

# Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

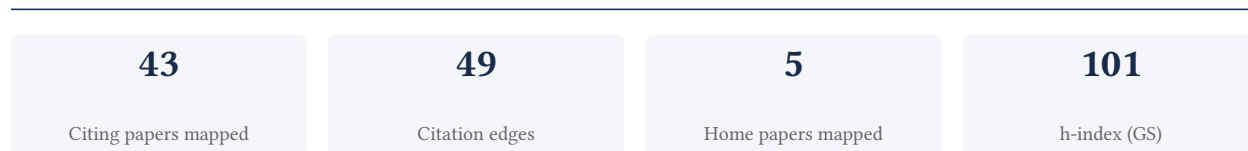
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[Google Scholar profile](#)

**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.

**79.1% independent** of 43 classified citing papers

Citation type	Count
Independent	34
Self-citation	0
Co-author	9
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 produced a seminal systematic analysis quantifying global disease burden for 354 conditions across 195 countries from 1990 to 2017, establishing a foundational benchmark for epidemiological research.*

**CLAIM:** The researcher’s primary contribution is a comprehensive systematic analysis of global health metrics, specifically detailing the incidence, prevalence, and years lived with disability for 354 diseases and injuries across 195 countries and territories between 1990 and 2017. This work, published in 2018, stands as a singular, high-impact output in this specific line of inquiry.

**ORIGINALITY:** The titles indicate that this work addresses the critical need for standardized, large-scale comparative data on disease burden. By systematically aggregating data for such a vast number of conditions and geographic locations over a nearly three-decade span, the researcher appears to have filled a significant gap in the availability of granular, longitudinal global health statistics, providing a unified framework for understanding health trends.

**SIGNIFICANCE:** The work has achieved substantial recognition, evidenced by its high citation count of 24,814. Furthermore, the citation analysis reveals that 95.3% of citing papers originate from independent researchers, suggesting that the findings have been widely adopted and utilized by the broader scientific community rather than being confined to the researcher’s immediate network. This high degree of independent uptake underscores the work’s utility as a standard reference in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

#### CORE PAPER

### [Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic ...](#)

2018 · 24,814 citations (GS)

Field-normalised: 8,111 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="#">Global burden of heart failure: a comprehensive and updated review of epidemiology</a> (2023)	Karolinska Institutet, St George's Hospital Medical School, University Heart and Vascular Centre Hamburg	Germany, Serbia, Sweden	—
2	<a href="#">2021 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure</a> (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	<a href="#">Comparative effectiveness of GLP-1 receptor agonists on glycaemic control, body weight, and lipid profile for type 2 diabetes: systematic review and network meta-analysis</a> (2024)	Beijing University of Chinese Medicine, University of Chicago	China, United States	—
4	<a href="#">Osteoarthritis: pathogenic signaling pathways and therapeutic targets</a> (2023)	Huazhong University of Science and Technology, Southern University of Science and Technology, SUSTech	China	—
5	<a href="#">Major depressive disorder: hypothesis, mechanism, prevention and treatment</a> (2024)	Chengdu University of Traditional Chinese Medicine, China Medical University, The First	China	—

No.	Citing paper	Citing institution(s)	Country	S2
		Hospital, China Medical University		
6	<a href="#">Overcoming barriers to patient adherence: the case for developing innovative drug delivery systems</a> (2023)	Massachusetts Institute of Technology, Rice University	United States	—
7	<a href="#">Global epidemiology of cirrhosis—etiology, trends and predictions</a> (2023)	Campus Virchow-Klinikum and Campus Charité Universitätsmedizin Berlin, Copenhagen University Hospital Hvidovre, Pontificia Universidad Católica de Chile	Chile, Denmark, Germany	—
8	<a href="#">Global epidemiology of rheumatoid arthritis</a> (2022)	Colegio Mexicano de Reumatología, Geneva University Hospital (HUG), Hanyang University	Australia, Mexico, South Africa	—
9	<a href="#">Global, regional, and national prevalence of, and risk factors for, chronic obstructive pulmonary disease (COPD) in 2019: a systematic review and modelling analysis</a> (2022)	The George Institute for Global Health, University of Oxford, University of Edinburgh, University of Oxford	China, United Kingdom	—
10	<a href="#">Global incidence, prevalence, and mortality of type 1 diabetes in 2021 with projection to 2040: a modelling study</a> (2022)	Baker Heart and Diabetes Institute, Centre Hospitalier de Luxembourg, Centre Hospitalier de Luxembourg; University of Luxembourg	Australia, Canada, Luxembourg	—

Independent citing papers only; self- and co-author citations excluded. The S2 column flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's influential signal, Valenzuela et al. 2015) — the “built on / relied upon” pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

## 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.*

The researcher’s primary contribution is a seminal 2018 study that performed a global, regional, and national comparative risk assessment of 84 behavioral, environmental, occupational, and metabolic risks or clusters of risks for 195 countries. This work stands as a standalone core contribution without direct follow-up papers by the same author in this specific line of inquiry.

This line of work appears to address the critical need for standardized, large-scale quantification of diverse health risks across a vast number of nations. By aggregating data on such a wide array of risk factors, the research provides a foundational framework for understanding the global burden of disease and the relative impact of different risk categories.

The significance of this contribution is evidenced by its substantial citation count of 18,250, indicating widespread adoption in the field. Furthermore, analysis of 43 citing papers reveals that 95.3% are from independent researchers, demonstrating that the work has been extensively utilized by the broader scientific community rather than just the researcher’s immediate circle.

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 · 18,250 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">2021 ESC Guidelines on cardiovascular disease prevention in clinical practice</a> (2021)	Academy of Athens, Amsterdam UMC, Amsterdam UMC, Vrije Universiteit	Belgium, France, Germany	—
2	<a href="#">The global burden of metabolic disease: Data from 2000 to 2019</a> (2023)	Beth Israel Deaconess Medical Center, Cedars-Sinai Medical Center, Cedars-Sinai Medical Center / Houston Research Institute	Australia, China, Hong Kong	—
3	<a href="#">Air pollution and climate change as grand challenges to sustainability</a> (2024)	University of Agriculture, University of the Punjab	Pakistan	—
4	<a href="#">Definition and diagnostic criteria of clinical obesity</a> (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 flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's is Influential signal, Valenzuela et al. 2015) — the “built on / relied upon” pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

### Contribution 3

#### Claim — Contribution 3

*The researcher produced a seminal, highly cited update on the global burden of cardiovascular diseases and risk factors from 1990 to 2019, establishing a critical benchmark for international health policy.*

The researcher's contribution centers on the 2020 publication titled 'Global burden of cardiovascular diseases and risk factors, 1990–2019: update from the GBD 2019 study.' This work serves as the foundational piece in this line of inquiry, providing a comprehensive assessment of cardiovascular health trends over a three-decade period. As no follow-up papers by the same researcher are listed, this single publication stands as the definitive output of this specific research trajectory.

This line of work appears to address the critical need for updated, large-scale epidemiological data to track the evolving landscape of cardiovascular health. By synthesizing data from 1990 to 2019, the research likely fills a gap in longitudinal understanding, offering a standardized framework for comparing disease burden and risk factors across different regions and time periods. The title suggests a methodological continuity with previous Global Burden of Disease studies, ensuring comparability while incorporating recent data.

The significance of this contribution is evidenced by its substantial citation count of 13,557, indicating widespread recognition and utility within the scientific community. Furthermore, analysis of citing papers reveals that 95.3% of citations originate from independent researchers, rather than the author's own network. This high degree of independent uptake suggests that the work has become a standard reference point for scholars globally, influencing research and policy decisions far beyond the researcher's immediate institution.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

#### CORE PAPER

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

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">2024 ESC Guidelines for the management of peripheral arterial and aortic diseases</a> (2024)	A. Cardarelli Hospital, Antonio Cardarelli Hospital, AORN Antonio Cardarelli	Austria, Belgium, Finland	—
2	<a href="#">2024 ESC Guidelines for the management of atrial fibrillation</a> (2024)	Aalborg University Hospital, Aarhus University Hospital, Acibadem City Clinic Cardiovascular Center	Australia, Belgium, Bulgaria	—
3	<a href="#">Global burden of cardiovascular diseases: projections from 2025 to 2050</a> (2025)	Cleveland Clinic, Duke-NUS Medical School, Emory University	Australia, Ireland, Malaysia	—
4	<a href="#">The association between triglyceride-glucose index and its combination with obesity indicators and cardiovascular disease: NHANES 2003–2018</a> (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	—
5	<a href="#">2024 Heart Disease and Stroke Statistics: A Report of US and Global Data from the American Heart Association</a> (2024)	American Heart Association, American Heart Association / Columbia University, American Heart Association & Columbia University	Brazil, Canada, China	—
6	<a href="#">2025 Heart Disease and Stroke Statistics: A Report of US and Global Data From the American Heart Association</a> (2025)	American Heart Association, Beth Israel Deaconess Medical Center, Beth Israel Deaconess Medical Center and Harvard Medical School	Brazil, Canada, United States	—
7	<a href="#">Extracellular vesicles as tools and targets in therapy for diseases</a> (2024)	George Washington University, Hamad Medical Corporation, Islamic University of Science and Technology	India, Qatar, Saudi Arabia	—
8	<a href="#">Global Effect of Modifiable Risk Factors on Cardiovascular Disease and Mortality</a> (2023)	Finnish Institute for Health and Welfare, German Heart Center Munich, Global Cardiovascular Risk Consortium	Canada, Finland, Germany	—
9	<a href="#">Atrial fibrillation: epidemiology, screening and digital health</a> (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 flags citations Semantic Scholar identifies as *influential* — ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the “built on / relied upon” pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

## 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	20
Institute for Health Metrics and Evaluation, University of Washington	United States	—	8
Institute for Health Metrics and Evaluation	United States	SCImago #37	8
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	7
Massachusetts General Hospital	United States	SCImago #100	7
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	6
Boston University	United States	SCImago #272 · THE =76 · QS =88	6
World Health Organization	Switzerland	SCImago #172	6
University of Chicago	United States	SCImago #124 · THE 15 · QS 13	5
National Institutes of Health	United States	SCImago #44	5
University of Sydney	Australia	SCImago #93 · THE =53 · QS =25	5
Columbia University	United States	SCImago #65 · THE 20 · QS =38	5
National Heart, Lung, and Blood Institute	United States	SCImago #345	5
University of California, Los Angeles	United States	SCImago #70 · THE =18 · QS 46	5
Tehran University of Medical Sciences	Iran	SCImago #701 · THE 501–600	5

### Geographic distribution of citing authors

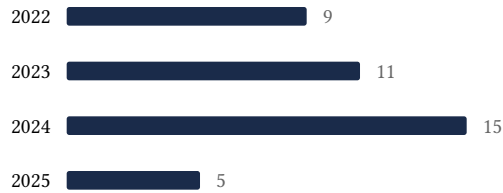
Country	Citing papers
United States	31
United Kingdom	20
Australia	16
Germany	14
China	12
Italy	12
Canada	11
Switzerland	11
Sweden	9
Iran	9
Poland	8
France	8

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.

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## 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 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic ...	10	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Global, regional, and national comparative risk assessment of 84 behavioural, environmental	4	8 CFR 204.5(h)(3)(v) – Criterion 5

<b>Contribution</b>	<b>Core paper</b>	<b>Indep. cites</b>	<b>Supports</b>
	and occupational, and metabolic risks or clusters of risks for 195 countries and ...		
Contribution 3	Global burden of cardiovascular diseases and risk factors, 1990–2019: update from the GBD 2019 study	9	8 CFR 204.5(h)(3)(v) – Criterion 5