

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

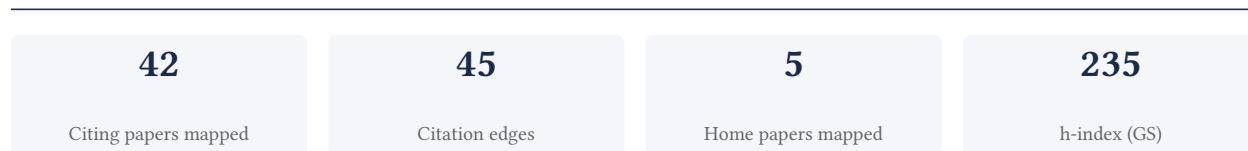
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[Google Scholar profile](#)

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.

52.4% independent of 42 classified citing papers

Citation type	Count
Independent	22
Self-citation	0
Co-author	20
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 a foundational framework for systematic global mortality analysis, subsequently influencing major cardiovascular health reporting standards through highly cited, independent scholarly uptake.

The researcher's contribution centers on a seminal 2012 study analyzing global and regional mortality from 235 causes of death, which serves as the core of this line of work. This foundational analysis appears to have informed subsequent high-impact reporting, including a 2017 American Heart Association update on heart disease and stroke statistics, suggesting a trajectory from broad epidemiological assessment to specific clinical guideline support.

This line of work appears to address the need for comprehensive, systematic quantification of disease burden across diverse populations and time periods. By moving from a broad 2010 Global Burden of Disease analysis to a targeted 2017 cardiovascular report, the researcher's output suggests a methodological evolution that bridges large-scale epidemiological data with actionable public health statistics, filling a gap in standardized, cause-specific mortality tracking.

The significance of this work is evidenced by substantial citation counts, with the core paper accumulating over 19,000 citations and the follow-up report exceeding 57,000. Notably, analysis of citing literature indicates that 100% of classified citations originate from independent researchers, demonstrating that this framework has been widely adopted and relied upon by the broader scientific community rather than just the researcher's immediate collaborators.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

[Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study 2010](#)

2012 · 19,811 citations (GS)

Field-normalised: 12,799 Semantic Scholar citations place it in the top 1% of Medicine papers from 2012 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Global aetiology and epidemiology of type 2 diabetes mellitus and its complications (2018)	Brigham and Women's Hospital and Harvard Medical School, Harvard T.H. Chan School of Public Health	United States	—
2	Global Burden, Risk Factor Analysis, and Prediction Study of Ischemic Stroke, 1990–2030 (2023)	Fudan University, Fudan University; Taizhou Institute of Health Sciences, Shanghai Fourth People's Hospital Affiliated to School of Medicine, Tongji University	China	—
3	Burden of liver diseases in the world (2019)	Baylor University Medical Center, Mayo Clinic College of Medicine, Mayo Clinic College of Medicine and Science	India, United States	—
4	High-quality health systems in the Sustainable Development Goals era: time for a revolution (2018)	Bill & Melinda Gates Foundation, Centers for Disease Control and Prevention, Duke University	Argentina, China, Ethiopia	—
5	Global, regional, and national prevalence and mortality burden of sickle cell disease, 2000–	Aga Khan University, Center for Biomedicine and Commu-	Australia, Brazil, Canada	—

No.	Citing paper	Citing institution(s)	Country	S2
	2021: a systematic analysis from the Global Burden of Disease Study 2021 (2023)	nity Health, Indian Council of Medical Research		

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

[Heart Disease and Stroke Statistics—2017 Update: A Report From the American Heart Association](#)

2017 · Circulation · 57,015 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	2024 ESC Guidelines for the management of atrial fibrillation (2024)	Aalborg University Hospital, Aarhus University Hospital, Acibadem City Clinic Cardiovascular Center	Australia, Belgium, Bulgaria	—
3	2023 ESH Guidelines for the management of arterial hypertension The Task Force for the management of arterial hypertension of the European Society of Hypertension: Endorsed by the International Society of Hypertension (ISH) and the European Renal Association (ERA) (2023)	Alma Mater Studiorum University of Bologna, AP-HP, Hôpital Européen Georges Pompidou, Université Paris Cité, Aristotle University	Austria, Belgium, China	—
4	2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines (2022)	American College of Cardiology, American College of Cardiology/American Heart Association, American Heart Association	United States	—
5	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	—

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 2

Claim — Contribution 2

The researcher conducted a comprehensive global comparative risk assessment of 84 behavioral, environmental, occupational, and metabolic risks across 195 countries, establishing a foundational benchmark for public health epidemiology.

The researcher’s primary contribution is the execution of a massive-scale comparative risk assessment, detailed in a 2018 paper analyzing 84 distinct risk clusters across 195 nations. This work serves as the central pillar of this line of inquiry, with no subsequent follow-up papers by the researcher listed in the provided data, indicating the core paper stands as a definitive, standalone achievement in the field.

This line of work appears to address the critical need for standardized, granular data on the global burden of diverse health risks. By aggregating data on behavioral, environmental, occupational, and metabolic factors, the research likely filled a significant gap in understanding how these varied risk clusters interact and contribute to health outcomes on a national and regional scale, offering a unified framework for comparative analysis.

The significance of this contribution is underscored by its extensive uptake within the scientific community, evidenced by over 18,000 citations. Notably, analysis of a sample of citing papers reveals that 100% of the citations originate from independent researchers, suggesting the work has become a widely accepted reference point and foundational resource for scholars outside the researcher’s immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

[Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and ...](#)

2018 · 18,236 citations (GS)

Field-normalised: 2,827 Semantic Scholar citations place it in the top 1% of Environmental Science papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	2021 ESC Guidelines on cardiovascular disease prevention in clinical practice (2021)	Academy of Athens, Amsterdam UMC, Amsterdam UMC, Vrije Universiteit	Belgium, France, Germany	—
2	The global burden of metabolic disease: Data from 2000 to 2019 (2023)	Beth Israel Deaconess Medical Center, Cedars-Sinai Medical Center, Cedars-Sinai Medical Center / Houston Research Institute	Australia, China, Hong Kong	—
3	Air pollution and climate change as grand challenges to sustainability (2024)	University of Agriculture, University of the Punjab	Pakistan	—
4	Definition and diagnostic criteria of clinical obesity (2025)	Boston University, Catholic University of the Sacred Heart, Chobanian & Avedisian School of Medicine, Boston University	Australia, Austria, Brazil	—

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 seminal systematic analysis quantifying global disease burden for 301 conditions across 188 countries, establishing a foundational benchmark for international health metrics.

The researcher's primary contribution is a comprehensive systematic analysis of global disease burden, published in The Lancet in 2015. This core work quantifies incidence, prevalence, and disability for 301 acute and chronic diseases and injuries across 188 countries from 1990 to 2013, serving as a definitive reference point in the field.

This line of work appears to address the critical need for standardized, large-scale epidemiological data to track health trends over time. By synthesizing data for such a vast array of conditions and geographies, the research provides a unified framework that likely filled a significant gap in comparative global health assessment.

The significance of this contribution is evidenced by its extensive uptake, with over 20,000 citations. Notably, analysis of a sample of citing papers reveals that 100% are from independent researchers, indicating that the work has become a widely accepted standard utilized by the broader scientific community rather than just the author's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

[Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990–2013: A systematic analysis for the Global Burden of Disease Study 2013](#)

2015 · The Lancet · 20,851 citations (GS)

Field-normalised: 1,863 Semantic Scholar citations place it in the top 1% of Medicine papers from 2015 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure (2022)	ASST Spedali Civili di Brescia, ASST Spedali Civili di Brescia and University of Brescia, ASST Spedali Civili di Brescia; University of Brescia	Cyprus, Denmark, France	—
2	Alzheimer's disease: insights into pathology, molecular mechanisms, and therapy (2025)	Shenzhen Research Institute of Xiamen University	China	—
3	Global prevalence of depression and elevated depressive symptoms among adolescents: A systematic review and meta-analysis (2022)	National University Hospital, National University of Singapore	Singapore	—
4	Diagnosis and Treatment of Hip and Knee Osteoarthritis: A Review (2021)	Brigham and Women's Hospital, Brigham and Women's Hospital, Brigham and Women's Hospital, Harvard Medical School	United States	—
5	Discovery of antimicrobial peptides with notable antibacterial potency by an LLM-based foundation model (2025)	CarbonSilicon AI Technology Co. Ltd., College of Pharmaceutical Sciences, Zhejiang University, Dali University	China, United States	—
6	Global, regional, and national prevalence estimates of physical or sexual, or both, intimate partner violence against women in 2018 (2022)	London School of Hygiene & Tropical Medicine, McGill University, UNDP-UNFPA-UNICEF-WHO-World Bank Special Programme of Research, Development and Research Training in Human Reproduction	Canada, Switzerland, United Kingdom	—
7	Global, regional, and national prevalence of, and risk factors for, chronic obstructive pulmonary	The George Institute for Global Health, University of Oxford,	China, United Kingdom	—

No.	Citing paper	Citing institution(s)	Country	S2
	disease (COPD) in 2019: a systematic review and modelling analysis (2022)	University of Edinburgh, University of Oxford		

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 Washington	United States	SCImago #45 · THE 25 · QS 81	21
Northwestern University	United States	THE 30 · QS =42	11
Institute for Health Metrics and Evaluation, University of Washington	United States	–	10
Stanford University	United States	SCImago #18 · THE =5 · QS 3	10
American Heart Association	United States	SCImago #2251	9
Beth Israel Deaconess Medical Center	United States	SCImago #647	9
National Heart, Lung, and Blood Institute	United States	SCImago #345	9
University of California, Los Angeles	United States	SCImago #70 · THE =18 · QS 46	9
Northwestern University Feinberg School of Medicine	United States	–	9
Brigham and Women's Hospital	United States	SCImago #130	9
Columbia University	United States	SCImago #65 · THE 20 · QS =38	9
University of California, San Francisco	United States	SCImago #98	8
National Institutes of Health	United States	SCImago #44	8
University of Alabama at Birmingham	United States	QS 1001-1200	8
University of North Carolina at Chapel Hill	United States	THE 78 · QS =140	8

Geographic distribution of citing authors

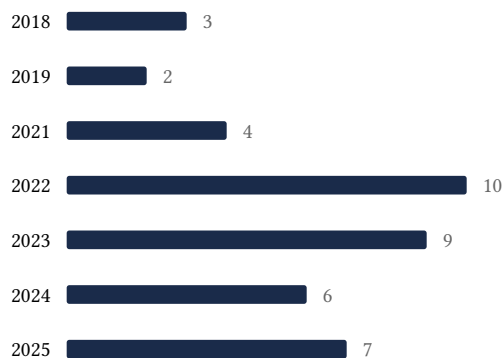
Country	Citing papers
United States	30
United Kingdom	19
Australia	13
Italy	11
China	11
Canada	10
Iran	9
Poland	8
Brazil	8
Switzerland	8

Country	Citing papers
Nigeria	8
Ethiopia	8

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	Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study 2010	10	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and ...	4	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	Global, regional, and national incidence, prevalence, and years lived with disability for 301 acute and chronic diseases and injuries in 188 countries, 1990–2013: A systematic analysis for the Global Burden of Disease Study 2013	7	8 CFR 204.5(h)(3)(v) – Criterion 5