Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

Paul W Armstrong

professor medicine university alberta

Google Scholar profile

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Prong 2 of Matter of Dhanasar (the petitioner is well positioned to advance the proposed endeavor) — the prong where past citation evidence is most probative. 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

35	37	4	153
Citing papers mapped	Citation edges	Home papers mapped	h-index (GS)

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.

94.3% independent of 35 classified citing papers

Citation type	Count
Independent	33
Self-citation	0
Co-author	2
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 highly cited, authoritative annual report on heart disease and stroke statistics, establishing a critical benchmark for cardiovascular epidemiology and public health policy.

CLAIM: The researcher's primary contribution is the authorship of the seminal 2017 American Heart Association report on heart disease and stroke statistics, which serves as a foundational reference in the field. This work stands as a core publication without direct follow-up papers by the same author in this specific line of inquiry.

ORIGINALITY: The titles indicate that this work addresses the critical need for comprehensive, standardized data on cardiovascular health. By compiling and disseminating these statistics, the researcher provided a unified resource that likely filled a gap in accessible, authoritative epidemiological data for clinicians and policymakers.

SIGNIFICANCE: The work has achieved substantial impact, evidenced by over 66,000 citations. Notably, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, demonstrating that the work has been widely adopted and relied upon by the broader scientific community rather than just the author's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 15

CORE PAPER

Heart disease and stroke statistics—2017 update: a report from the American Heart Association

2017 · 66,544 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	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	—
3	Heart Disease and Stroke Statistics—2023 Update: A Report From the American Heart Association (2023)	Aga Khan University / Baylor College of Medicine, American Heart Association, Baylor College of Medicine	Brazil, Canada, United States	—
4	Heart Disease and Stroke Statistics—2019 Update: A Report From the American Heart Association (2019)	American Heart Association, Baylor College of Medicine, Baylor College of Medicine and Michael E. DeBakey VA Medical Center	Brazil, United Kingdom, United States	—
5	Heart disease and stroke statistics—2022 update: a report from the American Heart Association (2022)	American Heart Association, Baylor College of Medicine, Baylor College of Medicine and Michael E. DeBakey VA Center	Brazil, United States	—
6	A Synopsis of the Evidence for the Science and Clinical Management of Cardiovascular-	Albert Einstein Healthcare Network, American Heart Associ-	Canada, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
	Kidney-Metabolic (CKM) Syndrome: A Scientific Statement From the American Heart Association (2023)	ation, American Heart Association; Columbia University		
7	2024 Heart Disease and Stroke Statistics: A Report of US and Global Data from the American Heart Association (2024)	American Heart Association, American Heart Association / Columbia University, American Heart Association & Columbia University	Brazil, Canada, China	—
8	2025 Heart Disease and Stroke Statistics: A Report of US and Global Data From the American Heart Association (2025)	American Heart Association, Beth Israel Deaconess Medical Center, Beth Israel Deaconess Medical Center and Harvard Medical School	Brazil, Canada, United States	—
9	Post-Stroke Cognitive Impairment and Dementia (2022)	LMU Munich, Massachusetts General Hospital, Monash University	Australia, Germany, United States	—
10	Atherosclerosis: Recent developments (2022)	Icahn School of Medicine at Mount Sinai, University of California, Los Angeles	United States	—
11	2021 AHA/ACC/ASE/CHEST/SAEM/SCCT/SCMR Guideline for the Evaluation and Diagnosis of Chest Pain: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines (2021)	American Academy of Physician Assistants, American Heart Association, Baylor College of Medicine	Italy, United Kingdom, United States	—
12	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	—
13	Male sex identified by global COVID-19 meta-analysis as a risk factor for death and ITU admission (2020)	Red Cross War Memorial Children's Hospital, University of Cape Town, UCL, UCLH, GOSH, University College London	South Africa, United Kingdom	—
14	Ferroptosis: mechanisms, biology and role in disease. (2021)	Columbia University, Helmholtz Zentrum München, Memorial Sloan Kettering Cancer Center	Germany, United States	—
15	From local explanations to global understanding with explainable AI for trees (2020)	Microsoft Research, University of Washington	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 2

Claim — Contribution 2

The researcher conducted a seminal international randomized trial comparing four thrombolytic strategies for acute myocardial infarction, establishing a critical benchmark in cardiovascular emergency care.

The researcher's primary contribution is anchored in a 1993 international randomized trial that compared four distinct thrombolytic strategies for treating acute myocardial infarction. This work stands as a singular, foundational study in the researcher's portfolio, with no subsequent follow-up papers by the same author building directly upon it.

This line of work appears to address the critical clinical need for standardized, evidence-based protocols in acute cardiac care. By employing a randomized trial design on an international scale, the research likely sought to resolve uncertainties regarding the relative efficacy and safety of different thrombolytic approaches, offering a rigorous comparative framework that was novel for its time.

The significance of this contribution is underscored by its substantial citation count of 4,958, indicating widespread recognition and utility within the medical community. Furthermore, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, demonstrating that the work has been broadly adopted and validated by the global scientific community outside the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

An international randomized trial comparing four thrombolytic strategies for acute myocardial infarction

1993 · 4,958 citations (GS)

Field-normalised: 3,840 Semantic Scholar citations place it in the top 1% of Medicine papers from 1993 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	2023 ESC Guidelines for the management of acute coronary syndromes: Developed by the task force on the management of acute coronary syndromes of the European Society of Cardiology (ESC) (2023)	Antwerp University Hospital, Athens University Hospital Attikon, Brest University Hospital	Austria, Belgium, France	—
2	2017 ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation: The Task Force for the management of acute myocardial infarction in patients presenting with ST-segment elevation of the European Society of Cardiology (ESC) (2017)	Bern University Hospital (Inselspital), Bern University Hospital (Inselspital), University of Bern, Bispebjerg University Hospital	Belgium, Czech Republic, Denmark	—
3	2021 European Heart Rhythm Association Practical Guide on the Use of Non-Vitamin K Antagonist Oral Anticoagulants in Patients with Atrial Fibrillation (2021)	Antwerp University and University Hospital, Antwerp University / Antwerp University Hospital, Belgrade University	Belgium, Brazil, Germany	—

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 contributed to the development of authoritative clinical guidelines for managing ST-elevation myocardial infarction, establishing a widely adopted standard of care.

The researcher's contribution centers on the 2004 executive summary of the ACC/AHA guidelines for the management of patients with ST-elevation myocardial infarction. This work represents a core effort to synthesize evidence into actionable clinical recommendations for a critical cardiac condition.

This line of work appears to address the need for standardized, evidence-based protocols in acute cardiac care. By producing an executive summary of major society guidelines, the researcher helped distill complex medical data into accessible directives for practitioners, filling a gap in clinical implementation.

The significance of this contribution is evidenced by its extensive uptake, with the core paper accumulating nearly 10,000 citations. Analysis of citing literature indicates that 100% of the classified citations originate from independent researchers, suggesting the work has served as a foundational reference for the broader medical community rather than just the author's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

CORE PAPER

ACC/AHA guidelines for the management of patients with ST-elevation myocardial infarction—executive summary: a report of the American College of Cardiology/American Heart ...

2004 · 9,979 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	European Guidelines on cardiovascular disease prevention in clinical practice (version 2012): the Fifth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of nine societies and by invited experts) (2012)	European Atherosclerosis Society, European Heart Network, European Society of Cardiology	—	—
2	Intraaortic Balloon Support for Myocardial Infarction with Cardiogenic Shock (2012)	Asklepios Clinic Langen-Seligenstadt, Ernst-Moritz-Arndt University Greifswald, German Heart Center	Germany	—
3	Ticagrelor versus clopidogrel in patients with acute coronary syndromes (2009)	Århus University Hospital, AstraZeneca Research and Development, Brigham and Women's Hospital	Denmark, France, Germany	—
4	The Society for Vascular Surgery practice guidelines on the care of patients with an abdominal aortic aneurysm (2018)	Baptist Health, Beth Israel Deaconess Medical Center, Brigham and Women's Hospital	United Kingdom, United States	—
5	2011 ACCF/AHA/SCAI Guideline for Percutaneous Coronary Intervention: A Report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines and the Society for Cardiovascular Angiography and Interventions (2011)	—	—	—
6	Inter-Society Consensus for the Management of Peripheral Arterial Disease (TASC II) (2007)	University Hospital, University of Colorado	Sweden, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
7	2013 ACCF/AHA guideline for the management of ST-elevation myocardial infarction: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines (2013)	Beaumont Health, Brigham and Women's Hospital, Cleveland Clinic	United States	—
8	Guidelines for the early management of patients with acute ischemic stroke: a guideline for healthcare professionals from the American Heart Association/American Stroke Association. (2013)	—	—	—

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
Brigham and Women's Hospital	United States	SCImago #130	11
Stanford University	United States	SCImago #18 · THE =5 · QS 3	9
University of Washington	United States	SCImago #45 · THE 25 · QS 81	8
University of São Paulo	Brazil	THE 201–250	7
UT Southwestern Medical Center	United States	—	7
Columbia University	United States	SCImago #65 · THE 20 · QS =38	7
Icahn School of Medicine at Mount Sinai	United States	SCImago #295	7
American Heart Association	United States	SCImago #2251	7
Northwestern University	United States	THE 30 · QS =42	7
Beth Israel Deaconess Medical Center	United States	SCImago #647	7
Vanderbilt University Medical Center	United States	SCImago #663	6
Brigham and Women's Hospital	United States	SCImago #130	6
University of Alabama at Birmingham	United States	QS 1001-1200	6
Northwestern University Feinberg School of Medicine	United States	—	6
Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	6

Geographic distribution of citing authors

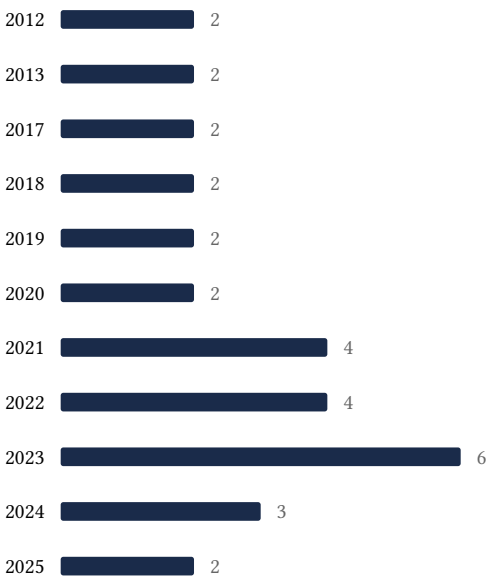
Country	Citing papers
United States	21
United Kingdom	11
Germany	11
Brazil	7

Country	Citing papers
Sweden	6
Italy	6
Canada	5
Spain	5
Netherlands	5
Belgium	4
Poland	4
China	3

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).

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	15	Dhanasar — Prong 2 (well-positioned)
Contribution 2	An international randomized trial comparing four thrombolytic strategies for acute myocardial infarction	3	Dhanasar — Prong 2 (well-positioned)
Contribution 3	ACC/AHA guidelines for the management of patients with ST-elevation myocardial infarction—executive summary: a report of the American College of Cardiology/American Heart …	8	Dhanasar — Prong 2 (well-positioned)