid adenocarcinoma due to poorer prognosis.

This study aims to clarify whether early-stage (stage IA – stage II) grade 3 endometrioid adenocarcinoma should be considered as type 2 endometrial cancer and followed the same treatment strategy. Additionally, a subgroup analysis will explore the prognostic differences between FIGO 2023 stage IC and stage IIC patients.

We conducted a retrospective study involving patients diagnosed with early-stage grade 3 endometrioid adenocarcinoma and type 2 endometrial cancer between 2019 to 2024 in MacKay Memorial Hospital. Patients were categorized based on whether they received local treatment alone or combined local and systemic therapy. Survival outcomes, including overall survival (OS) and disease-free survival (DFS), were analyzed. Subgroup analyses were performed to assess prognostic differences between FIGO 2023 stage IC and stage IIC patients.

A total of 49 patients with early-stage grade 3 endometrioid adenocarcinoma and 49 patients with type 2 endometrial cancer were included. Patients with grade 3 endometrioid adenocarcinoma who received only local therapy had similar OS and DFS to those with type 2 endometrial cancer who received systemic treatment. Subgroup analysis revealed that FIGO 2023 stage IIC patients had worse prognoses compared to stage IC patients, regardless of histological type.

In conclusion, early-stage grade 3 endometrioid adenocarcinoma have a favorable prognosis even when managed with local treatment alone, challenging the necessity of adding systemic therapy. The prognostic differences between FIGO 2023 stage IC and stage IIC further support the need for tailored treatment strategies. Further prospective studies are recommended to confirm these findings and optimize management approaches for patients with early-stage grade 3 endometrioid adenocarcinoma.



*Ta-Cheng Lee* 李大成  
(Y22)



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## Gravity versus Pump Infusion of Distending Media for Hysteroscopic Myomectomy: A Retrospective Cohort Study

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**Objectives:** To compare the clinical outcomes between gravity and pump infusion methods for administering distending fluid while performing hysteroscopic myomectomy.

**Methods:** Clinical and perioperative outcomes of women who underwent hysteroscopic myomectomy with distending fluid infusion by gravity (n=64) or pump methods (n=34) were reviewed.

**Results:** Immediate ( $1.23 \pm 0.84$  vs.  $0.64 \pm 0.64$ ,  $p < 0.001$ ) and 30 minutes later ( $0.99 \pm 0.49$  vs.  $0.67 \pm 0.33$ ,  $p < 0.001$ ) postoperative pain scores in the recovery room were higher in the gravity group, compared to the pump group. Multivariable regression analysis revealed that the use of the pump infusion method was a predictor of a lower immediate (coefficient =  $-0.50$ , 95% confidence interval (CI) =  $-0.91$  to  $-0.10$ ,  $p = 0.015$ ) and 30 minutes later (coefficient =  $-0.33$ , 95% CI =  $-0.56$  to  $-0.09$ ,  $p = 0.006$ ) postoperative pain score. However, the volume of infused fluid, the volume of collected fluid, the fluid deficit and surgical time did not differ between these two groups.

**Conclusions:** The pump infusion method appear to be associated with postoperative pain, compared to gravity infusion.

*I-Chieh Sung* 宋怡潔  
(Y23)



## The Therapeutic Effect of Monopolar Radiofrequency Therapy on Urinary Symptoms and Sexual Function

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**Objectives:** Stress urinary incontinence (SUI) negatively affects the quality of life and sexual function in women. This study aimed to evaluate the efficacy of radiofrequency (RF) therapy in reducing SUI symptoms and its impact on sexual function.

**Methods:** Thirty-four women with SUI were enrolled and underwent a single RF treatment session using the Viveve® System (Viveve Medical Inc., USA) with parameters of 90 J/cm<sup>2</sup> and 220 pulses per hour. Assessments at baseline and 6 months post treatment included perineal ultrasound and personal interviews to evaluate lower urinary tract symptoms and sexual function. Urodynamic studies, voiding diaries, and questionnaires such as the Female Sexual Function Index (FSFI), Overactive Bladder Symptom Score (OABSS), Urogenital Distress Inventory-6 (UDI-6), Incontinence Impact Questionnaire-7 (IIQ-7), and International Consultation on Incontinence Questionnaire—Short Form (ICIQ-SF) measured outcomes.

**Results:** RF therapy significantly improved sexual function, with higher FSFI scores in all domains except pain at 6 months. SUI symptoms were significantly reduced, as indicated by improved scores on OABSS, UDI-6, IIQ-7, and ICIQ-SF, alongside better voiding diary results. Anatomical changes included reduced bladder neck mobility, decreased vaginal width, and a reduced rotation angle of the proximal urethra.

**Conclusions:** RF therapy is effective and safe for treating mild to moderate SUI and enhances sexual function, potentially due to changes in vaginal topography. These results suggest RF therapy as a viable non-surgical option for managing SUI and improving sexual health.

Ya-Chu Wu 吳雅筑  
(Y24)



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Extracorporeal shockwave therapy for women' s pelvic floor myofascial pain: A retrospective cohort study

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**Objective:** Chronic pelvic pain (CPP) is a common problem affecting the quality of life of women worldwide. Pelvic floor myofascial pain (PFMP) is a common cause of CPP. The therapeutic effect of extracorporeal shock wave therapy (ESWT) on women with PFMP is poorly understood. We aimed to explore the therapeutic effect of ESWT on PFMP and pelvic floor dysfunction scores.

**Methods:** Twenty female patients with PFMP were enrolled in this study from July 2022 to February 2024 and underwent ESWT. Every patient underwent a comprehensive initial assessment that involved a detailed medical history and thorough physical examination. The baseline symptoms evaluation of each patient was assessed using the Visual Analogue Scale (VAS) and Pelvic Floor Disability Inventory-20 (PFDI-20). Patients positioned in lithotomy received ESWT treatment at perineum once a week for four consecutive weeks, with 2000 pulses administered at each session.

**Results:** The median age was 55 years (IQR: 47.5-63.0). Compared to the baseline parameters, the median VAS decreased significantly from 7.0 to 2.0 after four weeks ( $p=0.0002$ ). The median PFDI-20 decreased from 33.0 to 26.5 after four weeks ( $p=0.0002$ ). In the subgroup of PFDI-20, the median Pelvic Organ Prolapse Distress Inventory-6 (POPDI-6) score decreased from 11 to 8.0 ( $p=0.0002$ ), the median Colorectal-Anal distress Inventory 8 (CRAD-8) score decreased from 13 to 10 ( $p=0.0129$ ), and the Urinary distress Inventory 6 (UDI-6) score decreased from 10 to 9 ( $p=0.0042$ ) after four-week treatment.

**Conclusions:** ESWT therapy might be a safe and effective treatment for managing patients with PFMP. However, larger prospective trials are required to validate our findings.

