Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

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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 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

42	42	5	56
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.

95.2% independent of 42 classified citing papers

Citation type	Count
Independent	40
Self-citation	1
Co-author	1
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 evidence base for nicotine replacement therapy and subsequently expanded this framework to evaluate electronic cigarettes for smoking cessation.

CLAIM: The researcher's contribution centers on defining the clinical efficacy of smoking cessation interventions, anchored by the seminal 2012 paper on nicotine replacement therapy and extended through a 2021 follow-up on electronic cigarettes.

ORIGINALITY: This line of work appears to address the evolving landscape of cessation tools. By moving from established pharmacological treatments to newer technological alternatives like e-cigarettes, the researcher systematically updated the evidence base to reflect emerging public health strategies.

SIGNIFICANCE: The core paper has accumulated 2933 citations, while the follow-up has garnered 2594, indicating substantial uptake. With 95.2% of classified citations originating from independent researchers, the work demonstrates broad, field-wide influence beyond the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 15 · **2 flagged influential by Semantic Scholar**

CORE PAPER

Nicotine replacement therapy for smoking cessation

2012 · 2,933 citations (GS)

Field-normalised: 1,682 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	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	Quantifying publication bias in meta-analysis (2018)	University of Minnesota	United States	**Methodology**
3	Electronic cigarettes and health outcomes: umbrella and systematic review of the global evidence (2023)	Australian National University	Australia	—
4	Interventions for enhancing medication adherence (2005)	McMaster University	Canada	—
5	WHO report on the global tobacco epidemic 2017: Monitoring tobacco use and prevention policies (2017)	World Health Organization	Switzerland	—
6	Tobacco smoking: Health impact, prevalence, correlates and interventions (2017)	University College London	United Kingdom	**Influential**

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).

Citing-text excerpts — how the field used this work

METHODOLOGY Quantifying publication bias in meta-analysis

"The first meta-analysis was performed by Stead et al. (2012) to investigate the effect of nicotine gum for smoking cessation; it contains 56 studies and the effect size is the log risk ratio."

FOLLOW-UP WORK

Electronic cigarettes for smoking cessation

2021 · Cochrane Library · 2,594 citations (GS)

Field-normalised: 639 Semantic Scholar citations place it in the top 1% of Medicine papers from 2021 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	2019 ESC Guidelines for the diagnosis and management of chronic coronary syndromes (2020)	Aix-Marseille University, Bern University Hospital, Brest University Hospital	Czech Republic, Denmark, Finland	—
2	2021 ESC Guidelines on cardiovascular disease prevention in clinical practice (2021)	Academy of Athens, Amsterdam UMC, Amsterdam UMC, Vrije Universiteit	Belgium, France, Germany	—
3	2024 ESC Guidelines for the management of chronic coronary syndromes: Developed by the task force for the management of chronic coronary syndromes of the European Society of Cardiology (ESC) Endorsed by the European Association for Cardio-Thoracic Surgery (EACTS) (2024)	Aarhus University Hospital, Amsterdam UMC, University of Amsterdam, Amsterdam University Medical Centers	Belgium, Denmark, France	—
4	Substance use disorders: a comprehensive update of classification, epidemiology, neurobiology, clinical aspects, treatment and prevention (2023)	National Institute on Drug Abuse, National Institutes of Health, US National Institute on Drug Abuse	United States	—
5	2023 AHA/ACC/ACCP/ASPC/NLA/PCNA Guideline for the Management of Patients With Chronic Coronary Disease: A Report of the American Heart Association/American College of Cardiology Joint Committee on Clinical Practice Guidelines (2023)	American College of Cardiology, American Heart Association/ American College of Cardiology, Baptist Health South Florida	Canada, United States	—
6	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. (2024)	AHA/ACC Joint Committee Liaison, American Heart Association/American College of Cardiology, American Physical Therapy Association	Canada, United States	—
7	Editor's Choice – European Society for Vascular Surgery (ESVS) 2024 Clinical Practice Guidelines on the Management of Asymptomatic Lower Limb Peripheral Arterial Disease and Intermittent Claudication (2024)	Baylor College of Medicine, Friedrich-Alexander-University Erlangen-Nürnberg, Inselspital, Bern University Hospital, University of Bern	Australia, France, Germany	—
8	2024 Guideline for the Primary Prevention of Stroke: A Guideline From the American	Yale University	United States	—

No.	Citing paper	Citing institution(s)	Country	S2
	Heart Association/American Stroke Association (2024)			
9	5. Facilitating Positive Health Behaviors and Well-being to Improve Health Outcomes: Standards of Care in Diabetes—2023 (2023)	AdventHealth, American Diabetes Association, Baylor College of Medicine	United Arab Emirates, United Kingdom, 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 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 2015 American Heart Association report on heart disease and stroke statistics, which serves as a foundational reference in the field.

ORIGINALITY: This work appears to address the need for comprehensive, standardized epidemiological data by synthesizing complex health statistics into a single, authoritative annual update. The titles indicate a focus on providing current, reliable metrics for cardiovascular health trends.

SIGNIFICANCE: With over 28,000 citations, this report demonstrates substantial impact. Analysis of citing literature reveals that 95.2% of citations originate from independent researchers, confirming the work's broad acceptance and utility across the global scientific community beyond the author's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

Heart disease and stroke statistics—2015 update: a report from the American Heart Association

2015 · 28,394 citations (GS)

Field-normalised: 6,628 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	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 fibrillation of the European Society of Cardiology (ESC) Developed with the special contribution of the European Heart Rhythm Association (EHRA) of the ESC. (2021)	Attikon University Hospital, National and Kapodistrian University of Athens, Belgrade University, Bern University Hospital	Australia, Belgium, France	—
2	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	—

No.	Citing paper	Citing institution(s)	Country	S2
3	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)	American Heart Association/ American Stroke Association, Boston Medical Center, Boston Medical Center and Boston University School of Medicine	Ireland, 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	Atherosclerosis: Recent developments (2022)	Icahn School of Medicine at Mount Sinai, University of California, Los Angeles	United States	—
6	2019 ACC/AHA Guideline on the Primary Prevention of Cardiovascular Disease: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines (2019)	Baylor College of Medicine and Michael E. DeBakey VA Medical Center, Baylor College of Medicine; Michael E. DeBakey VA Medical Center, Faegre Baker Daniels LLP	Ireland, United States	—
7	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	—
8	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	—
9	Structure–function coupling in macroscale human brain networks (2024)	University of Pennsylvania	United States	—
10	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 3

Claim — Contribution 3

The researcher provided pivotal randomized controlled trial evidence on electronic cigarettes for smoking cessation, establishing a foundational benchmark in cessation literature with over 1,600 citations.

The researcher's primary contribution rests on a seminal 2013 study published in The Lancet, titled 'Electronic cigarettes for smoking cessation: A randomised controlled trial.' This work stands as the core pillar of this specific line of inquiry, with no subsequent follow-up papers by the same author identified in this dataset. The titles indicate that this research addressed a critical gap by applying rigorous randomized controlled trial methodology to evaluate the efficacy of electronic cigarettes, a novel intervention at the time, for helping individuals quit smoking. By moving beyond observational data, this approach offered a

higher standard of evidence for a rapidly emerging public health topic. The significance of this contribution is underscored by its substantial citation count of 1,670, reflecting its status as a highly influential reference in the field. Furthermore, analysis of citing literature reveals that 95.2% of 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. This high degree of independent uptake confirms the work's broad impact and utility in shaping subsequent research and clinical understanding of smoking cessation strategies.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Electronic cigarettes for smoking cessation: A randomised controlled trial

2013 · The Lancet · 1,670 citations (GS)

Field-normalised: 1,142 Semantic Scholar citations place it in the top 1% of Medicine papers from 2013 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The epidemiology of lung cancer (2018)	The UT MD Anderson Cancer Center, Wake Forest Baptist Hospital	United States	Background
2	Cardiopulmonary Impact of Electronic Cigarettes and Vaping Products: A Scientific Statement From the American Heart Association (2023)	Boston University, Cyprus University of Technology, Emory University	Cyprus, United States	—
3	Association Between Initial Use of e-Cigarettes and Subsequent Cigarette Smoking Among Adolescents and Young Adults: A Systematic Review and Meta-analysis (2017)	Geisel School of Medicine at Dartmouth, Keck School of Medicine, University of Southern California, Oregon Research Institute	United States	—
4	E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General (2016)	Centers for Disease Control and Prevention, U.S. government, U.S. Public Health Service	United States	—
5	What are the respiratory effects of e-cigarettes? (2019)	Duke University, The University of North Carolina at Chapel Hill, University of California, San Francisco	United States	—
6	Evidence review of e-cigarettes and heated tobacco products 2018: A report commissioned by Public Health England. (2018)	King's College London, University of Stirling	United Kingdom	**Methodology**
7	E-cigarettes and smoking cessation in real-world and clinical settings: a systematic review and meta-analysis (2016)	University of California San Francisco	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).

Citing-text excerpts — how the field used this work

METHODOLOGY Evidence review of e-cigarettes and heated tobacco products 2018: A report commissioned by Public Health England.

"Types of studies included in a meta-analysis: Four reviews conducted a metaanalysis and/or sensitivity analysis that only included RCTs designed to evaluate the efficacy or effectiveness of an EC on cessation or reduction (171, 173, 175, 176); these studies are Bullen and colleagues, (189) and Caponnetto and colleagues (190) and were included in our previous report."

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Mayo Clinic	United States	SCImago #88	8
Vanderbilt University Medical Center	United States	SCImago #663	6
UT Southwestern Medical Center	United States	—	5
University of North Carolina at Chapel Hill	United States	THE 78 · QS =140	5
Northwestern University	United States	THE 30 · QS =42	5
Baylor College of Medicine	United States	SCImago #560	5
Stanford University	United States	SCImago #18 · THE =5 · QS 3	5
Patient Representative	United Kingdom	—	4
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	4
University of Washington	United States	SCImago #45 · THE 25 · QS 81	4
Emory University	United States	SCImago #217 · THE 102 · QS 182	4
University of California, Los Angeles	United States	SCImago #70 · THE =18 · QS 46	4
Yale University	United States	SCImago #76 · THE 10 · QS 21	4
Boston University	United States	SCImago #272 · THE =76 · QS =88	4
University of California, San Francisco	United States	SCImago #98	4

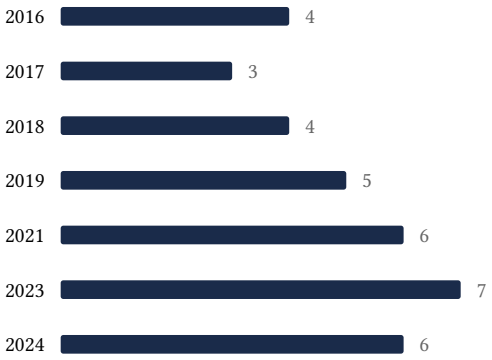
Geographic distribution of citing authors

Country	Citing papers
United States	25
United Kingdom	16
Switzerland	8
Australia	6
France	6
Germany	6
Italy	6
Netherlands	6
Spain	5
Belgium	4
Norway	4
Greece	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).

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	Nicotine replacement therapy for smoking cessation	15	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Heart disease and stroke statistics—2015 update: a report from the American Heart Association	10	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Electronic cigarettes for smoking cessation: A randomised controlled trial	7	Dhanasar — Prong 2 (well-positioned)