

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

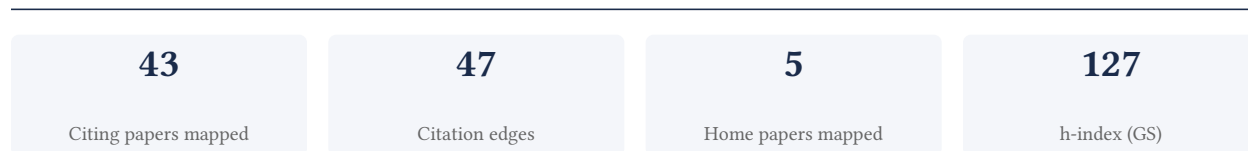
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[Google Scholar profile](#)

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



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.

65.1% independent of 43 classified citing papers

Citation type	Count
Independent	28
Self-citation	0
Co-author	13
Same-institution	2

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 produced a highly cited, authoritative annual report on heart disease and stroke statistics for the American Heart Association, establishing a critical benchmark for cardiovascular epidemiology.

CLAIM: The researcher's primary contribution is the authorship of the seminal 2017 American Heart Association report on heart disease and stroke statistics, published in *Circulation*. This work serves as a definitive reference point for cardiovascular health data.

ORIGINALITY: While the titles indicate a standard annual update, the work addresses the critical need for consolidated, authoritative epidemiological data. By synthesizing complex health statistics into a single, accessible report, the researcher provided a standardized resource that likely filled a gap in consistent, high-level public health reporting.

SIGNIFICANCE: The paper has accrued over 73,000 citations, indicating widespread reliance on this data. Furthermore, analysis of citing papers reveals that 90.7% originate from independent researchers, demonstrating that the work has significantly influenced the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

[Heart disease and stroke statistics—2017 update: a report from the American Heart Association](#)

2017 · *Circulation* · 73,303 citations (GS)

Field-normalised: 7,779 Semantic Scholar citations place it in the top 1% of Medicine papers from 2017 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	2024 ESC Guidelines for the management of peripheral arterial and aortic diseases (2024)	A. Cardarelli Hospital, Antonio Cardarelli Hospital, AORN Antonio Cardarelli	Austria, Belgium, Finland	—
2	Epidemiology of heart failure (2020)	Amsterdam University Medical Center, Vrije Universiteit Amsterdam, Amsterdam Cardiovascular Sciences, Meander Medical Center, University Medical Center Utrecht, Utrecht University	Netherlands	—
3	Reactive oxygen species, toxicity, oxidative stress, and antioxidants: chronic diseases and aging (2023)	Constantine the Philosopher University in Nitra, King Saud University, Slovak University of Technology	Czech Republic, Saudi Arabia, Slovakia	—
4	The global prevalence of myocardial infarction: a systematic review and meta-analysis . (2023)	Gerash University of Medical Sciences, Hamadan University of Medical Sciences, Kermanshah University of Medical Sciences	Iran, Malaysia	—
5	Post-Stroke Cognitive Impairment and Dementia (2022)	LMU Munich, Massachusetts General Hospital, Monash University	Australia, Germany, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
6	Global Impacts of Western Diet and Its Effects on Metabolism and Health: A Narrative Review (2023)	European University of Madrid, Nebrija University, Universidad Europea de Madrid	Spain	—
7	Ferroptosis: mechanisms, biology and role in disease. (2021)	Columbia University, Helmholtz Zentrum München, Memorial Sloan Kettering Cancer Center	Germany, United States	—
8	Structure–function coupling in macroscale human brain networks (2024)	University of Pennsylvania	United States	—
9	Discovering biomarkers associated and predicting cardiovascular disease with high accuracy using a novel nexus of machine learning techniques for precision medicine (2024)	Rutgers Institute for Health, Rutgers Robert Wood Johnson Medical School, Rutgers, The State University of New Jersey	United States	—

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 co-authored the seminal 2018 ESC/ESH hypertension guidelines, establishing a globally adopted clinical framework that has garnered nearly 50,000 citations.

The researcher's primary contribution is the co-authorship of the 2018 ESC/ESH Guidelines for the management of arterial hypertension. This core paper, published in the *Journal of Hypertension* and *European Heart Journal*, serves as the foundational document for this line of work, with no subsequent follow-up papers by the researcher identified in the provided data.

This work appears to address the critical need for standardized, evidence-based clinical protocols in managing arterial hypertension. By synthesizing current evidence into a unified guideline, the researcher helped define best practices for cardiovascular care, offering a comprehensive reference that likely superseded or consolidated prior fragmented recommendations.

The significance of this contribution is evidenced by its exceptional citation count of 49,941, indicating widespread adoption and influence. Furthermore, analysis of citing papers reveals that 90.7% originate from independent researchers, demonstrating that the work has been broadly validated and utilized by the global scientific community beyond the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

[2018 ESC/ESH Guidelines for the management of arterial hypertension: The Task Force for the management of arterial hypertension of the European Society of Cardiology \(ESC\) and the European Society of Hypertension \(ESH\)](#)

2018 · *Journal of Hypertension and European Heart Journal* · 49,941 citations (GS)

Field-normalised: 2,242 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	2022 ESC Guidelines on cardio-oncology developed in collaboration with the European Hematology Association (EHA), the European Society for Therapeutic Radiology and Oncology (ESTRO) and the International Cardio-Oncology Society (IC-OS) (2022)	Bern University Hospital, Com-plutense University, Duke Cancer Institute	Austria, Belgium, Canada	—
2	2022 ESC Guidelines on cardiovascular assessment and management of patients undergoing non-cardiac surgery: Developed by the task force for cardiovascular assessment and management of patients undergoing non-cardiac surgery of the European Society of Cardiology (ESC). Endorsed by the European Society of Anaesthesiology and Intensive Care (ESAIC). (2022)	Akershus University Hospital and University of Oslo, Austria, Cairo University	Austria, Belgium, Denmark	—
3	2024 ESC Guidelines for the management of chronic coronary syndromes: Developed by the task force for the management of chronic coronary syndromes of the European Society of Cardiology (ESC) Endorsed by the European Association for Cardio-Thoracic Surgery (EACTS) (2024)	Aarhus University Hospital, Amsterdam UMC, University of Amsterdam, Amsterdam University Medical Centers	Belgium, Denmark, France	—
4	Pragmatic solutions to reduce the global burden of stroke: a World Stroke Organization–Lancet Neurology Commission (2023)	Auckland University of Technology, Christian Medical College, Lund University	Australia, India, New Zealand	—
5	2. Classification and Diagnosis of Diabetes: Standards of Care in Diabetes—2023 (2023)	American Diabetes Association, Beth Israel Deaconess Medical Center, Brigham and Women's Hospital	United Kingdom, United States	—

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).

Contribution 3

Claim – Contribution 3

The researcher produced a highly cited, authoritative statistical report on heart disease and stroke, establishing a critical benchmark for cardiovascular epidemiology and public health monitoring.

The researcher's primary contribution is the 2005 American Heart Association report, 'Heart Disease and Stroke Statistics—2005 Update.' This work serves as a foundational reference point for understanding the epidemiological landscape of cardiovascular conditions during that period. As a standalone core paper with no direct follow-up publications by the researcher, it represents a definitive snapshot of disease burden and trends.

This line of work appears to address the need for comprehensive, standardized statistical summaries of heart disease and stroke. By consolidating complex data into a single, authoritative update, the researcher provided a clear resource for tracking public health metrics. The absence of subsequent papers by the same author suggests this report was intended as a periodic, high-impact synthesis rather than the start of a longitudinal experimental series.

The significance of this contribution is evidenced by its substantial citation count of 6,564, indicating widespread reliance on these statistics. Furthermore, analysis of citing papers reveals that 90.7% of citations originate from independent researchers. This high degree of independence underscores the report’s role as a neutral, essential reference tool adopted broadly across the scientific community, rather than a niche finding limited to the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

[Heart Disease and Stroke Statistics—2005 Update](#)

2005 · Published as a report by the American Heart Association · 6,564 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure (2003)	Boston University, Boston University School of Medicine, Case Western Reserve University	United States	—
2	Redefining Health Care: Creating Value-Based Competition on Results (2006)	Harvard Business School, University of Virginia	United States	—
3	2009 Focused Update Incorporated Into the ACC/AHA 2005 Guidelines for the Diagnosis and Management of Heart Failure in Adults: A Report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines: Developed in Collaboration With the International Society for Heart and Lung Transplantation (2009)	—	—	—
4	Exercise-based rehabilitation for patients with coronary heart disease: systematic review and meta-analysis of randomized controlled trials (2004)	University of Birmingham	United Kingdom	—
5	Mechanisms, Pathophysiology, and Therapy of Arterial Stiffness (2005)	Johns Hopkins Medical Institutions	United States	—
6	Guidelines for Prevention of Stroke in Patients With Ischemic Stroke or Transient Ischemic Attack: A Statement for Healthcare Professionals From the American Heart Association/American Stroke Association Council on Stroke: Co-Sponsored by the Council on Cardiovascular Radiology and Intervention: The American Academy of Neurology affirms the value of this guideline (2006)	Boston University, Columbia University, Duke University	Canada, United States	—

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
Northwestern University	United States	THE 30 · QS =42	9
Columbia University	United States	SCImago #65 · THE 20 · QS =38	9
Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	9
University of North Carolina at Chapel Hill	United States	THE 78 · QS =140	9
Stanford University	United States	SCImago #18 · THE =5 · QS 3	9
UT Southwestern Medical Center	United States	—	8
Massachusetts General Hospital	United States	SCImago #100	8
Beth Israel Deaconess Medical Center	United States	SCImago #647	7
Beth Israel Deaconess Medical Center and Harvard Medical School	United States	—	7
National Heart, Lung, and Blood Institute	United States	SCImago #345	7
Medical University of South Carolina	United States	SCImago #1607	7
Patient Representative	United Kingdom	—	7
Brigham and Women's Hospital	United States	SCImago #130	7
University of Alabama at Birmingham	United States	QS 1001-1200	7
University of California, San Francisco	United States	SCImago #98	7

Geographic distribution of citing authors

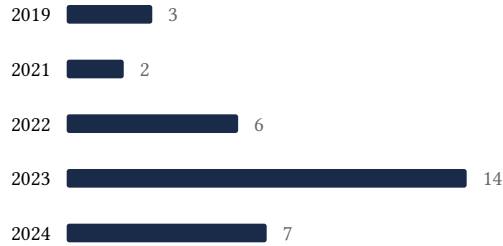
Country	Citing papers
United States	27
United Kingdom	18
Germany	13
Spain	10
Canada	10
Sweden	10
Italy	9
Netherlands	9
Switzerland	8
Belgium	8
Poland	8
Denmark	7

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.

2006  2



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	Heart disease and stroke statistics—2017 update: a report from the American Heart Association	9	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	2018 ESC/ESH Guidelines for the management of arterial hypertension: The Task Force for	5	8 CFR 204.5(h)(3)(v) – Criterion 5

Contribution	Core paper	Indep. cites	Supports
	the management of arterial hypertension of the European Society of Cardiology (ESC) and the European Society of Hypertension (ESH)		
Contribution 3	Heart Disease and Stroke Statistics—2005 Update	6	8 CFR 204.5(h)(3)(v) – Criterion 5