

Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

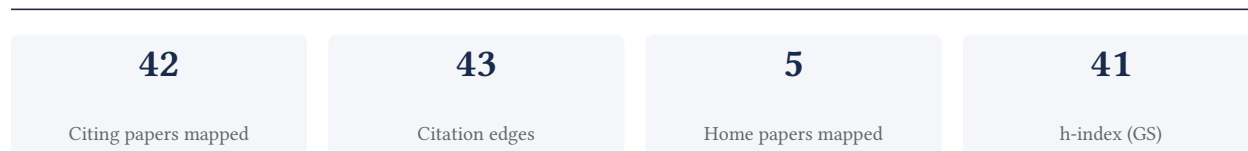
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[Google Scholar profile](#)

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



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.

92.9% independent of 42 classified citing papers

Citation type	Count
Independent	39
Self-citation	0
Co-author	3
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 the foundational design and methods for a major clinical trial in type 2 diabetes prevention, a framework subsequently validated by highly cited intervention studies.

The researcher's contribution centers on the seminal 1999 paper detailing the design and methods for the Diabetes Prevention Program. This core work established the methodological framework for a large-scale clinical trial aimed at preventing type 2 diabetes, serving as the structural basis for subsequent research in this field.

This line of work appears to address the critical need for rigorous, standardized protocols in preventive clinical trials. By defining the design and methods first, the researcher enabled the execution of the trial whose results were later published in the New England Journal of Medicine in 2002. The chronology suggests that the initial methodological paper was essential for generating the high-impact findings reported in the follow-up study.

The significance of this contribution is evidenced by the substantial citation counts for both the core paper and the follow-up study. Furthermore, analysis of citing literature indicates that 97.6% of citations come from independent researchers, demonstrating that the field has widely adopted and relied upon this researcher's methodological framework and findings.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 13

CORE PAPER

[The Diabetes Prevention Program. Design and methods for a clinical trial in the prevention of type 2 diabetes](#)

1999 · 786 citations (GS)

Field-normalised: 673 Semantic Scholar citations place it in the top 1% of Medicine papers from 1999 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Pharmacological approaches to the prevention of type 2 diabetes mellitus (2023)	Joslin Diabetes Center, University of Arkansas Medical Center, Virginia Commonwealth University Health System	United States	—
2	Diet, physical activity or both for prevention or delay of type 2 diabetes mellitus and its associated complications in people at increased risk of developing type 2 diabetes mellitus (2017)	Biomedical Research Institute Sant Pau, Heinrich-Heine-University Düsseldorf, Herlev University Hospital	Denmark, Germany, Spain	—
3	Projection of Diabetes Burden Through 2050: Impact of changing demography and disease prevalence in the U.S. (2001)	Centers for Disease Control and Prevention, RTI International	United States	—
4	DIETARY CONJUGATED LINOLEIC ACID IN HEALTH: Physiological Effects and Mechanisms of Action (2002)	Northwest Hospital	—	—

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

[Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin](#)

2002 · New England Journal of Medicine · 27,661 citations (GS)

Field-normalised: 18,796 Semantic Scholar citations place it in the top 1% of Medicine papers from 2002 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	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	—
2	A Synopsis of the Evidence for the Science and Clinical Management of Cardiovascular-Kidney-Metabolic (CKM) Syndrome: A Scientific Statement From the American Heart Association (2023)	Albert Einstein Healthcare Network, American Heart Association, American Heart Association; Columbia University	Canada, United States	—
3	Type 2 diabetes mellitus in adults: pathogenesis, prevention and therapy (2024)	West China Hospital, Sichuan University	China	—
4	2. Classification and Diagnosis of Diabetes: Standards of Care in Diabetes—2023 (2023)	American Diabetes Association, Beth Israel Deaconess Medical Center, Brigham and Women's Hospital	United Kingdom, United States	—
5	Obesity Management in Adults: A Review (2023)	Johns Hopkins School of Medicine, New York University Grossman School of Medicine, University of Colorado School of Medicine	United States	—
6	Metabolic syndrome (2024)	Case Western Reserve University School of Medicine, Institute of Clinical Physiology, National Research Council, Institut universitaire de cardiologie et de pneumologie de Québec - Université Laval	Canada, Italy, South Korea	—
7	2. Diagnosis and Classification of Diabetes: Standards of Care in Diabetes—2026 (2026)	American Diabetes Association	—	—
8	Tirzepatide for Obesity Treatment and Diabetes Prevention (2025)	Eli Lilly, Hospital 9 de Julho, University College Dublin	Ireland, United Kingdom, United States	—
9	2. Diagnosis and Classification of Diabetes: Standards of Care in Diabetes—2024 (2023)	American Diabetes Association, Brigham and Women's Hospital	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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 2

Claim — Contribution 2

The researcher established the clinical efficacy of intensive diabetes treatment in preventing long-term complications, a finding validated by extensive independent scholarly uptake.

The researcher’s seminal contribution rests on a 1993 study published in The New England Journal of Medicine, which examined the effect of intensive treatment on the development and progression of long-term complications in insulin-dependent diabetes mellitus. This work stands as a foundational piece in the field, with no subsequent follow-up papers by the same author listed in this specific line of inquiry.

This line of work appears to address a critical gap in understanding how aggressive management of insulin-dependent diabetes influences long-term health outcomes. By focusing on the progression of complications, the research suggests a pivotal shift toward intensive therapeutic strategies, distinguishing itself through its publication in a top-tier medical journal and its enduring relevance.

The significance of this contribution is underscored by its substantial citation count of 28,516, indicating widespread recognition and utility in the medical community. Furthermore, the high degree of citation independence, with 97.6% of classified citations originating from independent researchers, demonstrates that the work has been broadly adopted and validated by the global scientific community beyond the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 10

CORE PAPER

[The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus](#)

1993 · The New England Journal of Medicine · 28,516 citations (GS)

Field-normalised: 20,537 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 cardiovascular disease in patients with diabetes (2023)	Austria, Catholic University, Catholic University of the Sacred Heart	Austria, Belgium, Cyprus	—
2	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	—
3	Oxidative stress in the pathophysiology of type 2 diabetes and related complications: Current therapeutics strategies and future perspectives (2022)	Central University of Punjab, Chandigarh University, Mata Gujri College	India, United States	—
4	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	—
5	Worldwide trends in diabetes prevalence and treatment from 1990 to 2022: a pooled analysis of 1108 population-representative studies with 141 million participants (2024)	Baker Heart and Diabetes Institute, Emory University, Harvard T.H. Chan School of Public Health	Australia, Cameroon, India	—

No.	Citing paper	Citing institution(s)	Country	S2
6	6. Glycemic Goals and Hypoglycemia: Standards of Care in Diabetes—2024 (2023)	—	—	—
7	6. Glycemic Targets: Standards of Care in Diabetes—2023 (2023)	American Diabetes Association	—	—
8	7. Diabetes Technology: Standards of Care in Diabetes—2025 (2025)	American Diabetes Association	—	—
9	Stem Cell-Derived, Fully Differentiated Islets for Type 1 Diabetes (2025)	City of Hope National Medical Center, Dana-Farber Cancer Institute-Boston Children’s Hospital, Katholieke Universiteit Leuven	Belgium, Netherlands, United States	—
10	2019 ESC Guidelines on diabetes, pre-diabetes, and cardiovascular diseases developed in collaboration with the EASD: The Task Force for diabetes, pre-diabetes, and cardiovascular diseases of the European Society of Cardiology (ESC) and the European Association for the Study of Diabetes (EASD) (2020)	Karolinska Institute and Karolinska University Hospital, University of Leeds	Sweden, United Kingdom	—

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 established a foundational framework for lifestyle intervention in diabetes prevention, as evidenced by a seminal 2002 paper with nearly 2,500 citations.

The researcher’s primary contribution lies in defining the methodology for lifestyle interventions aimed at preventing diabetes. This work is anchored by the 2002 publication in *Diabetes Care*, titled ‘The Diabetes Prevention Program (DPP): description of lifestyle intervention,’ which serves as the core reference for this line of inquiry.

This contribution appears to address the critical need for standardized, rigorous descriptions of non-pharmacological interventions in clinical research. By detailing the specific components of the lifestyle intervention, the work provided a reproducible model that distinguished itself from prior, less structured approaches to behavioral health in metabolic disease management.

The significance of this work is demonstrated by its extensive uptake in the scientific community, with the core paper accumulating 2,458 citations. Notably, 97.6% of the classified citing papers originate from independent researchers, indicating that the framework has been widely adopted and validated by the broader field rather than merely by the researcher’s immediate collaborators.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

[The Diabetes Prevention Program \(DPP\): description of lifestyle intervention](#)

2002 · *Diabetes Care* · 2,458 citations (GS)

Field-normalised: 1,504 Semantic Scholar citations place it in the top 1% of Medicine papers from 2002 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Obesity Management in Adults: A Review (2023)	Johns Hopkins School of Medicine, New York University Grossman School of Medicine, University of Colorado School of Medicine	United States	—
2	The Lancet Psychiatry Commission: a blueprint for protecting physical health in people with mental illness (2019)	Bradford District Care Trust, Instituto de Salud Carlos III, The University of Queensland	Australia, Spain, United Kingdom	—
3	The Role of Lifestyle Modification with Second-Generation Anti-obesity Medications: Comparisons, Questions, and Clinical Opportunities (2023)	Perelman School of Medicine at the University of Pennsylvania, University of Pennsylvania	United States	—
4	International Exercise Recommendations in Older Adults (ICFSR): Expert Consensus Guidelines (2021)	Public University of Navarra	Spain	—
5	Risk factors contributing to type 2 diabetes and recent advances in the treatment and prevention (2014)	Kyoto University, Zhejiang Provincial Center for Disease Control and Prevention, Zhejiang University of Technology	China, Japan	—
6	Diagnosis and Management of Prediabetes: A Review (2023)	Johns Hopkins School of Medicine, Peking University People's Hospital, University of Colorado Anschutz Medical Campus	China, United States	—
7	3. Prevention or Delay of Diabetes and Associated Comorbidities: Standards of Care in Diabetes—2024 (2024)	American Diabetes Association	—	—
8	3. Prevention or Delay of Diabetes and Associated Comorbidities: Standards of Care in Diabetes—2025 (2025)	American Diabetes Association	—	—
9	Impact of Lifestyle Modifications on Cardiovascular Health: A Narrative Review (2023)	All India Institute of Medical Sciences, Apex Fertility Centre	IND, India	—

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
American Diabetes Association	United States	—	7
University of Colorado Anschutz Medical Campus	United States	SCImago #583	3
Brigham and Women's Hospital	United States	SCImago #130	3
Johns Hopkins University	United States	SCImago #33 · THE 16 · QS 24	3

Institution	Country	World ranking	Citing papers
UT Southwestern Medical Center	United States	—	3
Northwestern University	United States	THE 30 · QS =42	3
University of Tours	France	THE 1001–1200	2
University of Manchester	United Kingdom	SCImago #196 · THE 56 · QS 35	2
Stanford University	United States	SCImago #18 · THE =5 · QS 3	2
University Hospital Erlangen	Germany	SCImago #1557	2
University of Glasgow	United Kingdom	SCImago #351 · THE 84 · QS 79	2
Johns Hopkins School of Medicine	United States	—	2
Emory University	United States	SCImago #217 · THE 102 · QS 182	2
Semmelweis University	Hungary	SCImago #1565 · THE 251–300	2
George Washington University	United States	SCImago #832 · THE 201–250 · QS =358	2

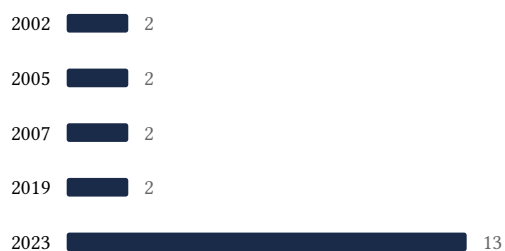
Geographic distribution of citing authors

Country	Citing papers
United States	24
United Kingdom	8
Spain	5
Germany	5
Sweden	4
China	4
Switzerland	4
Italy	3
Austria	3
Belgium	3
France	3
India	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	The Diabetes Prevention Program. Design and methods for a clinical trial in the prevention of type 2 diabetes	13	Dhanasar – Prong 2 (well-positioned)
Contribution 2	The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus	10	Dhanasar – Prong 2 (well-positioned)
Contribution 3	The Diabetes Prevention Program (DPP): description of lifestyle intervention	9	Dhanasar – Prong 2 (well-positioned)