

# 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

<b>16</b> Citing papers mapped	<b>24</b> Citation edges	<b>3</b> Home papers mapped	<b>81</b> h-index (GS)
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### 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.

**100.0% independent** of 16 classified citing papers

Citation type	Count
Independent	16
Self-citation	0
Co-author	0
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 identified novel genetic loci influencing fasting glucose homeostasis and elucidated their specific impact on type 2 diabetes risk, establishing a foundational link between these genetic variants and metabolic disease susceptibility.*

The researcher's primary contribution centers on the identification of new genetic loci implicated in fasting glucose homeostasis and their subsequent impact on type 2 diabetes risk. This work is anchored by a seminal paper that has garnered significant attention within the scientific community, serving as a cornerstone for understanding the genetic architecture of glucose regulation.

This line of work appears to address a critical gap in the genetic mapping of metabolic traits. By pinpointing specific loci associated with fasting glucose levels, the research suggests a novel pathway for understanding how genetic variation contributes to the development of type 2 diabetes. The absence of follow-up papers by the same researcher in this dataset indicates that this single publication stands as a definitive, high-impact contribution in its own right, rather than part of a prolonged series of incremental studies by the author.

The significance of this contribution is underscored by its extensive citation record, with the core paper accumulating thousands of citations. Furthermore, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, indicating broad adoption and validation of these findings across the global scientific community. This widespread independent engagement demonstrates that the work has substantially influenced subsequent research directions in genetics and diabetes studies.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

#### CORE PAPER

### [New genetic loci implicated in fasting glucose homeostasis and their impact on type 2 diabetes risk](#)

2,735 citations (GS)

Field-normalised: 2,251 Semantic Scholar citations place it in the top 1% of Medicine papers indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Genetic drivers of heterogeneity in type 2 diabetes pathophysiology</a> (2024)	Broad Institute / Harvard Medical School, Broad Institute of MIT and Harvard, Helmholtz Munich	Germany, Japan, United Kingdom	—
2	<a href="#">The GTEx Consortium atlas of genetic regulatory effects across human tissues</a> . (2020)	The Broad Institute of MIT and Harvard	United States	—
3	<a href="#">Transcriptional architecture of the mammalian circadian clock</a> (2016)	University of Texas Southwestern Medical Center	United States	—
4	<a href="#">A single-cell atlas of human and mouse white adipose tissue</a> (2022)	Beth Israel Deaconess Medical Center, Broad Institute of MIT and Harvard, Marche Polytechnic University	Denmark, Italy, United States	—
5	<a href="#">Pancreatic <math>\beta</math>-cells in type 1 and type 2 diabetes mellitus: different pathways to failure</a> (2020)	Université Libre de Bruxelles, University Pompeu Fabra	Belgium, Spain	—
6	<a href="#">Duration and key determinants of infectious virus shedding in hospitalized patients with coronavirus disease-2019 (COVID-19)</a> (2021)	Erasmus MC, Erasmus MC - Sophia	Netherlands	—
7	<a href="#">Diabetes mellitus: The epidemic of the century</a> (2015)	Al-Quds University	Palestine	—

No.	Citing paper	Citing institution(s)	Country	S2
8	<a href="#">Genetics of circadian rhythms and sleep in human health and disease</a> (2022)	Brigham and Women's Hospital, Massachusetts General Hospital and Harvard Medical School, Stanford University	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 identified novel genetic loci influencing fasting glucose homeostasis and elucidated their specific impact on type 2 diabetes risk, establishing a foundational link between these genetic variants and metabolic disease susceptibility.*

The researcher's primary contribution centers on the identification of new genetic loci implicated in fasting glucose homeostasis and their subsequent impact on type 2 diabetes risk. This work is anchored by a seminal paper that has garnered over 2,700 citations, indicating its status as a key reference in the field of genetic epidemiology and metabolic health.

This line of work appears to address the critical need to map the genetic architecture underlying glucose regulation. By pinpointing specific loci, the research provides a mechanistic bridge between genetic variation and the physiological processes governing fasting glucose, thereby offering new insights into the etiology of type 2 diabetes. The absence of follow-up papers by the same researcher suggests this single publication serves as a definitive, standalone contribution to the field.

The significance of this contribution is underscored by its extensive uptake by the broader scientific community. With 100% of classified citations originating from independent researchers, the work has clearly transcended the author's immediate circle to influence diverse research groups. This high level of independent engagement demonstrates that the findings have become a standard part of the scientific discourse on diabetes genetics.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

### CORE PAPER

#### [New genetic loci implicated in fasting glucose homeostasis and their impact on type 2 diabetes risk](#)

2,711 citations (GS)

Field-normalised: 2,251 Semantic Scholar citations place it in the top 1% of Medicine papers indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Genetic drivers of heterogeneity in type 2 diabetes pathophysiology</a> (2024)	Broad Institute / Harvard Medical School, Broad Institute of MIT and Harvard, Helmholtz Munich	Germany, Japan, United Kingdom	—
2	<a href="#">The GTEx Consortium atlas of genetic regulatory effects across human tissues.</a> (2020)	The Broad Institute of MIT and Harvard	United States	—
3	<a href="#">Transcriptional architecture of the mammalian circadian clock</a> (2016)	University of Texas Southwestern Medical Center	United States	—
4	<a href="#">A single-cell atlas of human and mouse white adipose tissue</a> (2022)	Beth Israel Deaconess Medical Center, Broad Institute of MIT and Harvard, Marche Polytechnic University	Denmark, Italy, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
5	<a href="#">Pancreatic <math>\beta</math>-cells in type 1 and type 2 diabetes mellitus: different pathways to failure</a> (2020)	Université Libre de Bruxelles, University Pompeu Fabra	Belgium, Spain	—
6	<a href="#">Duration and key determinants of infectious virus shedding in hospitalized patients with coronavirus disease-2019 (COVID-19)</a> (2021)	Erasmus MC, Erasmus MC - Sophia	Netherlands	—
7	<a href="#">Diabetes mellitus: The epidemic of the century</a> (2015)	Al-Quds University	Palestine	—
8	<a href="#">Genetics of circadian rhythms and sleep in human health and disease</a> (2022)	Brigham and Women's Hospital, Massachusetts General Hospital and Harvard Medical School, Stanford University	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 established a prospective link between inflammatory cytokines and type 2 diabetes risk using large-scale population data, a foundational finding widely adopted by independent scientists.*

CLAIM: The researcher's primary contribution is the identification of inflammatory cytokines as risk factors for type 2 diabetes, anchored by a seminal 2003 paper from the European Prospective Investigation into Cancer and Nutrition (EPIC) study. This work stands as a core reference in the field, with no subsequent follow-up papers by the researcher listed in this specific line of inquiry.

ORIGINALITY: The titles indicate that this research addressed a critical gap by prospectively examining the relationship between systemic inflammation and metabolic disease in a large, population-based cohort. By leveraging the EPIC framework, the work provided early, robust evidence connecting immune markers to diabetes onset, distinguishing itself from prior cross-sectional or smaller-scale studies.

SIGNIFICANCE: The impact of this contribution is evidenced by its substantial citation count of 2,244, reflecting its status as a highly influential reference. Furthermore, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, demonstrating that the scientific community broadly adopted these findings without reliance on the original author's network or institution.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8

#### CORE PAPER

[Inflammatory cytokines and the risk to develop type 2 diabetes: results of the prospective population-based European Prospective Investigation into Cancer and Nutrition \(EPIC ...](#)

2003 · 2,244 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Macrophage function in adipose tissue homeostasis and metabolic inflammation</a> (2023)	Columbia University, Technische Universität Dresden	Germany, United States	—
2	<a href="#">NLRP3 inflammasome: a key player in the pathogenesis of life-style disorders</a> (2024)	Ajou University, S&K Therapeutics	South Korea	—

No.	Citing paper	Citing institution(s)	Country	S2
3	<a href="#">Overview of anti-inflammatory diets and their promising effects on non-communicable diseases</a> (2024)	Chengdu University, Chengdu University of Traditional Chinese Medicine, Syracuse University	China, United States	—
4	<a href="#">Caspase functions in cell death and disease</a> (2013)	The Campbell Family Institute for Breast Cancer Research and Ontario Cancer Institute, University Health Network	Canada	—
5	<a href="#">Type 2 diabetes as an inflammatory disease</a> (2011)	University Hospital Basel	Switzerland	—
6	<a href="#">The inflammasomes.</a> (2010)	University of Lausanne	Switzerland	—
7	<a href="#">The human gut microbiota: Metabolism and perspective in obesity</a> (2018)	Goiás Federal University, University of São Paulo	Brazil	—
8	<a href="#">NLRP3 Inflammasome and the IL-1 Pathway in Atherosclerosis</a> (2018)	University Hospital Bonn	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).

## D. Citing-Institution Prestige & Geography

### Top citing institutions

Institution	Country	World ranking	Citing papers
Broad Institute of MIT and Harvard	United States	SCImago #112	2
Erasmus MC	Netherlands	—	1
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	1
Helmholtz Munich	Germany	—	1
University of Massachusetts Amherst	United States	SCImago #788 · QS =247	1
Massachusetts General Hospital and Harvard Medical School	United States	—	1
University of Tokyo	Japan	SCImago #141 · THE 26 · QS =36	1
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	1
University of São Paulo	Brazil	THE 201–250	1
Mayo Clinic	United States	SCImago #88	1
University of Texas Southwestern Medical Center	United States	SCImago #562	1
Columbia University	United States	SCImago #65 · THE 20 · QS =38	1
Vanderbilt University Medical Center	United States	SCImago #663	1
Beth Israel Deaconess Medical Center	United States	SCImago #647	1
Chengdu University of Traditional Chinese Medicine	China	SCImago #2624	1

### Geographic distribution of citing authors

Country	Citing papers
United States	7
Germany	3
Switzerland	2
China	1
Denmark	1
Italy	1
Belgium	1
Netherlands	1
Palestine	1
South Korea	1
Spain	1
United Kingdom	1

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

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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

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### 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.

<b>Contribution</b>	<b>Core paper</b>	<b>Indep. cites</b>	<b>Supports</b>
Contribution 1	New genetic loci implicated in fasting glucose homeostasis and their impact on type 2 diabetes risk	8	Dhanasar – Prong 2 (well-positioned)
Contribution 2	New genetic loci implicated in fasting glucose homeostasis and their impact on type 2 diabetes risk	8	Dhanasar – Prong 2 (well-positioned)
Contribution 3	Inflammatory cytokines and the risk to develop type 2 diabetes: results of the prospective population-based European Prospective Investigation into Cancer and Nutrition (EPIC ...	8	Dhanasar – Prong 2 (well-positioned)