

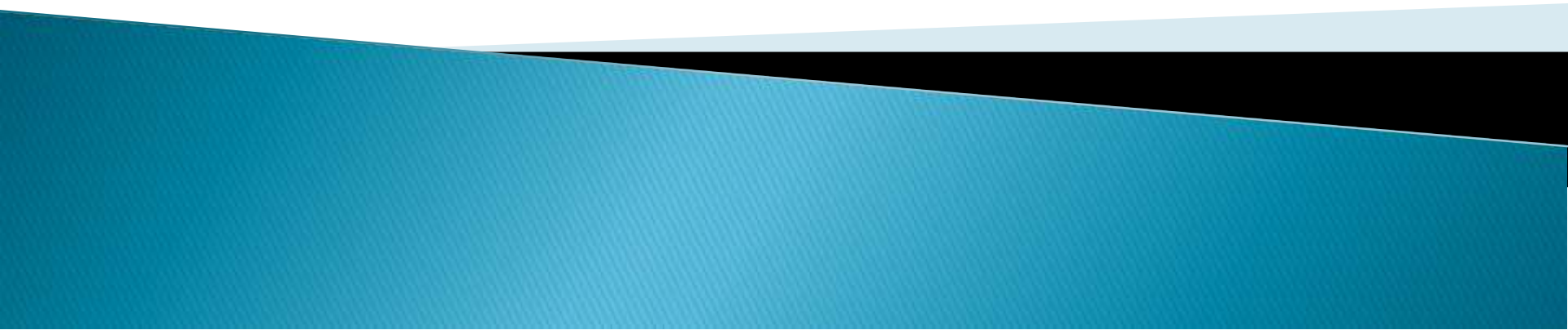
# Workshop in Contraception

McGill Annual Refresher

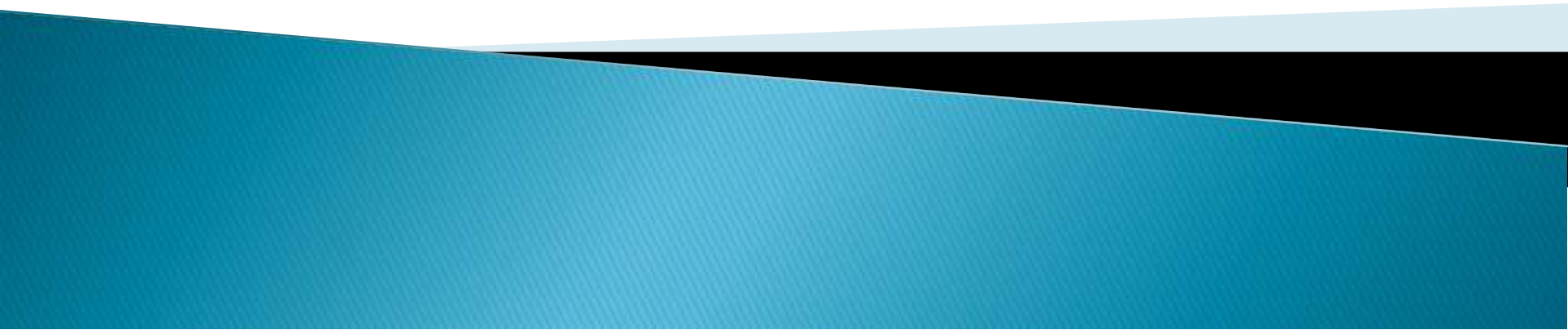
November 28, 2018

Cleve Ziegler, M.D

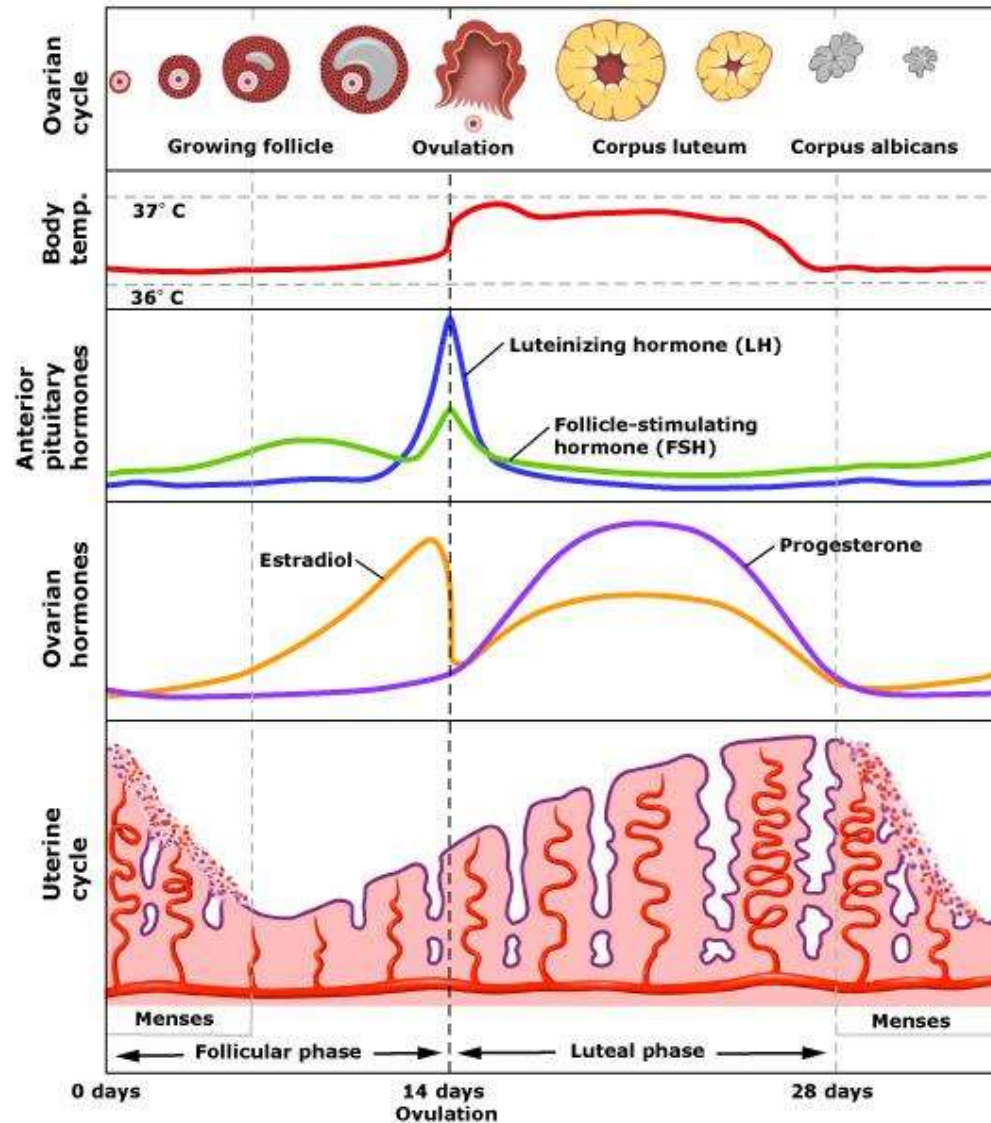
# Disclosure

- ▶ CME Speaker:
    - ▶ Bayer, Schering–Plough (Merck), Bayer, Wyeth (Pfizer)
  
  - ▶ Advisory Board:
    - ▶ Bayer, GSK, Schering–Plough (Merck)
- 

# Learning Objectives

- ▶ 1. L'évolution de la contraception modern
  - ▶ 2. Connaitre les tendances et l'innocuite de la Nouvelle Norme
  - ▶ 3. Questions/reponses
- 

# Menstruation: Normal Physiology



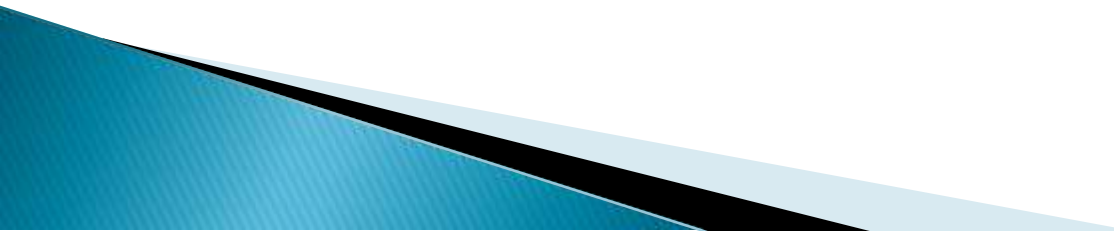
# Menstruation: Good or Bad?

- ▶ Ridding the body of toxins
- ▶ Sign of fertility and femininity
- ▶ Physiological anemia and reduction in cardiovascular disease
- ▶ Dysmenorrhea
- ▶ Menorrhagia
- ▶ Endometriosis
- ▶ Ovarian cancer
- ▶ Breast cancer
- ▶ Premenstrual syndrome
- ▶ Migraine headache
- ▶ Epilepsy

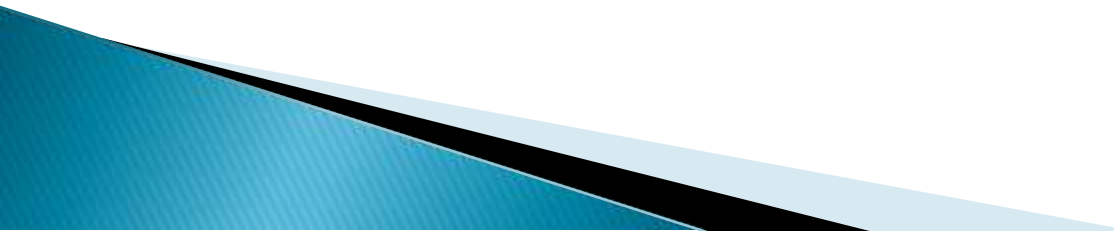
Normal Physiological Process

Pathological Entity

# Menstrual Disorders:Cost

- ▶ Affects 250,000 Canadian women /year
  - ▶ 10–15% of ER visits in women 15–44
  - ▶ 40% require regular analgesics
  - ▶ 25% reduction in productivity during menses
  - ▶ Economic cost 8–10% of total wages
  - ▶ 20% of women with abnormal bleeding undergo hysterectomy
- 

# Attitudes Towards Menstruation

- ▶ Culture
  - ▶ Age
  - ▶ Parity
  - ▶ Economic Status
  - ▶ Educational level
  - ▶ Presence/absence of menstrual associated symptoms
- 



# Menstruation: Ethnic Preferences



Song

Iman

Meghana

Nicole



Cultural Preferences

Geographic Trends



# Preferred Frequency of Menses

	Age category (years)					
	Dutch women			Italian women (without menstruation-related symptoms)		
	15-19 (n=322)	25-34 (n=325)	45-49 (n=324)	20-29 (n=22)	30-39 (n=171)	40-49 (n=77)
Monthly	30	35	32	9 (41%)	78 (46%)	31 (40%)
Every 3 months	35	24	10	10 (45%)	36 (21%)	15 (19%)
Every 6 months	6	6	4	2 (9%)	7 (4%)	2 (3%)
Yearly	3	4	5	0 (0%)	1 (<1%)	2 (3%)
Never	26	31	51	1 (5%)	49 (28%)	27 (35%)

den Tonkelaar I *et al. Contraception* 1999; 59(6):357-62.

Ferrero S *et al. Contraception* 2006; 73(5):537-41.

# BIRTH CONTROL EFFECTIVENESS



CONDOMS

99%



BIRTH  
CONTROL  
PILLS

99%



**crocs**<sup>™</sup>

100%

VIA @MENSHUMOR

# Address Risks Caused by Unplanned Changes in Methc



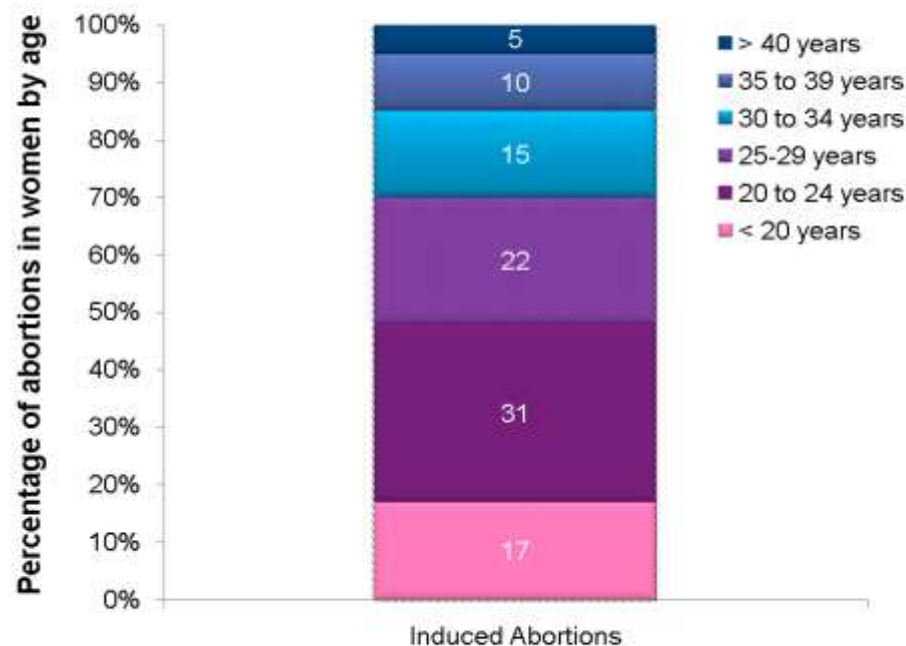
Unintended  
Pregnancies  
Each Year

**50%**

Unintended  
Pregnancies  
Using  
Contraception

**20%**

# Induced abortions by age in Canada



70% of induced abortions are among young women <30 years



# Oregon greenlights pharmacist-prescribed birth control

By Marilyn Malara

Jan. 2, 2016 at 10:24 AM

[Follow @upi](#)



Birth control pills in Oregon can now be prescribed by a pharmacist thanks to a law that began January 1. Oregon is the first state to implement the change, while reports say



# Health Canada Approval August 2015



# “Love, Sex, Freedom and the Paradox of the Pill”



“Arriving at a moment of social and political upheaval, the Pill became a handy proxy for wider trends: the rejection of tradition, the challenge to institutions, the redefinition of women’s roles”

*Nancy Gibbs,  
Time Executive Editor*



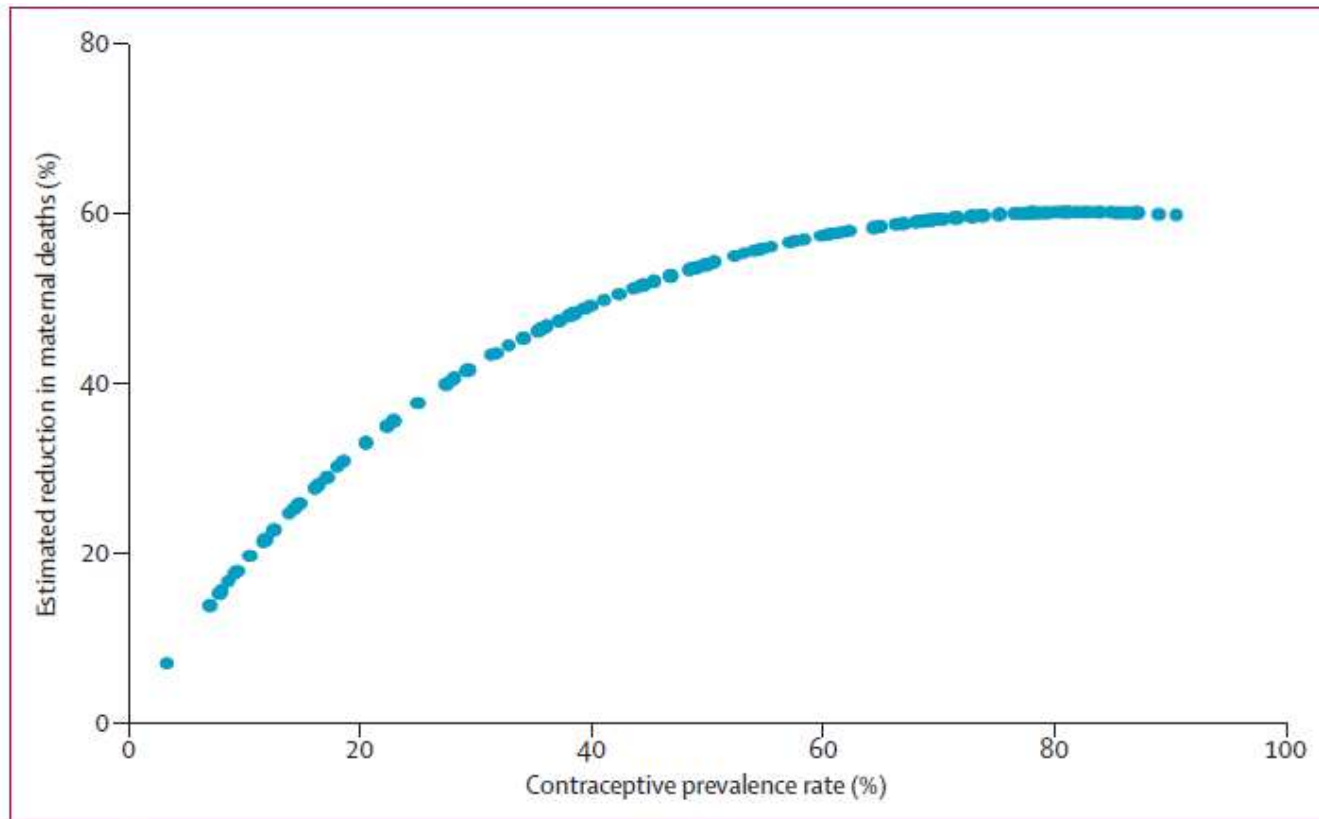
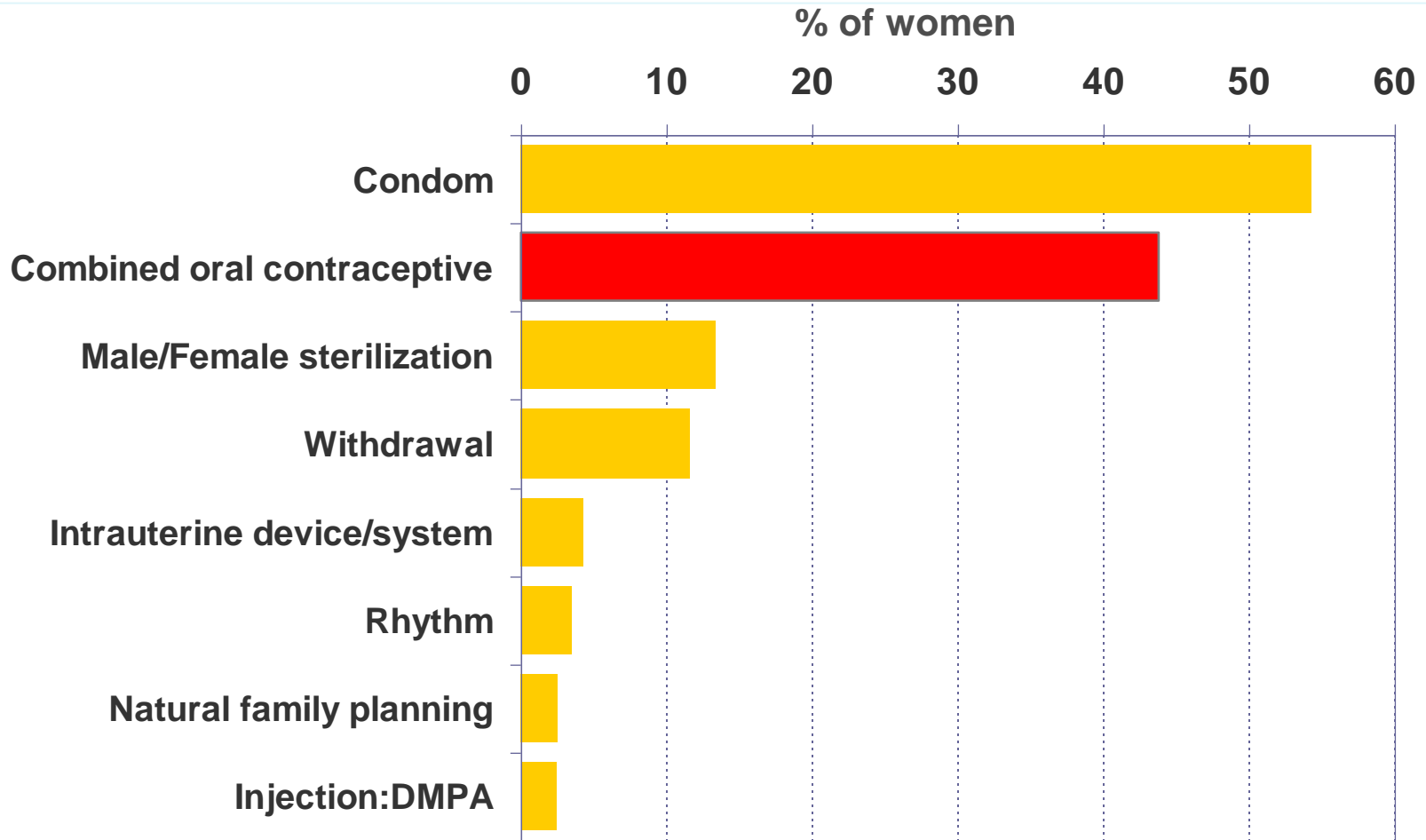


Figure 3: Contraceptive prevalence rate and estimated maternal mortality reduction

# Most Commonly Used Contraceptive Methods by Canadian Women



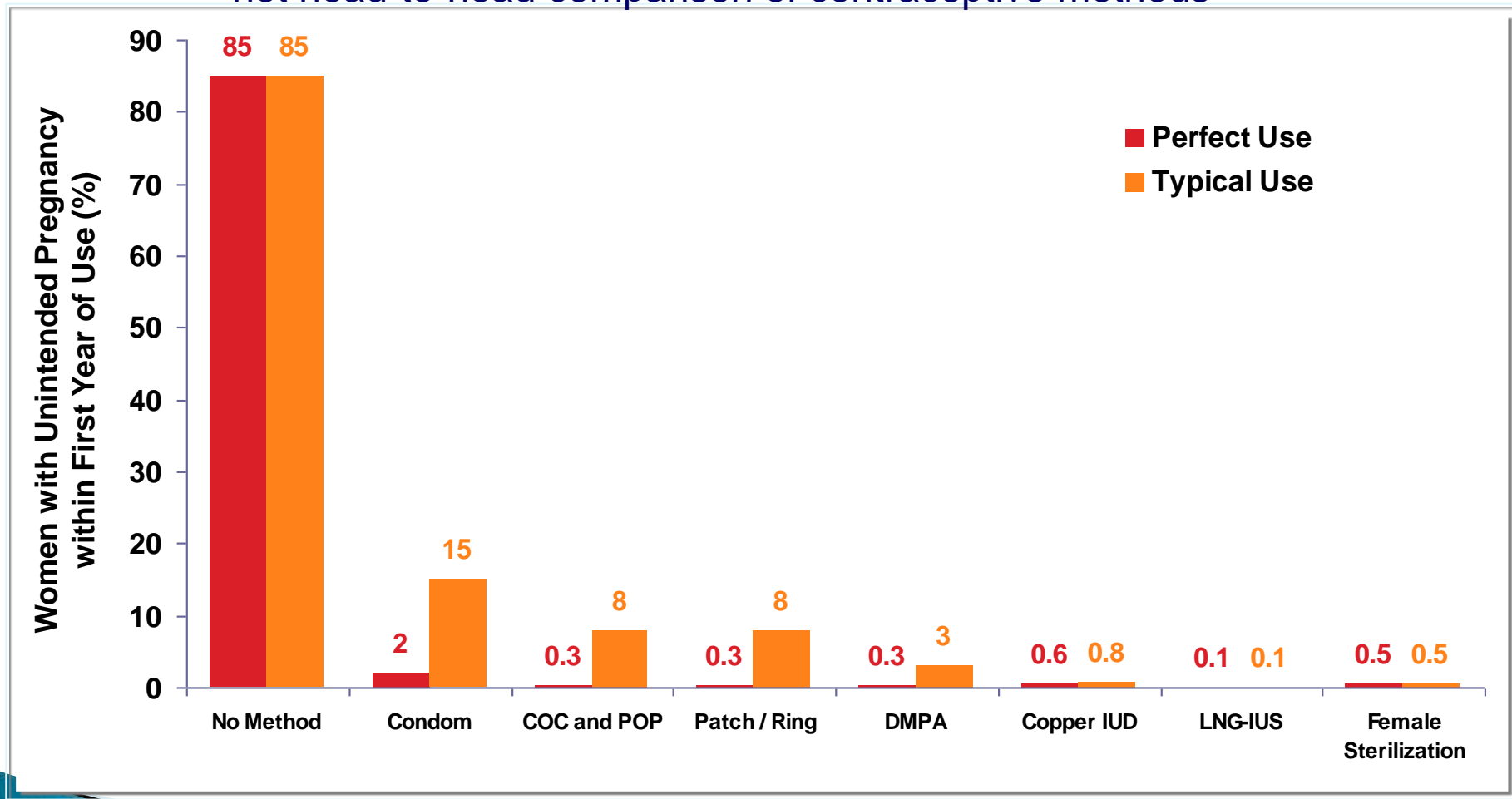
Column totals may exceed 100% as women were allowed to choose more than one method.  
Base: Women aged 15-50 who have had vaginal intercourse in the previous 6 months, n=2,341

DMPA=depot medroxyprogesterone

Back et al. J Obstet Gynaecol Can 2009;31(7):627-640.

# Unintended Pregnancy in First Year of Contraceptive Use\*

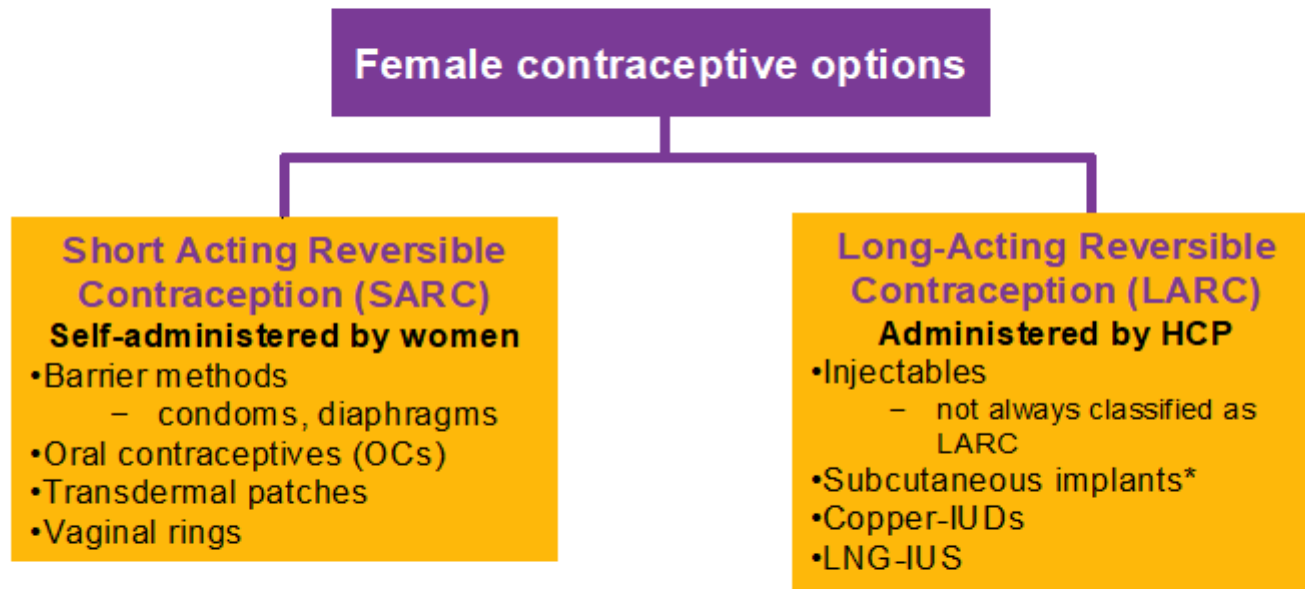
\*not head-to-head comparison of contraceptive methods



COC=combined oral contraceptive; POP= progestin only pill; DMPA=depot medroxyprogesterone; LNG-IUS=levonorgestrel releasing intrauterine system

Trussell J. Contraception 2004; 70: 89-96.

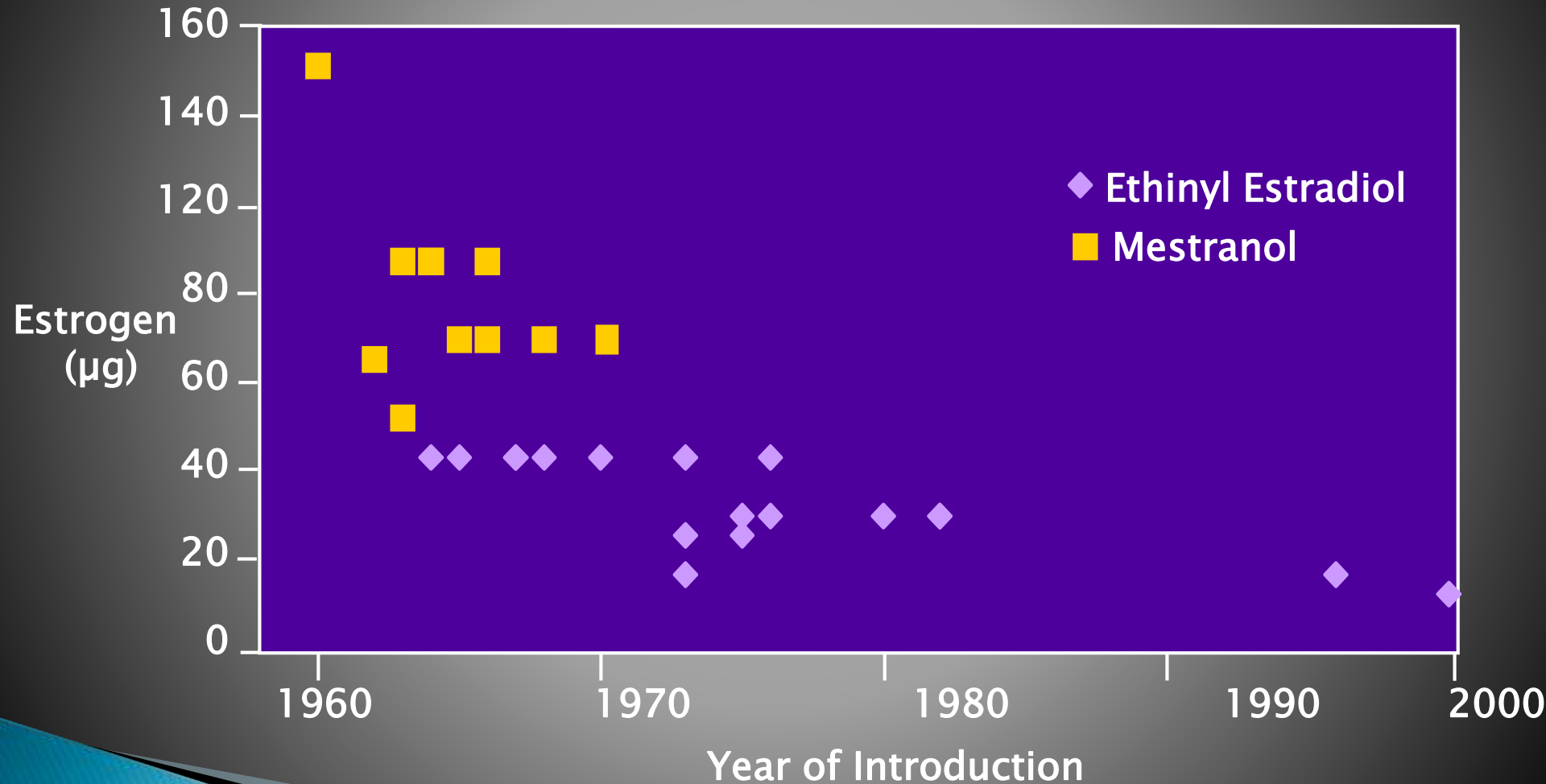
# Duration of use for reversible methods



HCP, healthcare provider; LARC, long acting reversible contraception; SARC, short acting reversible contraception; OC, oral contraceptive.; IUD, intrauterine device; LNG-IUS, levonorgestrel intrauterine system

\*Not available in Canada

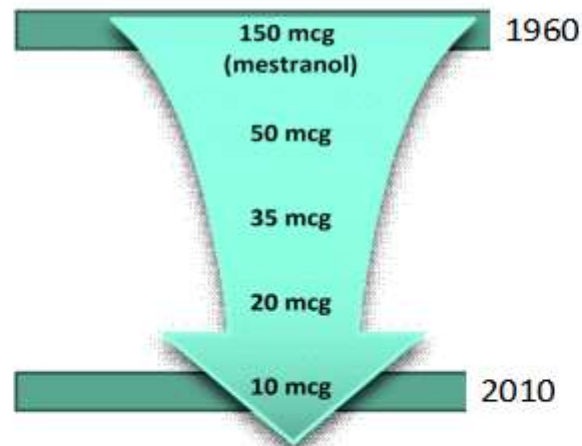
# Change in Estrogen and Dose



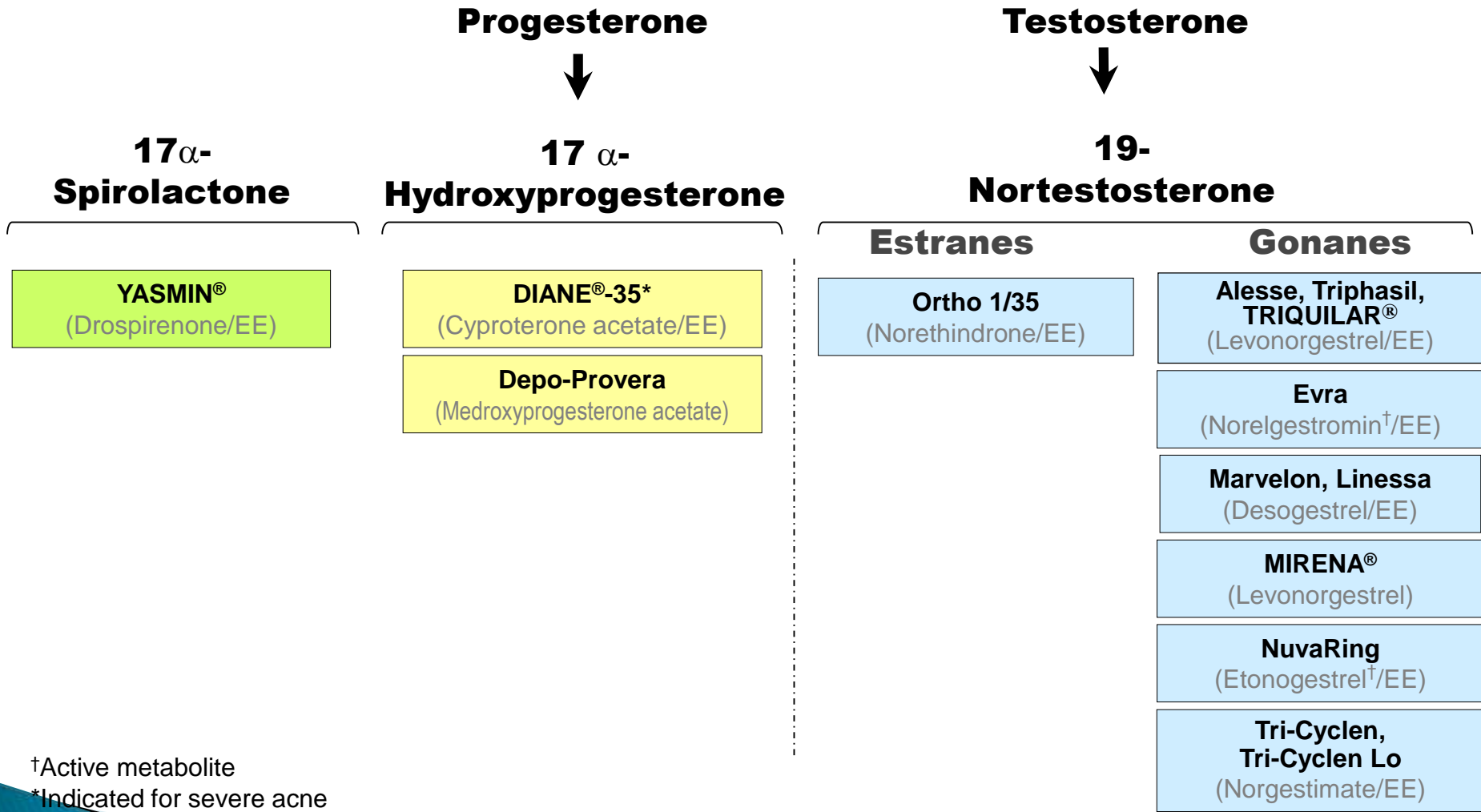
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## A Historical Perspective: Estrogen in COC's

Over time, the amount of estrogen in COCs has decreased significantly



# Evolution of Progestins



<sup>†</sup>Active metabolite

\*Indicated for severe acne

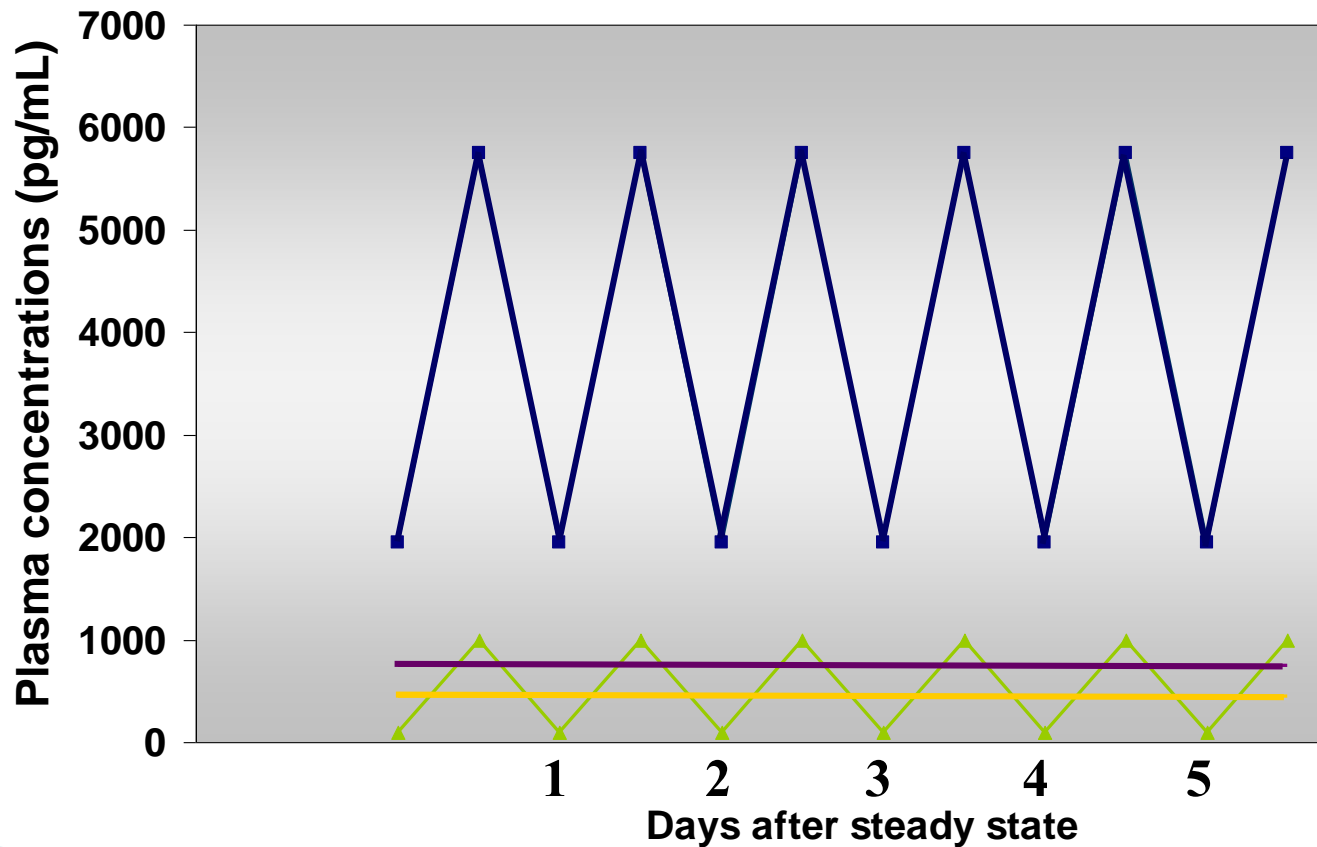
**Non-Androgenic**

**Androgenic**

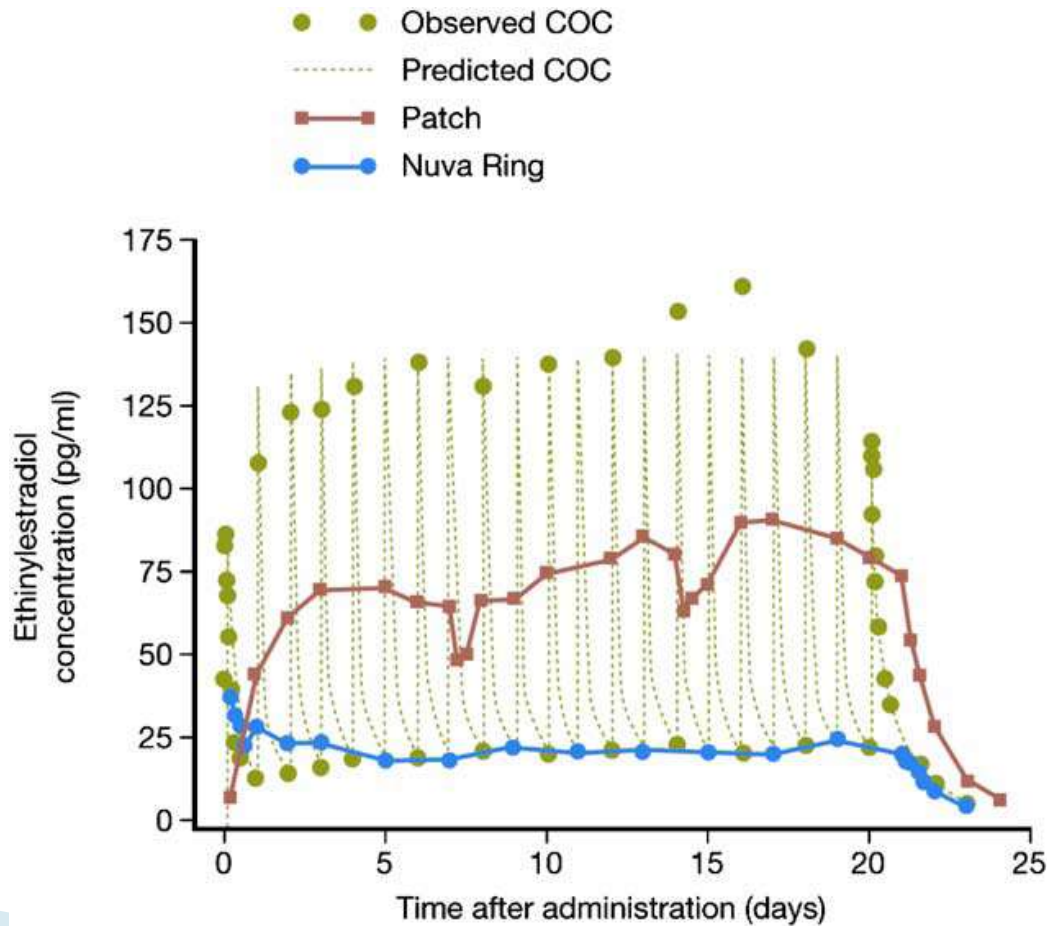


# Plasma Concentrations of Levonorgestrel

— Mirena — Implant — Mini-pill — ■ Combined OCs



# Serum Hormonal Levels: Pill, Patch and Ring



# Cycle Control: Definition

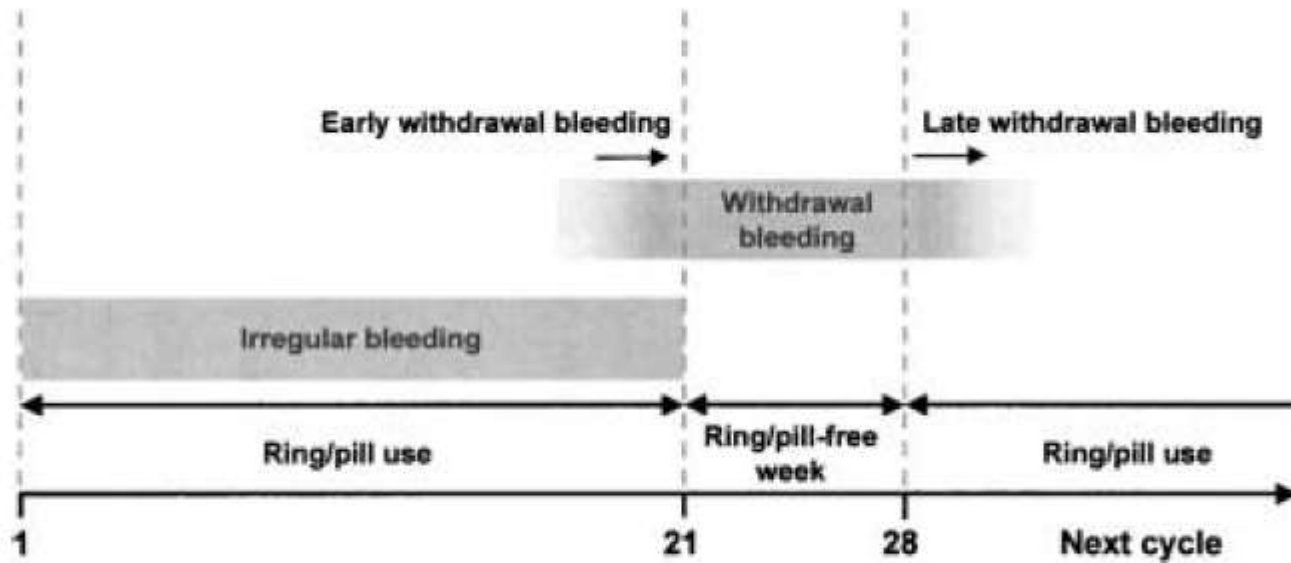
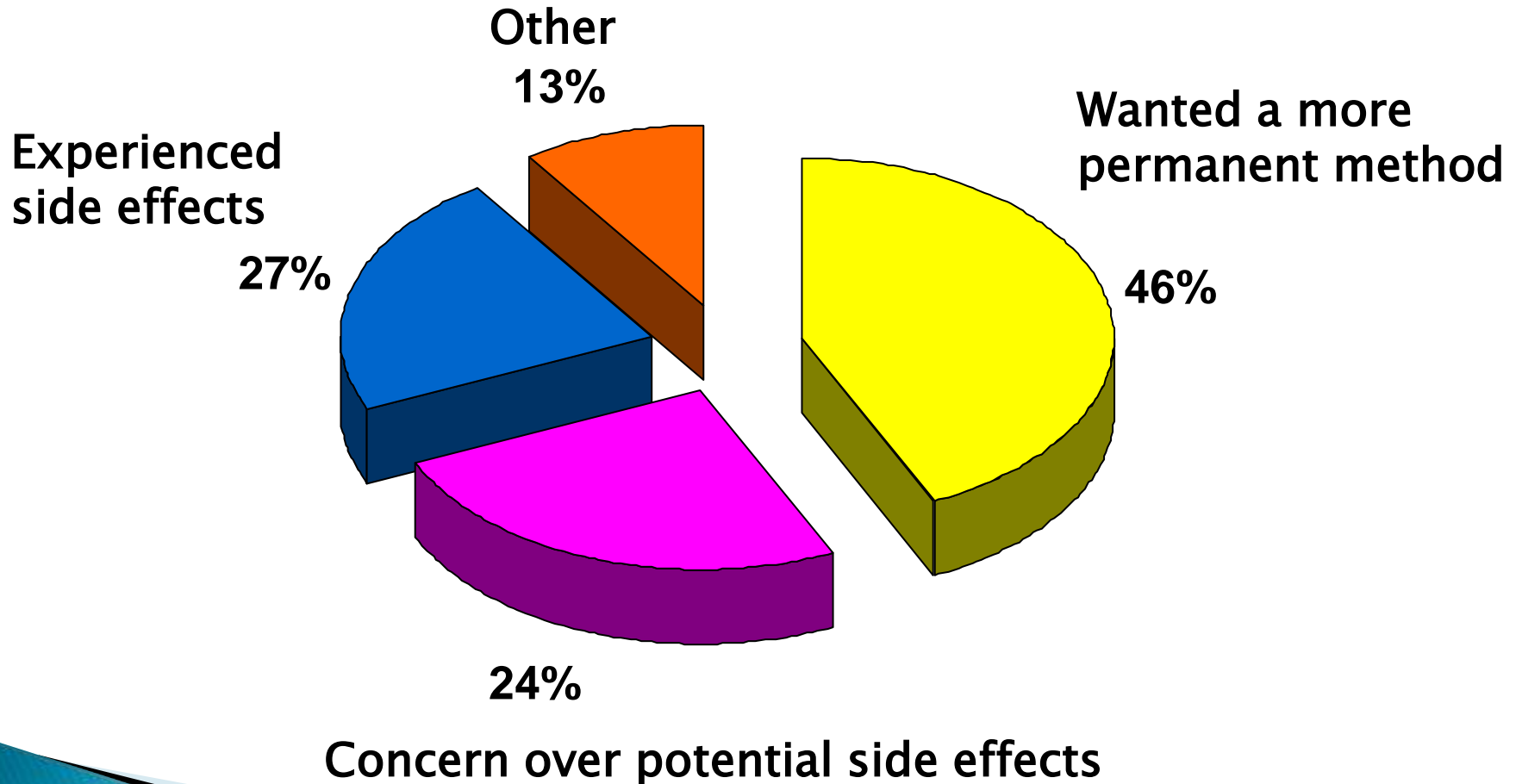


Fig 1. Parameters of cycle control.

# Reasons for discontinuation of oral contraception



## Extended Use Hormonal Contraception

Definition: “Extended” oral contraception refers to the use of combined hormonal contraceptives for extended periods of time (greater than 2 consecutive 21 days) with planned HFIs.

BMJ

RESEARCH

---

## Mortality among contraceptive pill users: cohort evidence from Royal College of General Practitioners' Oral Contraception Study

Philip C Hannaford, Grampian Health Board chair of primary care,<sup>1</sup> Lisa Iversen, research fellow,<sup>1</sup> Tatiana V Macfarlane, senior research fellow,<sup>2</sup> Alison M Elliott, senior research fellow,<sup>1</sup> Valerie Angus, data manager,<sup>3</sup> Amanda J Lee, professor of medical statistics<sup>4</sup>

Table 2 | Risk of death among ever and never users of oral contraceptives in full dataset

Cause of death	ICD-8 codes	Never users		Ever users		Adjusted relative risk† (95% CI)
		Observed rate (No)	Standardised rate*	Observed rate (No)	Standardised rate*	
All causes	000-999, all E codes	462.16 (1747)	417.45	349.62 (2864)	365.51	0.88 (0.82 to 0.94)
All cancers	140-209	205.29 (776)	194.55	160.16 (1312)	165.45	0.85 (0.78 to 0.92)
Large bowel and rectum	153-154	21.16 (80)	20.05	11.84 (97)	12.41	0.62 (0.46 to 0.81)
Gallbladder/liver	155-156	3.17 (12)	3.12	1.83 (15)	2.03	0.65 (0.30 to 1.43)
Lung	162	26.45 (100)	26.08	31.49 (258)	31.70	1.22 (0.96 to 1.55)
Melanoma	172	2.65 (10)	2.67	1.95 (16)	1.95	0.73 (0.33 to 1.64)
Breast	174	44.44 (168)	43.91	38.09 (312)	39.41	0.90 (0.74 to 1.08)
Invasive cervix	180	3.70 (14)	4.02	5.62 (46)	5.38	1.34 (0.74 to 2.43)
Uterine body	182	5.03 (19)	4.47	1.59 (13)	1.94	0.43 (0.21 to 0.87)
Ovary	183	19.84 (75)	18.04	9.16 (75)	9.47	0.53 (0.38 to 0.73)
Main gynaecological	180, 182, 183	28.57 (108)	26.51	16.36 (134)	16.80	0.63 (0.49 to 0.81)
CNS-pituitary	191, 194.3	5.03 (19)	4.47	3.42 (28)	3.74	0.84 (0.47 to 1.48)
Site unknown	199	22.22 (84)	20.50	17.21 (141)	18.02	0.88 (0.67 to 1.15)
Other cancers	140-209, except above	51.59 (195)	47.19	37.96 (311)	39.39	0.83 (0.70 to 0.98)
All circulatory diseases	390-458	132.54 (501)	115.18	93.14 (763)	99.15	0.86 (0.77 to 0.96)
Ischaemic heart disease	410-414	64.02 (242)	57.41	41.02 (336)	42.85	0.75 (0.63 to 0.88)
Other heart	420-429	15.34 (58)	11.90	9.03 (74)	10.12	0.85 (0.60 to 1.19)
Cerebrovascular disease	430-438	32.54 (123)	27.86	27.71 (227)	29.19	1.05 (0.84 to 1.31)
Other circulatory	390-409, 440-458	20.63 (78)	18.02	15.38 (126)	16.98	0.94 (0.71 to 1.24)
All digestive disease	520-577	18.25 (69)	16.53	15.38 (126)	15.67	0.95 (0.71 to 1.26)
Liver disease	570-573	5.56 (21)	5.48	7.20 (59)	7.20	1.32 (0.80 to 2.14)
Violence	800-999, E800-999	13.49 (51)	12.86	19.04 (156)	19.20	1.49 (1.09 to 2.03)
Suicide	E950-959	4.50 (17)	4.79	6.10 (50)	6.03	1.26 (0.73 to 2.14)



# Understanding Risk: Cardiovascular Adverse Events

Most serious cardiovascular  
adverse events associated with all  
COCs

**Venous  
thrombo-  
embolism**

**Stroke**

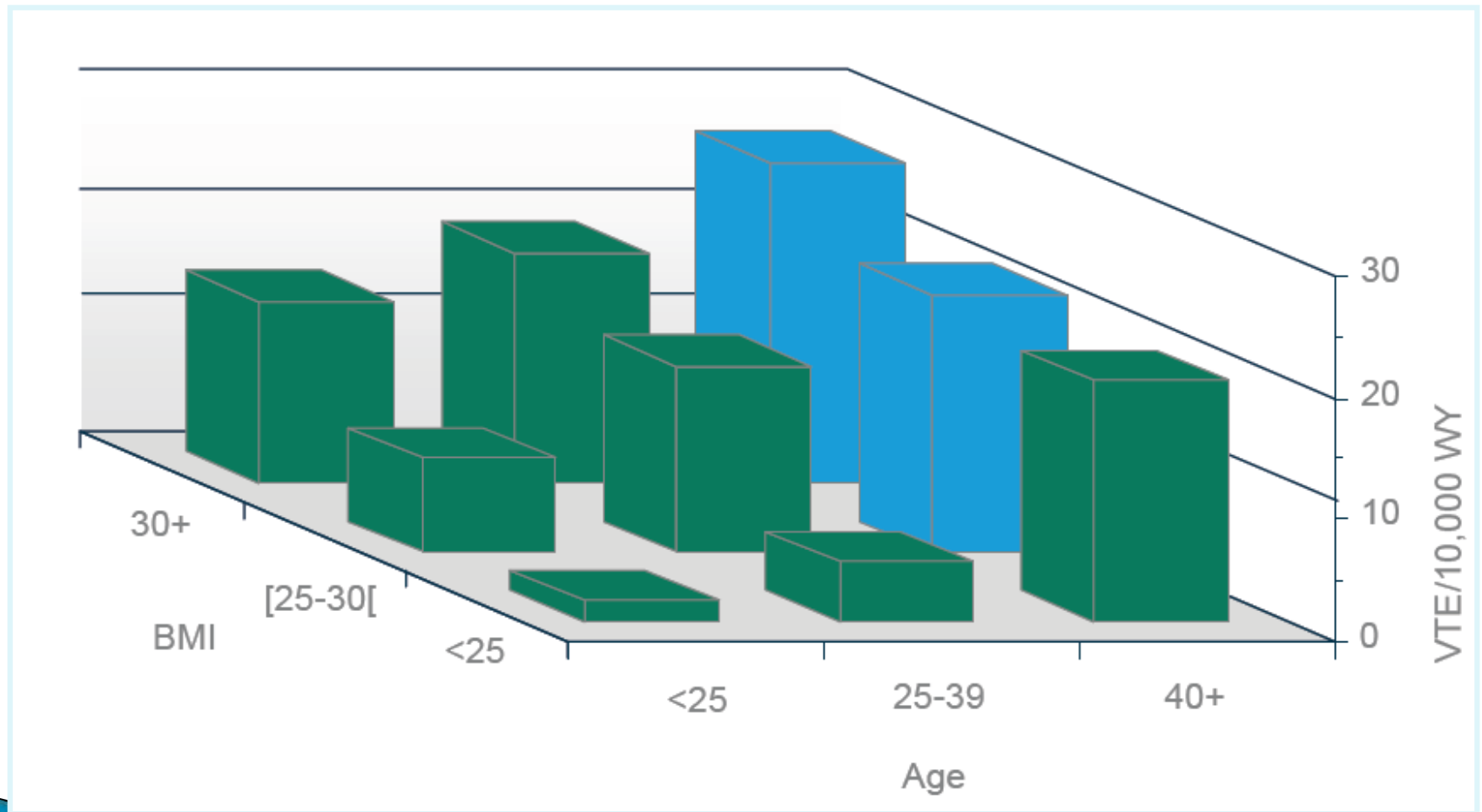
**Myocardial  
infarction**

# AEFI Frequency Terminology

<b>Very common*</b>	$\geq 1/10$	$\geq 10\%$
<b>Common (frequent)</b>	$\geq 1/100$ and $< 1/10$	$\geq 1\%$ and $< 10\%$
<b>Uncommon (infrequent)</b>	$\geq 1/1,000$ and $< 1/100$	$\geq 0.1\%$ and $< 1\%$
<b>Rare</b>	$\geq 1/10,000$ and $< 1/1,000$	$\geq 0.01\%$ and $< 0.1\%$
<b>Very rare*</b>	$< 1/10,000$	$< 0.01\%$

\* Optional categories

# Increased Impact of Age and BMI on VTE Incidence in COC Users\*



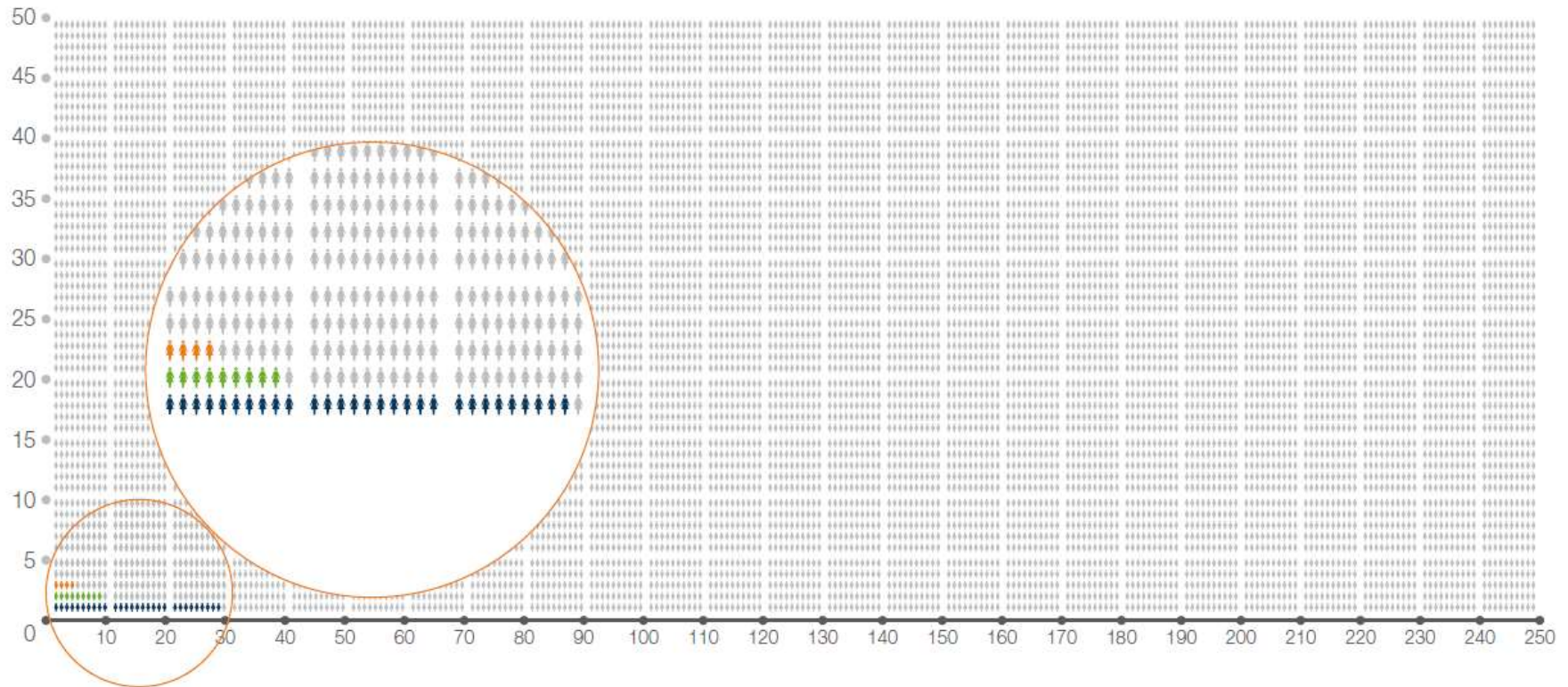
BMI: body mass index




\*Risk estimates based on 115 VTEs in 116,708 WY of exposure

Dinger, EURAS Study, Presentation EC Prague 2008.


# Putting the VTE Risk into Context

## 10 000 Woman-Years\*



-  Non-pregnant women not using any EE containing COCs (4.4/10,000 woman-years)
-  Women using low dose EE containing COCs (8.9/10,000 woman-years)
-  Pregnant women (29.5/10,000 woman-years)

Part 3: Literature  
on VTE:  
EURAS, Ingenix,  
MEGA, Danish  
National Registry



# VTE and Estrogen Dose

**Table 4** | The risk of venous thrombosis associated with different doses of ethinylestradiol in monophasic oral contraceptives. Data are odds ratios adjusted for age (95% CI) unless stated otherwise

Ethinylestradiol dose ( $\mu\text{g}$ )	Percentage use among controls*	Levonorgestrel	Gestodene	Desogestrel
20	11.2	1.1 (0.4 to 3.1)	0.3 (0.2 to 0.7)	0.7 (0.4 to 1.2)
30†	84.4	1	1	1
50	4.4	2.2 (1.3 to 3.7)	—	—

\*In total, 51 women used a monophasic preparation with 20  $\mu\text{g}$  ethinylestradiol, 385 women used one with 30  $\mu\text{g}$ , and 20 used one with 50  $\mu\text{g}$  (total 456).

†Reference category is the most commonly used dose of oestrogen among controls.



# VTE and Progestin Type

Table 3 | Risk of venous thrombosis associated with different types of progestogens in combined oral preparations. Data are numbers (percentages) unless stated otherwise

Type of progestogen	Thrombosis patients (n=1524)	Controls (n=1760)	Odds ratio (95% CI)*
Levonorgestrel†	485 (31.9)	373 (21.2)	3.6 (2.9 to 4.6)
Gestodene†	119 (7.8)	67 (3.8)	5.6 (3.7 to 8.4)
<b>Desogestrel†</b>	289 (19.0)	108 (6.2)	<b>7.3 (5.3 to 10.0)</b>
Lynestrenol†	44 (2.9)	19 (1.1)	5.6 (3.0 to 10.2)
Norethisterone	11 (0.7)	7 (0.4)	3.9 (1.4 to 10.6)
Cyproterone acetate	125 (8.2)	62 (3.5)	6.8 (4.7 to 10.0)
Norgestimate	9 (0.6)	4 (0.2)	5.9 (1.7 to 21.0)
<b>Drospirenone</b>	19 (1.2)	14 (0.8)	<b>6.3 (2.9 to 13.7)</b>
No oral contraceptive (reference)	421 (27.7)	1102 (62.8)	1



# The Oral Contraceptive

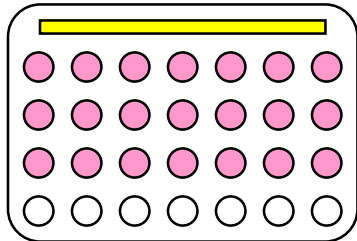


21 / 7 Phasic

21 / 7 Phasic

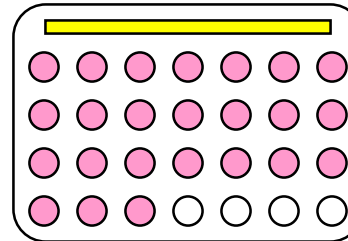
# What's the Difference in OC Dosing Regimens?

## Cyclic Regimen: 21/7



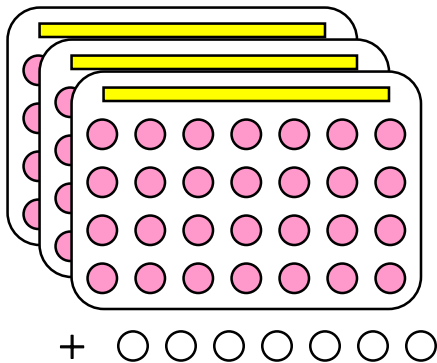
21 active pills  
7 placebo pills

## Cyclic Regimen: 24/4



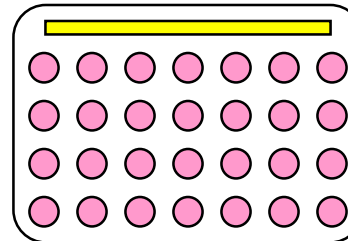
24 active pills  
4 placebo pills

## Extended Regimen: 84/7



84 active pills  
7 placebo pills

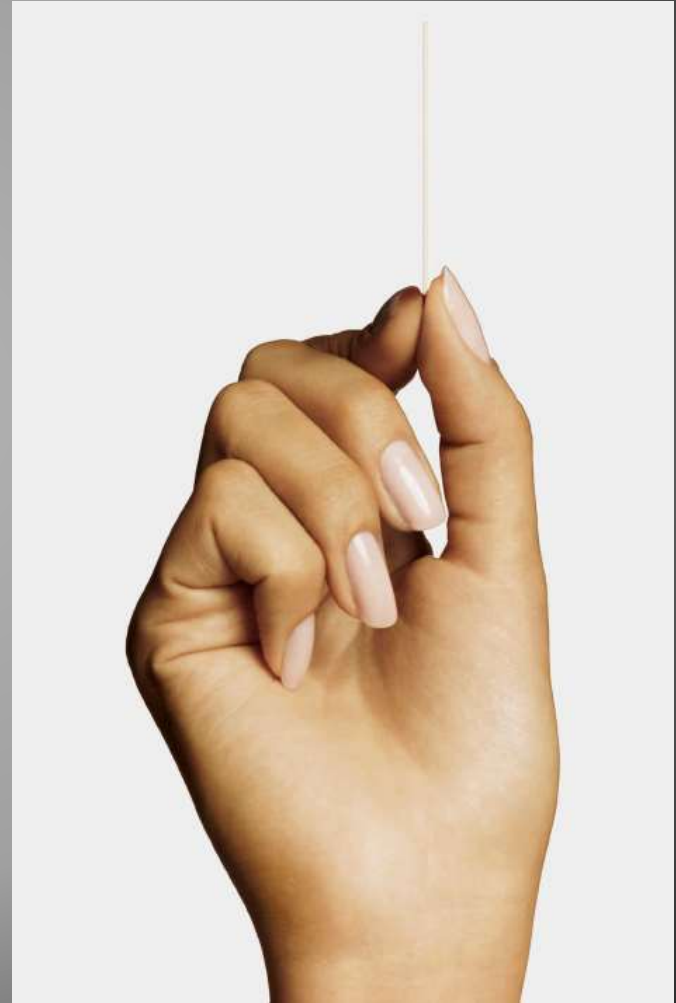
## Continuous Regimen:



365 active pills  
No placebo pills

X13 pill packs

# The EVRA Transdermal System



# Confronting the Legal Risks of Prescribing the Contraceptive Patch With Ongoing Litigation

John Y. Phelps, MD, JD, LLM and Mae Ellen Kelver, MD

Recent changes in U.S. Food and Drug Administration (FDA) labeling and news reports of lawsuits resulting in million-dollar settlements understandably may deter gynecologists from prescribing the transdermal contraceptive patch Ortho Evra (Ortho-McNeil Pharmaceutical, Inc., Titusville, NJ). Gynecologists who, with all good intentions, prescribe an FDA-approved drug such as the contraceptive patch potentially could find themselves liable for an adverse drug reaction. Although much of the current focus by plaintiff attorneys and the news media is on the contraceptive patch, no prescription contraceptive method is without medical risks to the patient or legal risks to the prescribing gynecologist. The purpose of this commentary is to provide an overview of the medical-legal controversies and pitfalls in prescribing the contraceptive patch as well as to outline how gynecologists can avert legal liability by providing proper informed consent. Despite FDA labeling changes and ongoing litigation, with proper informed consent, the contraceptive patch still may be the best choice for many patients who prefer the convenience of a weekly patch over a daily oral contraceptive. Also, regardless of the contraceptive option chosen, the principles of providing and documenting proper informed consent in medical records are applicable not only to providing quality care to patients, but also to protecting the legal interests of the prescribing gynecologist. By documenting proper informed consent in medical records, gynecologists should feel more at ease in prescribing the contraceptive method that best fits their individual

patients' needs, even in the presence of ongoing litigation.

(*Obstet Gynecol* 2009;113:712-6)

In January 2008, the U.S. Food and Drug Administration (FDA) revised the labeling for the Ortho Evra (Ortho-McNeil Pharmaceutical, Inc., Titusville, NJ) weekly transdermal contraceptive patch, stating that users of the patch may be at higher risk of developing venous thromboembolism.<sup>1</sup> This followed a lawsuit recently settled for \$1.25 million against Ortho-McNeil Pharmaceutical, Inc., a subsidiary of Johnson & Johnson, that was entered into federal court in Ohio for complications arising from its weekly transdermal contraceptive patch.<sup>2</sup> This lawsuit was filed on behalf of a 14-year-old girl who died of a pulmonary embolism several weeks after beginning use of the contraceptive patch.<sup>2</sup> Currently, it is estimated that there are more than 2,400 lawsuits filed against Johnson & Johnson for injuries allegedly stemming from use of the contraceptive patch.<sup>2</sup> The legal basis of the lawsuits includes claims for strict product liability, breach of express and implied warranties, implied warranty of merchantability, negligence, consumer fraud, and common-law fraud for its product. Among other allegations, all these claims allege that the contraceptive patch was defectively designed and that users of the patch received inadequate warnings regarding the patch's side effects and safety profile.<sup>3</sup> More specifically, the lawsuits allege Johnson & Johnson failed to give adequate warning of the transdermal contraceptive patch's known dangerous propensity to cause blood clots. The lawsuits follow a study that concluded there was a more than twofold increase in the risk of venous thromboembolism associated with use of the transdermal contraceptive system.<sup>4</sup>

Understandably, the prescribing practices of gy-

*From the Department of Obstetrics and Gynecology, Division of Reproductive Endocrinology and Infertility, The University of Texas Medical Branch, Galveston, Texas.*

*Corresponding author: John Y. Phelps, MD, JD, LLM, Department of Obstetrics & Gynecology, Division of Reproductive Endocrinology and Infertility, The University of Texas Medical Branch, 301 University Boulevard, Galveston, TX; e-mail: JYPhelps@aol.com.*

#### Financial Disclosure

The authors did not report any potential conflicts of interest.

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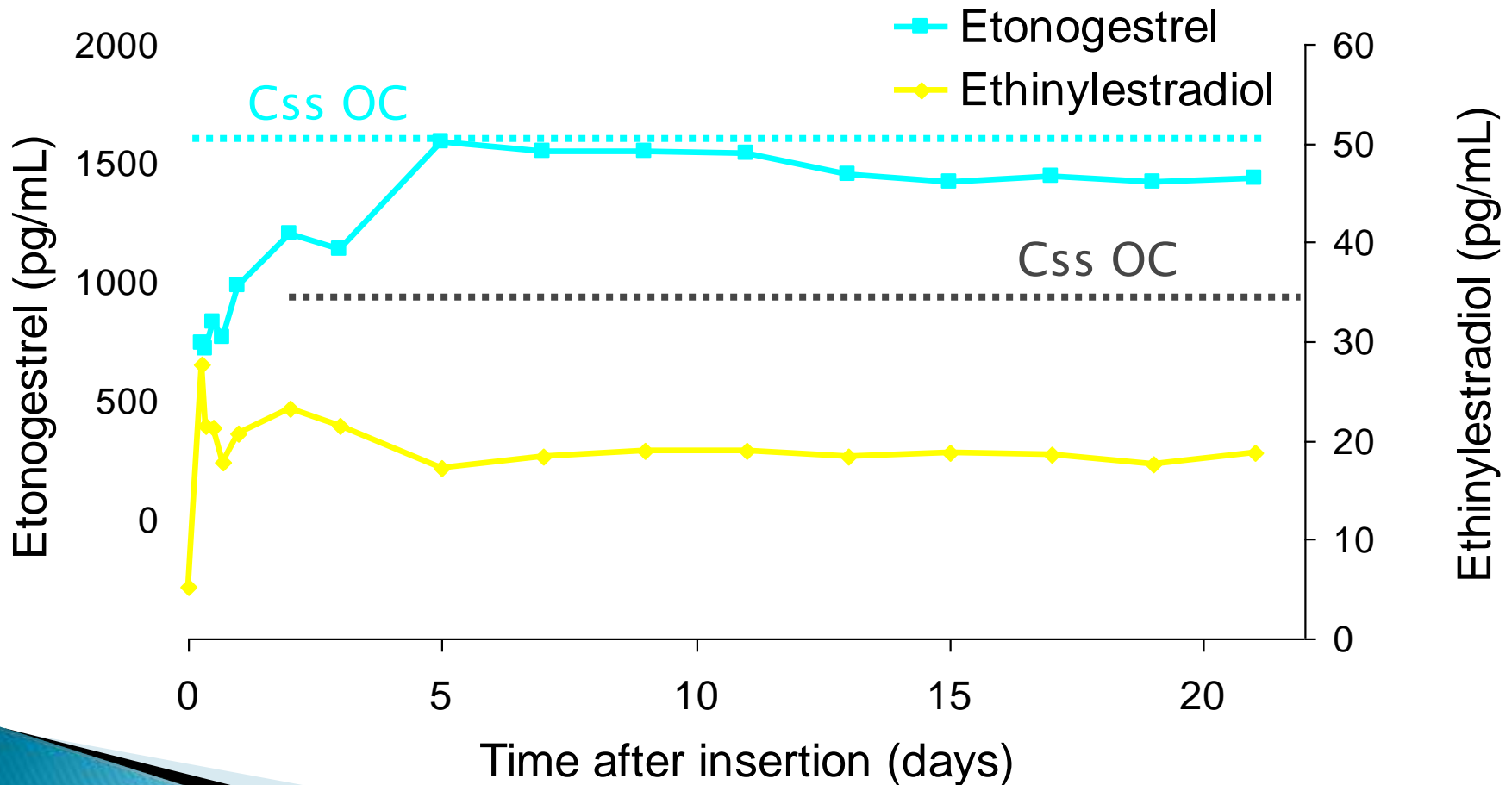
# NuvaRing

- ▶ 1 ring per cycle
- ▶ Regimen:
  - 3 weeks of ring-use
  - 1 ring-free week
- ▶ Daily release:
  - 15  $\mu\text{g}$  ethinylestradiol
  - 120  $\mu\text{g}$  etonogestrel



# Pharmacokinetic profile

## NuvaRing and 30 EE/150 DSG COC





ORIGINAL ARTICLE

## Effectiveness of Long-Acting Reversible Contraception

Brooke Winner, M.D., Jeffrey F. Peipert, M.D., Ph.D., Qihong Zhao, M.S.,  
Christina Buckel, M.S.W., Tessa Madden, M.D., M.P.H., Jenifer E. Allsworth, Ph.D.,  
and Gina M. Secura, Ph.D., M.P.H.

ABSTRACT

**BACKGROUND**

The rate of unintended pregnancy in the United States is much higher than in other developed nations. Approximately half of unintended pregnancies are due to contraceptive failure, largely owing to inconsistent or incorrect use.

**METHODS**

We designed a large prospective cohort study to promote the use of long-acting reversible contraceptive methods as a means of reducing unintended pregnancies in our region. Participants were provided with reversible contraception of their choice at no cost. We compared the rate of failure of long-acting reversible contraception (intrauterine devices [IUDs] and implants) with other commonly prescribed contraceptive methods (oral contraceptive pills, transdermal patch, contraceptive vaginal ring, and depot medroxyprogesterone acetate [DMPA] injection) in the overall cohort and in groups stratified according to age (less than 21 years of age vs. 21 years or older).

From the Department of Obstetrics and Gynecology, Washington University School of Medicine, St. Louis. Address reprint requests to Dr. Peipert at the Department of Obstetrics and Gynecology, Division of Clinical Research, Washington University School of Medicine in St. Louis, 4533 Clayton Ave., Campus Box 8219, St. Louis, MO 63110, or at [peipertj@wustl.edu](mailto:peipertj@wustl.edu).

N Engl J Med 2012;366:1998-2007.  
Copyright © 2012 Massachusetts Medical Society.



# Back to The Future: Depo-provera



# Two categories of intrauterine contraception (IUC)

## COPPER IUD



- Copper IntraUterine Device (copper IUD)
- 3.2cm piece of polyethylene often shaped like a T
- Copper coil wound round stalk and, sometimes, horizontal parts
- Two monofilament threads hang from uterus through cervix into vagina

## LNG-IUS



- Levonorgestrel-releasing IntraUterine System (LNG-IUS)
- 3.2cm piece of polyethylene shaped like a T
- Cylindrical reservoir around stalk contains 52 mg levonorgestrel
- Two monofilament threads hang from uterus through cervix into vagina

<sup>1</sup>Black et al. J Obstet Gynecol Can 2004; 143: 219-254

<sup>2</sup>Mirena Product Monograph, Bayer Inc. July 20, 2012

<sup>3</sup>Nova T Product Leaflet, Bayer Inc. January 26, 2007

# Mirena

- Intrauterine system (IUS)
- Releases up to 20  $\mu\text{g}/\text{day}$  of levonorgestrel (progestin)
- No estrogen
- 5 years of treatment

## Indications

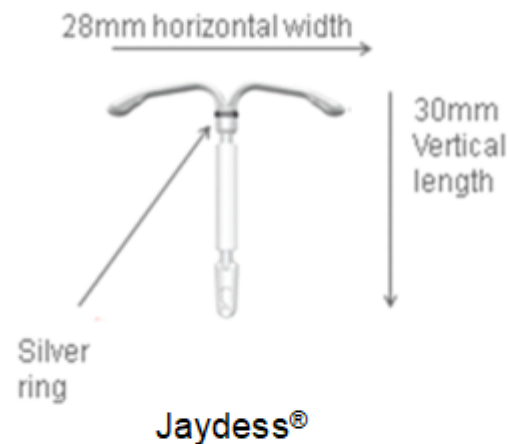
- Contraception



# What is Jaydess®?

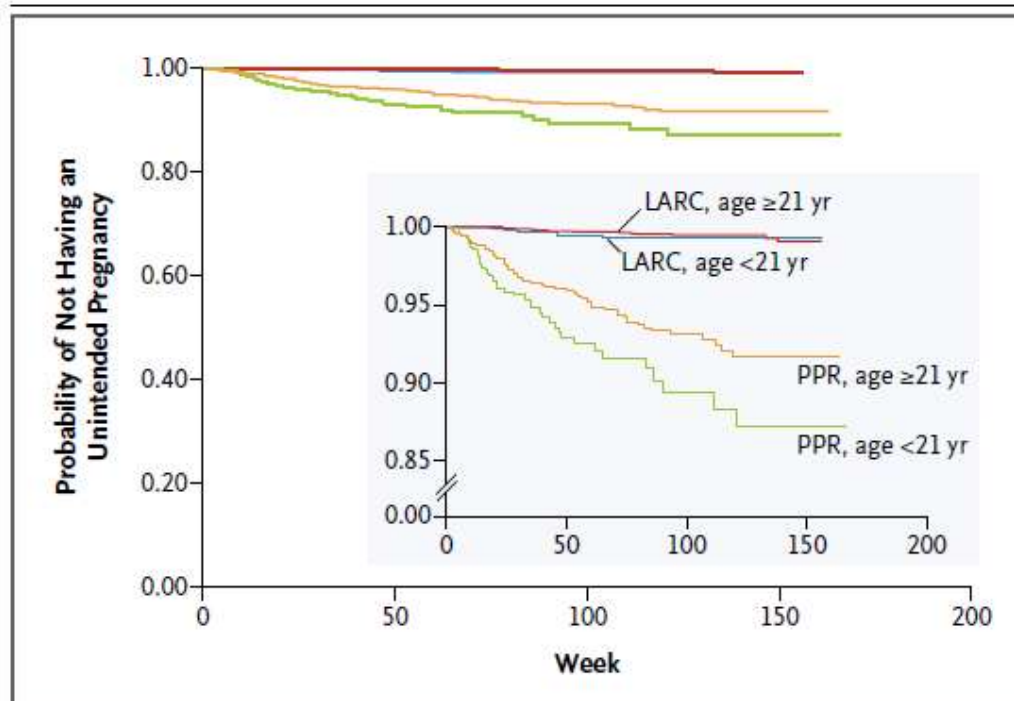
## Jaydess® is:

- The smallest LNG-IUS available<sup>1</sup>
- Inserted using the smallest diameter insertion tube for an IUS (3.80 mm)<sup>2</sup>
- The lowest dose LNG-IUS available (initial *in vivo* release rate: 10 µg/day\*)
- Approved for 3 years' maximum duration of use<sup>1</sup>
  
- Characteristics in common with Mirena®:
  - Estrogen-free
  - Mainly locally acting; minimal systemic exposure to levonorgestrel<sup>1</sup>



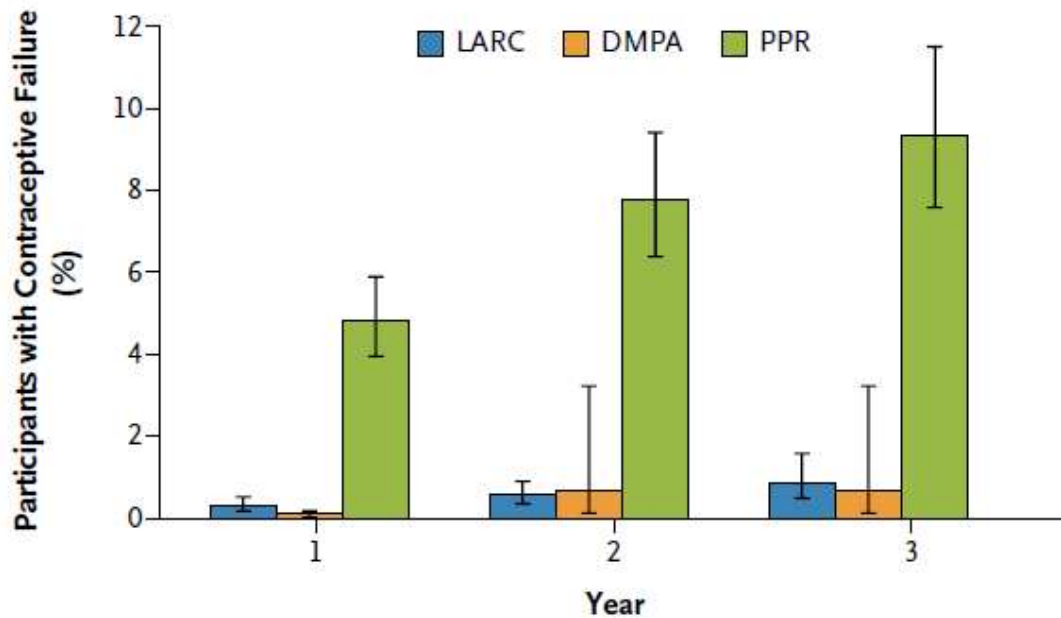
IUS, intrauterine system;  
LNG-IUS, levonorgestrel intrauterine system  
\*initial release rate, 3-4 weeks after insertion

1. Jaydess® Product Monograph, Bayer Inc. June 18, 2013;
2. Gemzell-Danielsson et al. *Fertil Steril* 2012; 97: 616-622.



**Figure 2. Probability of Not Having an Unintended Pregnancy, According to Contraceptive Method and Age.**

Survival curves show the probability of not having an unintended pregnancy, stratified according to age group. LARC methods were the most effective, and failure rates did not vary according to age ( $P=0.49$ ). PPR methods were less effective, and failure rates in participants younger than 21 years old were twice as great as in women 21 years of age or older ( $P=0.02$ ).



**Figure 1. Cumulative Percentage of Participants Who Had a Contraceptive Failure at 1, 2, or 3 Years, According to Contraceptive Method.**

Bars depict the cumulative percentage of participants who had a contraceptive failure with long-acting reversible contraception (LARC), depot medroxyprogesterone acetate (DMPA), or pill, patch, or ring (PPR) at 1, 2, or 3 years. Participants using PPR had significantly more unintended pregnancies than those using LARC ( $P < 0.001$ ) or DMPA ( $P < 0.001$ ).



*Original Research*

# Cancer Risk in Women Using the Levonorgestrel-Releasing Intrauterine System in Finland

*Tuuli Soini, MD, Ritva Hurskainen, MD, Seija Grénman, MD, Johanna Mäenpää, MD, Jorma Paavonen, MD, and Eero Pukkala, PhD*





The American College of  
Obstetricians and Gynecologists  
WOMEN'S HEALTH CARE PHYSICIANS

# COMMITTEE OPINION

Number 539 • October 2012

*(Replaces Committee Opinion No. 392, December 2007)*

**Committee on Adolescent Health Care**  
**Long-Acting Reversible Contraception Working Group**

*This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed.*

## **Adolescents and Long-Acting Reversible Contraception: Implants and Intrauterine Devices**

**ABSTRACT:** Long-acting reversible contraception (LARC)—intrauterine devices and the contraceptive implant—are safe and appropriate contraceptive methods for most women and adolescents. The LARC methods are top-tier contraceptives based on effectiveness, with pregnancy rates of less than 1% per year for perfect use and typical use. These contraceptives have the highest rates of satisfaction and continuation of all reversible contraceptives. Adolescents are at high risk of unintended pregnancy and may benefit from increased access to LARC methods.

# PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

**Contraception for Adolescents**  
**COMMITTEE ON ADOLESCENCE**  
*Pediatrics*; originally published online September 29, 2014;  
DOI: 10.1542/peds.2014-2299

The online version of this article, along with updated information and services, is  
located on the World Wide Web at:

<http://pediatrics.aappublications.org/content/early/2014/09/24/peds.2014-2299>

## RECOMMENDATIONS

1. Pediatricians should counsel about and ensure access to a broad range of contraceptive services for their adolescent patients. This includes educating patients about all contraceptive methods that are safe and appropriate for them and describing the most effective methods first.
2. Pediatricians should be able to educate adolescent patients about LARC methods, including the progestin implant and IUDs. Given the efficacy, safety, and ease of use, LARC methods should be considered first-line contraceptive choices for adolescents. Some pediatricians may choose to acquire the skills to provide these methods to adolescents. Those who do not should identify health care providers in their communities to whom patients can be referred.
3. Despite increased attention to adverse effects, DMPA and the contraceptive patch are highly effective methods of contraception that are much safer than pregnancy. Pedia-



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WOMEN'S HEALTH CARE PHYSICIANS

# COMMITTEE OPINION SUMMARY

Number 642 • October 2015

*(Replaces Committee Opinion Number 450, December 2009)*

For a comprehensive overview of these recommendations, the full-text version of this Committee Opinion is available at <http://dx.doi.org/10.1097/AOG.0000000000001106>.



Scan this QR code with your smart phone to view the full-text version of this Committee Opinion.

## Committee on Gynecologic Practice Long-Acting Reversible Contraception Working Group

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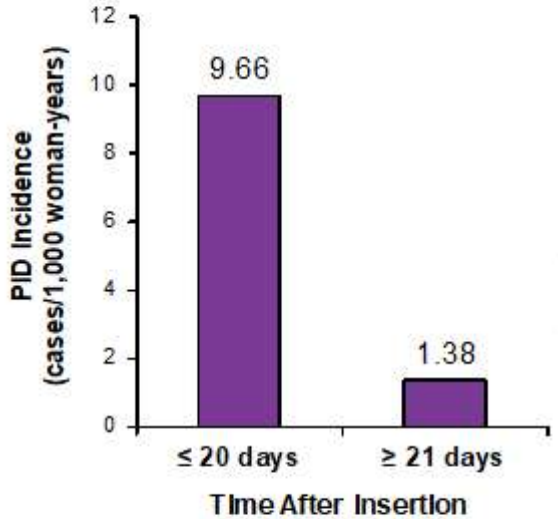
## Increasing Access to Contraceptive Implants and Intrauterine Devices to Reduce Unintended Pregnancy

**ABSTRACT:** Unintended pregnancy persists as a major public health problem in the United States. Although lowering unintended pregnancy rates requires multiple approaches, individual obstetrician–gynecologists may contribute by increasing access to contraceptive implants and intrauterine devices. Obstetrician–gynecologists should encourage consideration of implants and intrauterine devices for all appropriate candidates, including nulliparous women and adolescents. Obstetrician–gynecologists should adopt best practices for long-acting reversible contraception insertion. Obstetrician–gynecologists are encouraged to advocate for coverage and appropriate payment and reimbursement for every contraceptive method by all payers in all clinically appropriate circumstances.



# Myth # 1: IUDs Cause PID

## PID associated with insertion of IUC



WHO randomized controlled trial data

22,908 IUC insertions

51,399 woman-years of follow-up

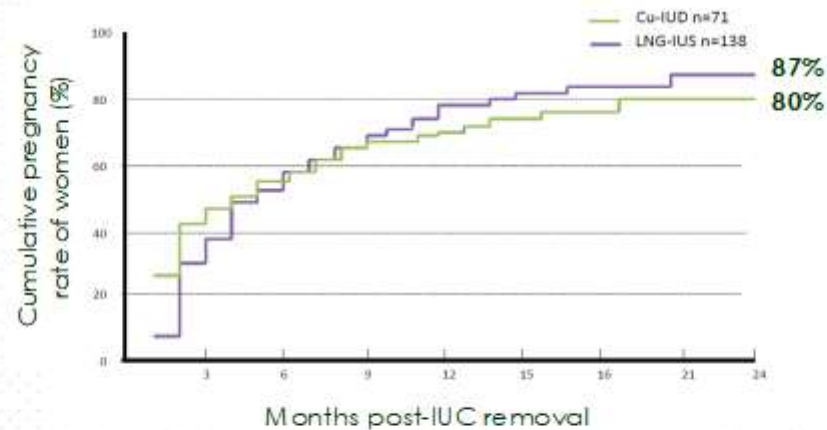
PID overall rate 1.58/1000 WY

IUC – Intrauterine contraception  
PID – Pelvic inflammatory disease  
WHO – World Health Organization  
WY – Woman-years

1. Farley et al. Lancet 1992; 339: 785-788
2. ACOG Practice on Practice Bulletins. Obstet Gynecol 2005; 105: 223-232
3. Black et al. J Obstet Gynaecol Can 2004; 26: 219-254.

# Myth #2 : IUDs Cause Infertility

IUC does not alter the course of future fertility



Cu-IUD, copper intrauterine device  
IUC, intrauterine contraception  
LNG-IUS, levonorgestrel intrauterine system

Andersson et al Contraception 1992; 46:575-584

## Nulliparous women: SOGC guidelines

### MYTH

“Nulliparous women cannot use IUDs.”

### FACT

“Nulliparity is not a contraindication to IUD use. In carefully selected nulliparous women, IUDs may be successfully used.”



# Implanon



# Implanon

