



The Global
Aware Group

Appropriate Care For Women
With Androgen Excess

The global burden of androgen excess

Educational Slide Kit Module 1

The AWARE group is a panel of independent physicians with an expert interest in androgen excess in women. Formation of the AWARE group and its ongoing work is supported and funded by Bayer AG.

Testing your knowledge



1. Which of these typical skin symptoms of androgen excess is the most commonly used marker?
 - A. Seborrhea
 - B. Hirsutism
 - C. Acne
 - D. Alopecia

Testing your knowledge



2. How often can hirsutism be present in women with androgen excess?
- A. In 2 out of 10 women
 - B. In 4 out of 10 women
 - C. In 6 out of 10 women
 - D. In 8 out of 10 women

Testing your knowledge



3. How frequently does alopecia occur in women with androgen excess due to PCOS?
- A. Women with PCOS are not affected by alopecia
 - B. 1 out of 3 women are affected
 - C. 1 out of 5 women are affected
 - D. 1 out of 10 women are affected

Testing your knowledge



4. When looking at the impact of hyperandrogenic skin symptoms, what proportion of women with hirsutism also report anxiety symptoms?
- A. Women with hirsutism are rarely affected by anxiety
 - B. Approximately 25% of women are affected by anxiety
 - C. Approximately 50% of women are affected by anxiety
 - D. Approximately 75% of women are affected by anxiety



Module content

- Defining androgen excess and its prevalence
- The burden of androgen excess
- Hyperandrogenic skin symptoms impact on:
 - Quality of life
 - Health and wellbeing
 - Healthcare systems

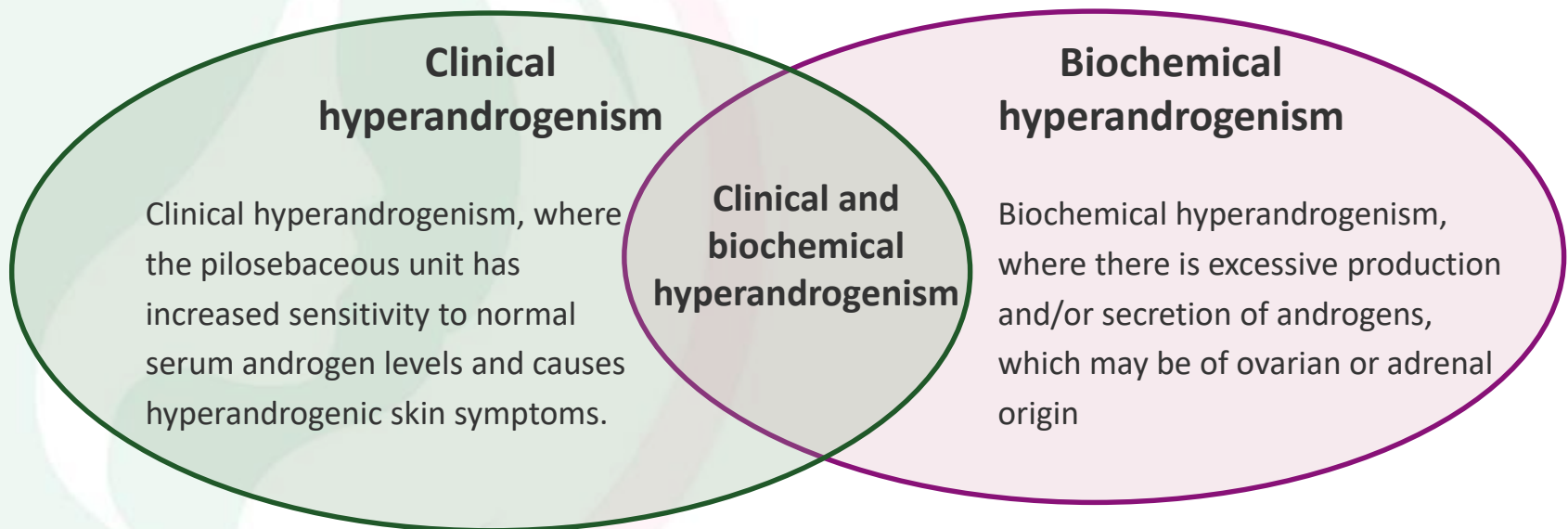



Defining androgen excess

Defining androgen excess



Androgen excess in women can be characterised by either clinical symptoms of hyperandrogenism and/or biochemical hyperandrogenism¹





Prevalence and presentation of androgen excess



Androgen excess* is the most common reproductive endocrine disorder in women¹

*Biochemical and/or clinical

- It affects up to **1 in 5** women of reproductive age²



- The **majority** of women with hyperandrogenism (**80–85%**) have polycystic ovary syndrome (PCOS)^{3,4}



Women can present with a combination of different symptoms^{1,2}



In some cases, women present with all four hyperandrogenic skin symptoms, described as the **SAHA syndrome**^{3,4}

Hirsutism is the most commonly used marker for diagnosis of androgen excess¹



- It is present in up to **8 out of 10** women with androgen excess^{1*}
Indicated by excess body or facial terminal (coarse) hair growth in females in a male-like pattern²
- Prevalence varies according to ethnicity²

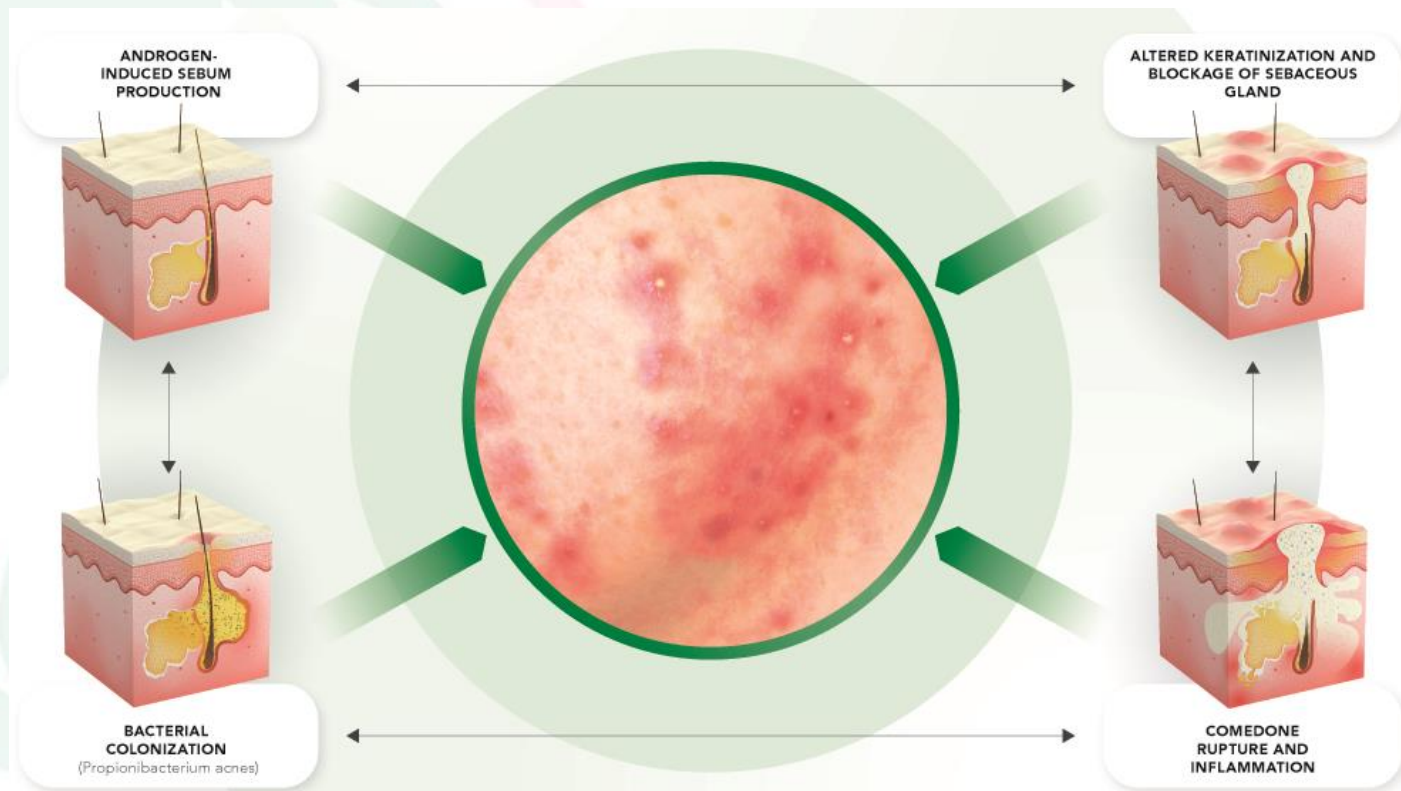


*Depending on criteria for definition and population studies

Acne is an extremely common, chronic skin condition^{1,2}



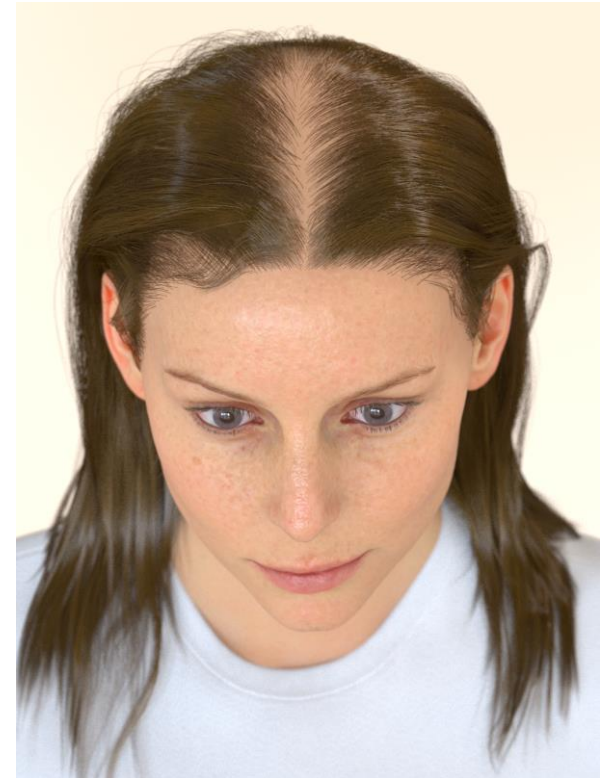
- Acne is caused by androgen excess in approximately **1 in 6** women³



Alopecia in women is most commonly caused by androgen excess¹



- Affects approximately **1 in 3** of women with PCOS²
- Characterised by overall thinning of scalp hair mainly in frontal and parietal areas¹
- Commonly presents with other skin symptoms of androgen excess¹



Seborrhea can also present as a symptom of androgen excess¹



- Often occurs alongside other skin symptoms of androgen excess (SAHA syndrome)¹
- Presents in approximately **1 in 5** women with hyperandrogenism
- Is a useful marker of androgen metabolic disorders²





The burden of androgen excess

Hyperandrogenic skin symptoms cause significant quality of life and psychological impairment¹⁻³



- Both hirsutism and acne can significantly and negatively impact on quality of life and cause anxiety and depression¹⁻³
- Alopecia has a negative effect on self-esteem, psychological wellbeing and body image³

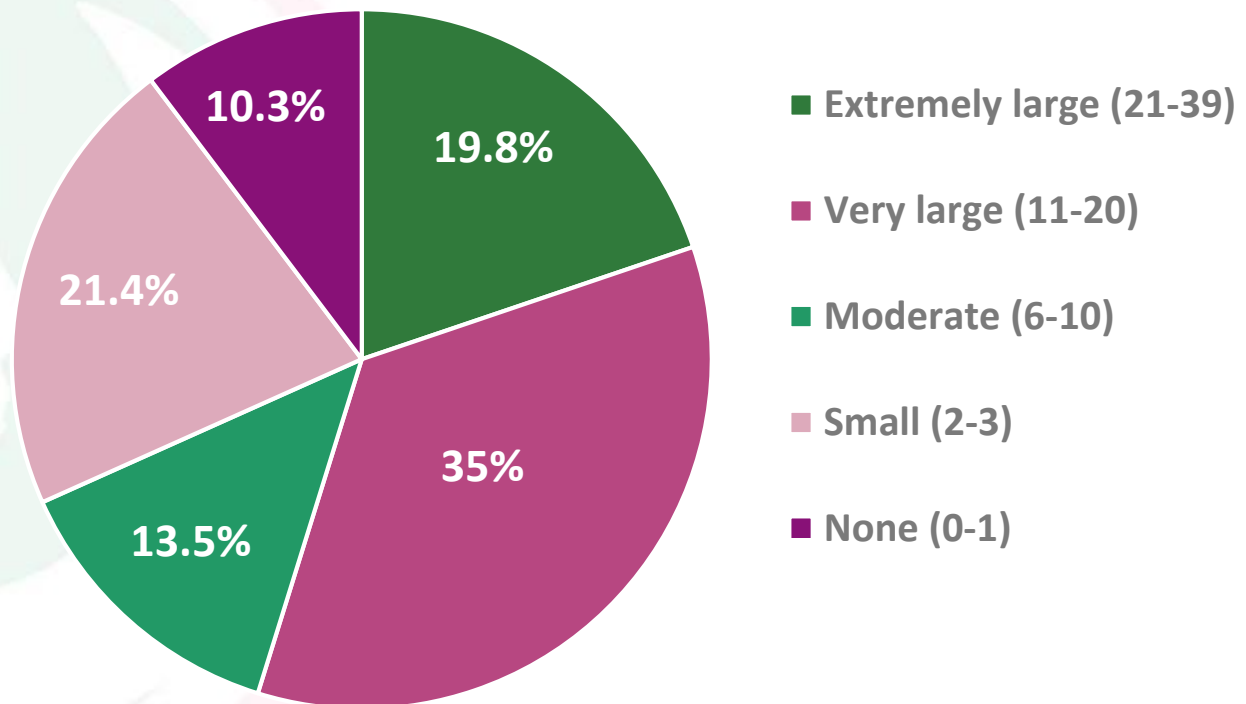


Hirsutism can significantly and negatively impact on quality of life¹



Effect measured by Dermatology Life Quality Index (DLQI)

n=127



DLQI: Dermatology Quality of Life Index

Hirsutism negatively affects multiple health-related quality of life domains¹



75% of women report anxiety²



30% of women report depression²



29% of women report both anxiety and depression²



Acne also has a significant impact on quality of life¹⁻⁴



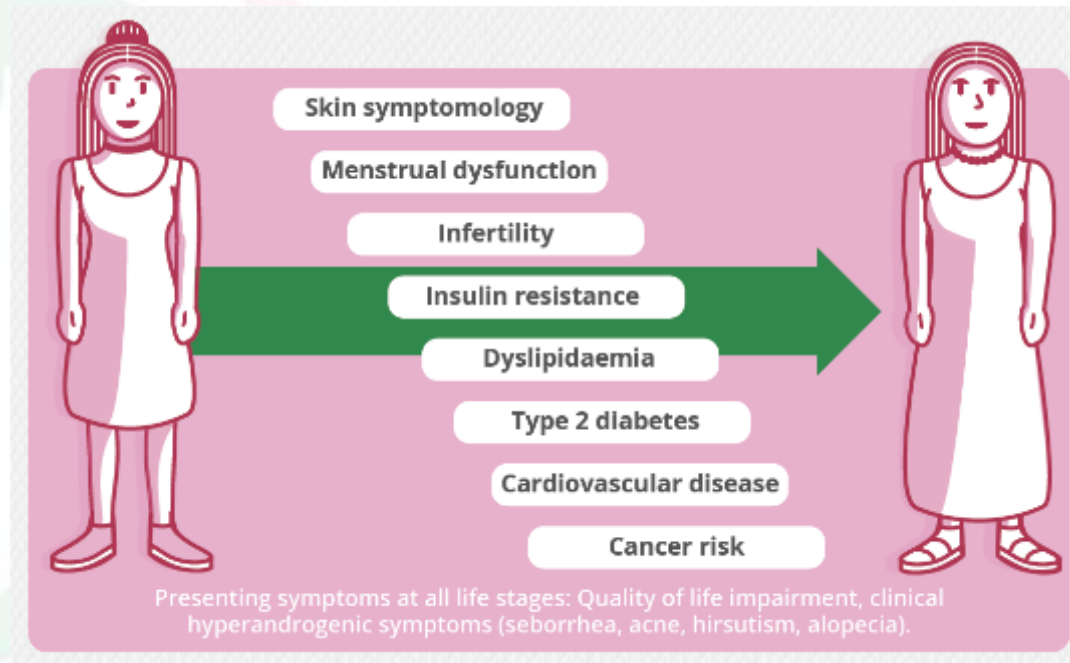
Clinically important depression and anxiety have been reported in **18%** and **44%** of acne patients respectively⁴

Anxiety
Depression
Suicidal thoughts
Self-esteem **Low mood**
Poorer social functioning



Androgen excess due to biochemical hyperandrogenism may have long-term impact on general health¹⁻³

- With increasing age, there is a change in presenting symptoms and health implications



- Women with abnormalities in androgen metabolism may have accompanying anovulation and/or polycystic ovary syndrome (PCOS)
- These have reproductive and metabolic implications if left untreated

Androgen excess represents a significant financial burden to healthcare systems¹



	Symptoms included in literature review	Prevalence (%)	Annual cost in millions US\$ (% of total)
Initial evaluation			99 (2.3)
Treatment			
	Menstrual dysfunction/abnormal uterine bleeding	75	1350 (30.9)
	Hirsutism*	70	622 (14.2)
	Infertility	50	533 (17.2)
	Type 2 diabetes	7.2	1766 (40.4)
Total cost			4370

* Treatment of hirsutism includes both cosmetic and hormonal therapies but does not take into account management of psychological and QoL impact or women's own expenditure on treatment

Conclusions



- Androgen excess affects up to **1 in 5** women of reproductive age¹
- Presenting symptoms include hyperandrogenic skin symptoms (**S**eborrhea, **A**cne, **H**irsutism and **A**lopecia) alone or in combination with menstrual irregularities and infertility^{2,3,4}
- It is associated with significant quality of life impairment and negative quality of life^{5,6,7}
- Although data is limited, evidence shows it can be a significant economic burden⁸

Testing your knowledge



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Find The Global AWARE Group educational materials on the European Menopause & Andropause Society website



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The Global AWARE Group Educational Materials

The Global AWARE Group
Appropriate Care For Women With Androgen Excess

The global AWARE (Appropriate care for Women with AndRogen Excess) group is a panel of independent physicians with an expert interest in androgen excess. Their mission is to address the unmet need in androgen excess to ensure that women receive appropriate care. Since its formation in 2015, the AWARE group and its ongoing work is supported by Bayer. The group have created a number of useful resources that are available to download below. These resources aim to support healthcare professionals in the recognition, diagnosis and appropriate treatment of androgen excess. You may want to use these materials to support discussions with colleagues, for example, in a workshop setting.

Your patient, Camila

- 19 years old
- Presents with moderate acne that has failed to improve with topical antibiotic treatment
- She tells you that her acne became much worse a year ago
- She also tells you that she is too embarrassed to go out with her friends because she feels miserable about her skin
- She is taking a combined oral contraceptive (COC)

Female acne for non-dermatologists
A practical educational manual

Polycystic ovary syndrome
affects up to 1 in 6 women of reproductive age

Women with hirsutism caused by androgen excess experience high levels of psychological distress

Androgen excess is linked to long-term medical problems, particularly in women with polycystic ovary syndrome

What are the signs and symptoms of androgen excess?

Assessment and Diagnosis of Polycystic Ovary Syndrome (PCOS)

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