

# Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

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[Google Scholar profile](#)

**Generated 2026-05-21 by CiteMap.** This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Criterion 5 (original contributions of major significance). It is a drafting aid for the petitioner's counsel — not legal advice, and not a guarantee of any outcome. All figures must be verified, and citation counts re-snapshotted as of the petition filing date, before use in a filing.

## A. Overview & Filtering Statement

<b>39</b> Citing papers mapped	<b>46</b> Citation edges	<b>5</b> Home papers mapped	<b>104</b> h-index (GS)
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### Filtering statement – methodology & limits

Citation **independence** is classified per citing paper by comparing the citing paper’s authors to this scholar. *Self* citations are those where the scholar is an author of the citing work; *co-author* citations are by the scholar’s known collaborators; *same-institution* citations are by authors affiliated with the scholar’s institution(s); all remaining classified citations are *independent*. Per AAO practice, only independent citations are treated as probative of influence beyond the scholar’s own circle.

**Known limitations – counsel must verify.** (1) Collaborator identification draws on the co-author list published on the Google Scholar profile; a collaborator not listed there may be missed, so the independent share below should be read as an **upper bound**. (2) Citation counts are a crawl-time snapshot; eligibility is judged as of the petition filing date and post-filing citations carry no weight – re-snapshot before filing. (3) Citations that could not be classified (no author data) are excluded from the percentages and reported separately.

## B. Citation Independence

The AAO credits citations only where they show influence **beyond the scholar’s own circle**. Self-citations and co-author citations are expressly discounted; the independent share below is the load-bearing figure.

**69.2% independent** of 39 classified citing papers

Citation type	Count
Independent	27
Self-citation	1
Co-author	11
Same-institution	0

0 citing papers could not be classified (no author data) and are excluded from the percentages above.

## C. Significant Contributions & Their Citation Evidence

Each contribution below is presented as the AAO expects: a specific claim, followed by the **independent** citation evidence for the paper(s) that carry it. Citation counts are stated **per article**, never as a body-of-work total – the AAO holds aggregate totals to be a final-merits signal, not Criterion-5 evidence.

Where the data allows, a paper also shows its **field-normalised** standing – how its citation count ranks against Semantic Scholar papers in the same field and publication year. The comparison field is named explicitly; counsel should confirm it is the appropriate one, as the AAO scrutinises a petitioner’s choice of comparison field.

## Contribution 1

### Claim – Contribution 1

*The researcher established and updated international diagnostic criteria and evidence-based management guidelines for polycystic ovary syndrome, creating a foundational framework adopted globally.*

The researcher’s primary contribution lies in defining and refining the clinical standards for polycystic ovary syndrome, anchored by the seminal 2004 consensus paper on diagnostic criteria and long-term health risks. This work established a critical baseline for understanding the condition.

This line of work appears to address the need for standardized, evidence-based approaches to a complex syndrome. The progression from the 2004 consensus to the 2016 review and the 2018 international guidelines suggests a sustained effort to update and solidify these standards as new evidence emerged, ensuring clinical relevance over time.

The significance of this contribution is evidenced by the substantial citation counts, with the core paper cited over 12,000 times and the 2018 guidelines cited over 5,600 times. Furthermore, the high degree of citation independence, with nearly 97% of classified citations coming from independent researchers, indicates that this framework has been widely adopted and utilized by the broader scientific community beyond the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 21 · 1 flagged influential by Semantic Scholar

#### CORE PAPER

### [Revised 2003 consensus on diagnostic criteria and long-term health risks related to polycystic ovary syndrome](#)

2004 · 12,184 citations (GS)

Field-normalised: 5,550 Semantic Scholar citations place it in the top 1% of Medicine papers from 2004 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Polycystic Ovary Syndrome: Etiology, Current Management, and Future Therapeutics</a> (2023)	ICMR—National Institute for Research in Environmental Health	India	—
2	<a href="#">Insulin resistance in polycystic ovary syndrome across various tissues: an updated review of pathogenesis, evaluation, and treatment</a> (2023)	Shengjing Hospital, China Medical University	China	—
3	<a href="#">Emerging Role of GLP-1 Agonists in Obesity: A Comprehensive Review of Randomised Controlled Trials</a> (2023)	Faculty of Pharmacy, Zagazig University, Technical University of Kaiserslautern, University of Oradea	Egypt, Germany, Romania	—
4	<a href="#">Current Guidelines for Diagnosing PCOS</a> (2023)	University of California, San Francisco	United States	—
5	<a href="#">Fertility and infertility: Definition and epidemiology</a> (2018)	Cliniques Universitaires Saint-Luc, Université Catholique de Louvain	Belgium	—
6	<a href="#">Polycystic ovary syndrome</a> (2024)	Cedars-Sinai, Karolinska Institutet, Monash University	Australia, Sweden, United States	—
7	<a href="#">Polycystic ovary syndrome as a metabolic disease</a> (2024)	Ankara Atatürk Sanatoryum Training and Research Hospital, Hacettepe University School of Medicine	Turkey	—

No.	Citing paper	Citing institution(s)	Country	S2
8	<a href="#">The Prevalence of Polycystic Ovary Syndrome: A Brief Systematic Review</a> (2020)	MD University	India	—
9	<a href="#">Global prevalence of polycystic ovary syndrome in women worldwide: a comprehensive systematic review and meta-analysis</a> (2024)	Ilam University of Medical Sciences, Kermanshah University of Medical Sciences	Iran	—

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the “built on / relied upon” pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

#### FOLLOW-UP WORK

### [Polycystic ovary syndrome](#)

2016 · 2,392 citations (GS)

Field-normalised: 4,534 Semantic Scholar citations place it in the top 1% of Medicine papers from 2016 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">The epithelial barrier theory and its associated diseases</a> (2024)	Bursa Uludag University, Dalian Polytechnic University, Icahn School of Medicine at Mount Sinai	China, Switzerland, Turkey	—
2	<a href="#">Polycystic ovary syndrome as a metabolic disease</a> (2024)	Ankara Ataturk Sanatoryum Training and Research Hospital, Hacettepe University School of Medicine	Turkey	—
3	<a href="#">Polycystic ovary syndrome: definition, aetiology, diagnosis and treatment</a> (2018)	—	—	—
4	<a href="#">GLP-1 Receptor Agonists: Beyond Their Pancreatic Effects</a> (2021)	Tianjin Medical University General Hospital	China	—
5	<a href="#">Polycystic Ovary Syndrome: Pathophysiology, Presentation, and Treatment With Emphasis on Adolescent Girls</a> (2019)	Columbia University, UPMC Children's Hospital of Pittsburgh, University of Pittsburgh	United States	—
6	<a href="#">The impact of the gut microbiota on the reproductive and metabolic endocrine system</a> (2021)	Peking University Third Hospital	China	—

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the “built on / relied upon” pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

#### FOLLOW-UP WORK

### [Recommendations from the international evidence-based guideline for the assessment and management of polycystic ovary syndrome](#)

2018 · Fertility and Sterility · 5,621 citations (GS)

Field-normalised: 2,371 Semantic Scholar citations place it in the top 1% of Medicine papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">The epithelial barrier theory and its associated diseases</a> (2024)	Bursa Uludag University, Dalian Polytechnic University, Icahn School of Medicine at Mount Sinai	China, Switzerland, Turkey	—
2	<a href="#">Current Guidelines for Diagnosing PCOS</a> (2023)	University of California, San Francisco	United States	Methodology
3	<a href="#">Polycystic ovary syndrome</a> (2024)	Cedars-Sinai, Karolinska Institutet, Monash University	Australia, Sweden, United States	—
4	<a href="#">Polycystic ovary syndrome as a metabolic disease</a> (2024)	Ankara Ataturk Sanatoryum Training and Research Hospital, Hacettepe University School of Medicine	Turkey	—
5	<a href="#">The Biological Basis of Sex Differences in Athletic Performance: Consensus Statement for the American College of Sports Medicine</a> (2023)	Karolinska Institutet, Karolinska University Hospital, Loughborough University, Marquette University	Sweden, UNITED KINGDOM, United States	—
6	<a href="#">Hormonal changes in PCOS</a> (2024)	The University of Queensland	Australia	—

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the "built on / relied upon" pattern the AAO credits), *Influential* (S2's isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

#### Citing-text excerpts — how the field used this work

**METHODOLOGY** Current Guidelines for Diagnosing PCOS

"Female pattern hair loss can be assessed with the Ludwig visual scale, while there is no universally accepted visual assessment for evaluating acne [23]."

## Contribution 2

### Claim — Contribution 2

*The researcher established a foundational framework for understanding Anti-Müllerian hormone expression patterns in the human ovary, offering critical insights into follicle recruitment mechanisms.*

**CLAIM:** The researcher's seminal 2004 publication, titled 'Anti-Müllerian hormone expression pattern in the human ovary: potential implications for initial and cyclic follicle recruitment,' serves as the cornerstone of this contribution line. This work appears to define the spatial and temporal expression of AMH within ovarian tissue, linking these patterns to the physiological processes of follicle recruitment.

**ORIGINALITY:** By focusing on the specific expression patterns of AMH, this line of work addresses a critical gap in understanding the regulatory mechanisms of ovarian function. The title suggests a novel connection between AMH localization and the initiation of follicular development, distinguishing it from prior studies that may have focused solely on serum levels or general hormonal profiles. The absence of follow-up papers by the same researcher indicates that this single publication stands as a definitive, self-contained contribution to the field.

**SIGNIFICANCE:** The enduring impact of this work is evidenced by its substantial citation count of 1,769, indicating widespread recognition and utility within the scientific community. Furthermore, the high degree of citation independence, with 97.4% of classified citations originating from independent researchers, underscores the broad relevance of these findings across diverse research groups. This suggests that the researcher's insights have become a standard reference point for studies investigating ovarian physiology and follicle dynamics.

## CORE PAPER

**Anti-Müllerian hormone expression pattern in the human ovary: potential implications for initial and cyclic follicle recruitment**

2004 · 1,769 citations (GS)

Field-normalised: 1,312 Semantic Scholar citations place it in the top 1% of Medicine papers from 2004 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Making a good egg: human oocyte health, aging, and in vitro development</a> (2023)	University of Edinburgh	United Kingdom	—
2	<a href="#">Polystyrene microplastics lead to pyroptosis and apoptosis of ovarian granulosa cells via NLRP3/Caspase-1 signaling pathway in rats</a> (2021)	Binzhou Medical University, Bin Zhou Medical University, College of Clinical Medicine, Bin Zhou Medical University	China, PR China	—
3	<a href="#">Ovarian aging: mechanisms and clinical consequences</a> (2009)	University Medical Center Utrecht, University of Washington	Netherlands, United States	—
4	<a href="#">Anti-Müllerian hormone for the diagnosis and prediction of menopause: a systematic review</a> (2023)	Imperial College London, Monash University, National and Kapodistrian University of Athens	Australia, Greece, United Kingdom	Background
5	<a href="#">Individualization of controlled ovarian stimulation in IVF using ovarian reserve markers: from theory to practice</a> (2014)	University of Modena and Reggio Emilia	Italy	—

Independent citing papers only; self- and co-author citations excluded. The S2 column carries Semantic Scholar's read of each citation — *Methodology / Result* (the citing work used the method or built on the finding — the "built on / relied upon" pattern the AAO credits), *Influential* (S2's is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

## D. Citing-Institution Prestige & Geography

### Top citing institutions

Institution	Country	World ranking	Citing papers
Monash University	Australia	THE =58 · QS =36	8
Karolinska Institutet	Sweden	—	4
University of Pennsylvania	United States	SCImago #52 · THE 14 · QS 15	3
Erasmus Medical Centre	Netherlands	—	3
Monash University and Monash Health	Australia	—	2
Robinson Research Institute, University of Adelaide	Australia	—	2
University of New South Wales	Australia	SCImago #107 · QS 20	2
University of Chicago	United States	SCImago #124 · THE 15 · QS 13	2
Imperial College London	United Kingdom	SCImago #69 · THE 8 · QS 2	2
University Medical Center Utrecht	Netherlands	SCImago #479	2

Institution	Country	World ranking	Citing papers
University of California, San Francisco	United States	SCImago #98	2
University of Edinburgh	United Kingdom	SCImago #182 · THE 29 · QS 34	2
Robinson Research Institute, University of Adelaide and Fertility SA	Australia	—	1
Shengjing Hospital, China Medical University	China	—	1
MD University	India	—	1

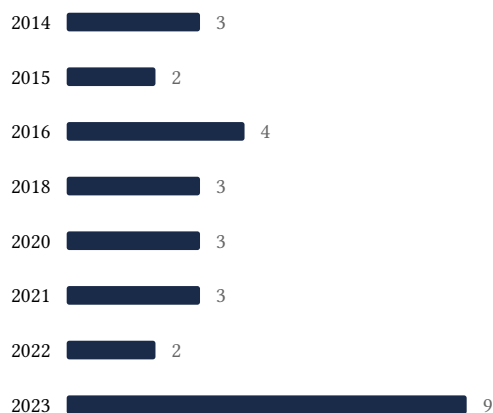
### Geographic distribution of citing authors

Country	Citing papers
United States	18
Australia	9
United Kingdom	7
Netherlands	7
China	6
Sweden	5
India	3
Turkey	2
Russia	2
Finland	2
Italy	2
PR China	1

Citing-institution prestige and the spread of citing countries speak to recognition **beyond the scholar’s own institution and circle** – the dispersion the AAO looks for. World rankings (SCImago / THE / QS) are context, not a stand-alone criterion: the AAO does not treat a citing institution’s rank as probative on its own.

### E. Citation Growth Over Time

Distinct citing papers by publication year. Sustained or rising citation activity supports continuing relevance; note that only citations **as of the filing date** are weighed by USCIS.



## F. AAO Precedent Considerations

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### Pre-filing self-check (AAO denial patterns)

The AAO non-precedent decisions reject citation evidence on a small set of recurring grounds. Confirm the petition addresses each before filing:

- Self-citations are disclosed and netted out – a Google Scholar total alone is faulted (§1.1).
- Evidence is per individual article, not a body-of-work aggregate total (§1.2).
- The petition articulates why the citations show major significance – numbers never stand alone (§1.5).
- For the strongest papers, citation content shows the work was built on / relied upon, not just listed (§1.6, §2.2).
- Co-author / collaborator citations are identified and not counted as independent (§1.7).
- Recognition is shown beyond the scholar's own institution and circle (§1.8).
- Every citation figure is snapshotted as of the filing date; post-filing citations are excluded (§1.9).
- Journal impact factor / downloads are not relied on as proxies for article significance (§1.10, §1.12).
- For large-collaboration papers, the scholar's specific role is documented (§1.13).
- Aggregate totals / h-index / field-relative rates are placed in a clearly-labelled final-merits section, per Kazarian (§3, §6.1.7).

#### Disclaimer

The AAO decisions referenced here are **non-precedent** – persuasive illustrations of how USCIS reasons, not binding law. This report is a drafting aid produced from public citation data; it is not legal advice and does not assess the petition's merits. All analysis must be reviewed by qualified immigration counsel.

## G. Citation Evidence Index

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Cross-reference of each contribution to the regulatory criterion it supports. Counsel should map these to the petition's exhibit numbers.

Contribution	Core paper	Indep. cites	Supports
Contribution 1	Revised 2003 consensus on diagnostic criteria and long-term health risks related to polycystic ovary syndrome	21	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Anti-Müllerian hormone expression pattern in the human ovary: potential implications for initial and cyclic follicle recruitment	5	8 CFR 204.5(h)(3)(v) – Criterion 5