PHILIPPINE SOCIETY FOR REPRODUCTIVE MEDICINE
MANILA 1994

QUICK GUIDE 2019

A 25th Anniversary Exclusive

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ABNORMAL UTERINE BLEEDING

New WHO Classification of Endometrial Hyperplasias (2014)				
New Term	Synonym	Genetic Changes	Coexistent Invasive Endometrial Carcinoma	Progression to Carcinoma
Hyperplasia without atypia	Benign endometrial hyperplasia; simple non-atypical endometrial hyperplasia; complex non-atypical endometrial hyperplasia; simple endometrial hyperplasia without atypia; complex endometrial hyperplasia without atypia	Low level of somatic mutations in scattered glands with morphology on HE staining showing no changes	< 1%	RR: 1.01 – 1.03
Atypical hyperplasia/ endometrioid intraepithelial neoplasia	Complex atypical endometrial hyperplasia; simple atypical endometrial hyperplasia; endometrial intraepithelial neoplasia (EIN)	Many of the genetic changes typical for endometrioid endometrial cancer are present, including: micro satellite instability; *PAX2* inactivation; mutation of *PTEN, KRAS* and *CTNNB1* (β-catenin)	25-33% [2] 59%[1]	RR: 14-45

Polyp
Adenomyosis
Leiomyoma
Malignancy & hyperplasia

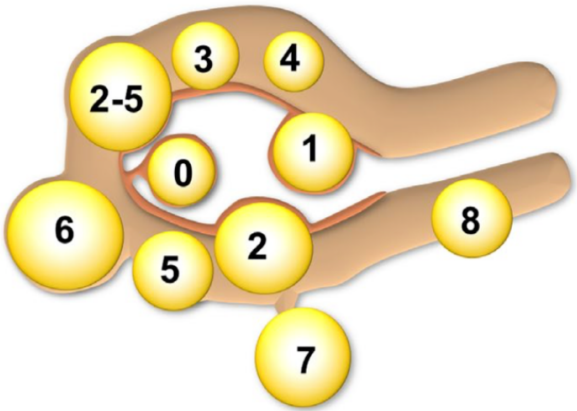
Coagulopathy
Ovulatory dysfunction
Endometrial
Iatrogenic
Not otherwise classified

FIGO
Leiomyoma Subclassification System

Polyp
Adenomyosis
Leiomyoma
Malignancy & hyperplasia

Submucous
Other

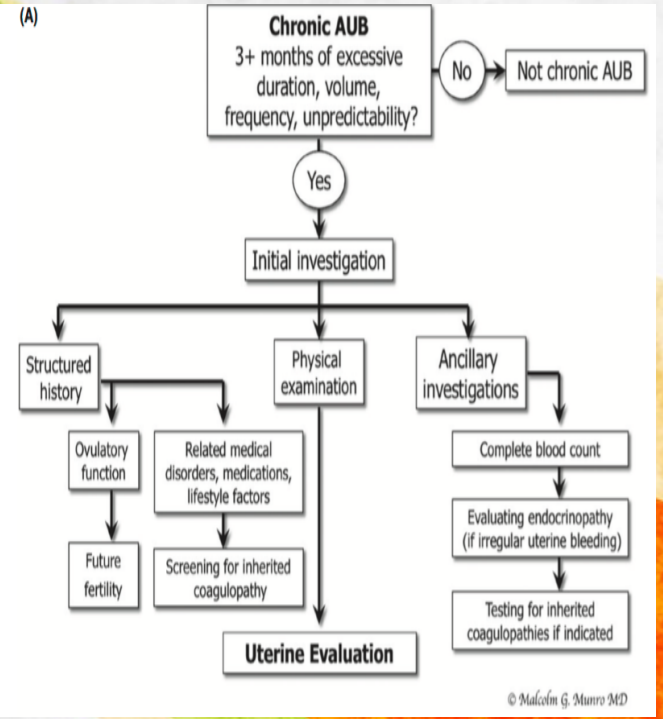
Coagulopathy
Ovulatory dysfunction
Endometrial
Iatrogenic
Not otherwise classified

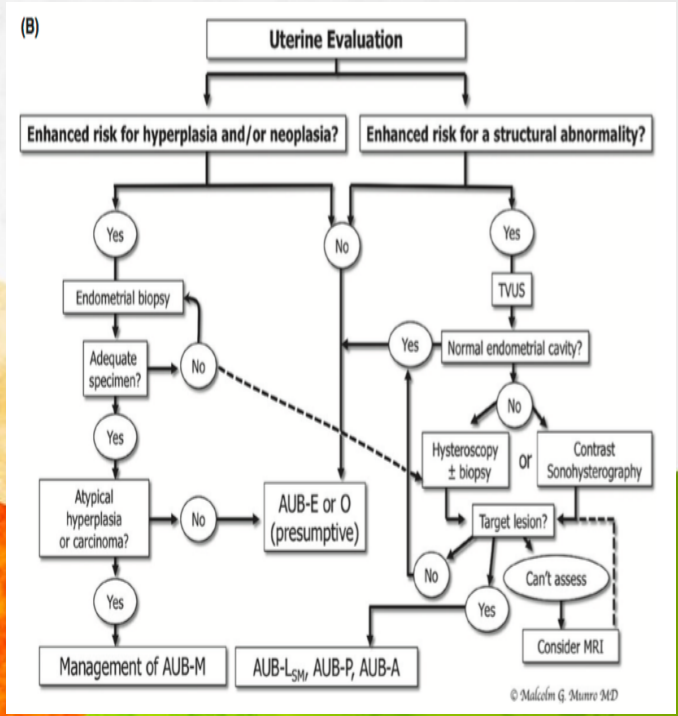


SM - Submucous	0	Pedunculated intracavitary
	1	<50% intramural
	2	≥50% intramural
	3	Contacts endometrium; 100% intramural
O - Other	4	Intramural
	5	Subserous ≥50% intramural
	6	Subserous <50% intramural
	7	Subserous pedunculated
	8	Other (specify e.g. cervical, parasitic)

Hybrid (contact both the endometrium and the serosal layer)	Two numbers are listed separated by a hyphen. By convention, the first refers to the relationship with the endometrium while the second refers to the relationship to the serosa. One example is below	
	2-5	Submucous and subserous, each with less than half the diameter in the endometrial and peritoneal cavities, respectively.

FIGO ALGORITHM FOR CHRONIC AUB IN THE REPRODUCTIVE YEARS





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ENDOMETRIOSIS

Patient's Name _____ Date _____

Stage I (Minimal) - 1-5
Stage II (Mild) - 6-15
Stage III (Moderate) - 16-40
Stage IV (Severe) - >40
Total _____

Laparoscopy _____ Laparotomy _____ Photography _____
Recommended Treatment _____
Prognosis _____

	ENDOMETRIOSIS	<1cm	1-3cm	>3cm
PERITONEUM	Superficial	1	2	4
	Deep	2	4	6
OVARY	R Superficial	1	2	4
	Deep	4	16	20
	L Superficial	1	2	4
	Deep	4	16	20
	POSTERIOR CUL-DE-SAC OBLITERATION	Partial		Complete
		4		40
	ADHESIONS	<1/3 Enclosure	1/3-2/3 Enclosure	>2/3 Enclosure
OVARY	R Filmy	1	2	4
	Dense	4	8	16
	L Filmy	1	2	4
	Dense	4	8	16
TUBE	R Filmy	1	2	4
	Dense	4*	8*	16
	L Filmy	1	2	4
	Dense	4*	8*	16

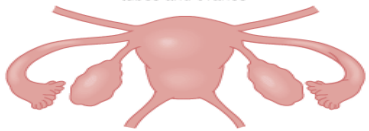
***If the fimbriated end of the fallopian tube is completely enclosed, change the point assignment to 16.**
Denote appearance of superficial implant types as red [(R), red, red-pink, flamelike, vesicular blobs, clear vesicles], white [(W), opacifications, peritoneal defects, yellow-brown], or black [(B) black, hemosiderin deposits, blue]. Denote percent of total described as R ___%, W___% and B ___%. Total should equal 100%

Additional Endometriosis: _____

Associated Pathology: _____

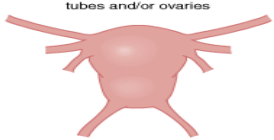
To be used with normal tubes and ovaries

L R



To be used with abnormal tubes and/or ovaries

L R



ENDOMETRIOSIS

EXAMPLES & GUIDELINES

STAGE I (MINIMAL)

PERITONEUM			
Superficial Endo	–	1-3cm	- 2
R. OVARY			
Superficial Endo	–	< 1cm	- 1
Filmy Adhesions	–	< 1/3	- 1
TOTAL POINTS			4

STAGE II (MILD)

PERITONEUM			
Deep Endo	–	> 3cm	- 6
R. OVARY			
Superficial Endo	–	< 1cm	- 1
Filmy Adhesions	–	< 1/3	- 1
L. OVARY			
Superficial Endo	–	< 1cm	- 1
TOTAL POINTS			9

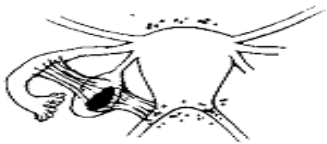
STAGE III (MODERATE)

PERITONEUM			
Deep Endo	–	>3cm	- 6
CULDESAC			
Partial Obliteration			- 4
L. OVARY			
Deep Endo	–	1-3cm	- 16
TOTAL POINTS			26

STAGE III (MODERATE)

PERITONEUM			
Superficial Endo	–	> 3cm	-4
R. TUBE			
Filmy Adhesions	–	< 1/3	- 1
R. OVARY			
Filmy Adhesions	–	< 1/3	- 1
L. TUBE			
Dense Adhesions	–	< 1/3	- 16*
L. OVARY			
Deep Endo	–	< 1 cm	-4
Dense Adhesions	–	< 1/3	-4
TOTAL POINTS			30

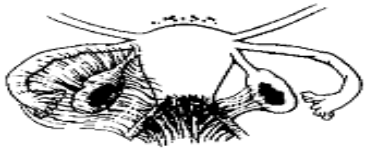
STAGE IV (SEVERE)



PERITONEUM			
Superficial Endo	–	> 3cm	-4
L. OVARY			
Deep Endo	–	1-3cm	- 32**
Dense Adhesions	–	< 1/3	- 8**
L. TUBE			
Dense Adhesions	–	< 1/3	-8**
TOTAL POINTS			52

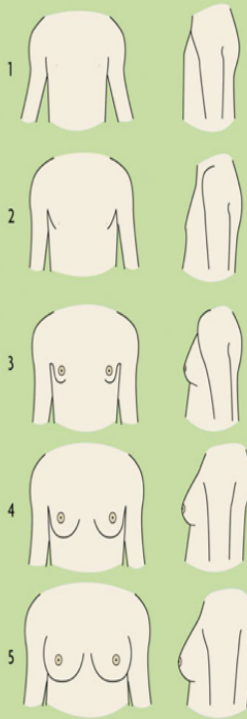
*Point assignment changed to 16
**Point assignment doubled

STAGE IV (SEVERE)



PERITONEUM			
Deep Endo	–	>3cm	- 6
CULDESAC			
Complete Obliteration			- 40
R. OVARY			
Deep Endo	–	1-3cm	- 16
Dense Adhesions	–	< 1/3	- 4
L. TUBE			
Dense Adhesions	–	> 2/3	- 16
L. OVARY			
Deep Endo	–	1-3cm	- 16
Dense Adhesions	–	> 2/3	- 16
TOTAL POINTS			114

PEDIATRIC GYNECOLOGY



Breasts

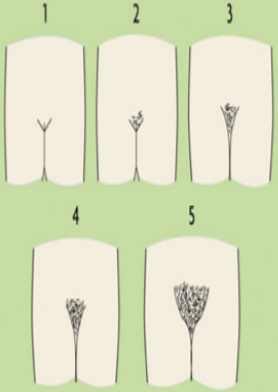
Stage 1: No breast development.

Stage 2: The first sign of breast development has appeared. This stage is sometimes referred to as the breast budding stage. Some palpable breast tissue under the nipple, the flat area of the nipple (areola) may be somewhat enlarged.

Stage 3: The breast is more distinct although there is no separation between contours of the two breasts.

Stage 4: The breast is further enlarged and there is greater contour distinction. The nipple including the areola forms a secondary mound on the breast.

Stage 5: Size may vary in the mature stage. The breast is fully developed. The contours are distinct and the areola has receded into the general contour of the breast.



Pubic Hair

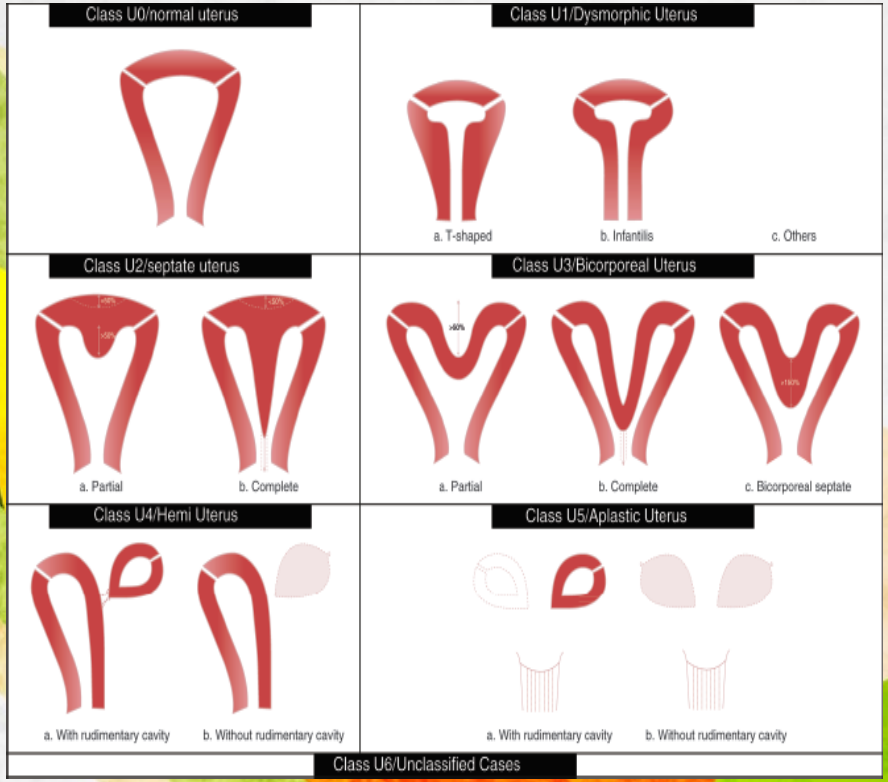
Stage 1: No pubic hair.

Stage 2: There is a small amount of long pubic hair chiefly along the vaginal lips.

Stage 3: The hair is darker, coarser, and curlier and spreads sparsely over the skin around the vaginal lips.

Stage 4: The hair is now adult in type, but the area covered is smaller than in most adults. There is no pubic hair on the inside of the thighs.

Stage 5: The hair is adult in type, distributed as an inverse triangle. There may be hair on the inside of the thighs.



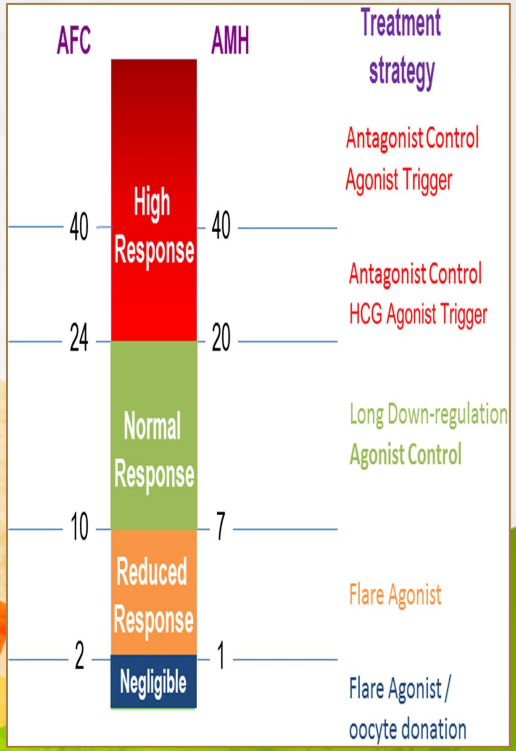
ESHRE/ESGE classification of uterine anomalies: schematic representation

Class U2: internal indentation >50% of the uterine wall thickness and external contour straight or with indentation <50%

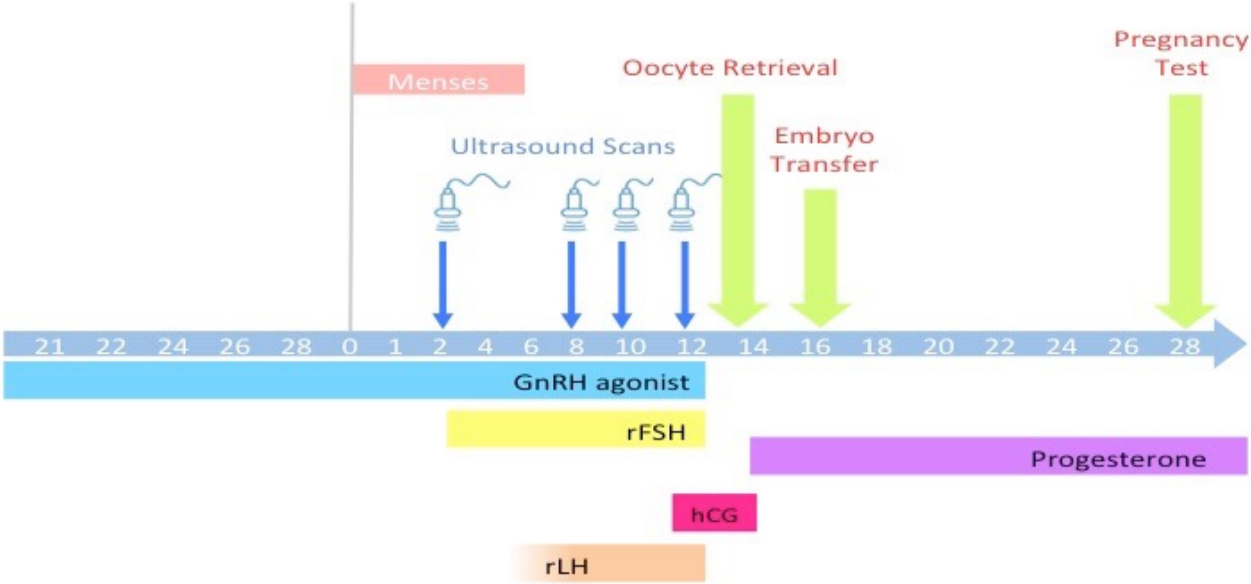
Class U3: external indentation >50% of the uterine wall thickness

Class U3b: width of the fundal indentation at the midline >150% of the uterine wall thickness).

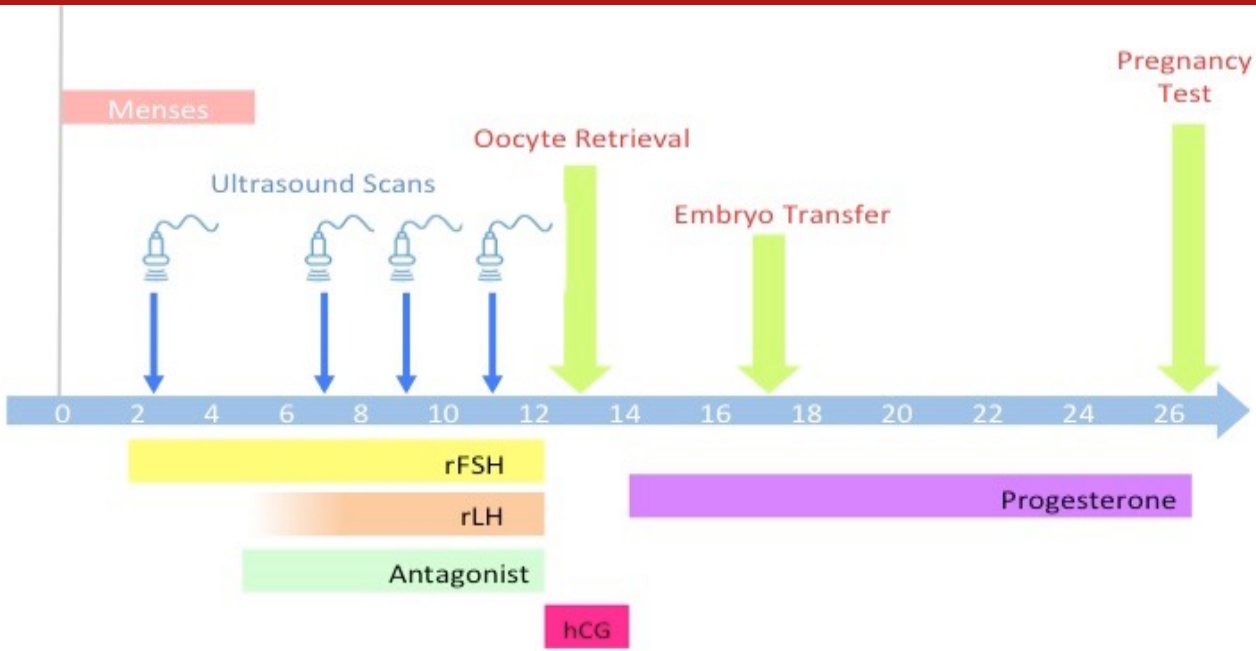
SEMEN ANALYSIS (WHO, 2010)	
Parameter	Lower reference limit
Semen volume (ml)	1.5 (1.4-1.7)
Total sperm number (106 per ejaculate)	39 (33-46)
Sperm concentration (106 per ml)	15 (12-16)
Total motility (PR + NP, %)	40 (38-42)
Progressive motility (PR, %)	32 (31-34)
Vitality (live spermatozoa, %)	58 (55-63)
Sperm morphology (normal forms, %)	4 (3.0-4.0)



AGONIST PROTOCOL



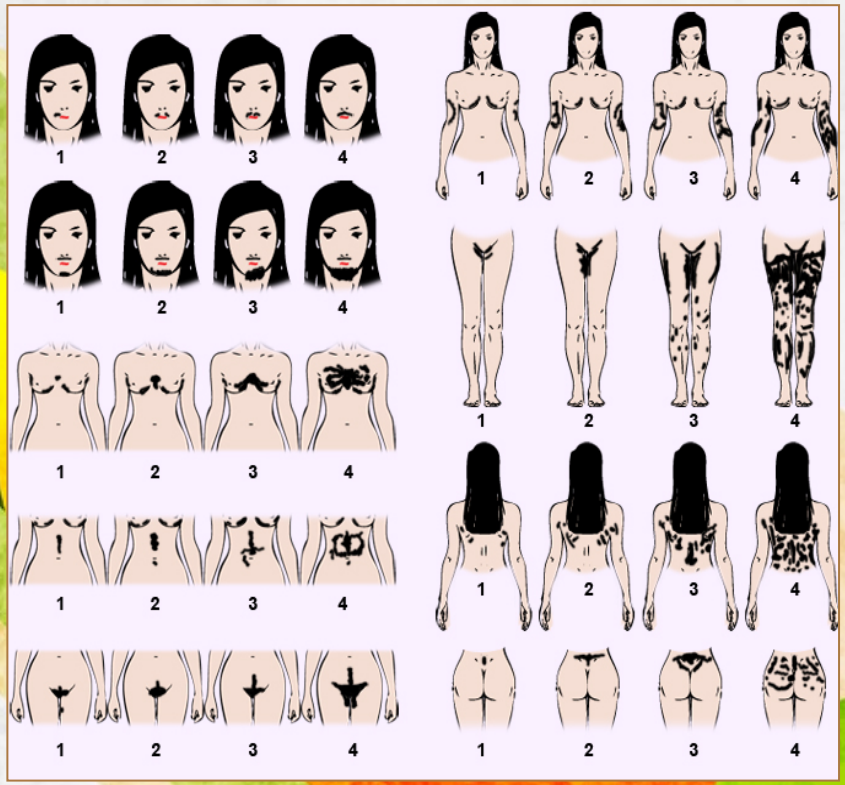
ANTAGONIST PROTOCOL



World Health Organization criteria for diagnosing osteoporosis using bone density measurements

CATEGORY	T SCORE
Normal	Not more than 1.0 standard deviations (SD) below the young adult mean
Osteopenia	Between 1.0 and 2.5 SD below the young adult mean
Osteoporosis	More than 2.5 SD below the young adult mean
Severe or established osteoporosis	More than 2.5 SD below the young adult mean with a fracture

Consensus Diagnostic Criteria for Polycystic Ovarian Syndrome		
1990 NIH: requires both criteria	**2003 ESHRE/ASRM: requires 2 of 3 criteria**	**2006 AE-PCOS: requires all 3 criteria**
Chronic anovulation	Oligo- and/or anovulation	Ovarian dysfunction (oligoanovulation and/or polycystic ovaries)
Clinical and/or biochemical signs of hyperandrogenism	Clinical and/or biochemical signs of hyperandrogenism	Hyperandrogenism (hirsutism and/or hyperandrogenemia)
	Polycystic ovaries	Exclusion of other androgen excess disorders
Exclusion of other androgen excess disorders		



Modified Ferriman- Gallwey (mF-G) Hirsutism Scoring System

Each of the nine body areas is rated 0 (absence of terminal hairs) to 4 (extensive internal hair growth), and the numbers in each area are added for total score. A modified F-G (mFG) score ≥6 generally defines hirsutism. *For Filipinas, mFG score of ≥ 2 defines hirsutism.*

POLYCYSTIC OVARIAN SYNDROME

ESHRE 2018 APPROACH TO DIAGNOSIS OF PCOS

Step 1: Irregular cycles + clinical hyperandrogenism

(exclude other causes)* = diagnosis

↓

Step 2: If no clinical hyperandrogenism

Test for biochemical hyperandrogenism (exclude other causes)* = diagnosis

↓

Step 3: If ONLY irregular cycles OR hyperandrogenism

Adolescents ultrasound is not indicated = consider at risk of PCOS and reassess later

Adults - request ultrasound for PCOM, if positive (exclude other causes)* = diagnosis

*** Exclusion of other causes requires TSH, Prolactin levels, FSH and if clinical status indicates other causes need to be excluded**

(e.g. CAH, Cushings, adrenal tumours etc)

Hypogonadotrophic hypogonadism, generally due to low body fat or intensive exercise, should also be excluded clinically and with LH and FSH levels.

Obesity Classification as per WHO and Asia-Pacific Guidelines

	WHO (BMI kg/m^2)	Asia-Pacific (BMI kg/m^2)	Obesity Score
Normal	18.5 – 24.9	18.5 – 22.9	0
Overweight	25 – 29.9	23 – 24.9	1
Obese	> 30	> 25	2

Cut-off Values for 2 hour 75g OGTT

	WHO		ADA	
	mg/dl	mmol/L	mg/dl	mmol/L
Normal	< 140	< 7.8	< 140	7.8
IGT	≥140 to 200	> 7.8 to < 11.1	140 - 199	7.8 - 11
NIDDM	≥ 200	11.1	> 200	11.1

WHO – World Health Organization; ADA – American Diabetes Association

South Asian Modified NCEP Criteria for Metabolic Syndrome

Risk Factor	Defining Level
Abdominal obesity*	Waist circumference >90cm (men); >80cm (women)
Triglycerides	≥150mg/dl
HDL-C	<40mg/dl (men); <50mg/dl (women)
Blood pressure	≥130/≥85mm Hg
Fasting glucose	≥100mg/dl

*optional based on the *South Asian Modified National Cholesterol Education Program (SAM-NCEP)*

POLYCYSTIC OVARIAN SYNDROME

PHARMACOLOGIC TREATMENT OF PCOS FOR NON-INFERTILITY INDICATIONS

Education + lifestyle + first line pharmacological therapy for hyperandrogenism and irregular cycles

COCP First line

- Use lowest effective oestrogen dose (20-30 micrograms ethinyl oestradiol or equivalent)
- Consider natural oestrogen preparations balancing efficacy, metabolic risk profile, side effects, cost and availability
- Follow WHO COCP general population guidelines for relative and absolute contraindications and risks
- 35 micrograms ethinyloestradiol plus cyproterone acetate not first line in PCOS due to increased adverse effects
- Hirsutism requires COCP and additional cosmetic therapy for at least 6 months
- Consider additional PCOS related risk factors such as high BMI, hyperlipidemia and hypertension

Note:
Other contraceptives don't increase hepatic SHBG production with limited efficacy for hyperandrogenism

Second line pharmacological therapies

COCP + lifestyle + metformin

No COCP preparation is superior in PCOS.

Should be considered in women with PCOS for management of metabolic features, where COCP + lifestyle does not achieve goals.

Could be considered in adolescents with PCOS and BMI ≥ 25kg/m^2 where COCP and lifestyle changes do not achieve desired goals.

Most beneficial in high metabolic risk groups including those with diabetes risk factors, impaired glucose tolerance or high-risk ethnic groups.

COCP + anti-androgens

Evidence in PCOS relatively limited.

Anti-androgens must be used with contraception to prevent male fetal virilisation.

Can be considered after 6/12 cosmetic treatment + COCP if they fail to reach hirsutism goals.

Can be considered with androgenic alopecia.

Metformin + lifestyle

With lifestyle, in adults should be considered for weight, hormonal and metabolic outcomes and could be considered in adolescents.

Most useful with BMI ≥ 25kg/m^2 and in high risk ethnic groups.

Side-effects, including GI effects, are dose related and self-limiting.

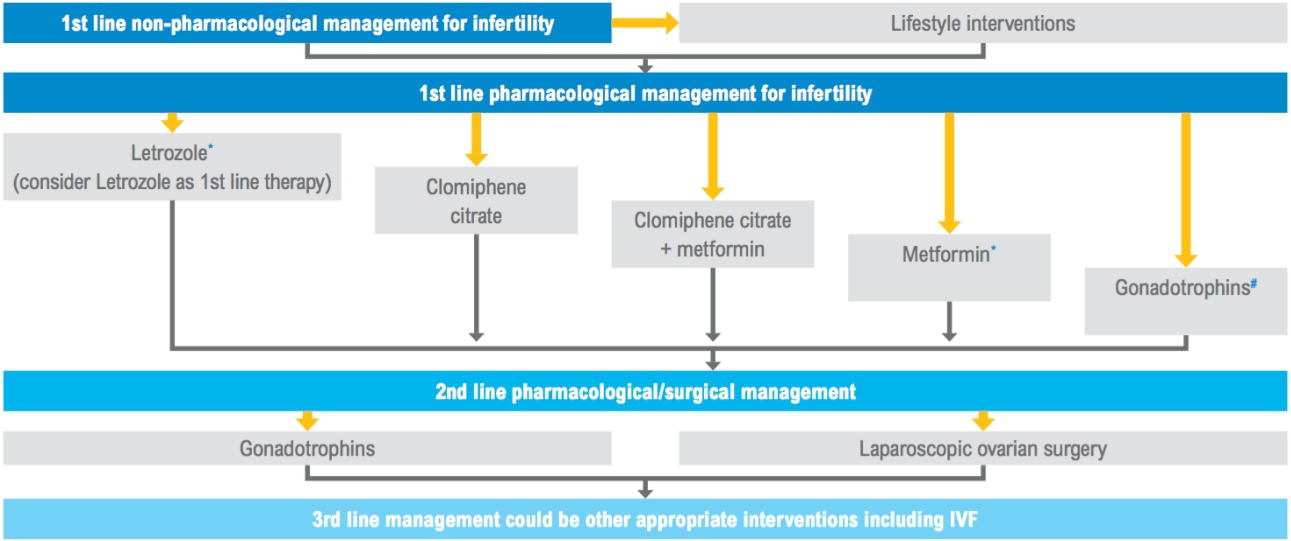
Consider starting low dose, with 500mg increments 1-2 weekly.

Metformin appears safe long-term. Ongoing monitoring required and has been associated with low vitamin B12.

Anti-obesity medications can be considered with lifestyle as per general population guidelines, considering cost, contraindications, side effects, availability and regulatory status and avoiding pregnancy when on therapy.

Inositol (in any form) should currently be considered experimental in PCOS, with emerging evidence of efficacy highlighting the need for further research.

MANAGEMENT OF INFERTILITY IN PCOS



*Off label prescribing: Letrozole, COCPs, metformin and other pharmacological treatments are generally off label in PCOS, as pharmaceutical companies have not applied for approval in PCOS. However, off label use is predominantly evidence-based and is allowed in many countries. Where it is allowed, health professionals should inform women and discuss the evidence, possible concerns and side effects of treatment.