



Know Your Tools: Hormonal Diagnostics for Fertility, PCOS & Menopause



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OF OULU

| Medix Biochemicals

Before we get started

 Please use the Q&A button at the bottom of your screen to submit any questions.

There will be a Q&A session at the end of this webinar. If we do not have time to answer your questions, we will reach out by email following the webinar.

 This webinar is being recorded. The recording as well as on-demand link will be released following the webinar.

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Featured Speakers



Professor Terhi Piltonen

Professor of Obstetrics and Gynecology
University of Oulu, Finland



Dr. Maria Voutilainen

Global Product Manager
Medix Biochemica



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Hormonal measures

-now your tools in women's health and fertility assessments

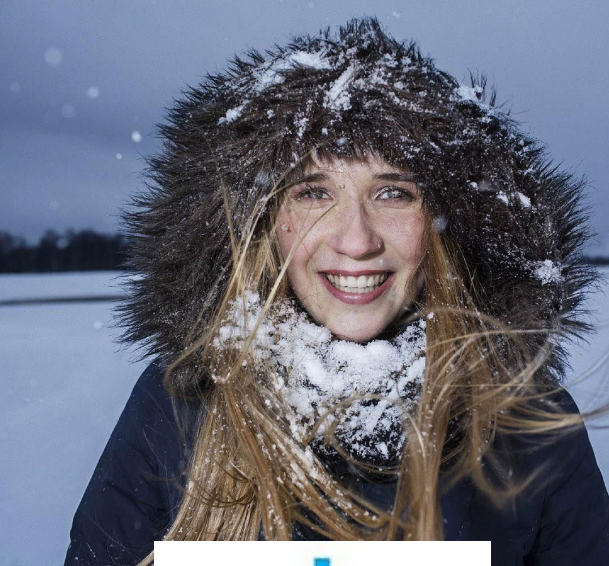
Terhi Piltonen, professor

Specialist in Ob-Gyn and Reproductive endocrinology

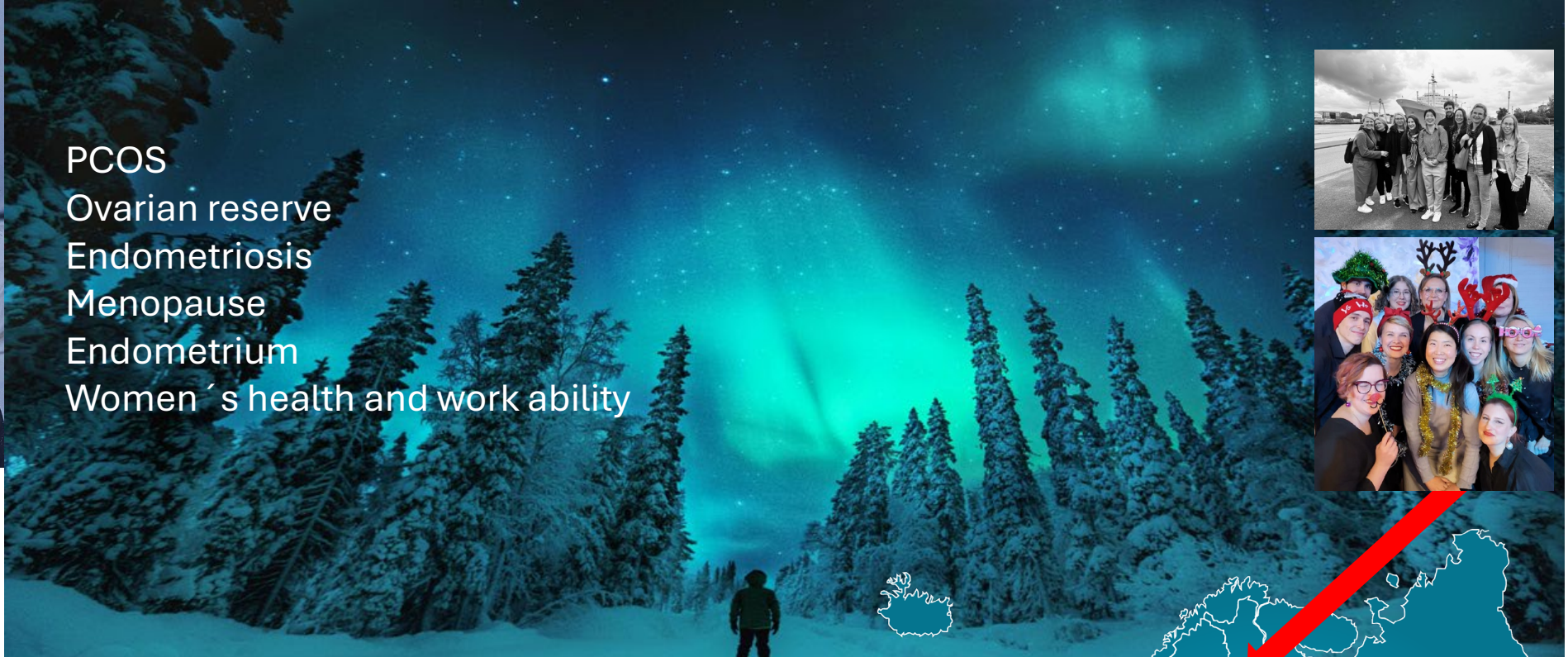
Dept Ob-Gyn, Univ Oulu/Univ Hospital Oulu, Finland

Disclosures

- Advisory board (Roche, Organon, Stragen, Astellas, Exeltis, Gedeon Richter)
 - Presentations with honorarium (**Medix Biochemica**, Ferring, Gedeon Richter, Exeltis, Astellas, Roche, Stragen, Astra Zeneca, Merck, MSD, Duodecim, Ajaton Terveys, Finnish patient organization Korento)
 - Research grant (Roche, Perkin Elmer, Gedeon Richter)
 - Clinical trial participation Mithra/Gedeon Richter/ESTETRA trial
 - Pharma sponsored meeting attendances
-
- Editor-in-Chief in Seminars of Reproductive Medicine
 - President Elect of the AE-PCOS Society
 - Chair, Scientific Committee of the Nordic Federation of Obstetrics and Gynecology (NFOG)
 - Chair, National Guideline for Contraception
 - International PCOS Guideline, Steering committee and Chair (GDG4 medical treatment)

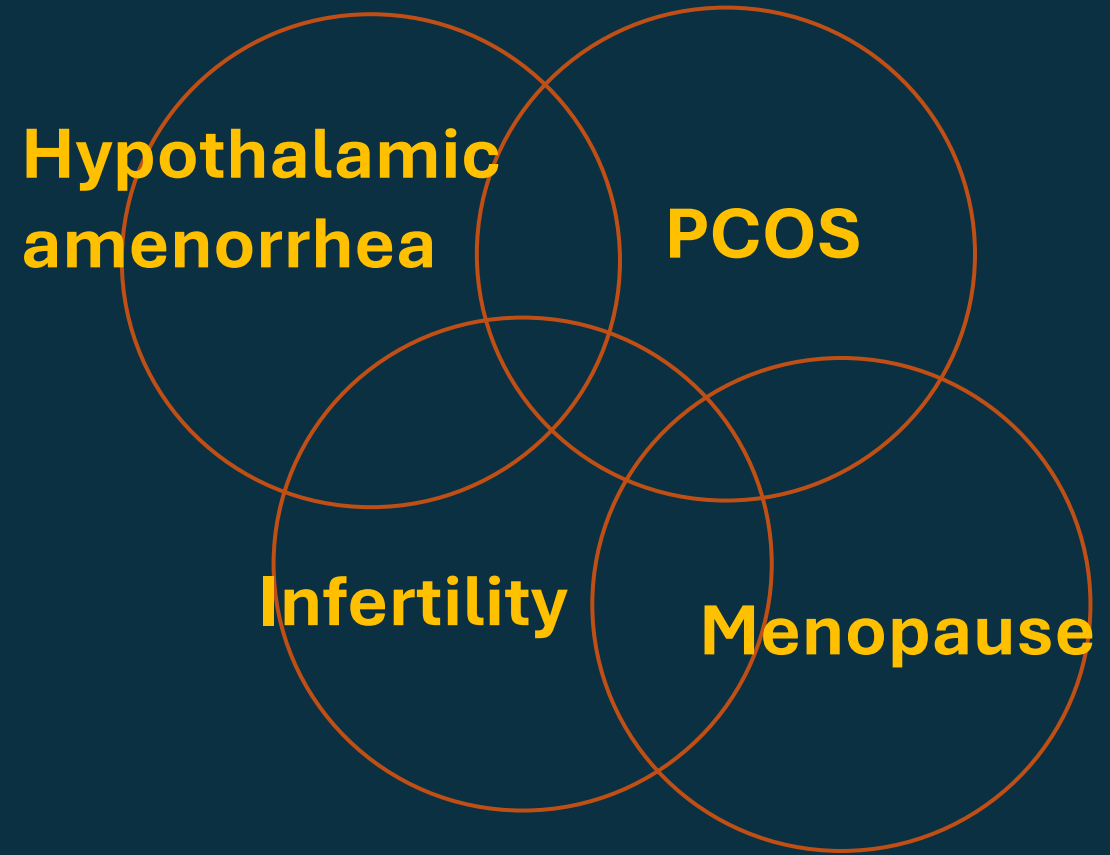


PCOS
Ovarian reserve
Endometriosis
Menopause
Endometrium
Women's health and work ability



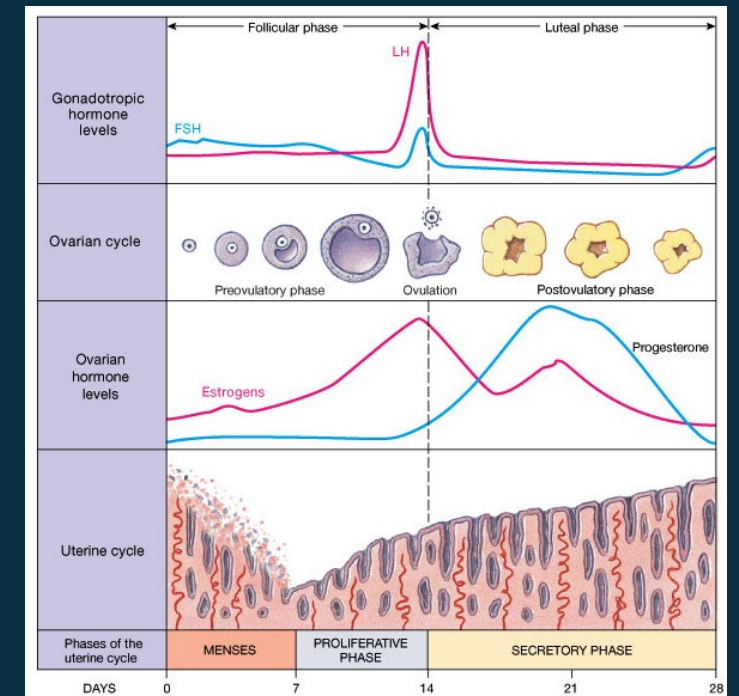
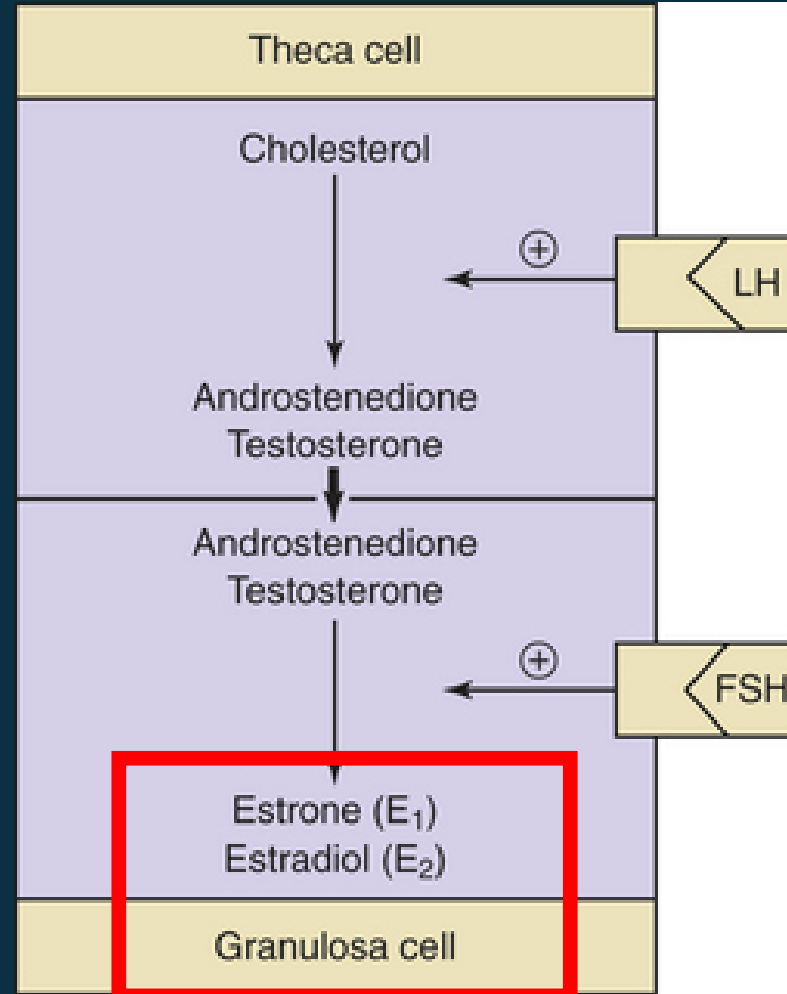
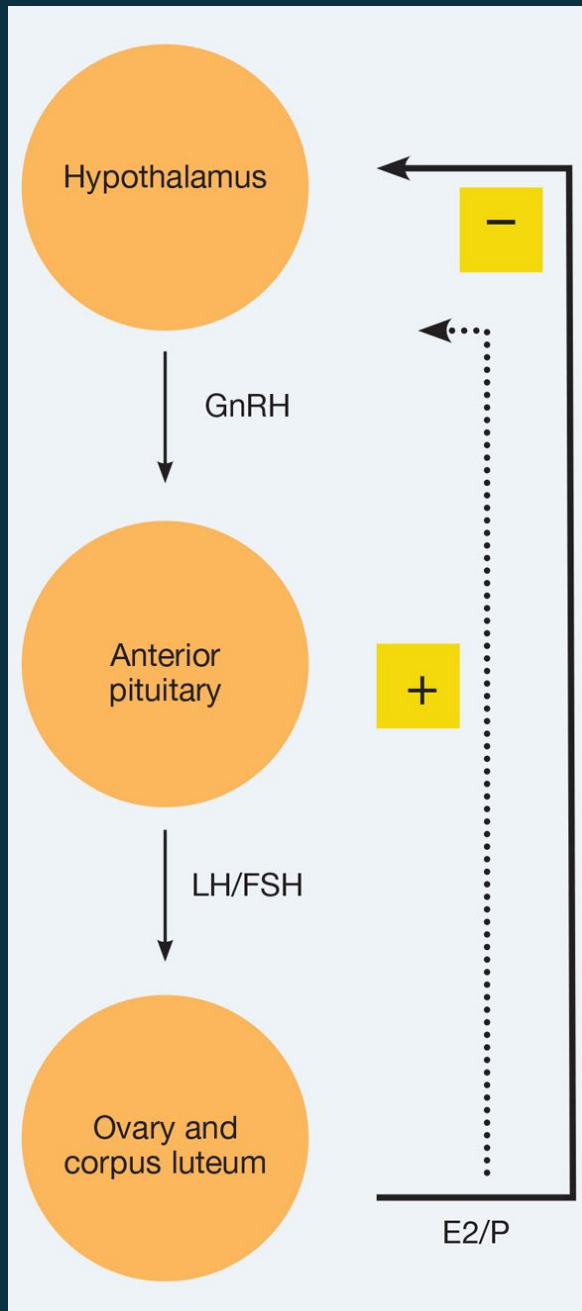
Topics

- Fertility
 - Menopause
 - PCOS
 - Hypothalamic amenorrhea
-
- Nominating factors
 - Irregular menstrual cycles



Overlapping traits!

Hypothalamus-pituitary-ovary-axis

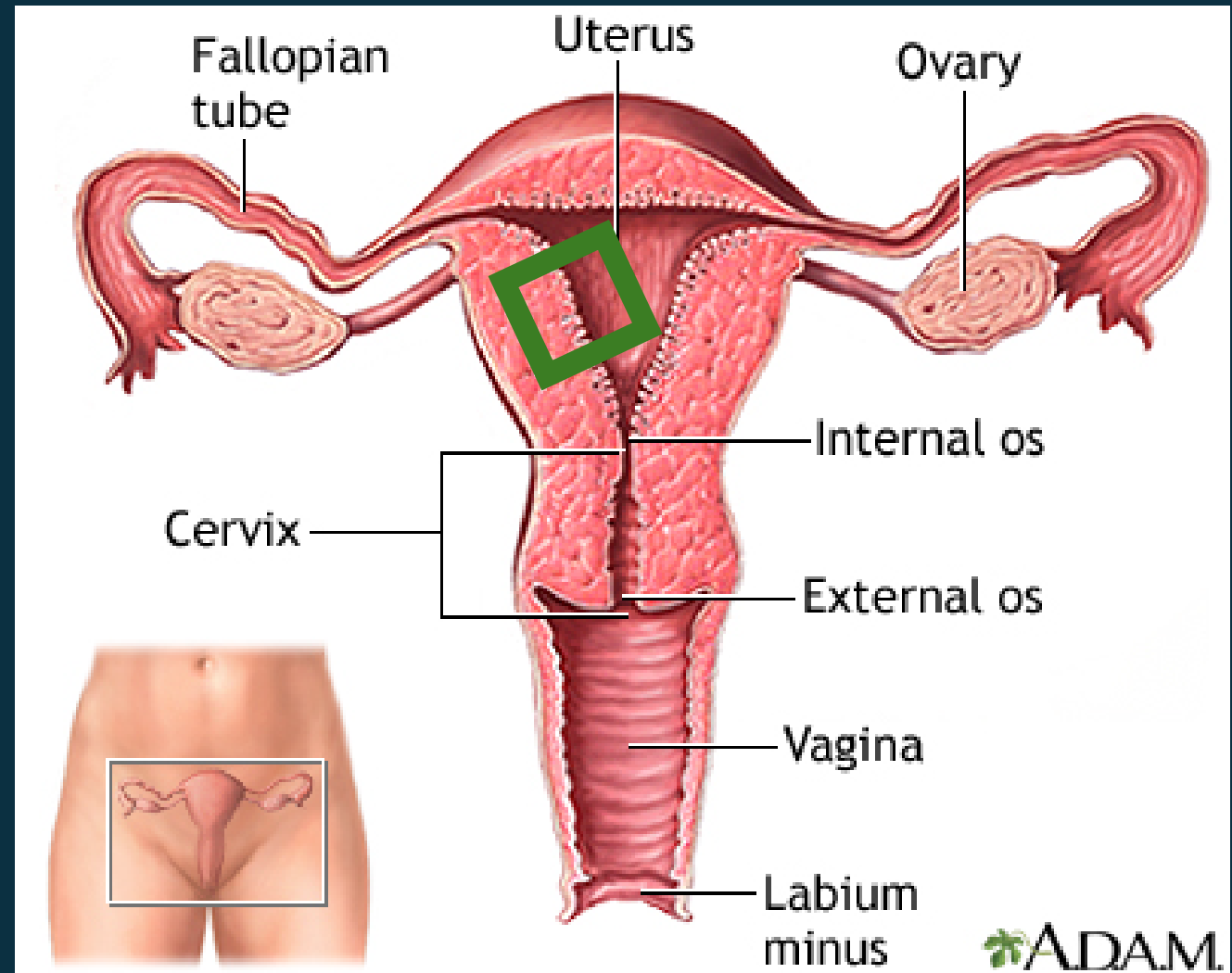


Menstrual cycle

- Endometrial lining

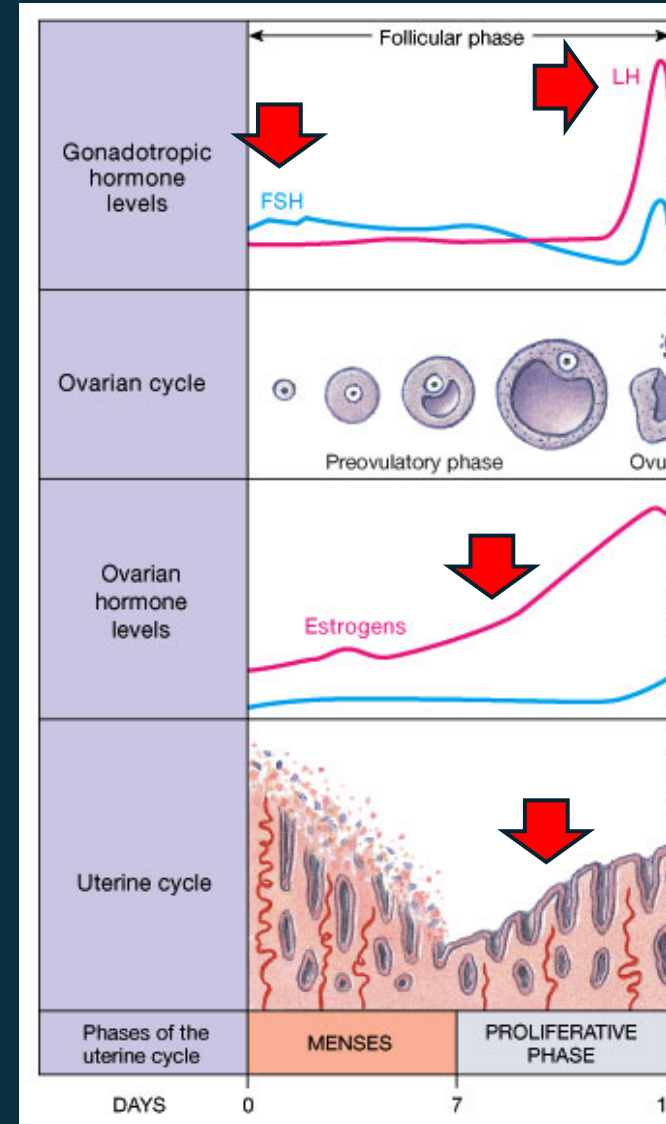
- Functions as the “Ovarian slave tissue”
- Cycles are 28 d on average
 - 21-35 normal range
- Sheds every month around 5 days
- 400 cycles during woman’s lifetime
- Irregular cycles are common

Every 4th woman!



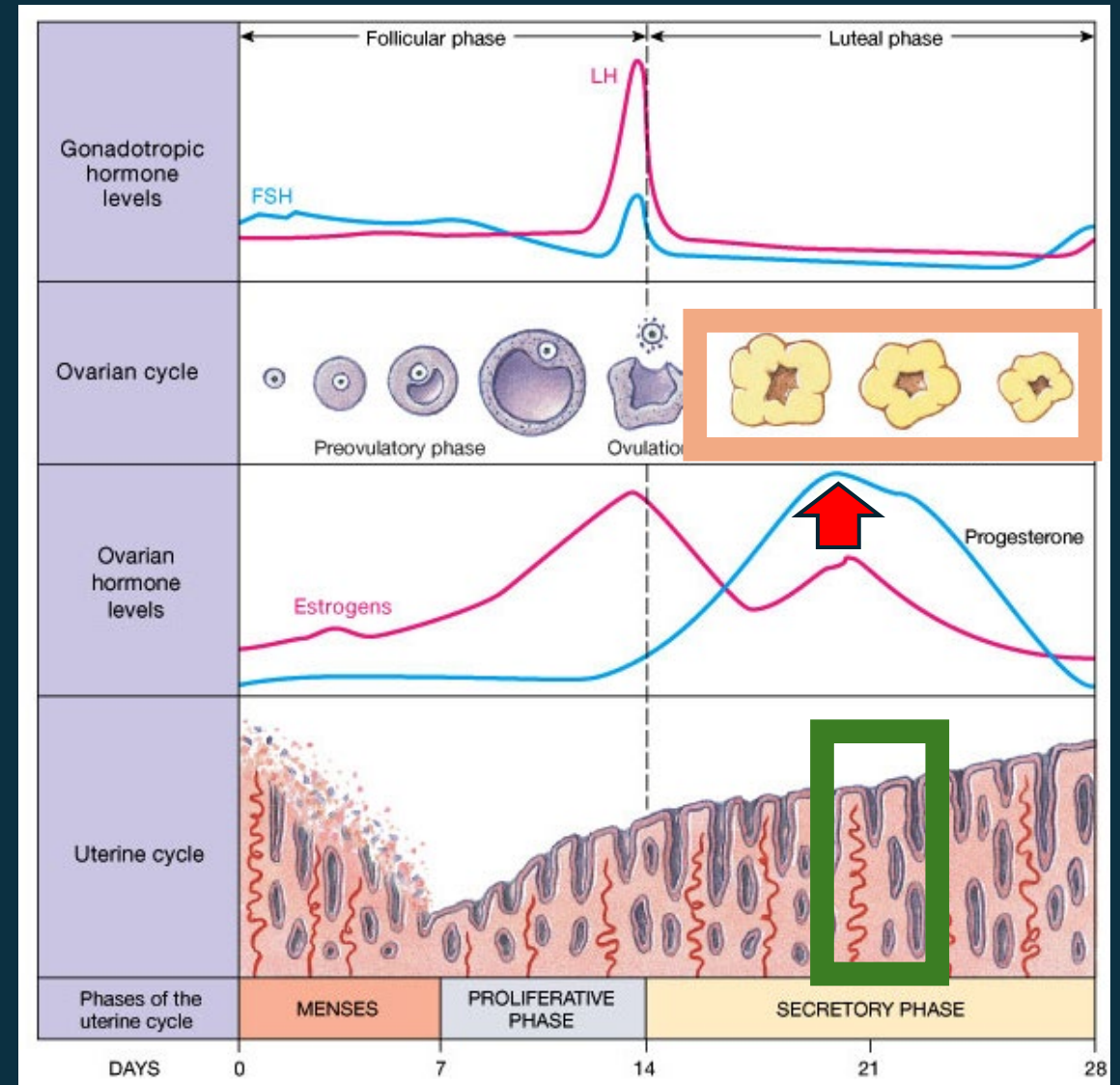
Regulation

- 1st day of menstruation
 - cycle day 1
- Pituitary runs the follicular phase
 - Follicle stimulating hormone (FSH) is secreted
 - Follicle growth and E2 synthesis
 - Endometrial growth (proliferation)
 - Luteinizing hormone (LH) stimulates theca cells
 - Ovulation around day 14.
 - Corpus luteum starts forming



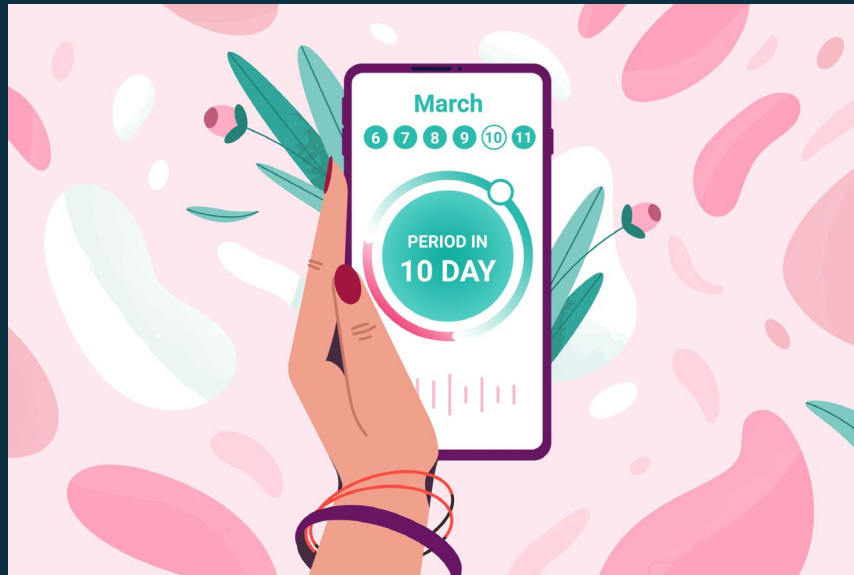
Regulation

- After ovulation **Corpus luteum** is formed
 - Progesterone is secreted
 - Stops proliferation
 - **Endometrium is differentiated**
 - Window of implantation opens around d 21.
- If there is no pregnancy, CL collapses, progesterone levels drop and signals the endometrium to start preparing for menstruation



Changes in the regulatory hormones cause irregular menstrual cycles

- Short cycle
- Long cycle
- Irregular cycles
- Heavy bleeding
- Absent bleeding
- Intermittent bleeding



Applications help tracking cycles irregularities

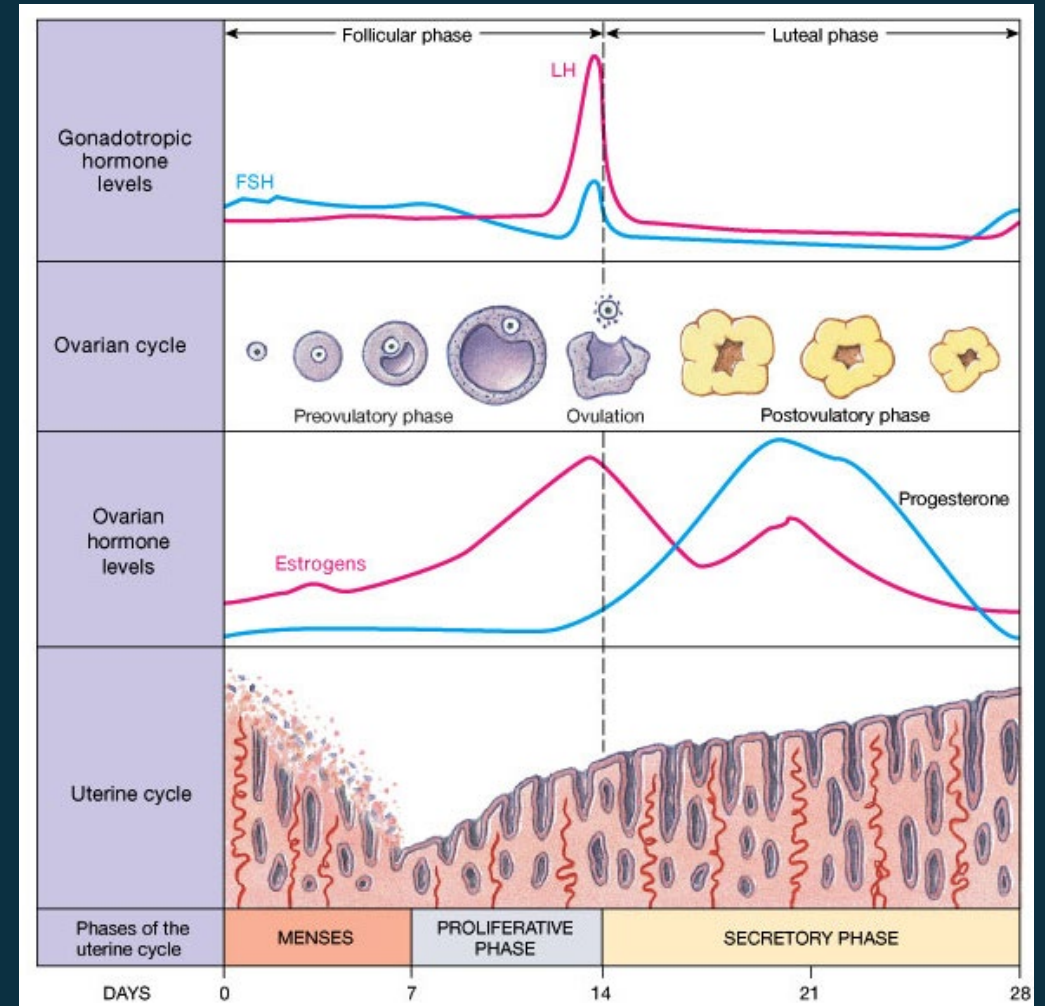
A

TOILETS	Score	TOWELS	TYPE	Score	TAMPONS	TYPE	Score in ml
	1ml		Day time	1ml	DATE	BRAND	
	3ml		Night time	1ml		Regular	0.5
	5ml		Day time	2ml		Super	1.0
			Night time	3ml		Super Plus	1.0
			Day time	3ml		Regular	1.0
			Night time	6ml		Super	1.5
			Day time	4ml		Super Plus	2.0
			Night time	10ml		Regular	1.5
			Day time	5ml		Super	3.0
			Night time	15ml		Super Plus	4.0
			Day time	5ml		Regular	4.0
			Night time	15ml		Super	8.0
						Super Plus	12.0

Visual tools help detecting heavy menstrual bleeding

Tracking problems: What am I looking for?

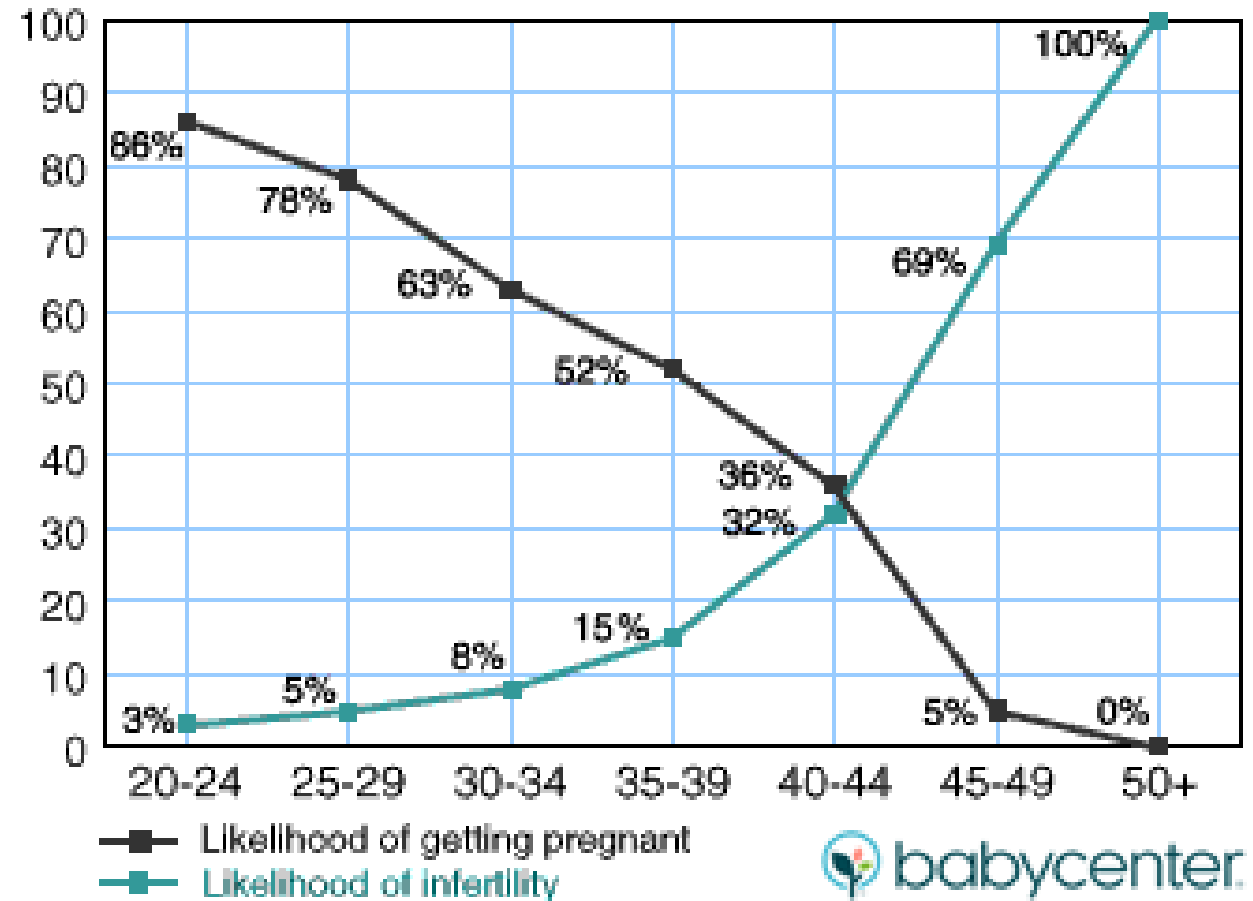
- Gonadotrophin levels
 - Early cycle → are they elevated to “push” the ovary? Or is are the levels suppressed
 - LH –ovulation → urinary test!
- Steroids hormones
 - Preferably early cycle, progesterone 7 d after ovulation
- Other factors
 - Thyroid function, PRL, ferritin
 - Preferably morning samples, early cycle, in many cases menstrual cycle phase does not matter



Fertility

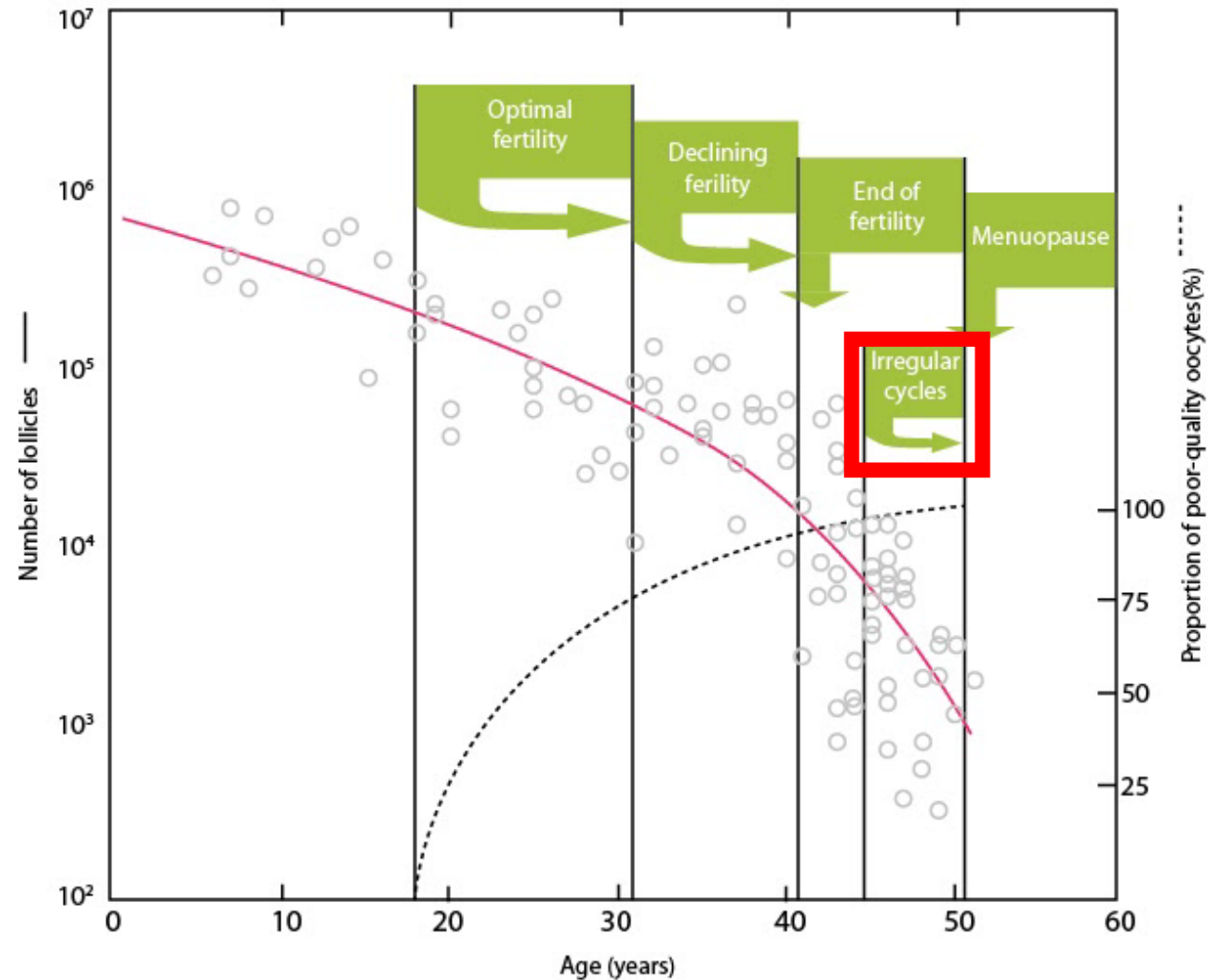
Fertility

- Normal fertility status if pregnancy is achieved in 12 months
- Likelihood decreases along ageing
- BMI and other health factors also impair fertility



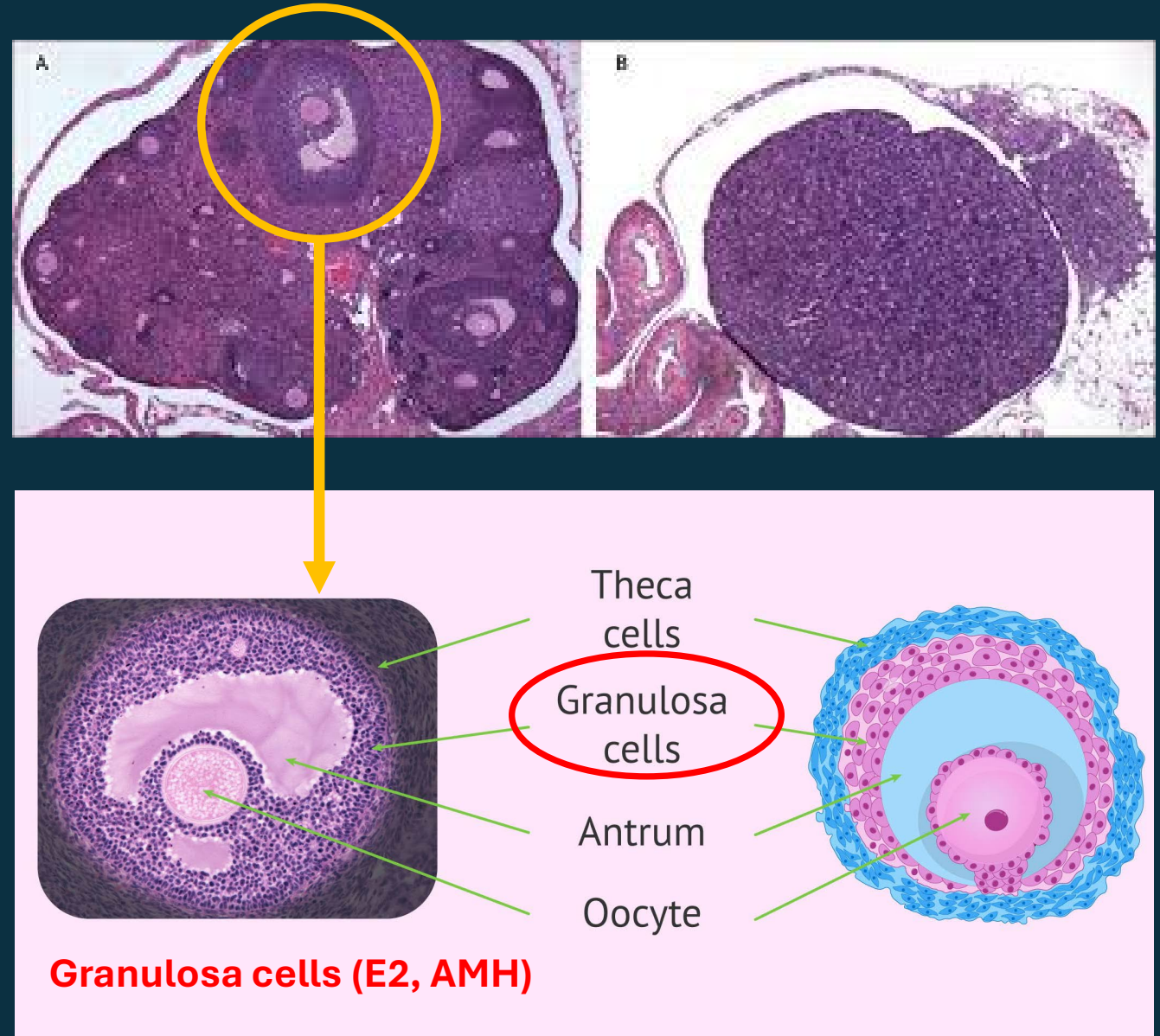
Ovarian ageing

- Number of **follicles** decrease over time
- Quality of the oocytes decrease over time
- Likelihood of pregnancy declines along ageing, , even with normal menstrual cycles!



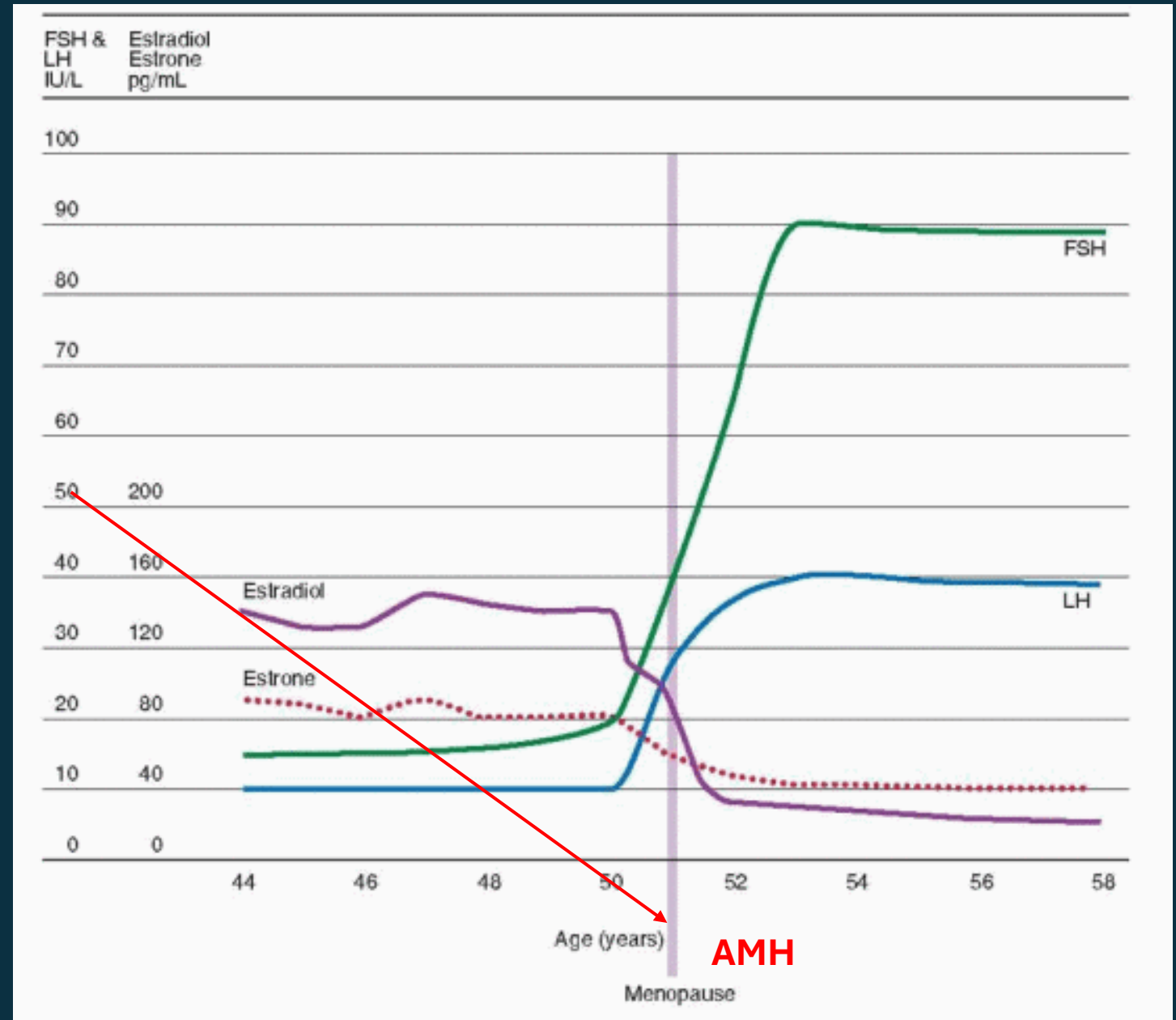
Ovarian ageing

- Number of **follicles** decrease over time
- Affects
 - AMH
 - FSH
 - LH
 - E2
 - Androgen levels
- Reflected by decrease in **anti-Müllerian hormone (AMH)**
- **later decrease in E2 and increased FSH**



Ovarian ageing

- Number of **follicles** decrease over time
- Affects
 - AMH
 - FSH
 - LH
 - E2
 - Androgen levels
- Reflected by decrease in **anti-Müllerian hormone (AMH)** and later in E2 and FSH



Know the physiology behind cycle length

Patient 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28							
Patient 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22													
Patient 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35

- Patient 1 P28 –assuming normal ovarian reserve
- Patient 2 P21 –ovary is ageing as, assume that AMH low and FSH elevated
- Patient 3 P35 –Might be higher ovarian reserve than average. Any longer cycles than 35? Hirsutism? PCOS?

Fertility assessment in women

- Age, BMI, changes in weight
- Menstrual cycle
- Menarche, parity, fam history of menopause
- Medical history (incl. obstetrical history)
- Medications and supplements
- Time to pregnancy

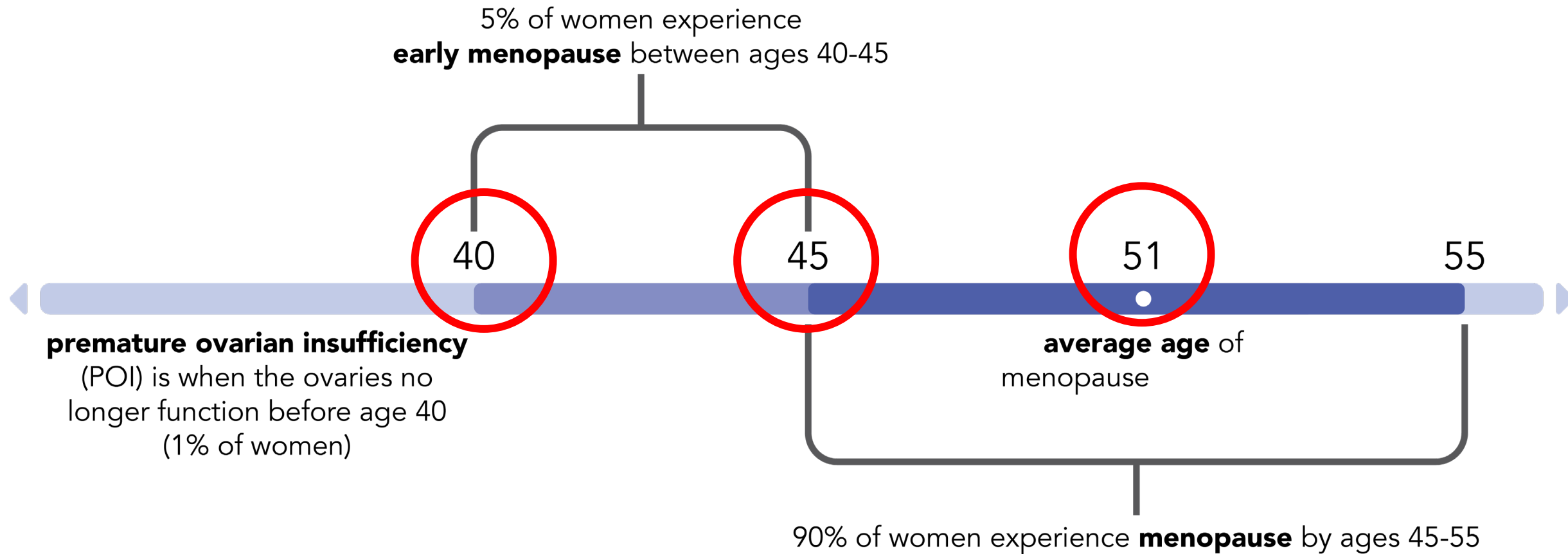
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Assessments

- Gynecological examination
- Ultrasonography (uterus, ovaries, tubes, peritoneum)
- Tubal patency (if risk evaluated high for occlusion)
- Serum AMH
 - Low → more emphasis on ovarian reserve
 - Normal → other reasons? Endometriosis? Male factor?
 - High → AMH → PCOS? More investigations needed
- Thyroid function? (TSH, T4). Antibodies?
- Prolactin (PRL), **note that gives easily false positives!!**
- Consider LH and FSH, **measure in early cycle**
- Ferritin (heavy menstruations?), **is there inflammation?**
- Celiac disease markers?

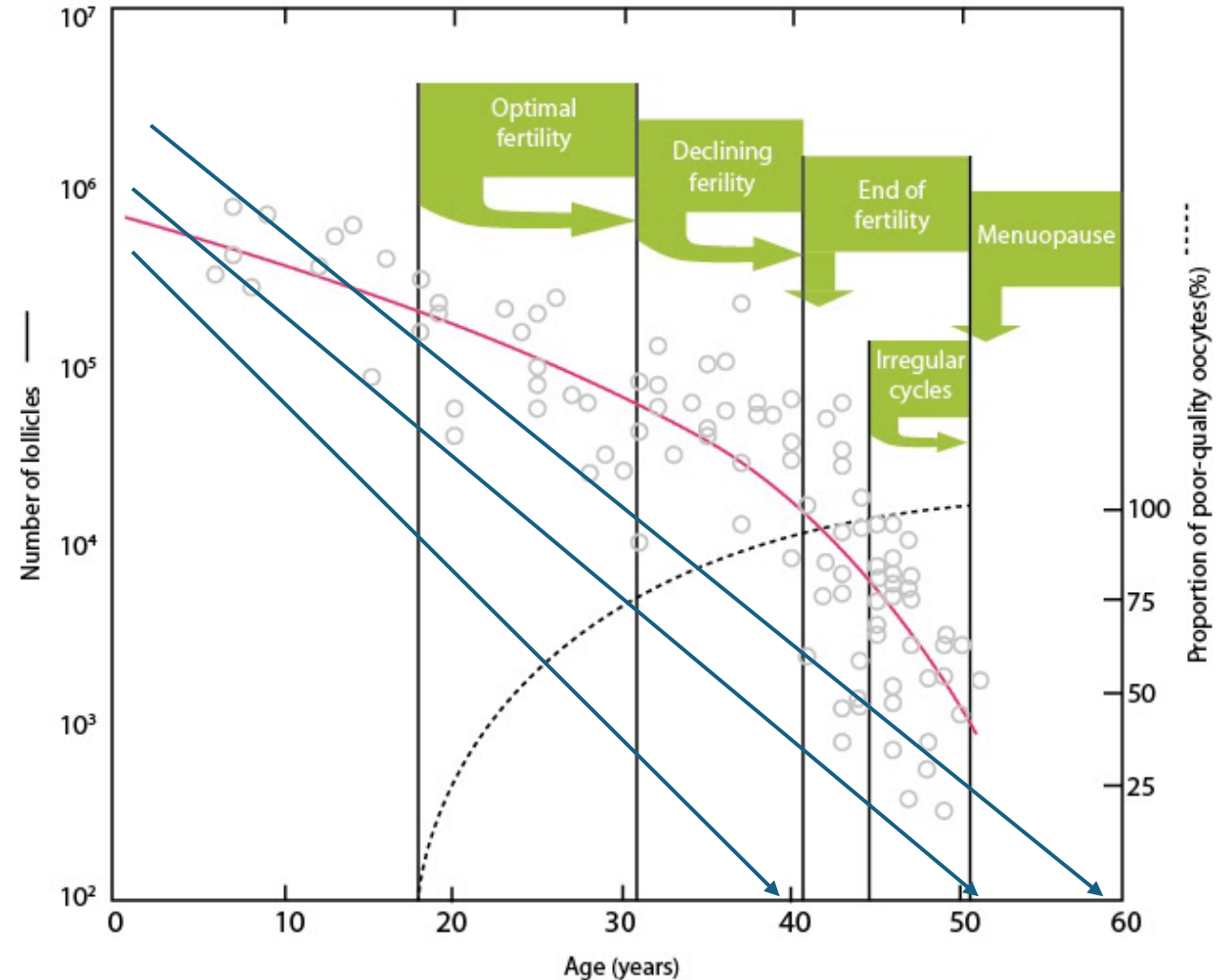
Menopause

Menopause



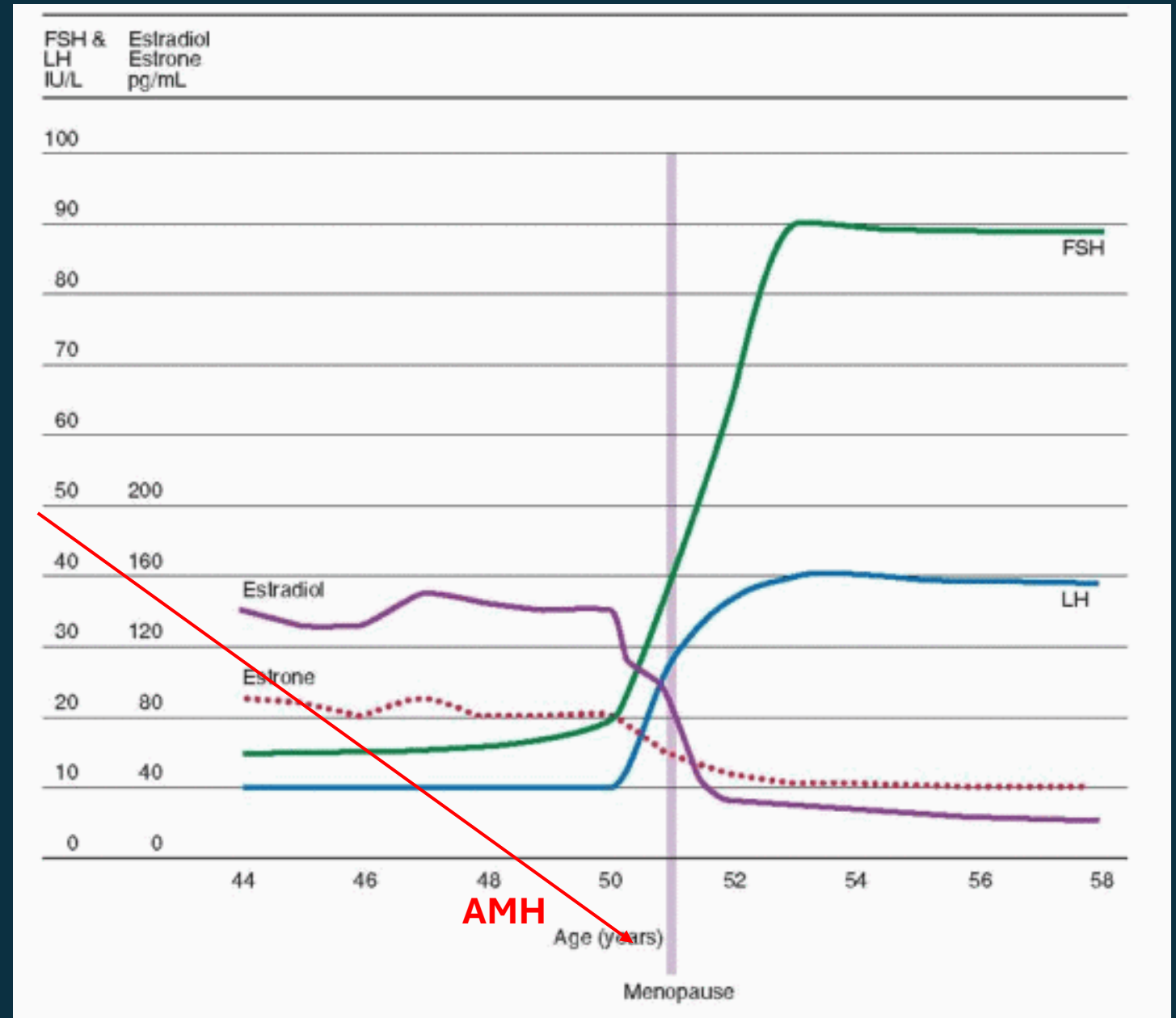
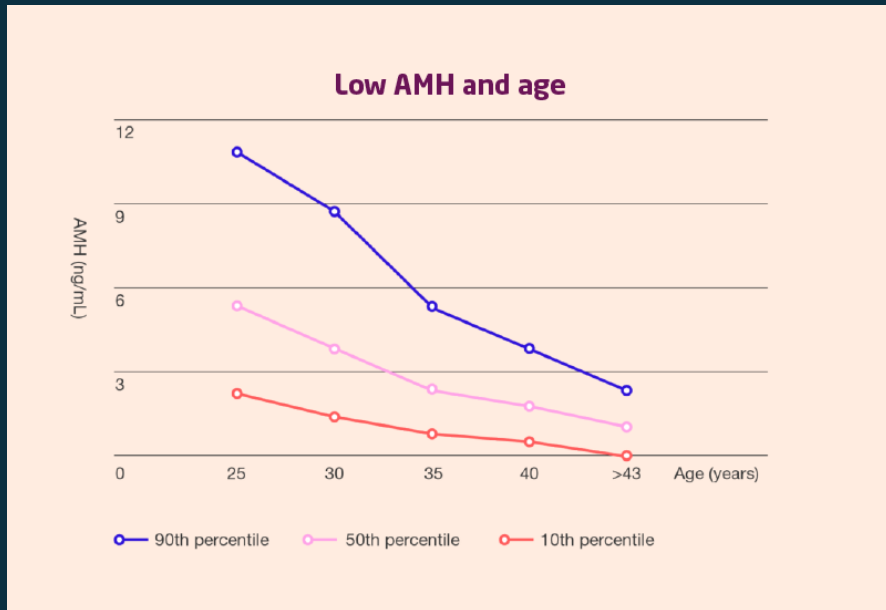
Menopause

- Age at menopause varies
 - Maternal age at menopause good indicator
- Oestrogen deficiency
 - Hot flashes
 - Joint pain
 - Sleep problems
 - Sexual dysfunction
 - Dry skin, eyes, vagina
- No ovulations
 - infertility
- No corpus luteum
 - Menstrual irregularities
 - Usually first, the cycles shorten
 - Then oligomenorrhea and heavy menstrual bleeding
- Symptoms can start years before menopause with still normal hormonal levels
- Important to screen for other factors
 - Mental distress, thyroid problems, other conditions like sleep apnea, diabetes etc.



Ovarian reserve?

- AMH <1 ng/ml already indicates low ovarian reserve
- FSH > 7-10 IU/l already implies decreased estrogen feed-back
- FSH > 30 IU/l indicates menopause
- LH rises very late
- All can be masked by COCs (except AMH)



*COC,_combined oral contraceptives

PCOS

PCOS



Most common endocrinopathy in women
1:6 (16%)

nature reviews disease primers

<https://doi.org/10.1038/s41572-024-00511-3>

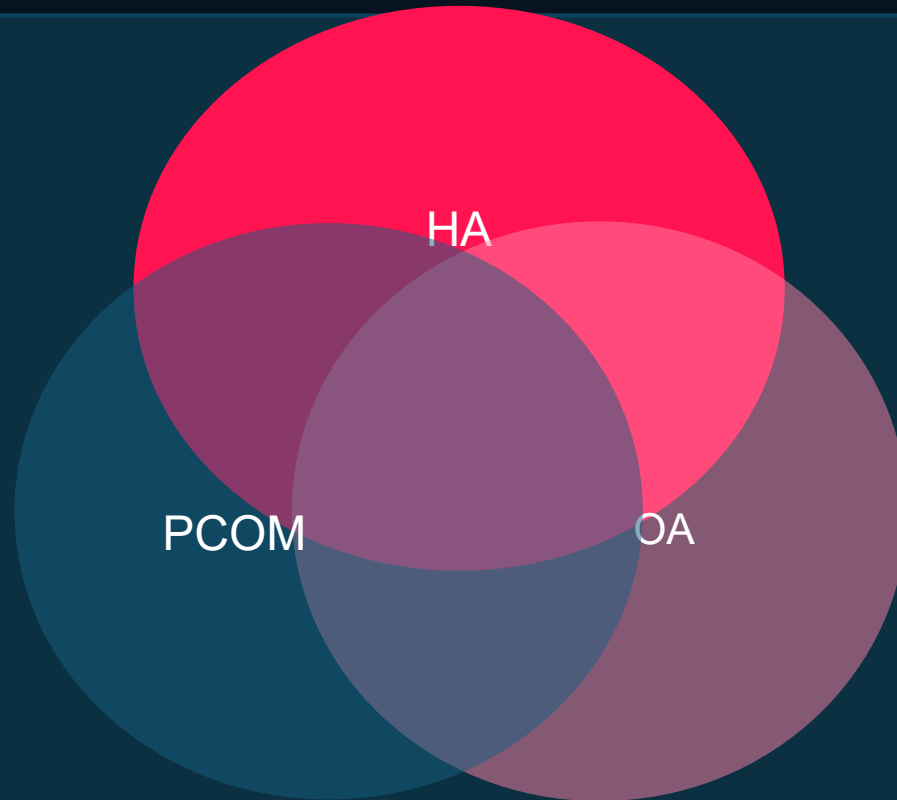
Primer

 Check for updates

Polycystic ovary syndrome

Elisabet Stener-Victorin¹✉, Helena Teede², Robert J. Norman³, Richard Legro^{4,5}, Mark O. Goodarzi⁶, Anuja Dokras⁷, Joop Laven⁸, Kathleen Hoeger⁹ & Terhi T. Piltonen¹⁰

PCOS



- Rotterdam 2/3
- 80% have hyperandrogenism (HA)

Most common comorbidities

- Metabolic
 - Hypertension
 - Dyslipidemia
 - Obesity
 - DMT2, MetS, MACE, CVD
 - Sleep apnea
- Psychological/Neurological
 - Anxiety
 - Depression
 - Disordered eating
 - Migraine
 - ADHD
- Reproductive
 - Anovulation
 - Irregular cycles
 - Endometrial ha/ca
 - Pregnancy complications

Hyperandrogenic
phenotype seems to
associate with higher
comorbidity profile

PCOS update 08/2023



International evidence-based guideline for the assessment and management of polycystic ovary syndrome 2023



European Journal of Endocrinology, 2023, **189**, G43–G64
<https://doi.org/10.1093/ejendo/lvad096>
Advance access publication 15 August 2023
Clinical Practice Guideline



Recommendations from the 2023 international evidence-based guideline for the assessment and management of polycystic ovary syndrome

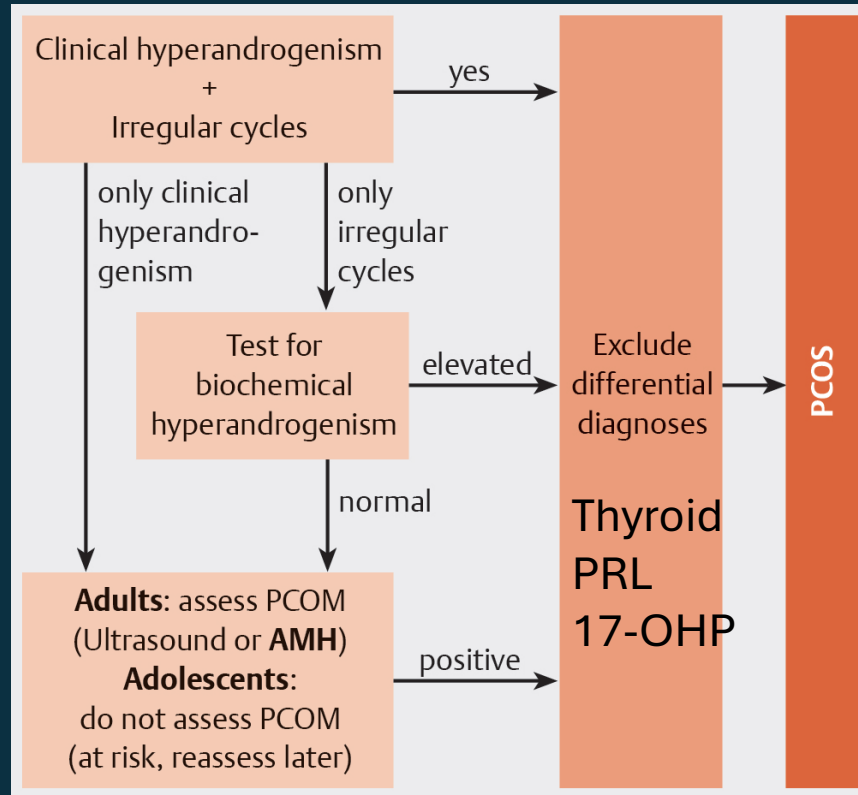
Helena J. Teede,^{1,2,*}  Chau Thien Tay,^{1,2} Joop J.E. Laven,^{2,3} Anuja Dokras,⁴ Lisa J. Moran,^{1,2} Terhi T. Piltonen,⁵  Michael F. Costello,^{2,6} Jacky Boivin,⁷  Leanne M. Redman,⁸ Jacqueline A. Boyle,^{2,9} Robert J. Norman,^{2,10} Aya Mousa,¹  and Anju E. Joham^{1,2} on behalf of the International PCOS Network[†]

Fertility and sterility
Human Reproduction
JCEM

Search: “PCOS and guideline and monash”

Diagnosis -adults

Algorithm 1: Screening diagnostic



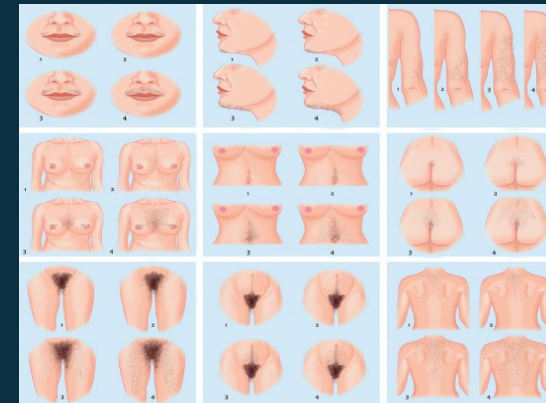
10-15% of women (regardless of ethnicity)

1. Irregular cycles:

<21 OR >45 days OR <8 cycles/yr

2. Hyperandrogenisms:

FG-score ≥ 4 OR high serum Testosterone

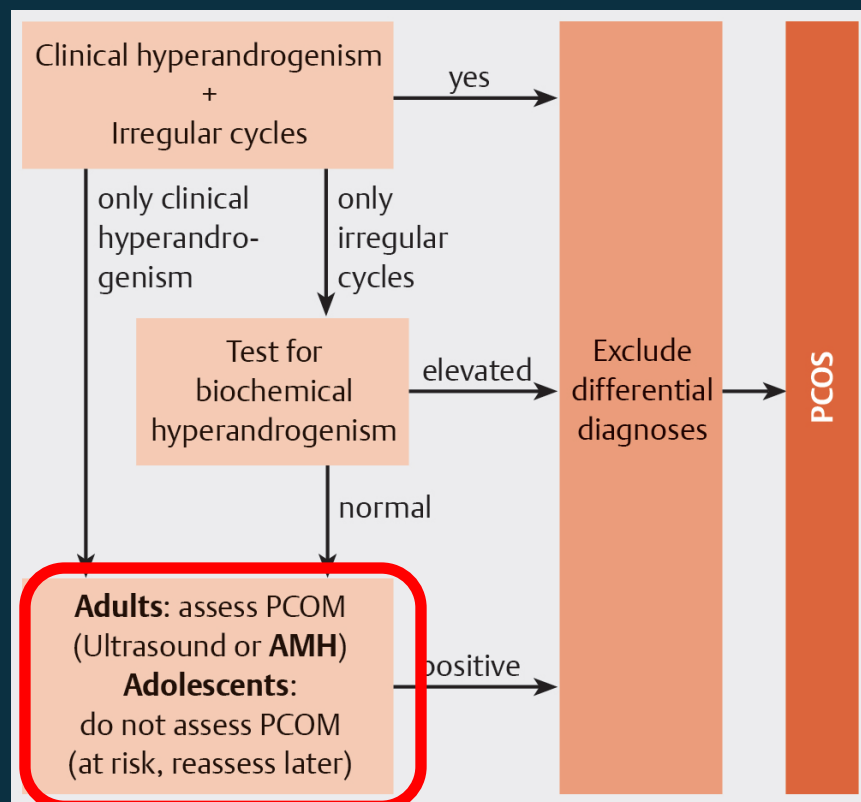


3. PCOM:

Ultrasound ≥ 20 AFC OR high serum AMH

Diagnosis -adolescents

Algorithm 1: Screening diagnostic

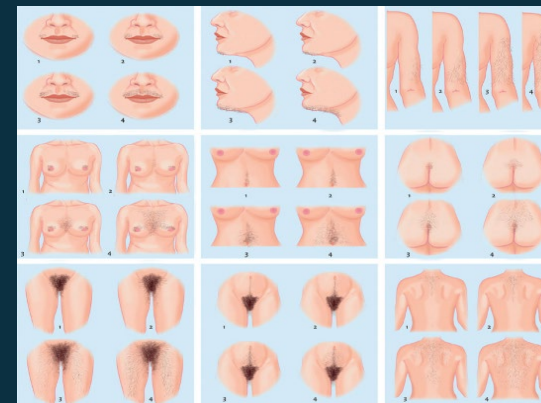


1. Irregular cycles:

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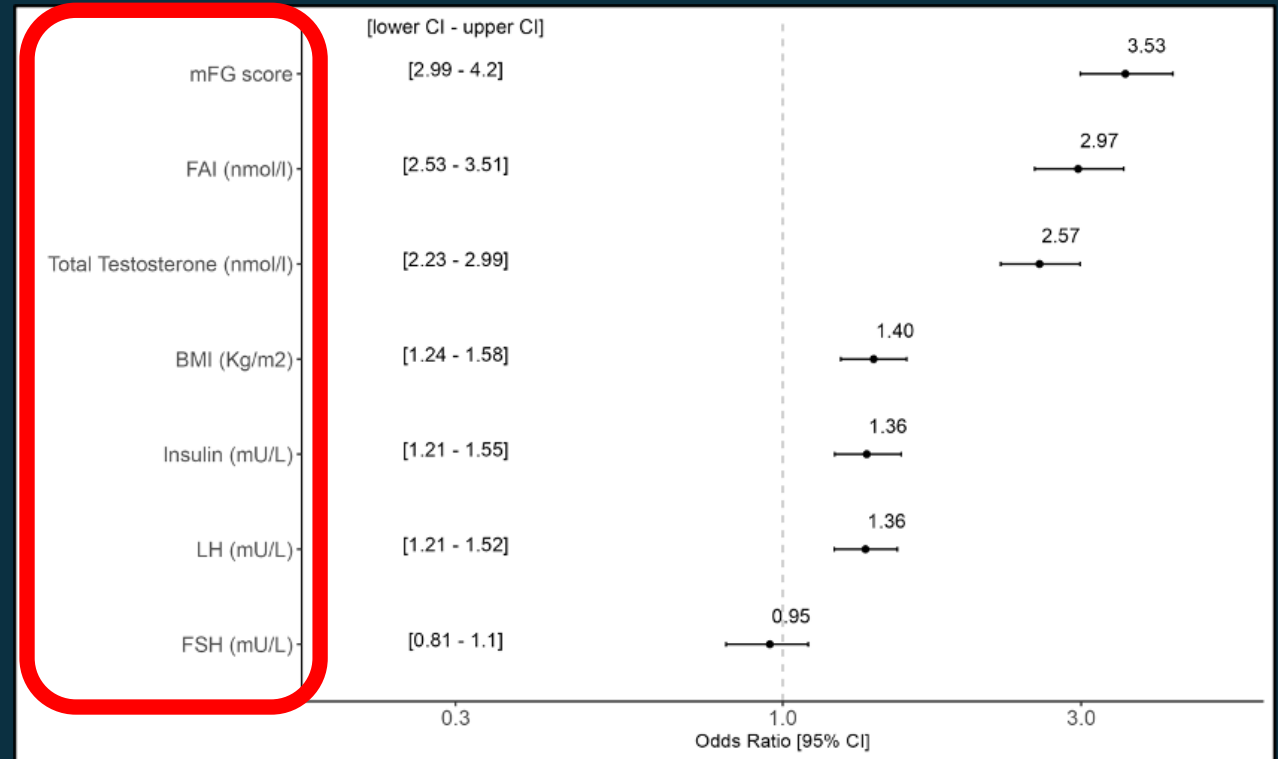
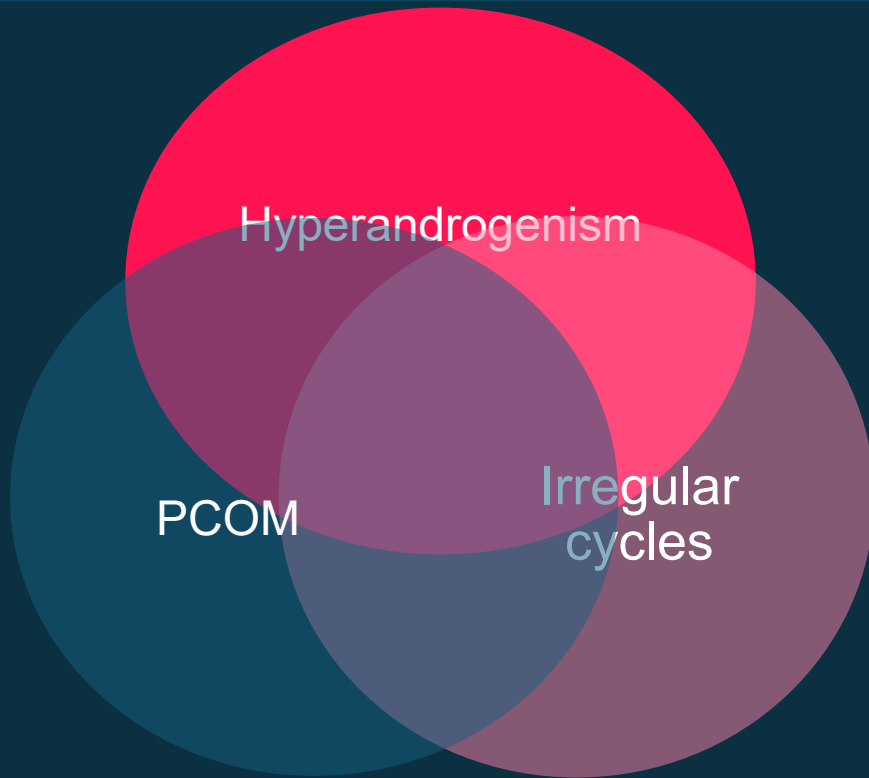
3. PCOM:

Ultrasound ≥ 20 AFC OR high serum AMH

PP

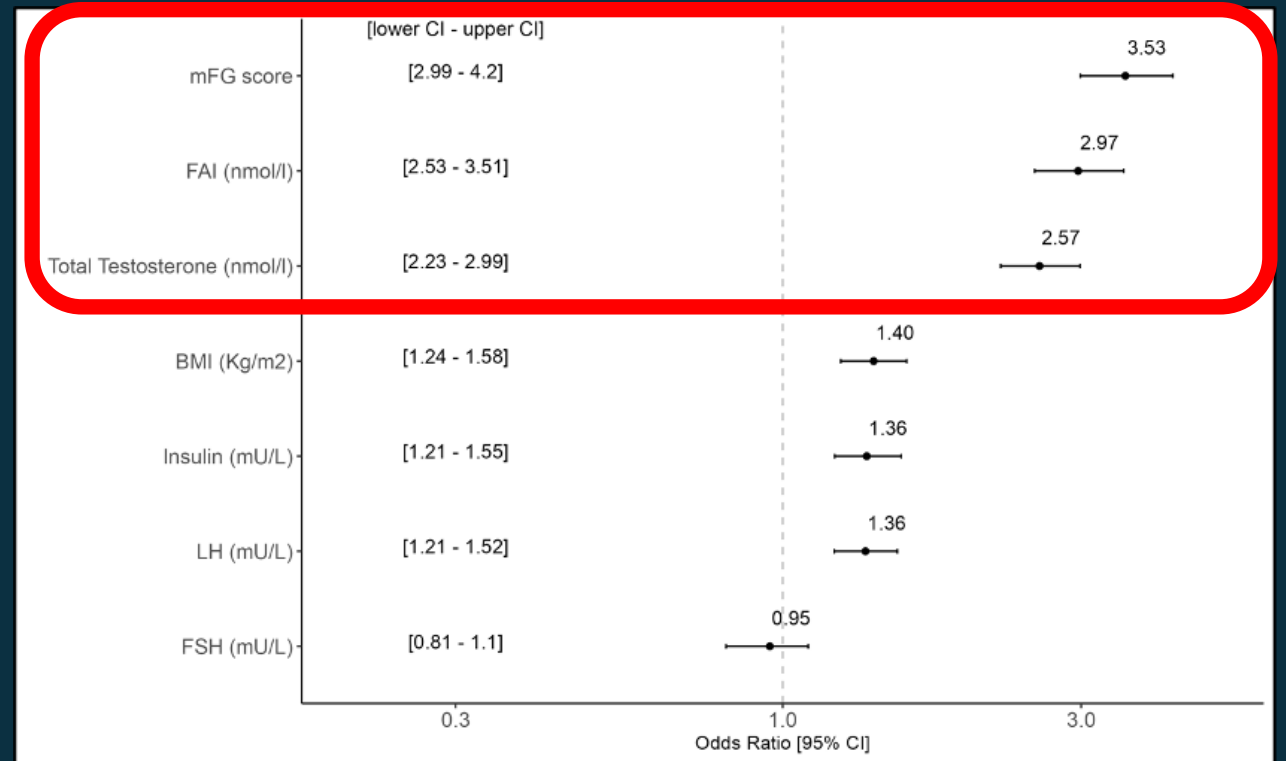
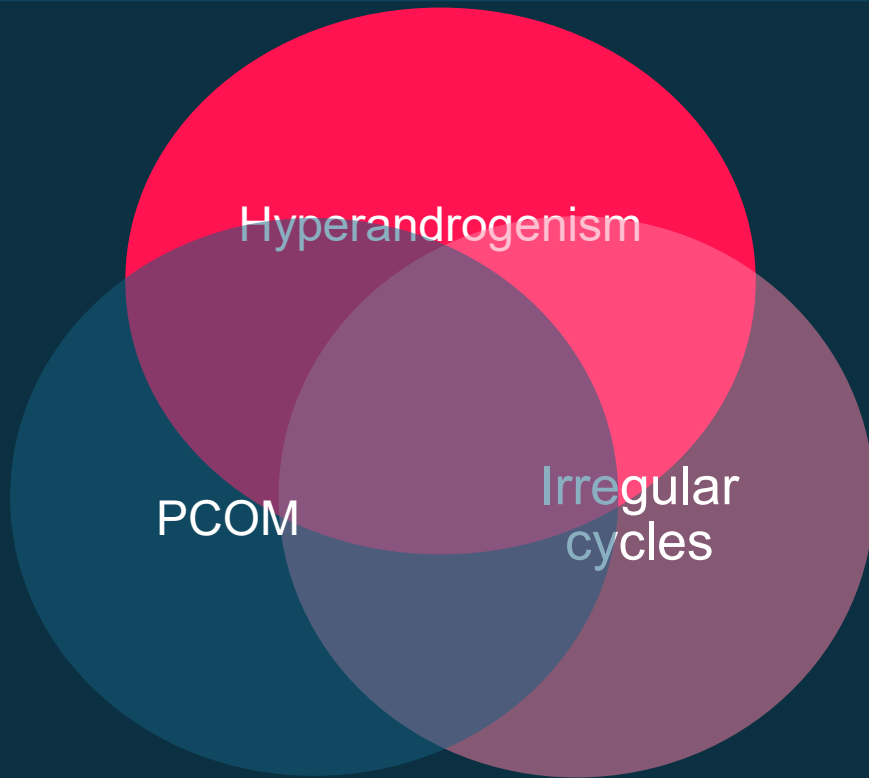
For adolescents who have features of PCOS, but do not meet diagnostic criteria, an **“increased risk”** could be considered and reassessment advised at or before full reproductive maturity, 8 years post menarche.

PCOS



- 80% PCOS of women are hyperandrogenic
- Symptoms are hirsutism, acne and hair loss

PCOS



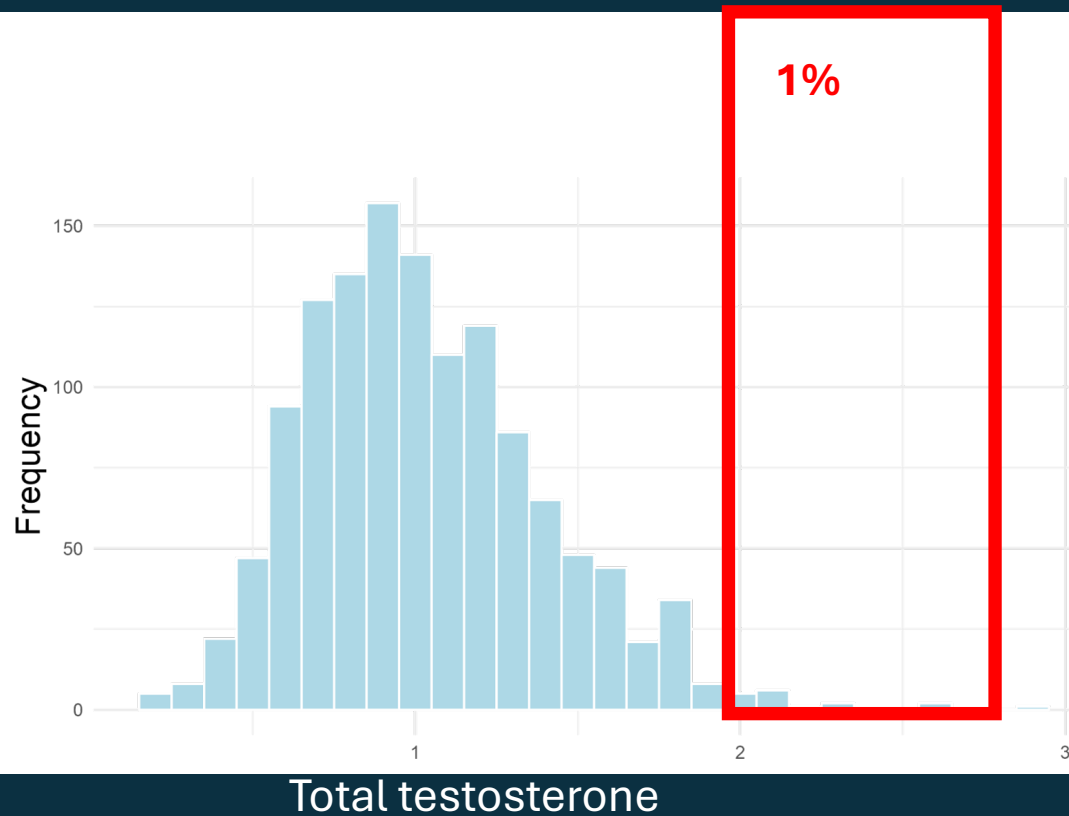
- 80% PCOS of women are hyperandrogenic
- Symptoms are hirsutism, acne and hair loss

PCOM-diagnosis and androgen measurement

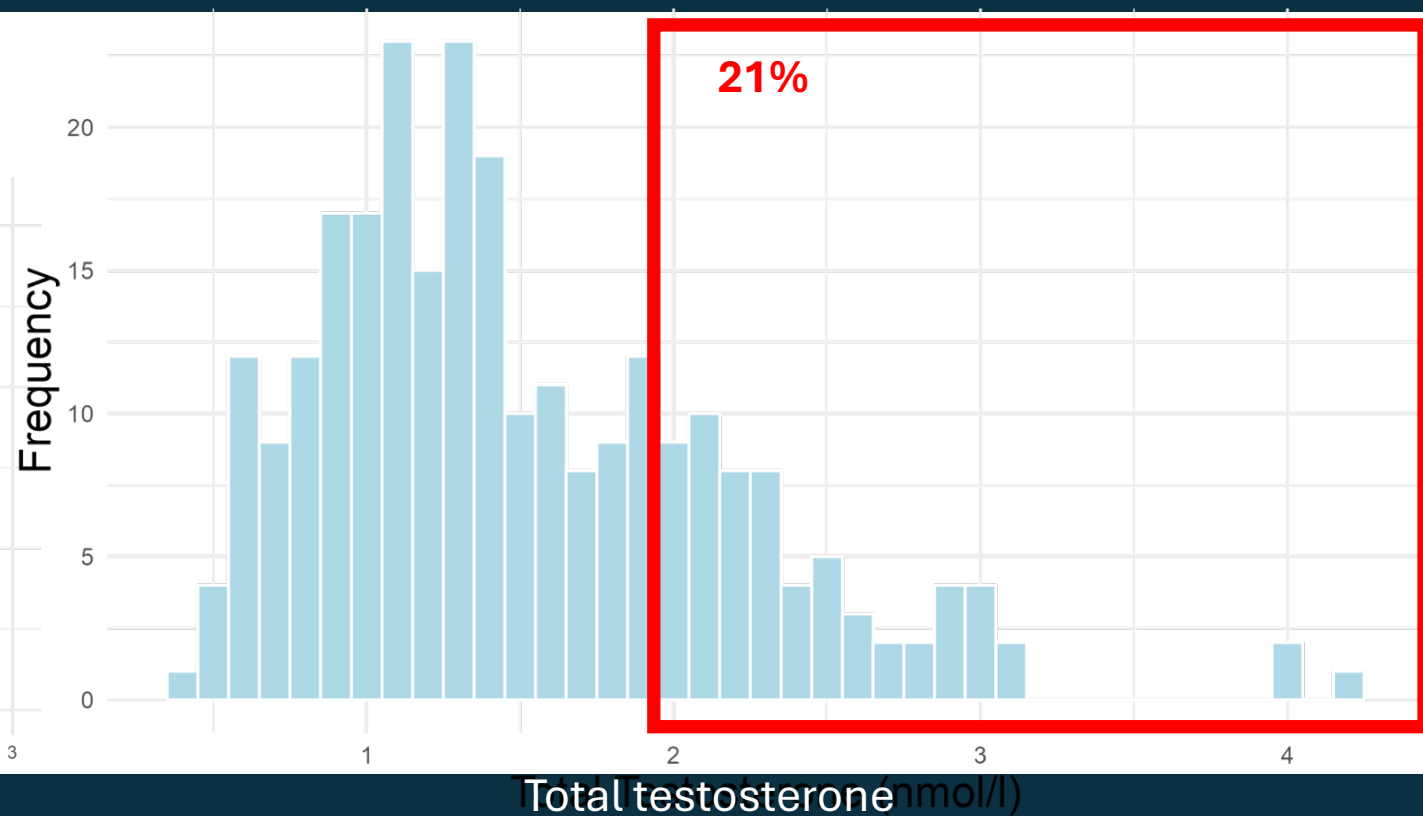
1.2	Biochemical hyperandrogenism	
1.2.1	EBR	Healthcare professionals should use total and free testosterone to assess biochemical hyperandrogenism in the diagnosis of PCOS; free testosterone can be estimated by the calculated free androgen index. $FAI = (testosterone / SHBG) \times 100$
1.2.2	EBR	If testosterone or free testosterone is not elevated, healthcare professionals could consider measuring androstenedione and dehydroepiandrosterone sulfate (DHEAS) noting their poorer specificity and greater age associated decrease in DHEAS.
1.2.3	EBR	Laboratories should use validated, highly accurate tandem mass spectrometry (LC-MS/MS) assays for measuring total testosterone and if needed, for androstenedione and DHEAS. Free testosterone should be assessed by calculation, equilibrium dialysis or ammonium sulfate precipitation.
1.2.4	EBR	Laboratories should use LC-MS/MS assays over direct immunoassays (e.g. radiometric, enzyme-linked, etc.) for assessing total or free testosterone, which have limited accuracy and demonstrate poor sensitivity and precision for diagnosing hyperandrogenism in PCOS.

Testosterone ≥ 2 nmol/l

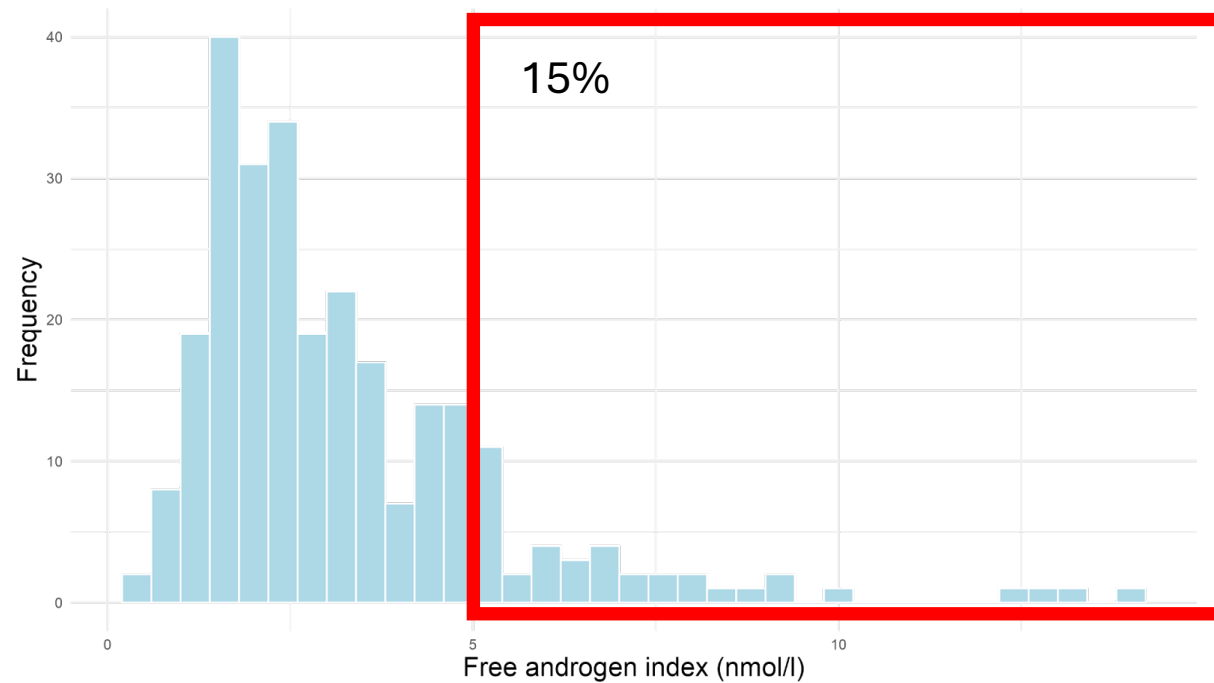
Controls



PCOS



FAI ≥ 5



$$\text{FAI} = (\text{Testosterone} / \text{SHBG}) * 100$$

N=1918

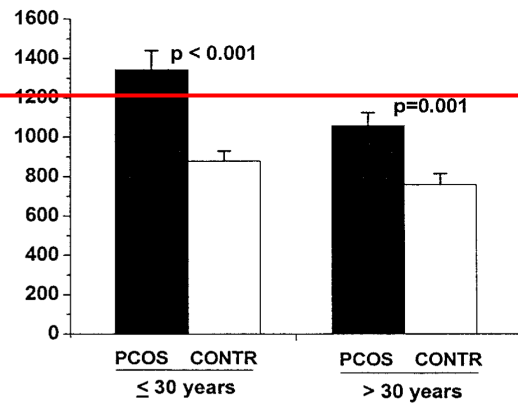
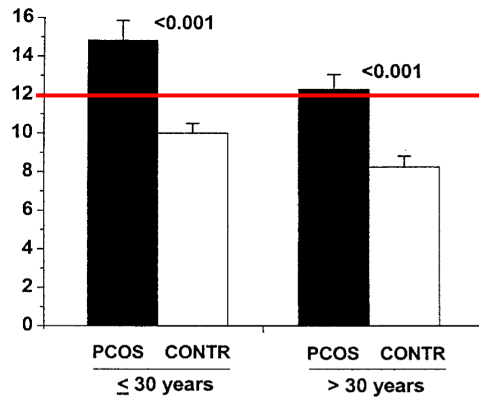
Cut-off for androgens?

testo/androstenedione

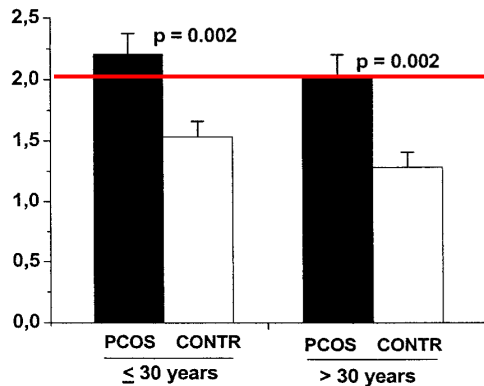
10-12 nmol/L = 286-343.840 ng/dL

AUC 96h androstenedione

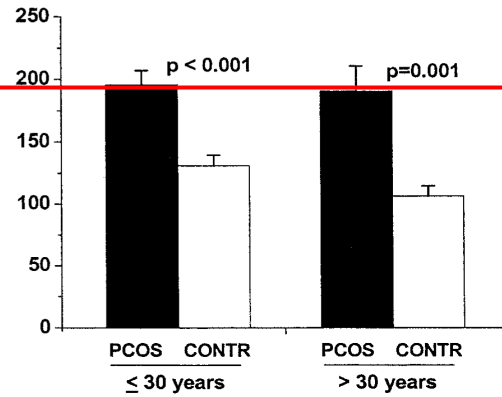
Basal androstenedione (nmol/l)



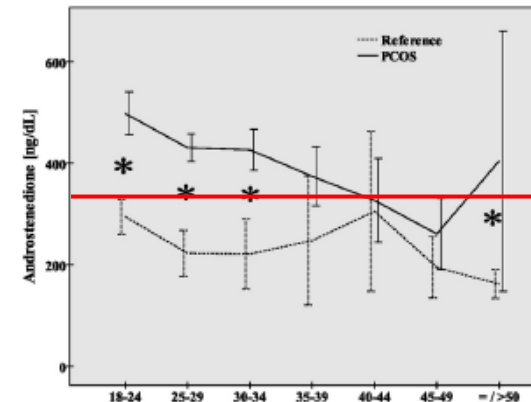
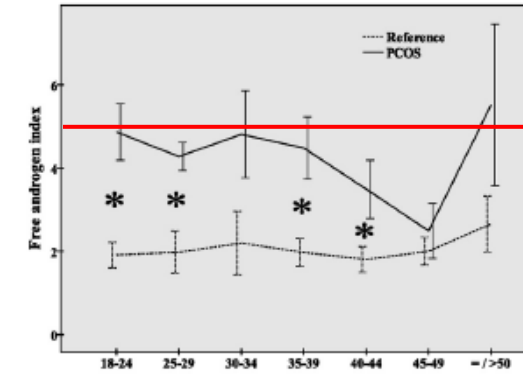
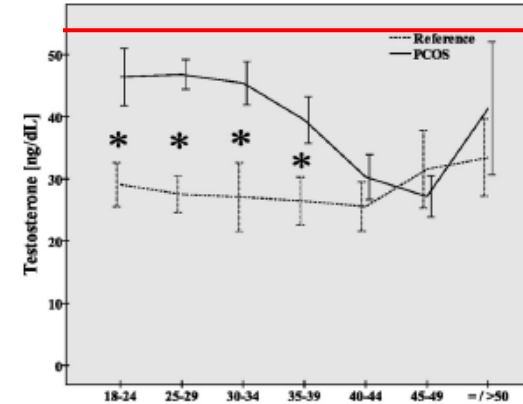
Basal testosterone (nmol /l)



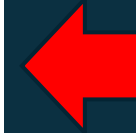
AUC 96h testosterone



1.8-2 nmol/L = 51-57.684 ng/dL



Not all were measured with LCM-MS



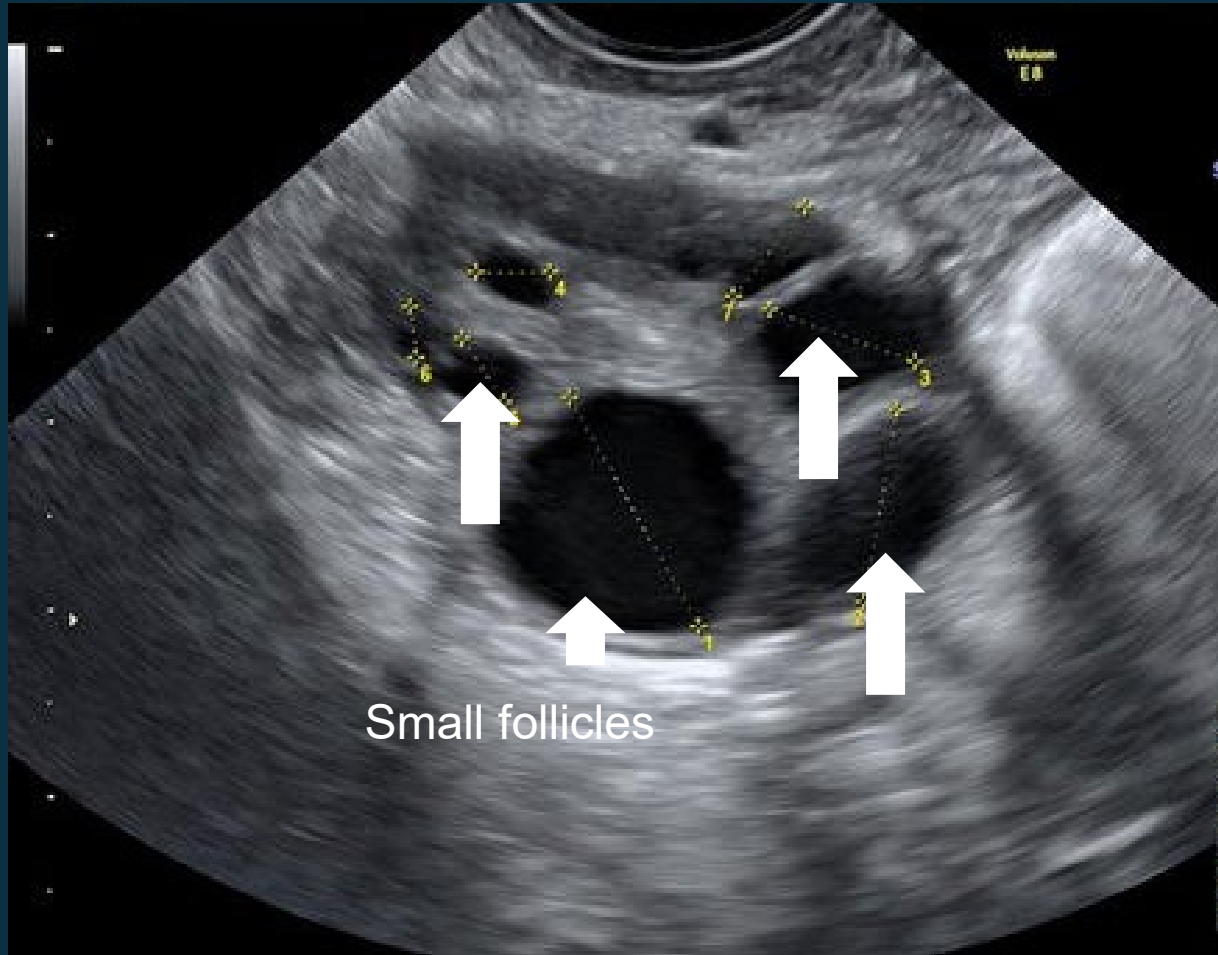
FAI more indicative



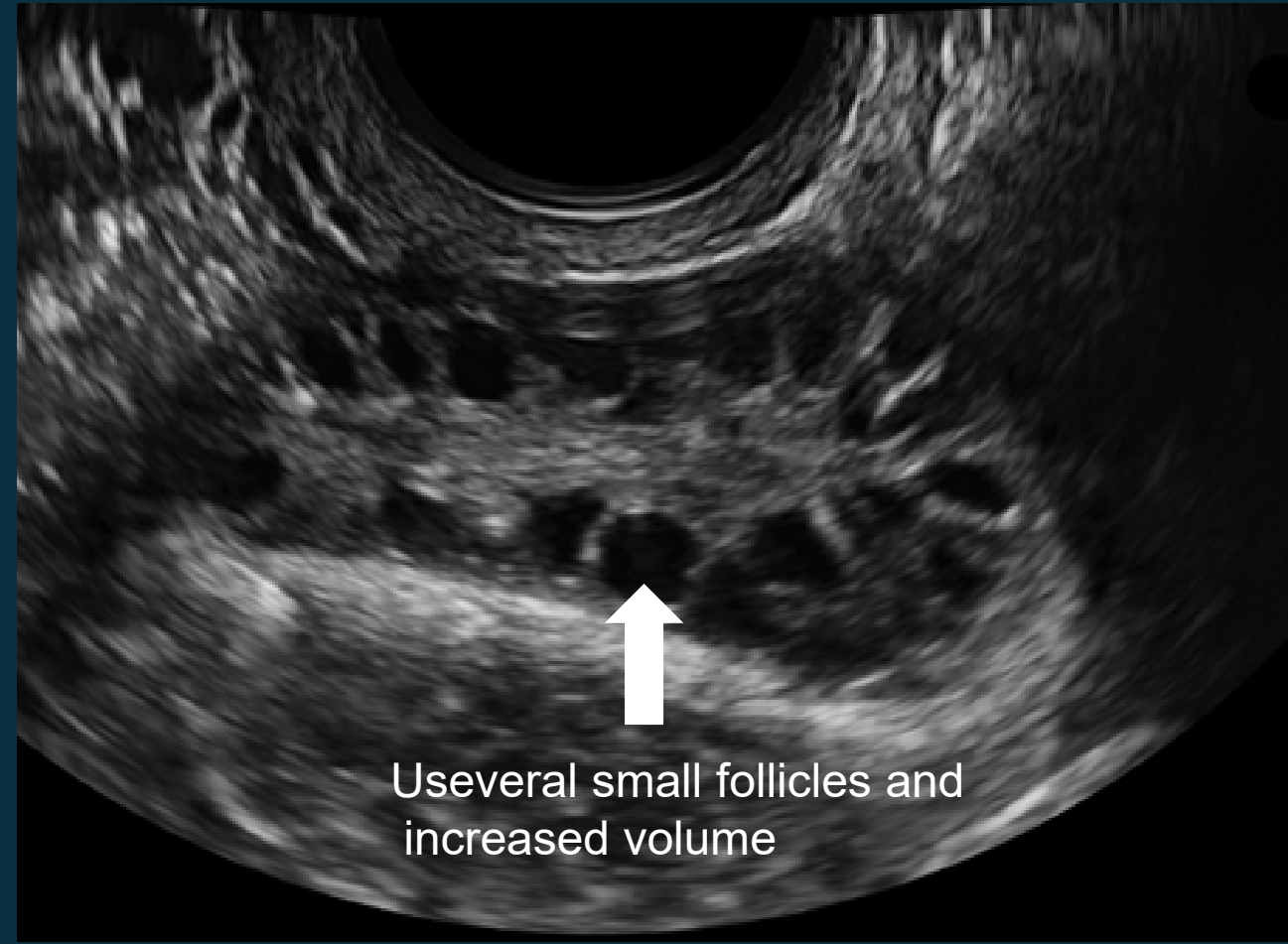
Androstenedione seems to be working well

PCOM – polycystic ovarian morphology

AFC ≥ 20 , Vol ≥ 10 ml OR high AMH



non-PCOM

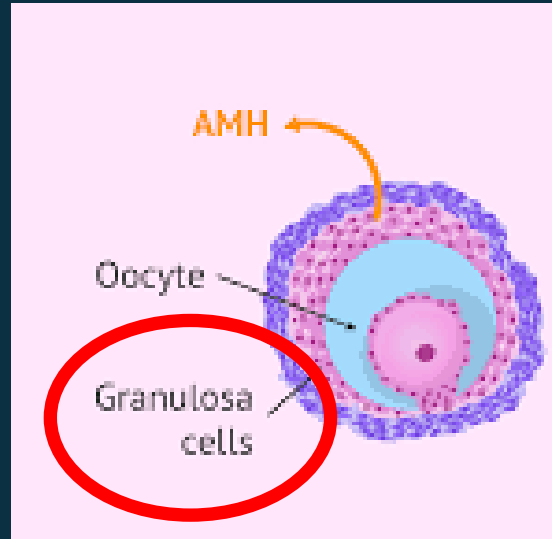


PCOM

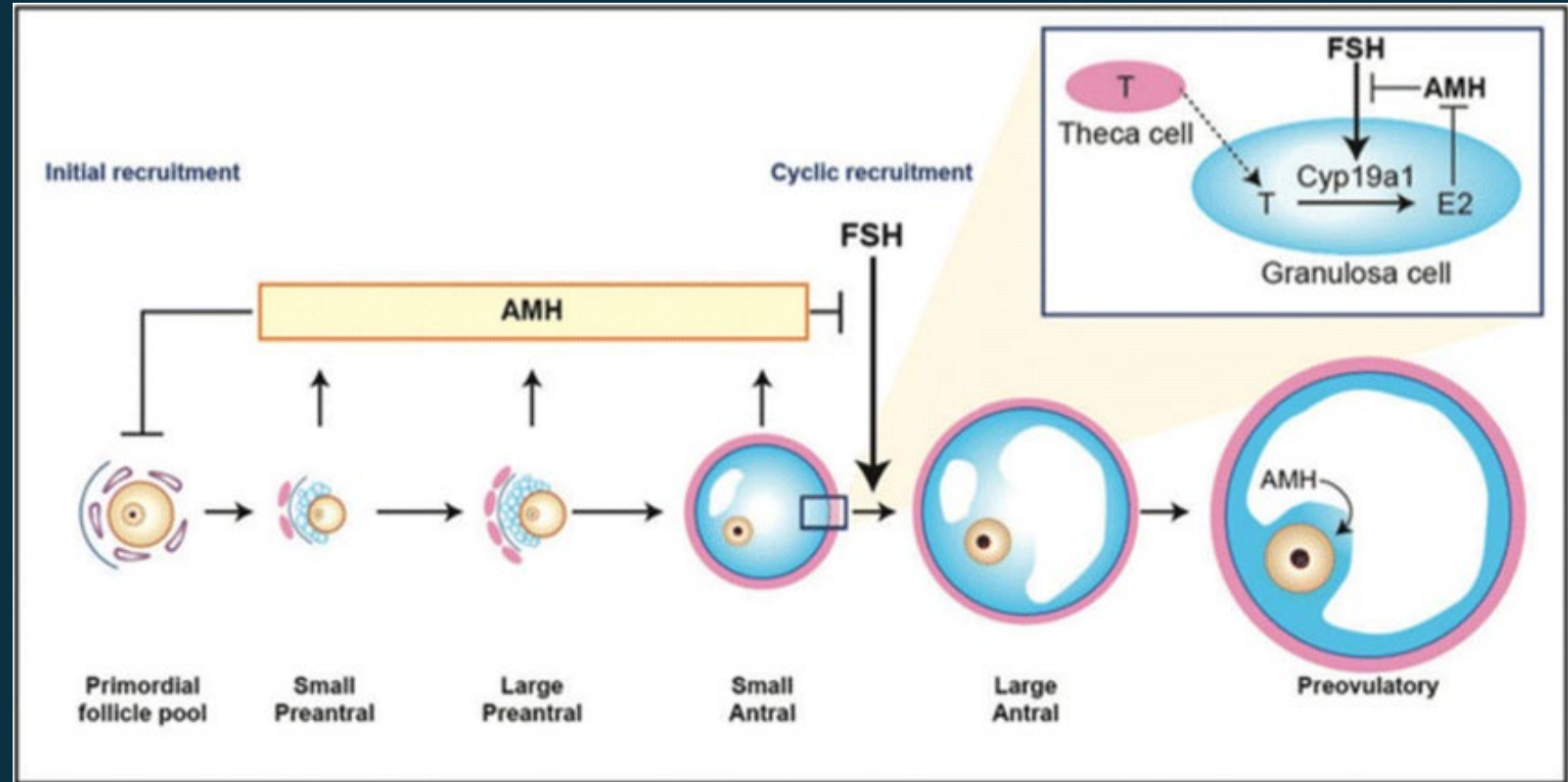
AMH

Anti-mullerian hormone (AMH) *

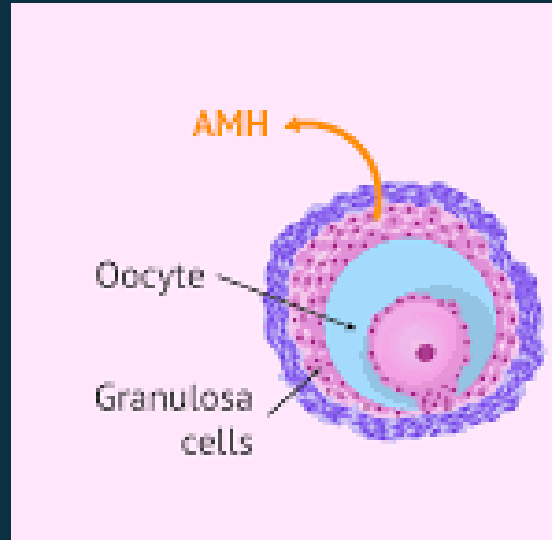
Serum AMH could be used for defining PCOM in adults as an alternative to pelvic ultrasound. Either serum AMH OR ultrasound may be used but not both to avoid overdiagnosis*



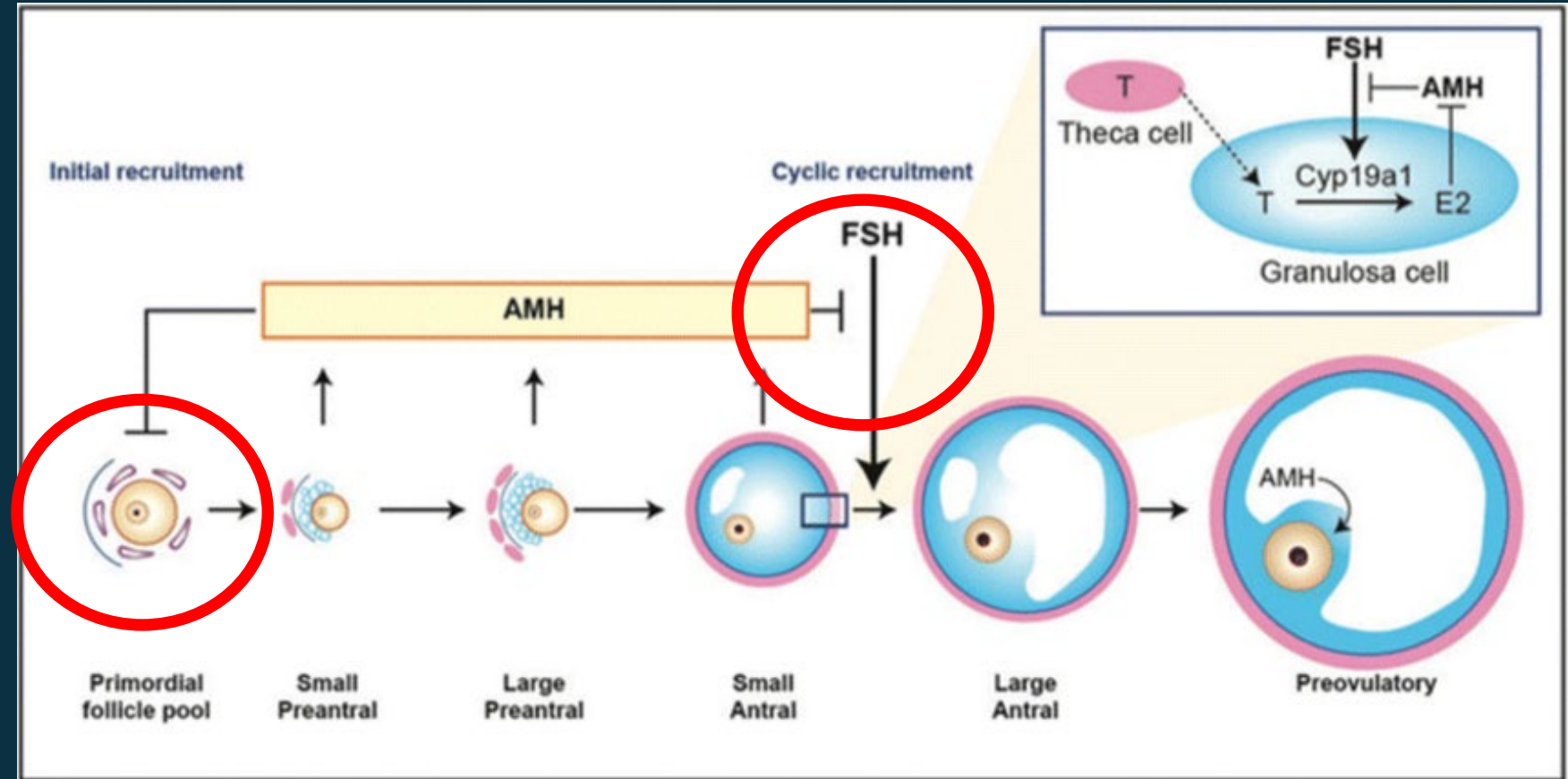
Normal AMH values	→	0.7-3.5 ng/mL
Low ovarian reserve	→	Lower than 0.7 ng/mL



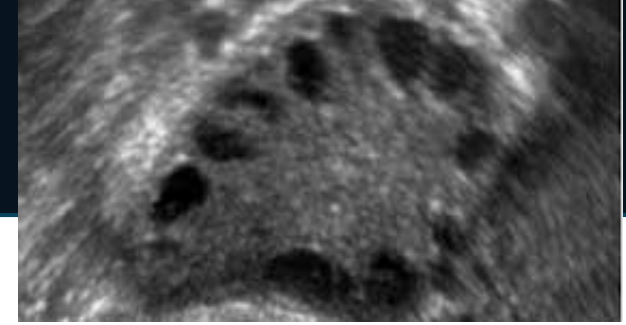
Anti-Müllerian hormone, AMH



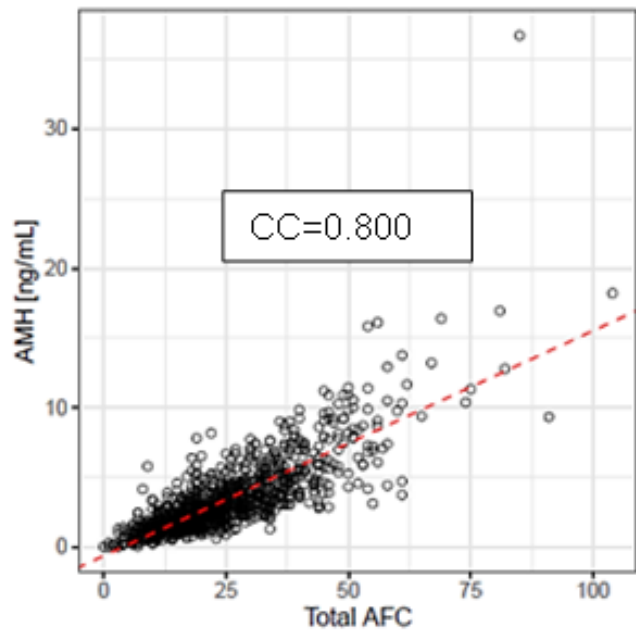
Normal AMH values	→	0.7-3.5 ng/mL
Low ovarian reserve	→	Lower than 0.7 ng/mL



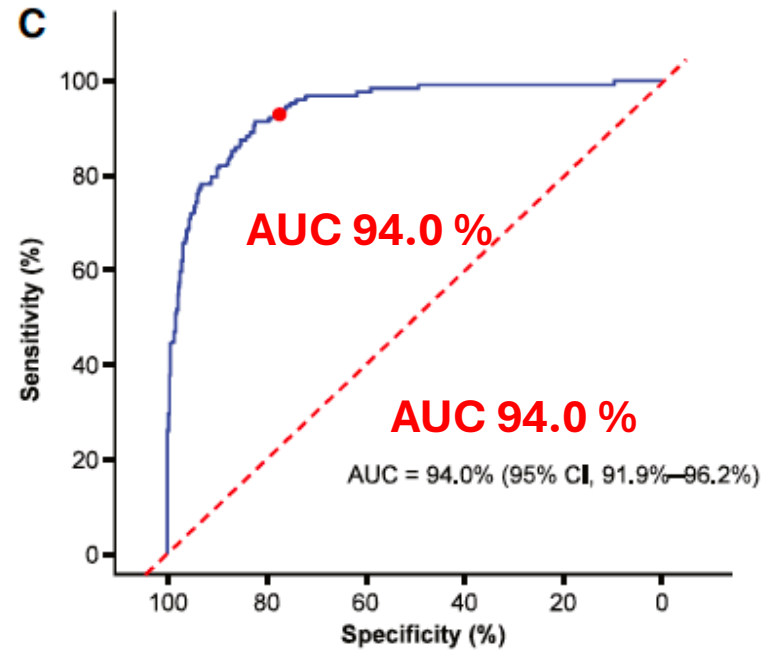
AMH and PCOS



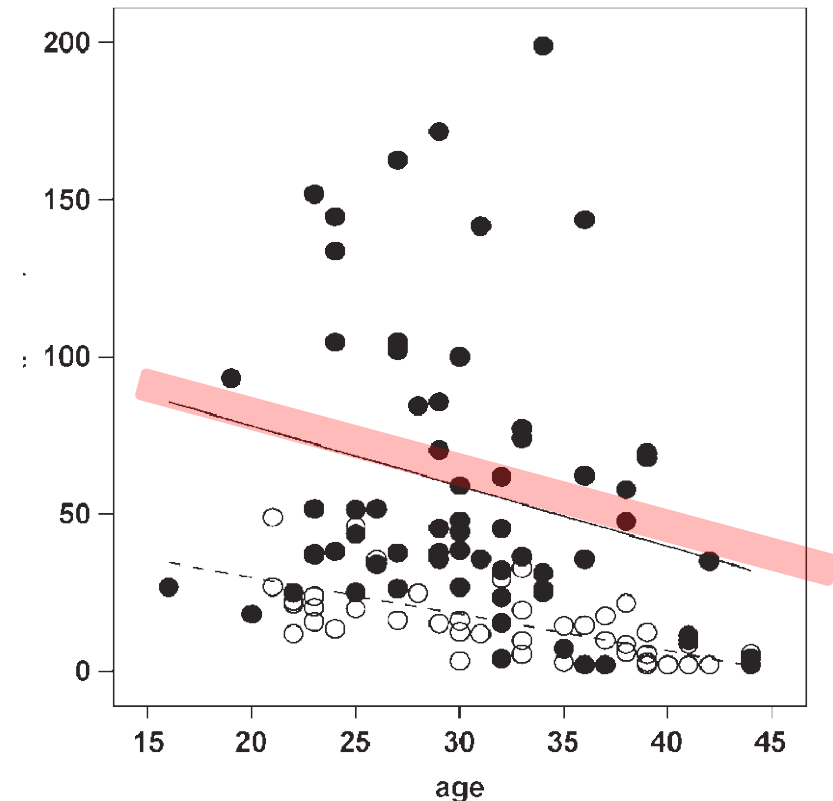
- AMH correlates well with AFC
- AMH levels are 2-3 x higher in PCOS and can be used to diagnose PCOM
- 3.2ng/ml prediction for PCOM in AUC is 94% (Piltonen FS 2025, Dietz De Loos FS 2019)
- AMH-levels decrease along ageing also in PCOS yet they remain higher



Piltonen et al., FS 2025



Piltonen et al., FS 2025



CONTR: $r = -0.691$ $p = <0.001$

PCOS: $r = -0.300$ $p = 0.014$

Piltonen et al., 2005

AMH and PCOS diagnostics

Utility of Serum Anti-Müllerian Hormone Measurement as Part of Polycystic Ovary Syndrome Diagnosis

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³ Department of Obstetrics and Gynecology, Institute of Clinical Sciences, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

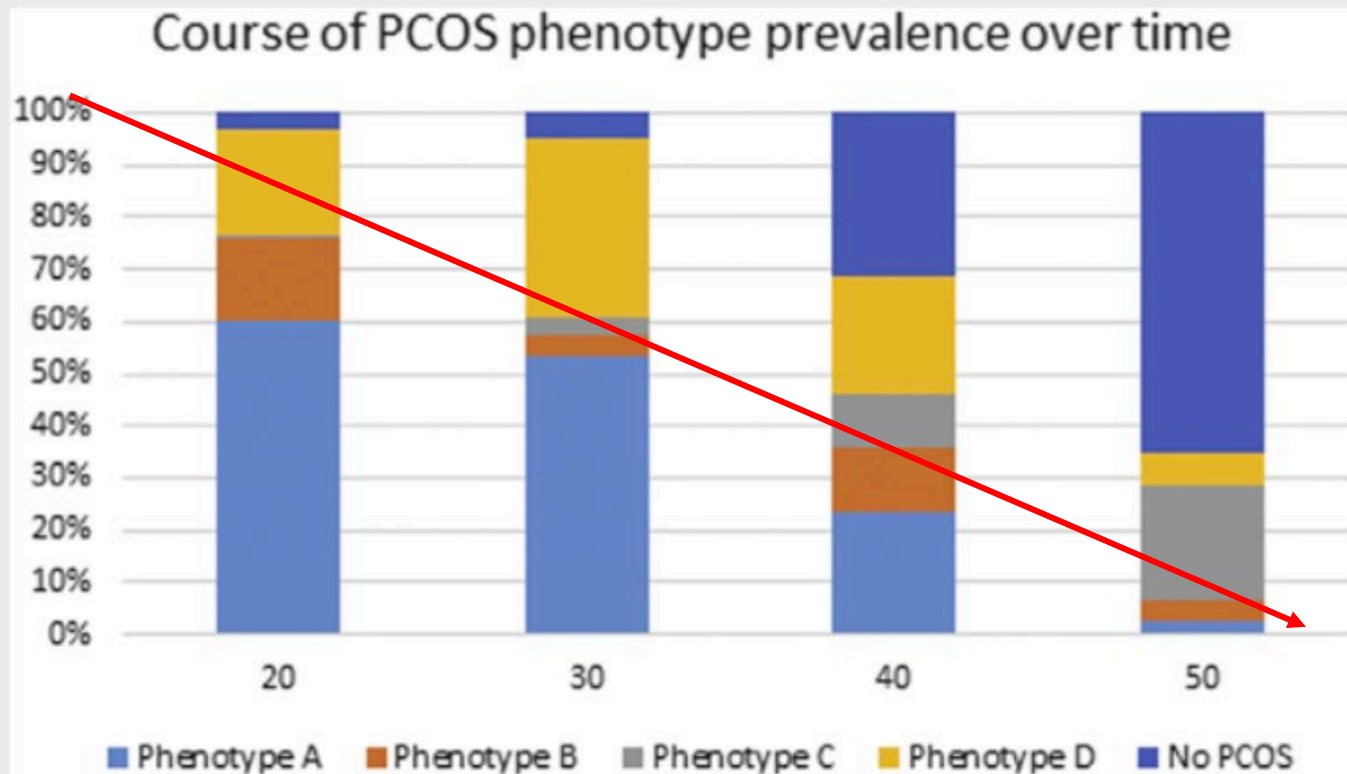
Address for correspondence Terhi T. Piltonen, MD, PhD, Department of Obstetrics and Gynecology, Research Unit of Clinical Medicine, Medical Research Center, Oulu University Hospital, University of Oulu, Aapistie 5A, P.O. BOX 5000, FI-90014 University of Oulu, Finland (e-mail: terhi.piltonen@oulu.fi).

Table 1 Factors influencing AMH levels

	Change in AMH
Increasing age	Lower
Increasing body mass index	Lower
Ethnicity	
Caucasian	Higher
Asian, Hispanic, Afro-Americans	Lower
Menstrual cycle stage	Indifferent/Clinically nonsignificant
Pregnancy	Lower
Use of hormonal contraceptive	Lower
Ovarian surgery	Lower

Abbreviation: AMH, anti-Müllerian hormone.

PCOS and change in phenotype

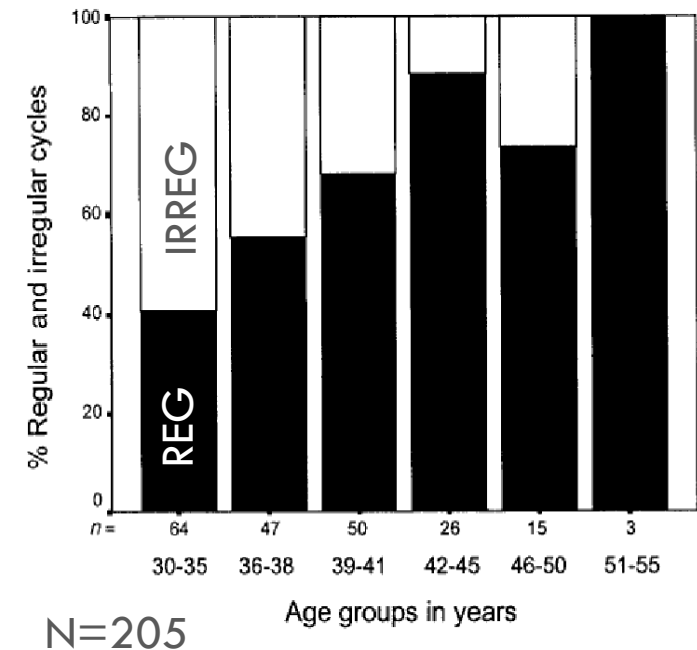


Van Keizerwaart et al., FS 2022

Also work by Carmina E et al.

- Occasional ovulations may occur
- Menstrual cycles and ovulations become more regular along ageing

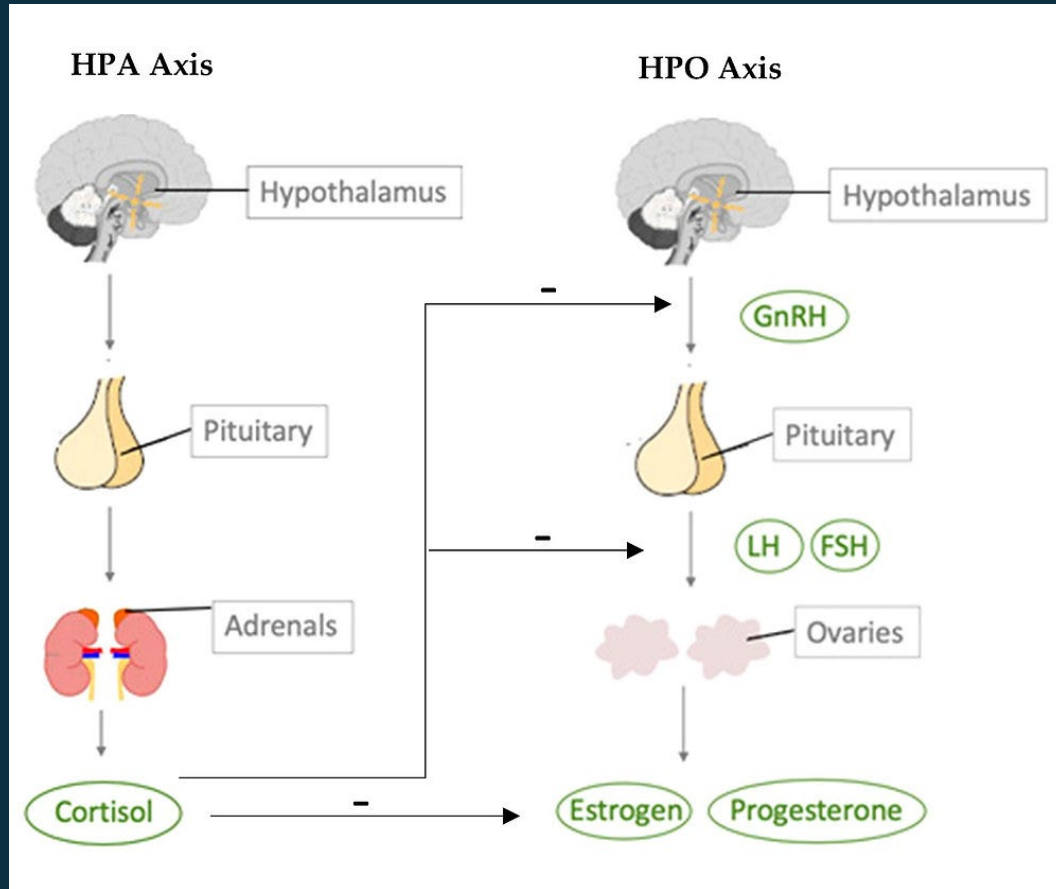
→ Contraception is needed



Elting et al., HR 2000

Hypothalamic amenorrhea

Hypothalamic amenorrhea



Often induced by stress

- Stress shuts down the HPO-axis
- Mental stress
- Physical stress
 - Diet
 - Exercise
- Low estrogen, irregular or absent cycles, fatigue, low bone mineral density
- Often in young women with good ovarian reserve, ovaries may present PCOM
- **Can be mixed with PCOS**

Hypothalamic amenorrhea

–is this HA or PCOS?

HA or PCOS?		
	HA	PCOS
No period / long cycle		
“Cysts” in the ovaries		
Loss of hair		
Estrogen	low or normal	normal or high
LH	often low	often high
LH to FSH ratio	low (<1)	high (>2)
Bleed from progesterone challenge		
Uterine lining	thin	thickened
High androgens or male hormones		

Summary

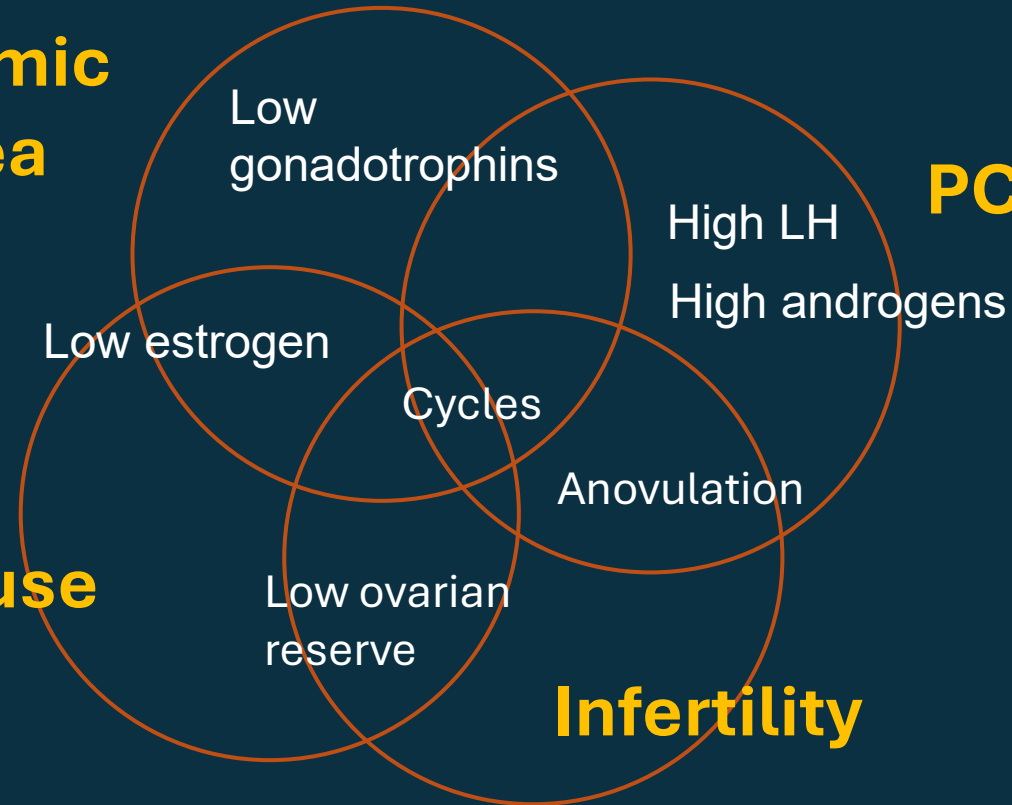
Differential diagnosis

**Hypothalamic
amenorrhea**

PCOS

Menopause

Infertility



Overlapping traits!

Summary

	Infertility	Menopause	PCOS	HA
Irregular cycles	sometimes	yes	yes	yes
LH	anovulation	high	high	low
FSH	low/high	high	normal/low	low
AMH	low/high/normal	low	high	normal/high
Androgens	normal	normal/low	high	low
Estrogen	normal/low	low	normal/low	low
Progesterone	normal/absent	absent	often absent	absent
Ferritin	normal/low	normal/low	normal	normal/low

Summary

- Gynaecological symptoms and irregular cycles are common
- Many features overlap → Warrants good diagnostic workup!
 - Underlying condition important to identify
- Serum measurements can help in diagnostics
 - AMH is a good marker for ovarian reserve and can be used as part of PCOS diagnostics
 - Gonadotrophins are often very helpful
 - Estrogen and progesterone measurements support other notions
 - PRL, TSH, Ferritin can be used in differential diagnostics
- Think what to measure and when
- Pitfalls – know your measures and how they behave (ie. COCs!)



Know Your Tools: Hormonal Diagnostics for Fertility, PCOS & Menopause

Maria Voutilainen, PhD
Global Product Manager for Hormones
25.6.2025

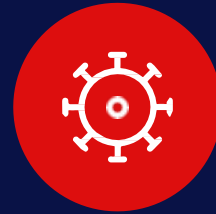
Medix Biochemica

The Qualified Supplier to the IVD Industry

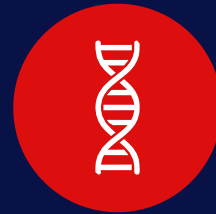
IVD test manufacturers across
the globe trust Medix Biochemica
as their partner of choice for IVD
raw materials



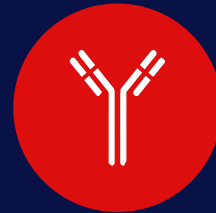
Quality



Supply Reliability

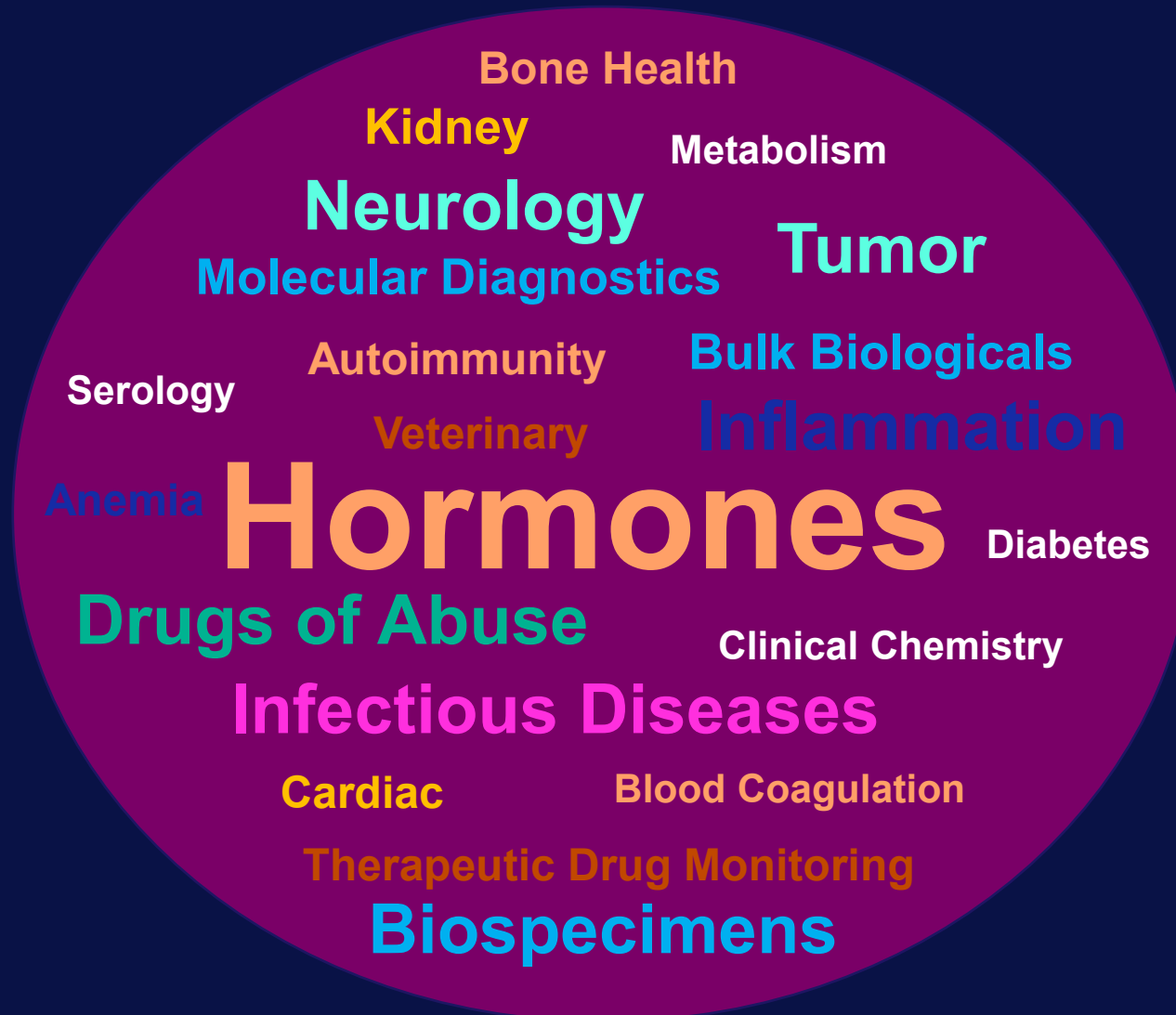


Scientific Innovation

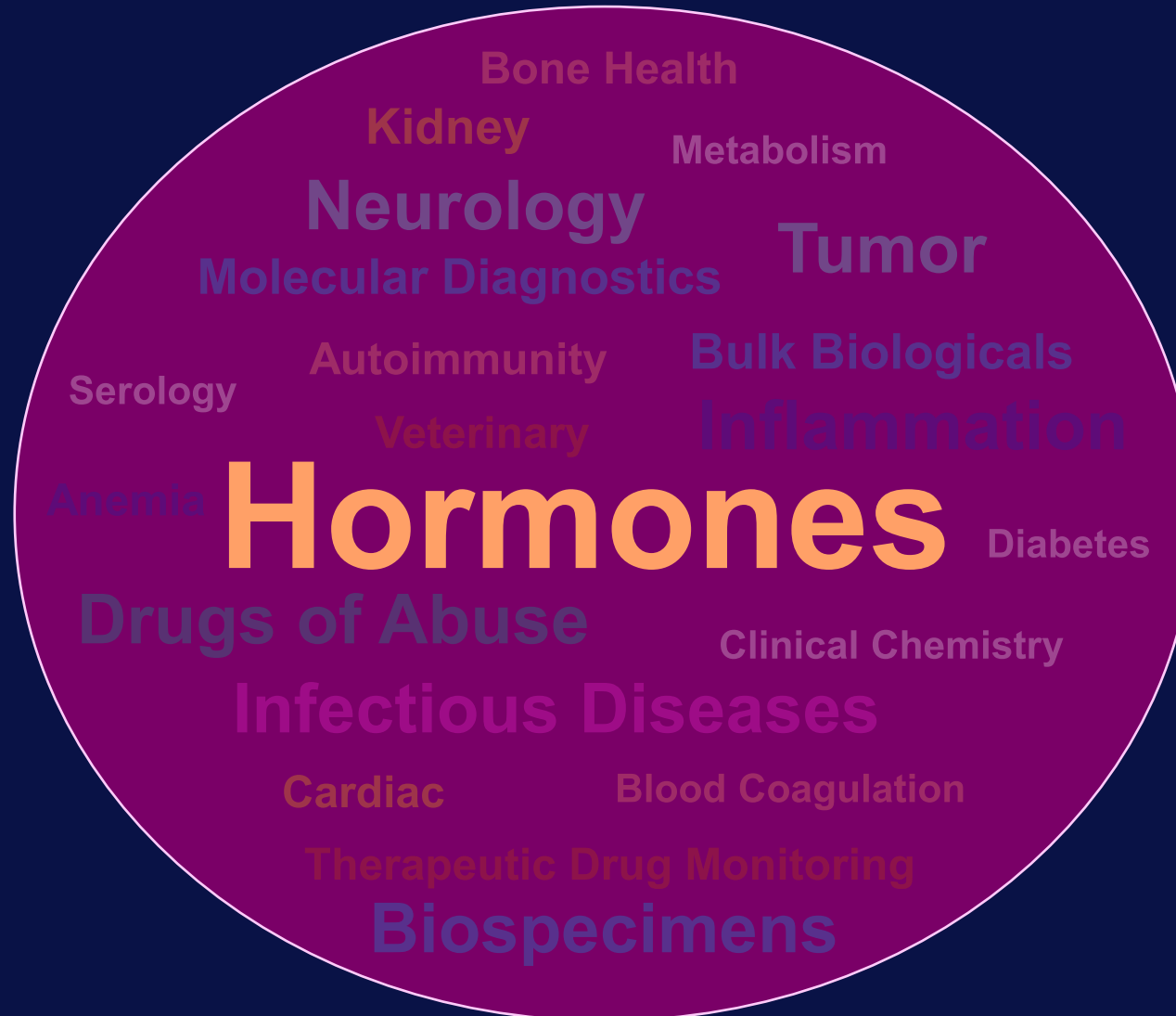


Comprehensive Portfolio

Clinical Areas Supported



Clinical Areas Supported



Reproductive Health - Hormonal Assay Indications

Ovarian Reserve

- Anti-Mullerian Hormone (AMH)
- Follicle Stimulating Hormone (FSH)
- Estradiol (E2)
- Inhibin B

PCOS (Polycystic Ovary Syndrome)

- Luteinizing Hormone (LH)
- Follicle Stimulating Hormone (FSH)
- Dehydroepiandrosterone (DHEA)
- Anti-Mullerian Hormone (AMH)
- Estradiol (E2)
- Estriol (E3)
- Estrone-3-Glucuronide (E1G)
- Estrone-3-Sulfate (E1S)
- Progesterone
- Pregnanediol Glucuronide (PDG)

Pregnancy Monitoring

- Human Chorionic Gonadotropin (HCG)
- Progesterone
- Estriol (E3)
- Pregnancy-Associated Plasma Protein-A (PAPP-A)
- Inhibin A

Menopause

- Follicle Stimulating Hormone (FSH)
- Estradiol (E2)
- Estriol (E3)
- Estrone-3-Glucuronide (E1G)
- Estrone-3-Sulfate (E1S)
- Progesterone

Fertility

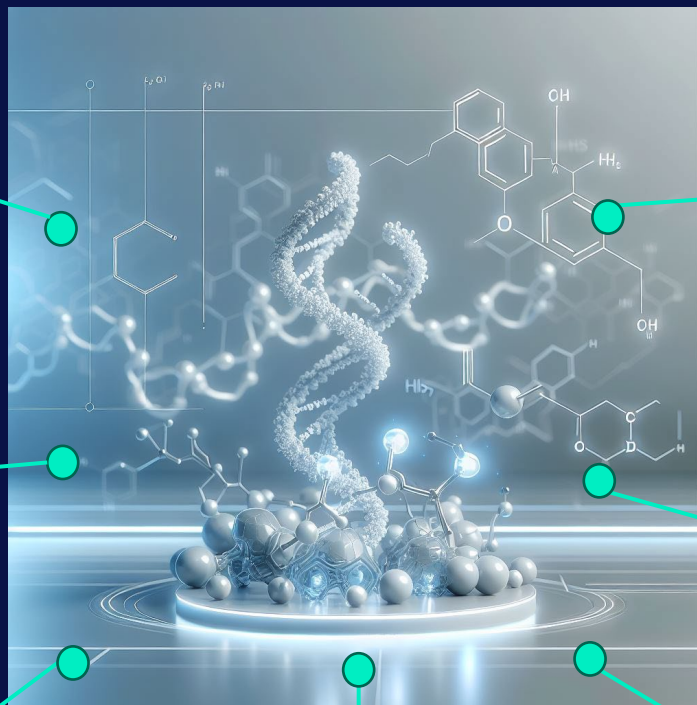
- Luteinizing Hormone (LH)
- Follicle Stimulating Hormone (FSH)
- Anti-Mullerian Hormone (AMH)
- Estradiol (E2)
- Estriol (E3)
- Estrone-3-Glucuronide (E1G)
- Estrone-3-Sulfate (E1S)
- Progesterone
- Pregnanediol Glucuronide (PDG)
- Human Chorionic Gonadotropin (HCG)
- Pregnancy-Associated Plasma Protein-A (PAPP-A)

Ovulation Monitoring / Cycle Tracking

- Luteinizing Hormone (LH)
- Estradiol (E2)
- Progesterone
- Pregnanediol Glucuronide (PDG)
- Estrone-3-Glucuronide (E1G)

Androgen Excess / Hirsutism

- Testosterone
- Dehydroepiandrosterone (DHEA)
- Sex Hormone Binding Globulin (SHBG)



Hormone Portfolio

Antibodies & Antigens



Reproductive and Fertility

(Follicle Stimulating Hormone (FSH), Luteinizing Hormone (LH), Human Chorionic Gonadotropin (HCG), Anti-Mullerian Hormone (AMH), Progesterone and many more..)



Steroid and Adrenal

(Cortisol, Aldosterone, DHEA, Corticosterone, Dexamethasone, ACTH, Testosterone)



Thyroid Function

(T4, T3, TG, TBG, TSH, Alpha subunit)



Growth and Metabolic Regulators

(hGH, IGF-1, IGFBP-1, Insulin, PTH)

Hormone Portfolio



- Conjugates
- Biospecimens
- Native Antigens
- Recombinant Antigens
- Primary Antibodies

Medix Biochemica Hormone Portfolio

Antibodies, Antigens & Biospecimens

Extensive list of mAbs and Antigens



AMH Antibody	Catalog #
11301	100756
11302	100757
11303	100758
11304	100759
11309	100840
LH Antibody	Catalog #
5301	100016
5302	100018
5303	100588
5304	100022
PR Antibody	Catalog #
1801	100248
1802	100249
1803	100250
1805	100252



Hormone Portfolio



- Conjugates
- Biospecimens
- Native Antigens
- Recombinant Antigens
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Medix Biochemica Hormone Portfolio

Antibodies, Antigens & Biospecimens

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5303	100588
5304	100022

PR Antibody	Catalog #
-------------	-----------

1801	100248
1802	100249
1803	100250
1805	100252



Pair recommendations

		Detection				
		11301	11302	11303	11304	11309
Capture	11301	+	+	+	-	+
	11302	+	-	+	-	+
	11303	+	+	+	+	+
	11304	-	+	+	-	+
	11309	+	+	+	+	-

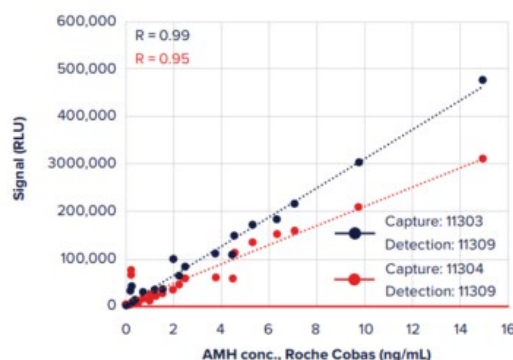
Hormone Portfolio



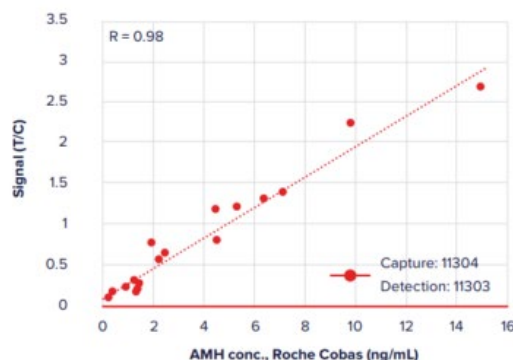
- Conjugates
- Biospecimens
- Native Antigens
- Recombinant Antigens
- Primary Antibodies

AMH mAbs results here from the tech note

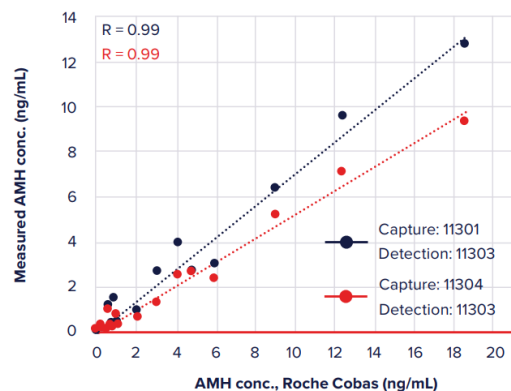
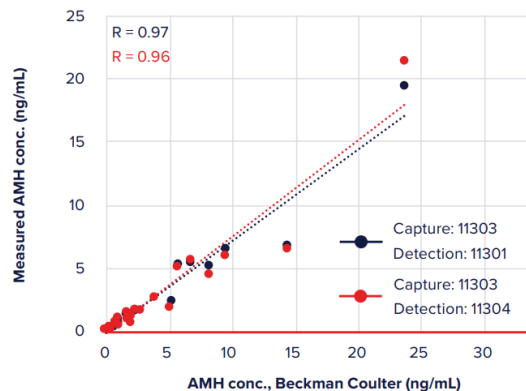
Correlation of AMH CLIA assay



Correlation of AMH LF assay



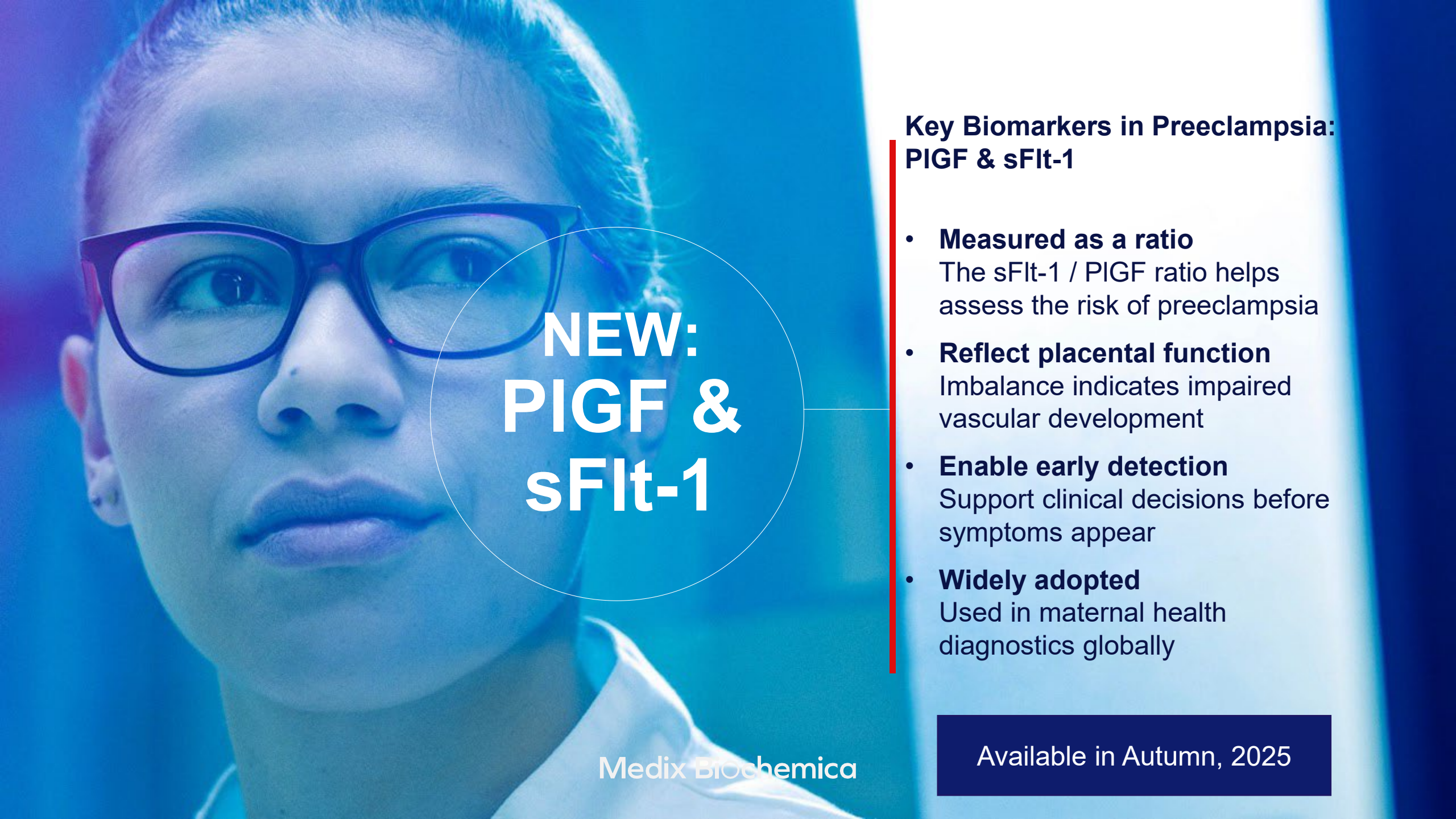
Correlation of AMH FIA assay with 2 reference methods



AMH detection using chemiluminescence immunoassay (CLIA), lateral flow (LF) or fluoroimmunoassay (FIA) from clinical samples with Medix Biochemica recommended pair showed excellent correlation to results obtained with reference method

Pair Recommendations:

- LF: 11304 (membrane) - 11303 (particles)
- FIA: 11309 (capture) - 11302 (detection), 11303-11301, 11301-11303
- CLIA: 11303 (capture) - 11309 (detection) and 11304-11309



NEW: PIGF & sFlt-1

Key Biomarkers in Preeclampsia: PIGF & sFlt-1

- **Measured as a ratio**
The sFlt-1 / PIGF ratio helps assess the risk of preeclampsia
- **Reflect placental function**
Imbalance indicates impaired vascular development
- **Enable early detection**
Support clinical decisions before symptoms appear
- **Widely adopted**
Used in maternal health diagnostics globally

Medix Biochemica

Available in Autumn, 2025

NEW Launch: Antigens

- TSH (recombinant), Part 610175
- IGF-1 (recombinant), Part 610173
- PAPP-A (native) from serum, Part 496-90

Coming Soon!

- FSH (recombinant)
- PAPP-A from placental blood (native)
- LH (recombinant)
- Prolactin (recombinant)

Exclusive Offer of Free Hormone Samples

Exclusive Offer: Free Samples

We are offering free samples of our selected hormone antibodies for a limited time.

Test our products and provide feedback!

List of Free mAb Samples (1mg)

Adrenocorticotrophic Hormone (ACTH)
Aldosterone
Alpha subunit (LH, FSH, TSH, HCG)
Anti-Mullerian Hormone (AMH)
Corticosterone
Cortisol
Estriol (E3)
Estrone-3-Glucuronide (E1G)
Follicle Stimulating Hormone (FSH)
Human Chorionic Gonadotropin (HCG)
Human Growth Hormone (hGH)
Inhibin A
Luteinizing Hormone (LH)
Parathyroid Hormone (PTH)
Pregnanediol Glucuronide (PDG)
Progesterone
Prolactin (PRL)
Sex Hormone Binding Globulin (SHBG)
Testosterone
Thyroglobulin (TG)
Thyroid Stimulating Hormone (TSH)
Thyroxine (T4)

Not seeing your analyte of interest?
Let us know which ones and we'll be in touch on what we can offer



Curious About Our Hormone Antibodies?

Now's your chance to try them out! **We're offering FREE samples** for a limited time on selected analytes.

Order Sample

Biospecimens for Hormone Diagnostics

Biologicals & Biospecimens
Description
Urine
Cerebrospinal fluid
Saliva
Breast milk/Colostrum
Sweat
Hair
Tears
Vaginal fluid
Nasal fluid
Menstrual blood
Semen
Serum
Plasma

Base Matrices, Processed Plasma & Serum	
Product Code	Description
H1091	Normalized human serum *
H2000	BioCon II, defibrinated plasma *
H2001	Human control base matrix *
H2420	Universal negative base matrix *
H2550	BioCon II CD, charcoal stripped plasma *
H2700	BioCon II D, defibrinated, delipidated plasma *
Coming soon!	Vitamin D depleted plasma
Coming soon!	Estradiol depleted plasma
Coming soon!	Testosterone depleted plasma
Coming soon!	Cortisol depleted plasma
Coming soon!	Progesterone depleted plasma
Coming soon!	T3 and T4 depleted plasma
Coming soon!	TSH depleted plasma
Coming soon!	FSH depleted plasma

* Available in a sample starter kit

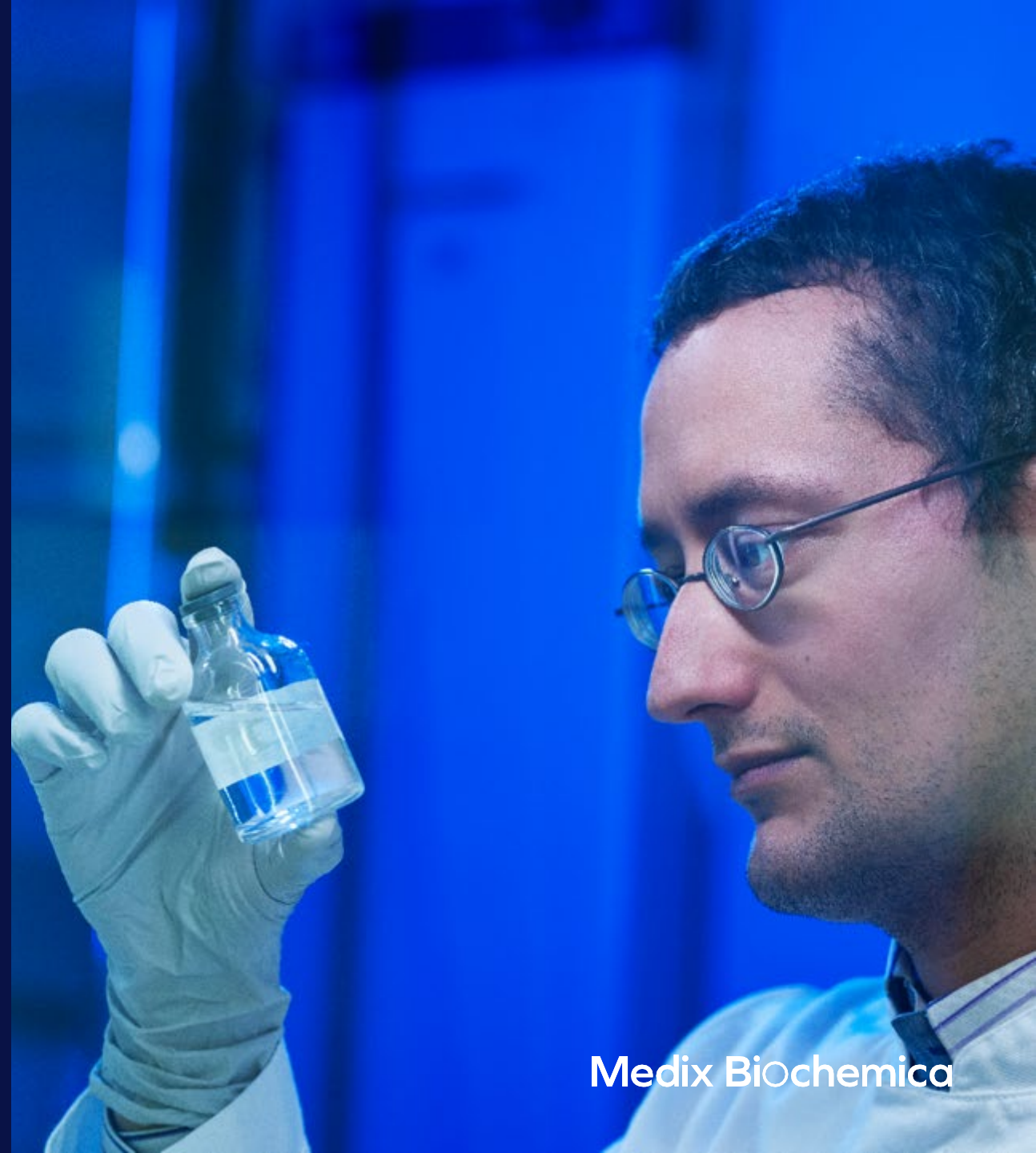
** New products - inquire for additional details

Common Hormone-Related Customization Options:

1. Life Period: Pregnancy, Age-Specific, Timepoint
2. Processing: Filtration, Stripping, Analyte Testing
3. Donor Access: Matched Samples, Donor Recall
4. Analytes: Estrogen, Estradiol, T3/T4, Cortisol, Testosterone, FSH, etc.

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Medix Biochemica

Questions and Answers



Professor Terhi Piltonen

Professor of Obstetrics and Gynecology
University of Oulu, Finland



Dr. Maria Voutilainen

Global Product Manager
Medix Biochemica



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