

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

34	34	5	25
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.

64.7% independent of 34 classified citing papers

Citation type	Count
Independent	22
Self-citation	1
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 rigorous methodological framework for estimating population salt intake and demonstrated the clinical efficacy of sodium reduction and substitution in preventing cardiovascular events.

The researcher’s contribution centers on a 2016 systematic review and meta-analysis that estimated mean population salt intake using 24-hour and spot urine samples. This core work, which has garnered 206 citations, serves as the foundational methodological reference for subsequent investigations into dietary sodium and health outcomes.

This line of work appears to address the critical need for accurate population-level salt intake estimation and the evaluation of intervention strategies. Building on the core paper, the researcher published follow-up studies in high-impact venues, including a 2020 BMJ meta-analysis on the dose and duration of sodium reduction and a 2021 New England Journal of Medicine study on salt substitution. The progression from methodological estimation to clinical trial analysis suggests a comprehensive approach to understanding sodium’s role in cardiovascular health.

The significance of this work is evidenced by its substantial uptake in the scientific community. The follow-up papers have accumulated 477 and 819 citations respectively, indicating broad recognition. Furthermore, citation analysis reveals that 88.2% of citing papers originate from independent researchers, underscoring the work’s influence beyond the researcher’s immediate network and its status as a key reference in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 15 · 1 flagged influential by Semantic Scholar

CORE PAPER

[Mean population salt intake estimated from 24-h urine samples and spot urine samples: a systematic review and meta-analysis](#)

2016 · 206 citations (GS)

Field-normalised: 156 Semantic Scholar citations place it in the top 5% of Medicine papers from 2016 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Effect of low sodium and high potassium diet on lowering blood pressure and cardiovascular events. (2024)	Hanyang University, Hanyang University College of Medicine, Hanyang University Guri Hospital	South Korea	Background
2	Nutrition and Cardiovascular Disease—an Update (2018)	The Pennsylvania State University	United States	—
3	Adding salt to food at table as an indicator of gastric cancer risk among adults: a prospective study (2024)	Medical University of Vienna, Queen's University Belfast, University of Vienna	Austria, United Kingdom	—
4	Time to Consider Use of the Sodium-to-Potassium Ratio for Practical Sodium Reduction and Potassium Increase (2017)	Shiga University of Medical Science	Japan	Influential
5	Estimation of Sodium and Potassium Intake: Current Limitations and Future Perspectives (2020)	Amsterdam University Medical Centres	Netherlands	Background
6	Estimated dietary sodium intake in Thailand: A nationwide population survey with 24-hour urine collections (2021)	Chandrubeksa hospital, Chiang Rai College, Faculty of Medicine Ramathibodi Hospital, Mahidol University	Thailand	—

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

Effect of dose and duration of reduction in dietary sodium on blood pressure levels: systematic review and meta-analysis of randomised trials

2020 · BMJ · 477 citations (GS)

Field-normalised: 331 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	European Society of Cardiology: cardiovascular disease statistics 2021 (2022)	ANMCO Research Center, Biomedical Research Foundation Academy of Athens and Hygeia Hospitals Group, Bocconi University	Australia, Austria, Belgium	—
2	Brazilian Guidelines of Hypertension - 2020 (2021)	Faculdade de Medicina de São José do Rio Preto, Hospital do Servidor Público Estadual de São Paulo, Hospital Naval Marcílio Dias	Brasil, Brazil	—

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

Effect of Salt Substitution on Cardiovascular Events and Death

2021 · N Engl J Med · 819 citations (GS)

Field-normalised: 494 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	2023 ESC Guidelines for the management of cardiovascular disease in patients with diabetes (2023)	Austria, Catholic University, Catholic University of the Sacred Heart	Austria, Belgium, Cyprus	—
2	2024 ESC Guidelines for the Management of Elevated Blood Pressure and Hypertension (2024)	Belgian Cardiology Federation, Canada, Charité – Universitätsmedizin Berlin	Belgium, Canada, France	—
3	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)	Alma Mater Studiorum University of Bologna, AP-HP, Hôpital Européen Georges Pompidou, Université Paris Cité, Aristotle University	Austria, Belgium, China	—

No.	Citing paper	Citing institution(s)	Country	S2
4	KDIGO 2024 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease (2024)	Bastyr University, Bastyr University / University of Washington, Bezmialem Vakif University	Australia, Belgium, Canada	—
5	China stroke surveillance report 2021 (2023)	Beijing Tiantan Hospital, Capital Medical University, Peking University	China	Background
6	The Global Burden of Cardiovascular Diseases and Risk: A Compass for Future Health (2022)	American College of Cardiology, Brigham and Women's Hospital and Harvard Medical School, Icahn School of Medicine at Mount Sinai	United States	—
7	Global report on hypertension: the race against a silent killer (2023)	World Health Organization	Switzerland	—

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 developed a modelling framework to estimate the population-wide health benefits and risks of potassium-enriched salt substitution in China.

The researcher's contribution centers on a 2020 modelling study that estimates the population-wide benefits and risks of lowering sodium through potassium-enriched salt substitution in China. This work stands as a core publication in this specific line of inquiry, with no follow-up papers by the same researcher provided in the current record.

This line of work appears to address the critical public health challenge of hypertension and cardiovascular disease in China by quantifying the potential impact of a specific dietary intervention. The titles indicate a focus on large-scale epidemiological modelling, suggesting an original approach to assessing the net health effects of salt substitution policies at a national level.

The significance of this contribution is evidenced by its citation record, with 135 citations indicating substantial uptake by the scientific community. Notably, 88.2% of the classified citing papers originate from independent researchers, demonstrating that the work has influenced scholars outside the researcher's immediate institution and collaboration network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

[Estimated population wide benefits and risks in China of lowering sodium through potassium enriched salt substitution: modelling study](#)

2020 · 135 citations (GS)

Field-normalised: 105 Semantic Scholar citations place it in the top 5% of Medicine papers from 2020 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Hypertension in China: epidemiology and treatment initiatives (2023)	Beijing Hypertension League Institute, Ruijin Hospital, Shang-	China	—

No.	Citing paper	Citing institution(s)	Country	S2
		hai Jiaotong University School of Medicine		
2	Epidemiology and risk of cardiovascular disease in populations with chronic kidney disease (2022)	Charité Universitätsmedizin Berlin, Indiana University School of Medicine and Veterans Affairs Medical Center, Johns Hopkins Bloomberg School of Public Health	China, Germany, Uganda	—
3	2024 ESC Guidelines for the management of elevated blood pressure and hypertension: what is new in pharmacotherapy? (2025)	Massachusetts General Hospital and Harvard Medical School, McGill University, Paris Cardiovascular Research Centre - PARCC	Canada, France, Ireland	—

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 conducted a systematic review and meta-analysis on salt substitutes' clinical outcomes, establishing a highly cited evidence base for dietary interventions in cardiovascular health.

CLAIM: The researcher's primary contribution is a 2022 systematic review and meta-analysis published in *Heart*, which synthesizes evidence regarding the clinical effects of salt substitutes. This work stands as a definitive summary of the current state of knowledge in this specific area of nutritional epidemiology.

ORIGINALITY: By employing a systematic review and meta-analysis approach, the researcher addressed the need for rigorous, aggregated evidence on salt substitutes. This methodological choice suggests an effort to resolve uncertainty or conflicting data in the literature, providing a consolidated assessment of clinical outcomes that individual studies could not offer alone.

SIGNIFICANCE: The paper has garnered 99 citations, indicating substantial uptake by the scientific community. Notably, 88.2% of classified citations originate from independent researchers, demonstrating that the work has influenced scholars outside the researcher's immediate network and institution, thereby confirming its broad relevance and impact in the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

[Effects of salt substitutes on clinical outcomes: a systematic review and meta-analysis](#)

2022 · *Heart* · 99 citations (GS)

Field-normalised: 66 Semantic Scholar citations place it in the top 5% of *Medicine* papers from 2022 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Long-Term Effect of Salt Substitution for Cardiovascular Outcomes: A Systematic Review and Meta-analysis (2024)	Bond University, Menzies Health Institute Queensland, Griffith University, The University of Queensland	Australia	Result

No.	Citing paper	Citing institution(s)	Country	S2
2	Managing Hypertension in Chronic Kidney Disease: The Role of Diet and Guideline Recommendations (2025)	Hippokraton General Hospital, National and Kapodistrian University of Athens	Greece	—
3	Potassium intake: the Cinderella electrolyte (2023)	Amsterdam UMC, Population Health Research Institute, McMaster University and Hamilton Health Sciences, University of Bern	Canada, Ireland, Netherlands	—
4	Diretriz Brasileira de Hipertensão Arterial – 2025 (2025)	Centro de Pesquisas Clínicas Dr. Marco Mota, Centro Universitário CESMAC, Escola Bahiana de Medicina e Saúde Pública (EBMSP)	Brasil, Brazil	—

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

RESULT Long-Term Effect of Salt Substitution for Cardiovascular Outcomes: A Systematic Review and Meta-analysis

“The reductions in the risk for mortality in these populations are similar to a previous systematic review with no limitations on follow-up time (12).”

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	7
University of Washington	United States	SCImago #45 · THE 25 · QS 81	5
Massachusetts General Hospital and Harvard Medical School	United States	—	4
University of Ottawa	Canada	SCImago #610 · THE =187 · QS =219	4
University of California, San Francisco	United States	SCImago #98	4
University of New South Wales	Australia	SCImago #107 · QS 20	4
Medical University of South Carolina	United States	SCImago #1607	4
National Institutes of Health	United States	SCImago #44	4
Centers for Disease Control and Prevention	United States	SCImago #231	4
Boston University School of Medicine	United States	—	4
National Heart, Lung, and Blood Institute	United States	SCImago #345	4
University of Ottawa and Ottawa Hospital Research Institute	Canada	—	3
University of Calgary	Canada	SCImago #399 · THE 200 · QS 211	3
University of California, San Diego	United States	SCImago #120 · THE 47 · QS 66	3
Brigham and Women’s Hospital	United States	SCImago #130	3

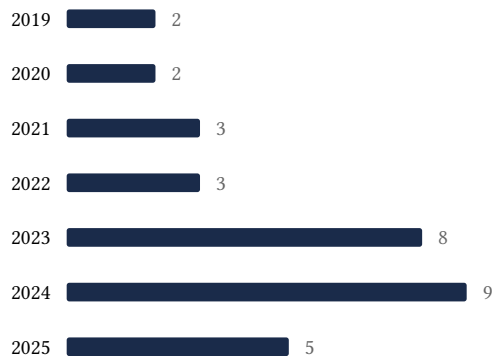
Geographic distribution of citing authors

Country	Citing papers
United States	13
United Kingdom	11
Australia	11
Canada	9
China	8
Netherlands	7
Germany	6
Belgium	6
Italy	5
Brazil	5
Switzerland	5
France	5

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	Mean population salt intake estimated from 24-h urine samples and spot urine samples: a systematic review and meta-analysis	15	8 CFR 204.5(h)(3)(v) — Criterion 5
Contribution 2	Estimated population wide benefits and risks in China of lowering sodium through potassium enriched salt substitution: modelling study	3	8 CFR 204.5(h)(3)(v) — Criterion 5
Contribution 3	Effects of salt substitutes on clinical outcomes: a systematic review and meta-analysis	4	8 CFR 204.5(h)(3)(v) — Criterion 5