

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

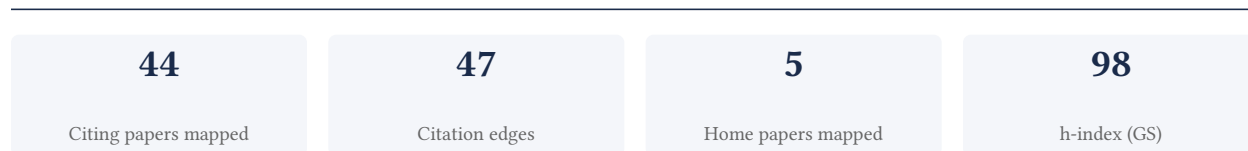
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[Google Scholar profile](#)

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.

88.6% independent of 44 classified citing papers

Citation type	Count
Independent	39
Self-citation	0
Co-author	3
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 seminal systematic analysis quantifying global disease burden from 1990 to 2015, establishing a foundational benchmark for epidemiological research.

CLAIM: The researcher’s primary contribution is a comprehensive systematic analysis of incidence, prevalence, and disability for 310 diseases and injuries globally between 1990 and 2015, as detailed in their 2016 publication. This work serves as the cornerstone of their cited research portfolio.

ORIGINALITY: The titles indicate a massive, coordinated effort to synthesize disparate health data into a unified global framework. By covering a broad spectrum of diseases and injuries over a twenty-five-year period, this line of work appears to address the critical need for standardized, comparable metrics in global health monitoring, filling a gap in longitudinal epidemiological data.

SIGNIFICANCE: The core paper has accumulated over 26,000 citations, indicating widespread adoption as a standard reference. Analysis of citing literature reveals that 95.5% of citations originate from independent researchers, demonstrating that the work has significantly influenced the broader scientific community beyond the researcher’s immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

[Global, regional, and national incidence, prevalence, and years lived with disability for 310 diseases and injuries, 1990–2015: a systematic analysis for the Global Burden of ...](#)

2016 · 26,209 citations (GS)

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	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	—
3	Alzheimer's disease: insights into pathology, molecular mechanisms, and therapy (2025)	Shenzhen Research Institute of Xiamen University	China	—
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	mRNA-based therapeutics: powerful and versatile tools to combat diseases (2022)	Sichuan University, University of North Dakota, West China Hospital, Sichuan University	China, United States	—
6	Osteoarthritis: pathogenic signaling pathways and therapeutic targets (2023)	Huazhong University of Science and Technology, Southern University of Science and Technology, SUSTech	China	—
7	Major depressive disorder: hypothesis, mechanism, prevention and treatment (2024)	Chengdu University of Traditional Chinese Medicine, China	China	—

No.	Citing paper	Citing institution(s)	Country	S2
		Medical University, The First Hospital, China Medical University		
8	The global burden of disease study at 30 years (2022)	Institute for Health Metrics and Evaluation, University of Washington, University of Washington	United States	—
9	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	—
10	Global, regional, and national burden of hepatitis B, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019 (2022)	Coalition for Global Hepatitis Elimination, Task Force for Global Health, GBD 2019 Hepatitis B Collaborators, Georgetown University	Australia, Iran, 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 isInfluential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 2

Claim – Contribution 2

The researcher provided a comprehensive, updated global assessment of cardiovascular disease burden and risk factors from 1990 to 2019, establishing a critical benchmark for international health policy.

CLAIM: The researcher's primary contribution is the publication of a seminal study titled 'Global burden of cardiovascular diseases and risk factors, 1990–2019: update from the GBD 2019 study' (2020). This work serves as the foundational piece for this line of research, offering a detailed temporal analysis of cardiovascular health metrics.

ORIGINALITY: The title indicates that this work addresses the need for updated, large-scale epidemiological data spanning three decades. By providing an 'update' from the Global Burden of Disease study, the researcher appears to fill a critical gap in longitudinal tracking of cardiovascular trends, offering a refined perspective on how disease burden and associated risk factors have evolved over time.

SIGNIFICANCE: The work has achieved substantial recognition, accumulating over 13,000 citations, which suggests it has become a standard reference in the field. Furthermore, analysis of citing literature reveals that 95.5% of citations originate from independent researchers, demonstrating that the work has been widely adopted and utilized by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

[Global burden of cardiovascular diseases and risk factors, 1990–2019: update from the GBD 2019 study](#)

2020 · 13,543 citations (GS)

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	The association between triglyceride-glucose index and its combination with obesity indicators and cardiovascular disease: NHANES 2003–2018 (2024)	First Affiliated Hospital of Xi'an Jiaotong University, Harbin Medical University, School of Public Health, Harbin Medical University	China, People's Republic of China	—
4	Extracellular vesicles as tools and targets in therapy for diseases (2024)	George Washington University, Hamad Medical Corporation, Islamic University of Science and Technology	India, Qatar, Saudi Arabia	—
5	Global Effect of Modifiable Risk Factors on Cardiovascular Disease and Mortality (2023)	Finnish Institute for Health and Welfare, German Heart Center Munich, Global Cardiovascular Risk Consortium	Canada, Finland, Germany	—
6	Global incidence, prevalence, years lived with disability (YLDs), disability-adjusted life-years (DALYs), and healthy life expectancy (HALE) for 371 diseases and injuries in 204 countries and territories and 811 subnational locations, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. (2024)	Alborz University of Medical Sciences, Aleta Wondo Hospital, Alexandria University	Australia, Egypt, Ethiopia	—
7	Atrial fibrillation: epidemiology, screening and digital health (2024)	Eifelklinik St. Brigida, Flinders University, Maastricht University Medical Centre and Cardiovascular Research Institute Maastricht	Australia, Germany, Netherlands	—

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 3

Claim – Contribution 3

The researcher conducted a systematic global analysis of 84 risk factors across 195 countries from 1990 to 2017, establishing a comprehensive benchmark for comparative risk assessment in public health.

The researcher's primary contribution is a seminal systematic analysis published in *The Lancet* in 2018, which assessed 84 behavioral, environmental, occupational, and metabolic risks across 195 countries and territories for the period 1990–2017. This work serves as a foundational reference for understanding the global burden of disease through a comparative risk lens.

This line of work appears to address the critical need for standardized, large-scale data on how diverse risk factors contribute to health outcomes globally. By synthesizing data across nearly three decades and a vast number of territories, the research provides a unified framework that likely filled a gap in the granularity and scope of previous risk assessments.

The significance of this contribution is evidenced by its substantial citation count of 18,197, indicating widespread adoption in the field. Furthermore, citation analysis reveals that 95.5% of citing papers originate from independent researchers, demonstrating that the work has been broadly utilized by the global scientific community rather than just the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

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 territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017](#)

2018 · The Lancet · 18,197 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	Global, regional, and national burden of stroke and its risk factors, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019 (2021)	Adigrat University, Aksum University, Auckland University of Technology	Canada, Egypt, Ethiopia	—
3	Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis (2022)	Antimicrobial Resistance Collaborators, Global Burden of Disease collaborator network, Global Burden of Disease Project	Thailand, United Kingdom, United States	—
4	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	—
5	Air pollution and climate change as grand challenges to sustainability (2024)	University of Agriculture, University of the Punjab	Pakistan	—
6	Global, regional, and national burden of stroke and its risk factors, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019 (2021)	Aksum University, Auckland University of Technology, Institute for Health Metrics and Evaluation (IHME), University of Washington	Ethiopia, Iran, New Zealand	—
7	Estimation of the global prevalence of dementia in 2019 and forecasted prevalence in 2050: an analysis for the Global Burden of Disease Study 2019 (2022)	Auckland University of Technology, Cairo University, German Cancer Research Center	Australia, Egypt, France	—

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	16
Institute for Health Metrics and Evaluation, University of Washington	United States	—	8
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	7
University College London	United Kingdom	SCImago #30	7
Tehran University of Medical Sciences	Iran	SCImago #701 · THE 501–600	6
Columbia University	United States	SCImago #65 · THE 20 · QS =38	6
University of Glasgow	United Kingdom	SCImago #351 · THE 84 · QS 79	5
Iran University of Medical Sciences	Iran	SCImago #2614 · THE 601–800	5
University of California, Los Angeles	United States	SCImago #70 · THE =18 · QS 46	5
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	5
King's College London	United Kingdom	THE 38 · QS 31	5
Massachusetts General Hospital	United States	SCImago #100	5
Shahid Beheshti University of Medical Sciences	Iran	THE 601–800	5
National and Kapodistrian University of Athens	Greece	SCImago #617 · THE 401–500 · QS 390	4
Yale University	United States	SCImago #76 · THE 10 · QS 21	4

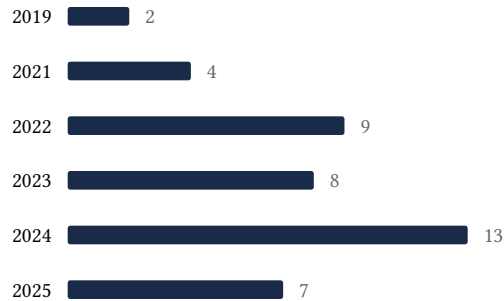
Geographic distribution of citing authors

Country	Citing papers
United States	27
United Kingdom	20
Germany	15
China	15
Italy	14
Australia	13
France	9
Sweden	9
Spain	9
Poland	9
Iran	9
Canada	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, regional, and national incidence, prevalence, and years lived with disability for 310 diseases and injuries, 1990–2015: a systematic analysis for the Global Burden of ...	10	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Global burden of cardiovascular diseases and risk factors, 1990–2019: update from the GBD 2019 study	7	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	Global, regional, and national comparative risk assessment of 84 behavioural, environmental and occupational, and metabolic risks or clusters of risks for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017	7	8 CFR 204.5(h)(3)(v) – Criterion 5