



Polycystic ovary syndrome: **Top 5 questions**

Get the insights you need on this complex condition with testing from Quest Diagnostics

Introduction

Polycystic ovary syndrome (PCOS) is a common reproductive metabolic condition that affects between 5% and 18% of women, with health impacts across the lifespan.¹

The exact cause of PCOS is unknown but is thought to involve complex genetic and environmental interactions. Insulin resistance, accompanied by compensating hyperinsulinemia, is believed to play a key role in PCOS pathophysiology by increasing androgen production.¹⁻³



PCOS is one of the most common causes of female infertility, affecting as many as **5 million women of reproductive age in the United States⁴**

~75% An estimated 75% of individuals with PCOS **remain undiagnosed⁵**

This document answers the top five questions you may have about PCOS as a provider, covering what the condition is and how it is diagnosed, which patients are most appropriate for screening, and what other risks may be associated with PCOS.

1 Which of your patients may have PCOS?

PCOS is a complex disease defined by a combination of signs and symptoms of androgen excess and ovulatory dysfunction in the absence of other specific diagnoses.¹⁻³

Common symptoms to look for may include:

- Hirsutism
- Weight gain
- Acne
- Thinning hair/androgenic alopecia
- Ovulatory dysfunction/ Menstrual irregularities
- Enlarged polycystic ovaries
- Infertility



Clinical presentations of PCOS can encompass a wide spectrum, ranging from mild cases with normal androgens, ovulatory dysfunction, and polycystic ovaries to severe instances that exhibit marked hirsutism, alopecia, obesity, and high testosterone.¹⁻³



2 What is the criteria used to identify and diagnose PCOS?

As no single criterion or test can be used to diagnose PCOS, diagnosing PCOS can be challenging. Rather, diagnosis is primarily based on the exclusion of diseases with similar symptoms.¹⁻³

Over 30%

Over 30% of women with PCOS will spend more than 2 years and see 3 or more healthcare professionals **before the condition is diagnosed**⁶

The 2003 Rotterdam criteria are the most-used approach for diagnosis of PCOS, and define PCOS based on the presence of at least 2 of 3 criteria:

- hyperandrogenism
- ovulatory dysfunction
- polycystic ovarian morphology (PCOM)¹⁻³

Table 1. Polycystic Ovary Syndrome Phenotypes Based on Rotterdam Criteria

Criteria ¹⁻³	Phenotype ⁷			
	A	B	C	D
Hyperandrogenism (clinical or biochemical)	✓	✓	✓	
Ovulatory dysfunction	✓	✓		✓
PCOM	✓		✓	✓

PCOM, polycystic ovarian morphology.

✓ Present

Differential diagnosis from disorders with similar presentation, such as nonclassic congenital adrenal hyperplasia (CAH), hyperprolactinemia, obesity, and hypothyroidism, is needed to confirm a diagnosis of PCOS.¹⁻³

3 Which of your patients are suitable for PCOS testing?

As outlined in the Rotterdam criteria, women of reproductive age experiencing the following symptoms are suitable for screening:

- Hyperandrogenism (Clinical or biochemical)
- Ovulatory dysfunction
- Polycystic ovaries

Patients experiencing symptoms outlined in Question 1 may also align with the Rotterdam PCOS diagnostic criteria.

Other patients suitable for testing include adolescents with hyperandrogenism (clinical or biochemical) and persistent ovulatory dysfunction, and perimenopausal/menopausal individuals with a well-documented, long-term history of the same.

4 How does PCOS impact patients' risk for other comorbidities?

Approximately half of all patients with PCOS are obese.¹

More than half of all patients with PCOS develop type 2 diabetes by age 40.⁴

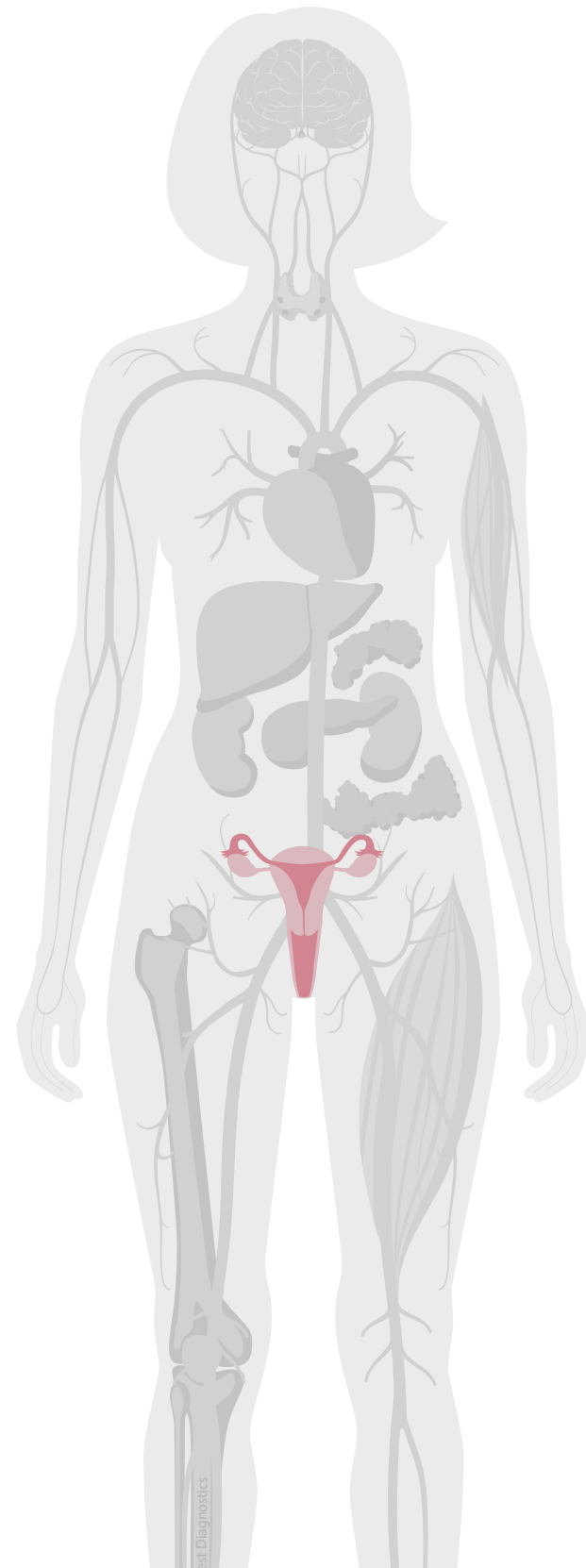
Patients with PCOS should be assessed and treated for a number of serious comorbidities associated with the condition, such as^{1-3,7,8}:

- Cardiovascular disease (CVD)
- Hypertension
- Metabolic syndrome
- Abnormal uterine bleeding
- Endometrial cancer
- Infertility
- Pregnancy complications including gestational diabetes and preeclampsia
- Sleep apnea
- Nonalcoholic fatty liver disease (NAFLD)

Psychological conditions associated with PCOS

Individuals with PCOS, particularly adolescents, also have higher rates of anxiety-related disorders and depression when compared to the general population.⁹

The 2018 International Evidence-Based Guideline for the Assessment and Management of Polycystic Ovary Syndrome recommends that all patients, especially adolescents, be screened for symptoms of anxiety and depression at the time of diagnosis.¹⁰



5 What tests are available for PCOS screening?

Accurately diagnosing and ascertaining the cause of PCOS is vital to determining the appropriate course of treatment, ensuring effective disease management, and avoiding complications.

Quest Diagnostics offers a broad range of endocrine tests aligned to the most recent clinical practice guidelines, including high-quality liquid chromatography–mass

spectrometry (LCMS) assays as recommended for the most accurate assessment of total or free testosterone in patients with PCOS.¹⁰

Quest provides tests and panels for PCOS criteria and for differential diagnosis of disorders with overlapping features, as well as tests and panels for the diagnosis and management of comorbidities associated with PCOS.

Help diagnose and manage polycystic ovary syndrome

Count on actionable results from Quest Diagnostics so you can do more for your patients.



Visit [QuestDiagnostics.com/PCOS](https://questdiagnostics.com/PCOS) to view the detailed brochure and learn even more about diagnosing and managing PCOS.

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