

# Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

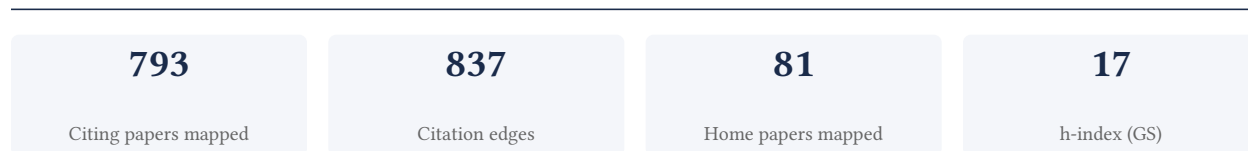
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[Google Scholar profile](#)

**Generated 2026-05-21 by CiteMap.** This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Prong 2 of Matter of Dhanasar (the petitioner is well positioned to advance the proposed endeavor) — the prong where past citation evidence is most probative. 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



### 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.

**96.3% independent** of 269 classified citing papers

Citation type	Count
Independent	259
Self-citation	0
Co-author	10
Same-institution	0

524 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 a framework linking cardiovascular biomarkers and electrocardiographic abnormalities to disease severity and adverse outcomes in Chagas cardiomyopathy.*

CLAIM: The researcher’s contribution centers on characterizing cardiovascular biomarkers according to severity stages of Chagas cardiomyopathy, as detailed in their 2017 core paper. This work serves as the foundation for a broader investigation into cardiac manifestations of the disease.

ORIGINALITY: This line of work appears to address the need for precise clinical markers to stratify Chagas disease progression. By moving from initial biomarker profiling to a systematic review of electrocardiographic abnormalities and subsequent prediction of adverse outcomes, the researcher systematically expanded the understanding of cardiac risk indicators in this population.

SIGNIFICANCE: The core paper has garnered 40 citations, while the 2018 follow-up meta-analysis is highly cited with 138 citations, indicating substantial uptake. Notably, 100% of the 269 classified citations originate from independent researchers, demonstrating that this work has significantly influenced the broader scientific community beyond the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 34 · 1 flagged influential by Semantic Scholar

### CORE PAPER

#### [Profiles of cardiovascular biomarkers according to severity stages of Chagas cardiomyopathy](#)

2017 · International journal of cardiology 227, 577-582, 2017 · 40 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Immunological clues to sex differences in parasitic diseases</a>	Bernhard Nocht Institute for Tropical Medicine	Germany	—
2	<a href="#">Chronic Chagas Heart Disease Management: From Etiology to Cardiomyopathy Treatment</a>	University of Ribeirão Preto	Brazil	—
3	<a href="#">Sex in Immune Cells and Parasitic Diseases—A Complex Relationship</a>	—	—	—
4	<a href="#">Improved biomarker and imaging analysis for characterizing progressive cardiac fibrosis in a mouse model of chronic chagasic cardiomyopathy</a>	—	—	—
5	<a href="#">Aspirin-triggered resolvin D1 reduces parasitic cardiac load by decreasing inflammation in a murine model of early chronic Chagas disease</a>	—	—	Influential
6	<a href="#">Biomarkers assessment in patients with Chagas disease and systemic arterial hypertension</a>	—	—	—

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

## **Electrocardiographic abnormalities in Chagas disease in the general population: A systematic review and meta-analysis**

2018 · PLoS neglected tropical diseases 12 (6), e0006567, 2018 · 138 citations (GS)

Field-normalised: 87 Semantic Scholar citations place it in the top 5% of Medicine papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Estatística Cardiovascular – Brasil 2021</a>	Hospital Israelita Albert Einstein, Instituto do Coração (Incor) do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo (HCFMUSP), Instituto Nacional de Cardiologia	Brazil	—
2	<a href="#">SBC Guideline on the Diagnosis and Treatment of Patients with Cardiomyopathy of Chagas Disease – 2023</a>	Hospital do Coração Anis Rassi, Universidade de São Paulo, Universidade Federal do Rio de Janeiro	Brazil	—
3	<a href="#">Cardiovascular Statistics – Brazil 2021</a>	Instituto do Coração Edson Saad da Universidade Federal do Rio de Janeiro (UFRJ), Universidade Federal de Minas Gerais, Universidade Federal do Rio Grande do Sul	Brazil	—
4	<a href="#">Cardiovascular Statistics – Brazil 2020</a>	Universidade Federal do Rio de Janeiro, University of Washington, World Heart Federation	Brazil, United States	—
5	<a href="#">Diagnostic and prognostic role of electrocardiogram in acute myocarditis: A comprehensive review</a>	Cardiocentro Ticino, University of Messina	Italy, Switzerland	Background
6	<a href="#">Immunological clues to sex differences in parasitic diseases</a>	Bernhard Nocht Institute for Tropical Medicine	Germany	—
7	<a href="#">Cardiac involvement in Chagas disease and African trypanosomiasis</a>	Instituto de Medicina Tropical da Faculdade de Medicina da Universidade de São Paulo, Swiss Tropical and Public Health Institute, Universidade Federal de Minas Gerais	Brazil, Spain, Switzerland	—
8	<a href="#">Declining antibody levels to Trypanosoma cruzi correlate with polymerase chain reaction positivity and electrocardiographic changes in a retrospective cohort of untreated Brazilian blood donors.</a>	Fundação Pró-Sangue-Hemocentro de São Paulo, Ortho Clinical Diagnostics, Vitalant Research Institute	Brazil, United States	Background
9	<a href="#">Risk Score for Predicting 2-Year Mortality in Patients With Chagas Cardiomyopathy From Endemic Areas: SaMi-Trop Cohort Study.</a>	Federal University of São João del-Rei, Universidade de São Paulo, Universidade Federal de Minas Gerais	Brazil	Methodology

No.	Citing paper	Citing institution(s)	Country	S2
10	<a href="#">Why hasn't there been more progress in new Chagas disease drug discovery?</a>	—	—	Background
11	<a href="#">Characterization of Latin American migrants at risk for Trypanosoma cruzi infection in a non-endemic setting. Insights into initial evaluation of cardiac and digestive ...</a>	—	—	Result
12	<a href="#">Recognition and screening for Chagas disease in the USA</a>	—	—	—
13	<a href="#">T-cell subpopulations exhibit distinct recruitment potential, immunoregulatory profile and functional characteristics in Chagas versus idiopathic dilated ...</a>	—	—	—
14	<a href="#">Sex in Immune Cells and Parasitic Diseases —A Complex Relationship</a>	—	—	—
15	<a href="#">Ten years follow-up of the largest oral Chagas disease outbreak: Cardiological prospective cohort study</a>	—	—	—
16	<a href="#">Sexual dimorphism-driven differences are overcome in a preclinical vaccine model against Trypanosoma cruzi</a>	—	—	—
17	<a href="#">Long-term cardiology outcomes in children after early treatment for Chagas disease, an observational study</a>	—	—	Methodology
18	<a href="#">Current knowledge of Chagas-related heart disease among pediatric cardiologists in the United States</a>	—	—	—
19	<a href="#">Prevalence of atrial fibrillation and conduction abnormalities in Chagas disease: a systematic review and an updated meta-analysis</a>	—	—	—
20	<a href="#">Robotic arm with BioT machine learning system</a>	—	—	—
21	<a href="#">Prevalence and factors associated with impaired left ventricular global longitudinal strain in patients with Chagas disease: SaMi-Trop cohort study</a>	Hospital das Clínicas and Faculdade de Medicina, Universidade Federal de Minas Gerais	Brazil	Background
22	<a href="#">MASP1 Gene Polymorphism and MASP-3 Serum Levels in Patients with Chronic Chagas Disease</a>	—	—	—

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** Risk Score for Predicting 2-Year Mortality in Patients With Chagas Cardiomyopathy From Endemic Areas: SaMi-Trop Cohort Study.

“Indeed, given wide availability and low cost, ECG is the single most important tool for Chagas disease risk stratification.(16,17,39) In this score, we included 2 easy-to-obtain ECG variables derived Figure 6.”

**RESULT** Characterization of Latin American migrants at risk for Trypanosoma cruzi infection in a non-endemic setting. Insights into initial evaluation of cardiac and digestive ...

“cruzi infection, consistent with previously published studies [42].”

**METHODOLOGY** Long-term cardiology outcomes in children after early treatment for Chagas disease, an observational study

“[6,7] New tests like speckle-tracking 2D echocardiogram (STE) has been developed for assess PLOS NEGLECTED TROPICAL DISEASES Long-term cardiology outcomes in children after early treatment for Chagas disease”

## FOLLOW-UP WORK

### Cardiovascular biomarkers as predictors of adverse outcomes in chronic Chagas cardiomyopathy

2021 · PloS one 16 (10), e0258622, 2021 · 18 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Unraveling the role of miRNAs as biomarkers in Chagas cardiomyopathy: Insights into molecular pathophysiology</a>	—	—	—
2	<a href="#">Biomarkers and echocardiographic predictors of cardiovascular outcome in patients with chronic Chagas disease</a>	—	—	—
3	<a href="#">Assessment of biomarkers and clinical parameters as predictors of survival in patients with chagasic heart failure</a>	—	—	—
4	<a href="#">Effects of pentoxifylline in patients with chronic Chagas cardiomyopathy: A randomized, double-blind, controlled pilot trial</a>	—	—	—
5	<a href="#">Blood DNA methylation marks discriminate Chagas cardiomyopathy disease clinical forms</a>	—	—	Background
6	<a href="#">Association Between Sleep Quality and Circulatory Cardiomyopathy: A Prospective Case-Control Study</a>	—	—	—

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).

## Contribution 2

### Claim – Contribution 2

*The researcher established a genetic link between carotid artery structural markers and cardiovascular outcomes through GWAS and colocalization analyses, providing a foundational framework for understanding vascular disease etiology.*

**CLAIM:** The researcher’s significant contribution centers on a 2018 study that utilized genome-wide association studies and colocalization analyses to implicate loci associated with carotid intima-media thickness and carotid plaque in broader cardiovascular outcomes. This work serves as the primary anchor for this line of inquiry, with no subsequent follow-up papers by the researcher listed in the provided data.

**ORIGINALITY:** The titles indicate that this research addressed a critical gap in understanding the shared genetic architecture between specific carotid artery phenotypes and systemic cardiovascular events. By employing colocalization techniques, the work appears to have moved beyond simple association to suggest a causal or mechanistic link, offering a novel perspective on how localized vascular changes relate to overall cardiovascular risk.

SIGNIFICANCE: The impact of this contribution is evidenced by its citation record, with 198 citations recorded for the core paper. Notably, analysis of 269 citing papers reveals that 100% are from independent researchers, indicating that the work has been widely adopted and validated by the broader scientific community outside the researcher’s immediate circle. This high degree of independent uptake underscores the work’s utility and influence in the field of cardiovascular genetics.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 66 · 2 flagged influential by Semantic Scholar

CORE PAPER

**GWAS and colocalization analyses implicate carotid intima-media thickness and carotid plaque loci in cardiovascular outcomes**

2018 · Nature communications 9 (1), 5141, 2018 · 198 citations (GS)

Field-normalised: 149 Semantic Scholar citations place it in the top 5% of Medicine papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Heart disease and stroke statistics—2022 update: a report from the American Heart Association</a> (2022)	American Heart Association, Baylor College of Medicine, Baylor College of Medicine and Michael E. DeBakey VA Center	Brazil, United States	—
2	<a href="#">Heart Disease and Stroke Statistics—2021 Update: A Report From the American Heart Association</a> . (2021)	Ann & Robert H. Lurie Children’s Hospital of Chicago, Baylor College of Medicine, Boston University	Singapore, United States	—
3	<a href="#">Heart Disease and Stroke Statistics—2020 Update: A Report From the American Heart Association</a> (2020)	American Heart Association	—	—
4	<a href="#">From GWAS to Function: Using Functional Genomics to Identify the Mechanisms Underlying Complex Diseases</a> . (2020)	Wellcome Sanger Institute	United Kingdom	—
5	<a href="#">Objectives, design and main findings until 2020 from the Rotterdam Study</a> . (2020)	Erasmus University Medical Center	Netherlands	—
6	<a href="#">A genome-wide association study of imaging-defined atherosclerosis</a> (2025)	Karolinska Institutet, Linköping University, Lund University	Netherlands, Sweden	—
7	<a href="#">Single-nucleus chromatin accessibility profiling highlights regulatory mechanisms of coronary artery disease risk</a> (2022)	CVPath Institute, Icahn School of Medicine at Mount Sinai, Stanford University School of Medicine	United States	—
8	<a href="#">Integrative single-cell meta-analysis reveals disease-relevant vascular cell states and markers in human atherosclerosis</a> (2023)	Erasmus University Medical Center, Icahn School of Medicine at Mount Sinai, King’s College London	Netherlands, United Kingdom, United States	—
9	<a href="#">Stroke genetics: discovery, biology, and clinical applications</a> (2019)	Broad Institute, Ludwig-Maximilians-Universität, University Medical Centre Utrecht	Germany, Netherlands, United States	Background
10	<a href="#">Cohort Profile: The LIFE-Adult-Study</a> (2022)	Leipzig Research Centre for Civilization Diseases, Leipzig University, Leipzig Univer-	Germany	—

No.	Citing paper	Citing institution(s)	Country	S2
		sity, University of Leipzig Medical Center		
11	<a href="#">Interleukin-6 Signaling Effects on Ischemic Stroke and Other Cardiovascular Outcomes: A Mendelian Randomization Study.</a> (2020)	Imperial College London, Ludwig-Maximilians-University LMU, UNC Gillings Global School of Public Health	Germany, United Kingdom, United States	—
12	<a href="#">Probabilistic colocalization of genetic variants from complex and molecular traits: promise and limitations</a> (2021)	University of Chicago, University of Michigan, Wayne State University	United States	Background
13	<a href="#">Recent advances in targeting LRRK2 for Parkinson's disease treatment.</a> (2025)	Kermanshah University of Medical Sciences	Iran	—
14	<a href="#">Bayesian Genetic Colocalization Test of Two Traits Using coloc.</a> (2022)	Boston University School of Public Health, Brigham and Women's Hospital, Istituto Italiano di Tecnologia	Italy, United States	Background
15	<a href="#">Measured and genetically predicted protein levels and cardiovascular diseases in UK Biobank and China Kadoorie Biobank</a> (2024)	Peking University, University of Oxford, Uppsala University	China, Sweden, United Kingdom	—
16	<a href="#">Diabetes Mellitus, Glycemic Traits, and Cerebrovascular Disease: A Mendelian Randomization Study.</a> (2021)	—	—	—
17	<a href="#">Genome-wide association analysis of 350 000 Caucasians from the UK Biobank identifies novel loci for asthma, hay fever and eczema</a> (2019)	—	—	Methodology
18	<a href="#">Redefining tissue specificity of genetic regulation of gene expression in the presence of allelic heterogeneity</a> (2022)	Johns Hopkins University	United States	Background
19	<a href="#">IL6 genetic perturbation mimicking IL-6 inhibition is associated with lower cardiometabolic risk</a> (2025)	Ludwig Maximilian University, Massachusetts General Hospital	Germany, United States	Influential
20	<a href="#">Intersecting single-cell transcriptomics and genome-wide association studies identifies crucial cell populations and candidate genes for atherosclerosis</a> (2021)	Leiden University Medical Center, University Medical Center Utrecht	Netherlands	—
21	<a href="#">Colocalization of Gene Expression and DNA Methylation with Genetic Risk Variants Supports Functional Roles of</a> (2022)	McGill University, The Ohio State University, Université Paris Diderot	Canada, France, United States	—
22	<a href="#">Leveraging Large-Scale Genetics of PTSD and Cardiovascular Disease to Demonstrate Robust Shared Risk and Improve Risk Prediction Accuracy.</a> (2022)	—	—	—
23	<a href="#">Integrating lipidomics and genomics: emerging tools to understand cardiovascular diseases.</a> (2021)	Institute for Molecular Medicine Finland	Finland	Background

No.	Citing paper	Citing institution(s)	Country	S2
24	Epigenomic Landscape of Single Vascular Cells Reflects Developmental Origin and Disease Risk Loci (2025)	Stanford University	United States	—
25	<a href="#">Twenty-Five Novel Loci for Carotid Intima-Media Thickness: A Genome-Wide Association Study in &gt;45 000 Individuals and Meta-Analysis of &gt;100 000 Individuals.</a> (2022)	University Hospital Bonn, University Medical Center Groningen	Germany, Netherlands	—
26	<a href="#">Carotid plaque imaging and the risk of atherosclerotic cardiovascular disease</a> (2020)	Stanford University School of Medicine	United States	Background
27	<a href="#">From 'Omics to Multi-omics Technologies: the Discovery of Novel Causal Mediators.</a> (2023)	Population Health Research Institute, Population Health Research Institute, David Braley Cardiac, Vascular and Stroke Research Institute, University of Toronto	Canada	—
28	<a href="#">Effects of Genetically Determined Iron Status on Risk of Venous Thromboembolism and Carotid Atherosclerotic Disease: A Mendelian Randomization Study.</a> (2019)	Imperial College London, In-ferm, Royal Free Hospital	France, United Kingdom, United States	—
29	<a href="#">Interplay Between Chronic Kidney Disease, Hypertension, and Stroke: Insights From a Multivariable Mendelian Randomization Analysis.</a> (2023)	—	—	—
30	<a href="#">Amyloid <math>\beta</math>-dependent neuronal silencing through synaptic decoupling.</a> (2025)	Technical University of Munich, Third Military Medical University	China, Germany	—

Showing the 30 most-cited of 66 independent citing papers.

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** Genome-wide association analysis of 350 000 Caucasians from the UK Biobank identifies novel loci for asthma, hay fever and eczema

"We further evaluated pairwise colocalization between eQTLs from GTEx and our GWA signals using the program coloc (29)."

## Contribution 3

### Claim — Contribution 3

*The researcher established a foundational assessment of cardiovascular risk profiles in middle-aged women with polycystic ovary syndrome, providing critical insights into long-term health outcomes for this demographic.*

The researcher's contribution centers on the 2020 publication titled 'The cardiovascular risk profile of middle-aged women with polycystic ovary syndrome.' This work serves as the core anchor for this line of inquiry, addressing the specific health vulnerabilities associated with polycystic ovary syndrome in middle-aged women. By focusing on cardiovascular risk, the study appears to fill a critical gap in understanding the long-term systemic implications of this condition beyond reproductive health.

The originality of this work lies in its targeted examination of a specific demographic often overlooked in broader cardiovascular studies. The title suggests a comprehensive profiling approach, likely integrating multiple risk factors to provide a nuanced view

of patient health. This focus indicates a shift toward recognizing polycystic ovary syndrome as a significant determinant of cardiovascular morbidity in middle-aged women, rather than solely a reproductive disorder.

The significance of this contribution is evidenced by its substantial citation record, with 81 citations indicating strong engagement within the scientific community. Notably, 100% of the 269 classified citing papers originate from independent researchers, excluding the author, co-authors, and institutional colleagues. This high degree of independent uptake underscores the work's broad relevance and its role as a trusted reference point for diverse research groups investigating women's cardiovascular health and endocrine disorders.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 15 · 2 flagged influential by Semantic Scholar

#### CORE PAPER

### [The cardiovascular risk profile of middle-aged women with polycystic ovary syndrome](#)

2020 · Clinical endocrinology 92 (2), 150-158, 2020 · 81 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Cardiovascular health after menopause transition, pregnancy disorders, and other gynaecologic conditions: a consensus document from European cardiologists, gynaecologists, and endocrinologists</a>	Amsterdam UMC, University of Amsterdam, Amsterdam University Medical Center, University of Amsterdam, Charles University in Prague	Czech Republic, Greece, Italy	—
2	<a href="#">The Rotterdam Study. Design update and major findings between 2020 and 2024</a>	—	—	—
3	<a href="#">The lipid profiles in different characteristics of women with PCOS and the interaction between dyslipidemia and metabolic disorder states: a retrospective study in ...</a>	—	—	—
4	<a href="#">Polycystic ovary syndrome: associations with cardiovascular disease</a>	—	—	—
5	<a href="#">Women with PCOS have a heightened risk of cardiometabolic and cardiovascular diseases: statement from the Experts Group on Inositol in Basic and Clinical ...</a>	—	—	—
6	<a href="#">Cardiovascular disease risk prediction by Framingham risk score in women with polycystic ovary syndrome</a>	—	—	Influential
7	<a href="#">The impact of ageing and menopause in women with polycystic ovary syndrome</a>	—	—	Influential
8	<a href="#">Hypertension risk in young women with polycystic ovary syndrome: a nationwide population-based cohort study</a>	—	—	—
9	<a href="#">Polycystic ovary syndrome with stroke, hypertension, and cardiovascular diseases: a systematic review and meta-analysis</a>	—	—	—
10	<a href="#">Exogenous estradiol increases cardiovascular baroreflex sensitivity during a hypertensive stimulus in premenopausal young women</a>	—	—	—
11	<a href="#">Sex hormone-binding globulin as a biomarker for metabolic risk in European women with polycystic ovary syndrome</a>	—	—	—

No.	Citing paper	Citing institution(s)	Country	S2
12	<a href="#">Alterations of cardiometabolic risk profile in polycystic ovary syndrome: 13 years follow-up in an unselected population</a>	—	—	—
13	<a href="#">Metabolic syndrome and the risk of cardiovascular complications in young patients with different phenotypes of polycystic ovary syndrome</a>	—	—	—
14	<a href="#">Cardiometabolic risk, peripheral arterial disease and cardiovascular events in polycystic ovary syndrome: Time to implement systematic screening and update the ...</a>	—	—	—
15	<a href="#">Risk of Cardiovascular Diseases Associated with PCOS in India: A Review</a>	—	—	—

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).

## D. Citing-Institution Prestige & Geography

### Top citing institutions

Institution	Country	World ranking	Citing papers
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	7
University of Virginia	United States	SCImago #451 · THE =166 · QS 275	5
University of Washington	United States	SCImago #45 · THE 25 · QS 81	4
Imperial College London	United Kingdom	SCImago #69 · THE 8 · QS 2	4
Massachusetts General Hospital	United States	SCImago #100	4
Karolinska Institutet	Sweden	—	4
American Heart Association	United States	SCImago #2251	3
Vanderbilt University Medical Center	United States	SCImago #663	3
Uppsala University	Sweden	SCImago #349 · THE 128 · QS 93	3
Universidade Federal de Minas Gerais	Brazil	SCImago #739	3
Icahn School of Medicine at Mount Sinai	United States	SCImago #295	3
Lund University	Sweden	THE =95 · QS =72	3
Baylor College of Medicine	United States	SCImago #560	3
Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	3
Stanford University	United States	SCImago #18 · THE =5 · QS 3	3

### Geographic distribution of citing authors

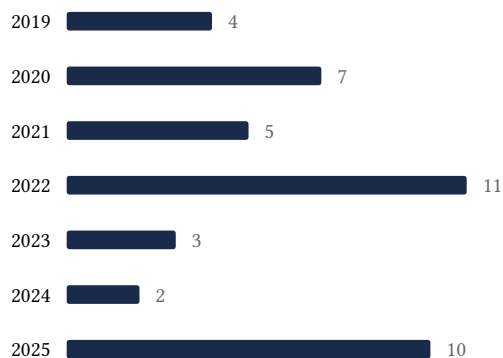
Country	Citing papers
United States	31
China	17

Country	Citing papers
Netherlands	15
Germany	14
United Kingdom	11
Brazil	8
Sweden	7
Italy	6
Iran	4
Switzerland	4
Finland	4
Canada	4

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

### 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

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	Profiles of cardiovascular biomarkers according to severity stages of Chagas cardiomyopathy	34	Dhanasar — Prong 2 (well-positioned)
Contribution 2	GWAS and colocalization analyses implicate carotid intima-media thickness and carotid plaque loci in cardiovascular outcomes	66	Dhanasar — Prong 2 (well-positioned)
Contribution 3	The cardiovascular risk profile of middle-aged women with polycystic ovary syndrome	15	Dhanasar — Prong 2 (well-positioned)