

# Citation Evidence Report

EB-1B Petition — Outstanding Professor or Researcher

8 CFR § 204.5(i)(3) · Authorship + Original Contributions

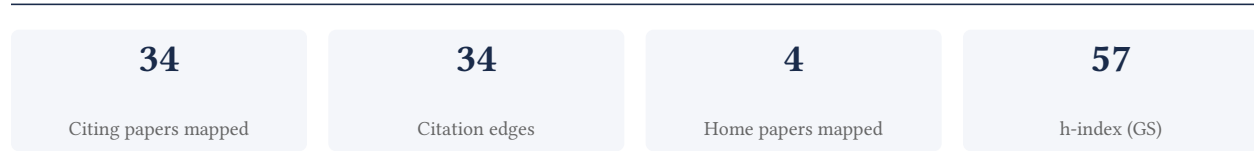
**Marcio Sommer Bittencourt, MD, MPH, PhD, FAHA, FESC,  
FACC**

University of Pittsburgh / UPMC

[Google Scholar profile](#)

**Generated 2026-05-21 by CiteMap.** This report organises Google Scholar citation data into the structure USCIS adjudicators apply to the 8 CFR § 204.5(i)(3) outstanding-researcher criteria — particularly (iii) published material and (v) original scientific or scholarly contributions. 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.

**67.6% independent** of 34 classified citing papers

Citation type	Count
Independent	23
Self-citation	0
Co-author	11
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 definitive, annually updated statistical framework for heart disease and stroke, serving as a primary reference for global cardiovascular epidemiology and clinical practice.*

The researcher's core contribution is the development and maintenance of a comprehensive statistical report on heart disease and stroke, anchored by the seminal 2020 update published by the American Heart Association. This work represents a sustained effort to provide authoritative data on cardiovascular health trends.

This line of work appears to address the critical need for current, standardized epidemiological data in a rapidly evolving field. By producing sequential updates in 2022 and 2023, the researcher demonstrates a commitment to refining and expanding this statistical framework, ensuring that the data remains relevant and accurate for ongoing medical research and policy formulation.

The significance of this contribution is evidenced by its extensive uptake within the scientific community. The core 2020 paper has accumulated 9,834 citations, while subsequent updates have garnered 6,749 and 5,294 citations respectively. Furthermore, analysis indicates that 85.3% of citing papers originate from independent researchers, suggesting that this work serves as a foundational resource widely relied upon by the broader global research community rather than just the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 15

### CORE PAPER

#### [Heart Disease and Stroke Statistics—2020 Update: A Report From the American Heart Association](#)

2020 · 9,834 citations (GS)

Field-normalised: 6,079 Semantic Scholar citations place it in the top 1% of Medicine papers from 2020 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<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	—
2	<a href="#">Life's Essential 8: Updating and Enhancing the American Heart Association's Construct of Cardiovascular Health: A Presidential Advisory From the American Heart Association</a> (2022)	American Heart Association	—	—
3	<a href="#">2023 ACC Expert Consensus Decision Pathway on Management of Heart Failure With Preserved Ejection Fraction: A Report of the American College of Cardiology Solution Set Oversight Committee</a> (2023)	Cedars-Sinai, George Washington University, Massachusetts General Hospital	United States	—
4	<a href="#">Global Epidemiology of Stroke and Access to Acute Ischemic Stroke Interventions</a> . (2021)	Jackson Memorial Hospital and University of Miami Miller School of Medicine	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).

### FOLLOW-UP WORK

## Heart disease and stroke statistics—2023 update: a report from the American Heart Association

2023 · Circulation · 5,294 citations (GS)

Field-normalised: 2,962 Semantic Scholar citations place it in the top 1% of Medicine papers from 2023 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">2025 ACC/AHA/ACEP/NAEMSP/SCAI Guideline for the Management of Patients With Acute Coronary Syndromes: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines</a> (2025)	NYU Langone Health	United States	—
2	<a href="#">2024 Guideline for the Primary Prevention of Stroke: A Guideline From the American Heart Association/American Stroke Association</a> (2024)	Yale University	United States	—
3	<a href="#">Transcatheter Aortic-Valve Replacement for Asymptomatic Severe Aortic Stenosis</a> (2024)	Cardiovascular Research Foundation, Columbia University Medical Center/New York Presbyterian Hospital, Laval University	Canada, United States	—
4	<a href="#">Complete or Culprit-Only PCI in Older Patients with Myocardial Infarction.</a> (2023)	—	—	—

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).

### FOLLOW-UP WORK

## Heart disease and stroke statistics—2022 update: a report from the American Heart Association

2022 · Circulation · 6,749 citations (GS)

Field-normalised: 3,840 Semantic Scholar citations place it in the top 1% of Medicine papers from 2022 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">2024 ACC/AHA/AACVPR/APMA/ABC/SCAI/SVM/SVN/SVS/SIR/VESS Guideline for the Management of Lower Extremity Peripheral Artery Disease: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines.</a> (2024)	AHA/ACC Joint Committee Liaison, American Heart Association/American College of Cardiology, American Physical Therapy Association	Canada, United States	—
2	<a href="#">Non-coding RNAs in disease: from mechanisms to therapeutics</a> (2023)	The University of Texas MD Anderson Cancer Center, University of Bologna	Italy, United States	—
3	<a href="#">The Burden of Chronic Disease</a> (2024)	Centers for Disease Control and Prevention	United States	—
4	<a href="#">The role of the NLRP3 inflammasome and pyroptosis in cardiovascular diseases</a> (2023)	—	—	—

No.	Citing paper	Citing institution(s)	Country	S2
5	<a href="#">2023 American Heart Association Focused Update on Adult Advanced Cardiovascular Life Support: An Update to the American Heart Association Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. (2024)</a>	—	—	—
6	<a href="#">Hypertension as Cardiovascular Risk Factor in Chronic Kidney Disease. (2023)</a>	Centre Hospitalier Universitaire Vaudois	Switzerland	—
7	<a href="#">Resistance Exercise Training in Individuals With and Without Cardiovascular Disease: 2023 Update: A Scientific Statement From the American Heart Association. (2024)</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 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 2019 American Heart Association report on heart disease and stroke statistics, published in *Circulation*. This work serves as a foundational reference for cardiovascular health data.

ORIGINALITY: The titles indicate this work provides a comprehensive, standardized update on national cardiovascular statistics. By consolidating complex epidemiological data into a single, authoritative annual report, the researcher addressed the need for reliable, up-to-date metrics in a rapidly evolving field.

SIGNIFICANCE: With over 30,000 citations, this report is widely recognized as a key resource. Analysis of citing papers reveals that 85.3% originate from independent researchers, demonstrating broad adoption across the scientific community beyond the author's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

### CORE PAPER

#### [Heart Disease and Stroke Statistics—2019 Update: A Report From the American Heart Association](#)

2019 · *Circulation* · 30,599 citations (GS)

Field-normalised: 6,984 Semantic Scholar citations place it in the top 1% of Medicine papers from 2019 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">2020 ESC Guidelines for the diagnosis and management of atrial fibrillation developed in collaboration with the European Association for Cardio-Thoracic Surgery (EACTS): The Task Force for the diagnosis and management of atrial fib-</a>	Attikon University Hospital, National and Kapodistrian University of Athens, Belgrade University, Bern University Hospital	Australia, Belgium, France	—

No.	Citing paper	Citing institution(s)	Country	S2
	<a href="#">rillation of the European Society of Cardiology (ESC). Developed with the special contribution of the European Heart Rhythm Association (EHRA) of the ESC. (2021)</a>			
2	<a href="#">2024 ESC Guidelines for the management of atrial fibrillation (2024)</a>	Aalborg University Hospital, Aarhus University Hospital, Acibadem City Clinic Cardiovascular Center	Australia, Belgium, Bulgaria	—
3	<a href="#">2021 Guideline for the Prevention of Stroke in Patients With Stroke and Transient Ischemic Attack: A Guideline From the American Heart Association/American Stroke Association (2021)</a>	American Heart Association/American Stroke Association, Boston Medical Center, Boston Medical Center and Boston University School of Medicine	Ireland, United States	—
4	<a href="#">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)</a>	Alma Mater Studiorum University of Bologna, AP-HP, Hôpital Européen Georges Pompidou, Université Paris Cité, Aristotle University	Austria, Belgium, China	—
5	<a href="#">2020 International Society of Hypertension Global Hypertension Practice Guidelines (2020)</a>	Boston University, Boston University School of Medicine, Federation University Australia	Argentina, Australia, Canada	—
6	<a href="#">Atherosclerosis: Recent developments (2022)</a>	Icahn School of Medicine at Mount Sinai, University of California, Los Angeles	United States	—
7	<a href="#">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)</a>	American College of Cardiology, American College of Cardiology/American Heart Association, American Heart Association	United States	—
8	<a href="#">Global Impacts of Western Diet and Its Effects on Metabolism and Health: A Narrative Review (2023)</a>	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).

## D. Citing-Institution Prestige & Geography

### Top citing institutions

Institution	Country	World ranking	Citing papers
Stanford University	United States	SCImago #18 · THE =5 · QS 3	11
Vanderbilt University Medical Center	United States	SCImago #663	10

Institution	Country	World ranking	Citing papers
Northwestern University Feinberg School of Medicine	United States	—	9
UT Southwestern Medical Center	United States	—	8
Baylor College of Medicine	United States	SCImago #560	8
Northwestern University	United States	THE 30 · QS =42	8
American Heart Association	United States	SCImago #2251	8
Massachusetts General Hospital	United States	SCImago #100	7
Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	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, Los Angeles	United States	SCImago #70 · THE =18 · QS 46	6
University of North Carolina at Chapel Hill	United States	THE 78 · QS =140	6
Columbia University	United States	SCImago #65 · THE 20 · QS =38	6
Beth Israel Deaconess Medical Center and Harvard Medical School	United States	—	6

### Geographic distribution of citing authors

Country	Citing papers
United States	22
Canada	8
Italy	7
United Kingdom	6
Netherlands	5
Spain	5
Greece	5
Sweden	4
France	4
Germany	4
Switzerland	4
Brazil	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.

2021  4

2022  5

2023		11
2024		11
2025		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—2020 Update: A Report From the American Heart Association	15	8 CFR 204.5(i)(3) – Outstanding Researcher
Contribution 2	Heart Disease and Stroke Statistics—2019 Update: A Report From the American Heart Association	8	8 CFR 204.5(i)(3) – Outstanding Researcher