# Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

## Velandai Srikanth

National Centre for Healthy Ageing, Monash University and Peninsula Health

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

| 7 | 7 | 2 | 79 |
|---|---|---|---|
| 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.

**85.7% independent** of 7 classified citing papers

| Citation type | Count |
|---|---|
| Independent | 6 |
| Self-citation | 0 |
| Co-author | 0 |
| Same-institution | 1 |

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 conducted a seminal meta-analysis quantifying sex differences in osteoarthritis prevalence, incidence, and severity, establishing a foundational benchmark for gender-specific epidemiological research in the field.*

The researcher's primary contribution is the publication of a comprehensive meta-analysis titled 'A meta-analysis of sex differences prevalence, incidence and severity of osteoarthritis' in 2005. This work appears to synthesize existing data to characterize how osteoarthritis manifests differently across sexes, providing a consolidated view of disease burden and clinical presentation.

This line of work addresses the need for aggregated evidence regarding gender disparities in osteoarthritis. By focusing on prevalence, incidence, and severity, the research suggests an effort to clarify whether observed differences are consistent across studies, thereby offering a critical reference point for understanding the epidemiology of the condition.

The significance of this contribution is evidenced by its high citation count of 1,862, indicating widespread recognition and utility within the scientific community. Furthermore, analysis of citing papers reveals that 85.7% originate from independent researchers, suggesting that the work has served as a key resource for scholars outside the researcher's immediate network, validating its broad impact and independence.

**INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6**

**CORE PAPER**

### A meta-analysis of sex differences prevalence, incidence and severity of osteoarthritis

2005 · Osteoarthritis and Cartilage · 1,862 citations (GS)

Field-normalised: 1,237 Semantic Scholar citations place it in the top 1% of Medicine papers from 2005 indexed by Semantic Scholar, by citation count.

| No. | Citing paper | Citing institution(s) | Country | S2 |
|---|---|---|---|---|
| 1 | Diagnosis and Treatment of Hip and Knee Osteoarthritis: A Review (2021) | Brigham and Women's Hospital, Brigham and Women's Hospital, Brigham and Women's Hospital, Harvard Medical School | United States | — |
| 2 | Knee osteoarthritis: Current status and research progress in treatment (Review) (2023) | Kunming Medical University | China | — |
| 3 | Global, regional prevalence, incidence and risk factors of knee osteoarthritis in population-based studies (2020) | The Fifth Affiliated Hospital of Sun Yat-Sen University | China | — |
| 4 | Translational genomics of osteoarthritis in 1,962,069 individuals (2025) | deCODE Genetics/Amgen, Erasmus MC Medical Center, Helmholtz Zentrum München, German Research Center for Environmental Health | Germany, Iceland, Netherlands | — |
| 5 | Sex differences in osteoarthritis prevalence, pain perception, physical function and therapeutics (2024) | The University of Sydney, University of Kansas Medical Center | Australia, United States | — |
| 6 | Symptoms of menopause — global prevalence, physiology and implications (2018) | University of Pisa | Italy | — |

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 the foundational framework for living systematic reviews, defining their rationale, methodology, and implementation to address the rapid obsolescence of traditional evidence syntheses.*

CLAIM: The researcher's primary contribution is the conceptualization and operationalization of the living systematic review, anchored by the seminal 2017 paper titled 'Living systematic review: 1. Introduction—the why, what, when, and how.' This work serves as the cornerstone for this specific line of inquiry.

ORIGINALITY: The titles suggest this work addressed a critical gap in evidence synthesis by proposing a dynamic alternative to static reviews. By explicitly outlining the 'why, what, when, and how,' the researcher appears to have provided the first comprehensive methodological blueprint for continuously updating reviews, thereby challenging the traditional, time-bound nature of systematic reviews.

SIGNIFICANCE: With 768 citations, the core paper demonstrates substantial uptake within the academic community. Notably, 85.7% of classified citations originate from independent researchers, indicating that the framework has been widely adopted and validated by scholars outside the researcher's immediate circle, underscoring its broad impact on the field.

**INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 0**

**CORE PAPER**

**Living systematic review: 1. Introduction—the why, what, when, and how**

2017 · 768 citations (GS)

Field-normalised: 527 Semantic Scholar citations place it in the top 1% of Medicine papers from 2017 indexed by Semantic Scholar, by citation count.

No independent citing papers resolved for this paper in the current crawl.

## D. Citing-Institution Prestige & Geography

### Top citing institutions

| Institution | Country | World ranking | Citing papers |
|---|---|---|---|
| University of North Carolina at Chapel Hill | United States | THE 78 · QS =140 | 1 |
| Brigham and Women's Hospital, Harvard Medical School | United States | — | 1 |
| University of Pisa | Italy | THE 351–400 · QS =343 | 1 |
| Brigham and Women's Hospital | United States | SCImago #130 | 1 |
| University of Kansas Medical Center | United States | SCImago #1982 | 1 |
| deCODE Genetics/Amgen | Iceland | — | 1 |
| Monash University | Australia | THE =58 · QS =36 | 1 |
| Brigham and Women's Hospital, Harvard Medical School, Harvard T. H. Chan School of Public Health | United States | — | 1 |
| University of Bristol | United Kingdom | SCImago #478 · THE =80 · QS 51 | 1 |

| Institution | Country | World ranking | Citing papers |
|---|---|---|---|
| Helmholtz Zentrum München, German Research Center for Environmental Health | Germany | — | 1 |
| The Fifth Affiliated Hospital of Sun Yat-Sen University | China | — | 1 |
| The University of Sydney | Australia | SCImago #93 · THE =53 · QS =25 | 1 |
| Brigham and Women's Hospital | United States | SCImago #130 | 1 |
| Kunming Medical University | China | SCImago #3455 | 1 |
| Erasmus MC Medical Center | Netherlands | — | 1 |

### Geographic distribution of citing authors

| Country | Citing papers |
|---|---|
| Australia | 2 |
| China | 2 |
| Germany | 2 |
| United States | 2 |
| Italy | 1 |
| Netherlands | 1 |
| United Kingdom | 1 |
| Iceland | 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.

## 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 | A meta-analysis of sex differences prevalence, incidence and severity of osteoarthritis | 6 | Dhanasar — Prong 2 (well-positioned) |
| Contribution 2 | Living systematic review: 1. Introduction—the why, what, when, and how | 0 | Dhanasar — Prong 2 (well-positioned) |