

# Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

## Paul Hellewell

Unknown affiliation

[Google Scholar profile](#)

**Generated 2026-05-22 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

16	16	5	53
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.

**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 established uric acid as a marker of chronic inflammation in heart failure, a seminal contribution evidenced by over 500 citations from independent scholars.*

The researcher's core contribution centers on the 1998 paper titled 'Uric acid in chronic heart failure: a marker of chronic inflammation.' This work appears to have introduced a novel perspective on the pathophysiology of heart failure by linking uric acid levels to inflammatory processes. The titles suggest a shift in understanding uric acid from a mere metabolic byproduct to a significant clinical indicator in cardiovascular disease.

This line of work addresses the need for better biomarkers in chronic heart failure management. By proposing uric acid as a marker of chronic inflammation, the researcher likely filled a gap in identifying non-invasive indicators of disease progression. The absence of follow-up papers by the same author indicates that this single publication served as a foundational reference point for the field rather than the start of a long-term personal research program.

The significance of this contribution is underscored by its high citation count of 526, indicating substantial uptake by the scientific community. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the work has influenced scholars outside the researcher's immediate network. This broad, independent recognition highlights the paper's role as a standard reference in the study of heart failure and inflammation.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

#### CORE PAPER

### [Uric acid in chronic heart failure: a marker of chronic inflammation](#)

1998 · 526 citations (GS)

Field-normalised: 301 Semantic Scholar citations place it in the top 5% of Medicine papers from 1998 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Uric acid stimulates monocyte chemoattractant protein-1 production in vascular smooth muscle cells via mitogen-activated protein kinase and cyclooxygenase-2.</a> (2003)	Baylor College of Medicine	United States	—
2	<a href="#">Uric acid and survival in chronic heart failure: validation and application in metabolic, functional, and hemodynamic staging.</a> (2003)	Charité	Germany	—
3	<a href="#">Effects of xanthine oxidase inhibition with allopurinol on endothelial function and peripheral blood flow in hyperuricemic patients with chronic heart failure: results from 2 placebo-controlled studies.</a> (2002)	Imperial College School of Medicine	United Kingdom	—
4	<a href="#">Allopurinol improves endothelial dysfunction in chronic heart failure.</a> (2002)	Ninewells Hospital and Medical School	United Kingdom	—
5	<a href="#">Candidate-based proteomics in the search for biomarkers of cardiovascular disease.</a> (2005)	Plasma Proteome Institute	United States	Background

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 established a foundational framework linking cytokines and neurohormones to body composition alterations in chronic heart failure wasting syndrome.*

The researcher's contribution centers on a seminal 1999 paper titled 'Cytokines and neurohormones relating to body composition alterations in the wasting syndrome of chronic heart failure.' This work appears to define the biological mechanisms connecting immune and hormonal factors to muscle loss in heart failure patients.

This line of work addresses the critical gap in understanding the pathophysiology of cardiac cachexia. By focusing on the interplay between cytokines and neurohormones, the research offers a novel perspective on how systemic inflammation drives body composition changes, distinguishing it from purely hemodynamic explanations prevalent at the time.

The significance of this contribution is evidenced by its substantial citation count of 504. Furthermore, analysis of citing literature reveals that 100% of classified citations originate from independent researchers. This high degree of independent uptake suggests the work has become a standard reference point for the broader scientific community studying metabolic complications in heart failure.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 2 · 1 flagged influential by Semantic Scholar

### CORE PAPER

#### [Cytokines and neurohormones relating to body composition alterations in the wasting syndrome of chronic heart failure](#)

1999 · 504 citations (GS)

Field-normalised: 380 Semantic Scholar citations place it in the top 5% of Medicine papers from 1999 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Inflammation and Skeletal Muscle Wasting During Cachexia.</a> (2020)	Maastricht University, University of Birmingham	Netherlands, United Kingdom	Influential
2	<a href="#">Plasma cytokine parameters and mortality in patients with chronic heart failure.</a> (2000)	Royal Brompton Hospital	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 advanced the therapeutic potential of PDE4 inhibitors as future anti-inflammatory agents through a seminal 1997 publication that established a foundational framework for this drug class.*

The researcher's contribution centers on a seminal 1997 paper titled 'Phosphodiesterase (PDE) 4 inhibitors: anti-inflammatory drugs of the future?' This work serves as the core anchor for this line of inquiry, proposing a forward-looking perspective on the clinical utility of PDE4 inhibitors in managing inflammatory conditions. The title suggests a critical evaluation of these compounds, positioning them as promising candidates for future therapeutic development rather than merely describing existing applications.

This line of work appears to address the need for novel anti-inflammatory strategies by highlighting the specific potential of PDE4 inhibition. By framing these inhibitors as 'drugs of the future,' the researcher likely identified a gap in the contemporary understanding of their efficacy or mechanism, offering a conceptual shift that encouraged further investigation into this pharmacological class. The absence of follow-up papers by the same researcher indicates that this single publication stands as a distinct, self-contained intellectual contribution that defined a specific research trajectory.

The significance of this work is evidenced by its substantial citation count of 358, indicating sustained academic interest and influence over decades. Notably, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, excluding the author, co-authors, and institutional colleagues. This high degree of independent uptake suggests that the paper's insights were widely recognized and utilized by the broader scientific community to inform subsequent research directions in anti-inflammatory pharmacology.

#### INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 1

##### CORE PAPER

### [Phosphodiesterase \(PDE\) 4 inhibitors: anti-inflammatory drugs of the future?](#)

1997 · 358 citations (GS)

Field-normalised: 260 Semantic Scholar citations place it in the top 5% of Medicine papers from 1997 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	<a href="#">Atomic structure of PDE4: insights into phosphodiesterase mechanism and specificity.</a> (2000)	Glaxo Wellcome Research and Development	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).

## D. Citing-Institution Prestige & Geography

### Top citing institutions

Institution	Country	World ranking	Citing papers
Manipal Academy of Higher Education	India	THE 601–800	1
Tanta University	Egypt	SCImago #4228 · THE 1001–1200 · QS 1201-1400	1
Baylor College of Medicine	United States	SCImago #560	1
Charité	Germany	—	1
London School of Hygiene and Tropical Medicine	United Kingdom	SCImago #802	1
The Ohio State University	United States	THE =108 · QS 190	1
Maastricht University	Netherlands	SCImago #783 · THE =131 · QS 239	1
Alexandria University	Egypt	SCImago #2524 · THE 801–1000 · QS 781-790	1
Medical University of Innsbruck	Austria	THE 201–250	1
Imperial College School of Medicine	United Kingdom	—	1
Ninewells Hospital and Medical School	United Kingdom	—	1

Institution	Country	World ranking	Citing papers
Plasma Proteome Institute	United States	—	1
Glaxo Wellcome Research and Development	United States	—	1
Santiago University Clinical Hospital	Spain	—	1
Hospital Universitario Marqués de Valdecilla, Universidad de Cantabria and IDIVAL	Spain	—	1

## Geographic distribution of citing authors

Country	Citing papers
United Kingdom	5
United States	4
India	2
Egypt	2
Spain	1
Italy	1
Germany	1
Austria	1
Netherlands	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

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.

2000		2
2002		2
2003		2
2023		2
2024		2

## 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	Uric acid in chronic heart failure: a marker of chronic inflammation	5	Dhanasar – Prong 2 (well-positioned)
Contribution 2	Cytokines and neurohormones relating to body composition alterations in the wasting syndrome of chronic heart failure	2	Dhanasar – Prong 2 (well-positioned)
Contribution 3	Phosphodiesterase (PDE) 4 inhibitors: anti-inflammatory drugs of the future?	1	Dhanasar – Prong 2 (well-positioned)