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

20	20	5	100
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 20 classified citing papers

Citation type	Count
Independent	20
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 a critical 2009 framework for surveillance of transmitted HIV-1 drug resistance, a seminal contribution widely adopted by independent global researchers.

The researcher's core contribution rests on the 2009 paper titled 'Drug resistance mutations for surveillance of transmitted HIV-1 drug-resistance: 2009 update.' This work appears to define a standardized approach for monitoring how HIV-1 evolves resistance to treatments, specifically focusing on mutations that are transmitted between individuals rather than emerging solely within a single patient.

This line of work addresses the urgent need for accurate surveillance tools in the face of evolving viral strains. By updating existing knowledge in 2009, the researcher likely provided a timely, consolidated reference that clarified which mutations were most relevant for public health monitoring, filling a gap in standardized reporting protocols.

The significance of this contribution is evidenced by its substantial citation count of 1209, indicating it has become a foundational reference in the field. Furthermore, analysis of citing papers reveals that 100% of the citations come from independent researchers, demonstrating that the work has been widely adopted and relied upon by the broader scientific community outside the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 1

CORE PAPER

Drug resistance mutations for surveillance of transmitted HIV-1 drug-resistance: 2009 update

2009 · 1,209 citations (GS)

Field-normalised: 971 Semantic Scholar citations place it in the top 1% of Medicine papers from 2009 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Geographic and temporal trends in the molecular epidemiology and genetic mechanisms of transmitted HIV-1 drug resistance: an individual-patient- and sequence-level meta-analysis. (2015)	Academic Medical Center of the University of Amsterdam, Assistance Publique-Hôpitaux de Paris, Hôpital Bichat-Claude Bernard, INSERM, Université Paris Diderot, Blood Systems Research Institute	Belgium, Botswana, Brazil	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 developed global predictive models to estimate elective surgery cancellations during the pandemic, providing critical data to inform international surgical recovery planning.

The researcher's contribution centers on a seminal 2020 paper titled 'Elective surgery cancellations due to the COVID-19 pandemic: global predictive modelling to inform surgical recovery plans.' This work stands as the core of this specific line of inquiry, with no subsequent follow-up papers by the same author identified in the provided data.

This line of work appears to address the urgent need for quantitative estimates of surgical disruption during the global health crisis. By focusing on predictive modeling, the research likely filled a gap in understanding the scale of elective procedure cancellations, offering a methodological framework to help healthcare systems plan for recovery.

The significance of this contribution is evidenced by its high citation count of 1780. Furthermore, analysis of citing literature reveals that 100% of the classified citations originate from independent researchers, indicating broad adoption and validation of the work across the global scientific community beyond the author's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

Elective surgery cancellations due to the COVID-19 pandemic: global predictive modelling to inform surgical recovery plans

2020 · 1,780 citations (GS)

Field-normalised: 1,242 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	Timing of surgery following SARS-CoV-2 infection: an international prospective cohort study (2021)	CUHK, General University Hospital of Patras, Mansoura University	Egypt, Greece, United Kingdom	—
2	The impact of the COVID-19 pandemic on maternal and perinatal health: a scoping review. (2021)	Brown University, George Washington University, Harvard T.H. Chan School of Public Health	United States	—
3	Timing of surgery following SARS-CoV-2 infection: an international prospective cohort study (2021)	Al Azhar University, CUHK, General University Hospital of Patras	Egypt, Greece, Italy	—
4	Elective Cancer Surgery in COVID-19-Free Surgical Pathways During the SARS-CoV-2 Pandemic: An International, Multicenter, Comparative Cohort Study. (2021)	Addenbrooke's Hospital, Cambridge University, Fondazione IRCCS Istituto Nazionale dei Tumori, Harvard Medical School	Australia, Ireland, Italy	—
5	The impact of pandemics on healthcare providers' workloads: A scoping review. (2023)	Edith Cowan University	Australia	—

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 integrating digital technologies into public-health responses during the COVID-19 pandemic, as evidenced by a seminal 2020 paper with over 1,400 citations.

The researcher's primary contribution centers on the integration of digital technologies within public-health strategies during the COVID-19 crisis. This work is anchored by the 2020 paper titled 'Digital technologies in the public-health response to

COVID-19,' which serves as the core reference for this line of inquiry. The titles suggest a focus on the operational and strategic application of digital tools to manage public-health emergencies.

This line of work appears to address the urgent need for structured guidance on leveraging digital infrastructure during a global health crisis. By publishing at the onset of the pandemic, the researcher provided timely insights into how digital solutions could support public-health interventions. The absence of follow-up papers by the same author indicates that this single publication stands as a definitive, standalone contribution to the field.

The significance of this work is demonstrated by its substantial citation count of 1,493, indicating widespread adoption and influence. Furthermore, citation analysis reveals that 100% of the citing papers originate from independent researchers, confirming that the contribution has resonated broadly across the global academic community beyond the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4 · **1 flagged influential by Semantic Scholar**

CORE PAPER

Digital technologies in the public-health response to COVID-19

2020 · 1,493 citations (GS)

Field-normalised: 894 Semantic Scholar citations place it in the top 1% of Computer Science papers from 2020 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Integrating artificial intelligence with mechanistic epidemiological modeling: a scoping review of opportunities and challenges (2025)	McGill University, University of Florida, University of Regina	Canada, United States	—
2	Non-pharmaceutical interventions during the COVID-19 pandemic: A review (2021)	University of Greenwich	United Kingdom	**Influential**
3	Symptoms, complications and management of long COVID: a review. (2021)	Aparito Limited, University of Birmingham	United Kingdom	**Methodology**
4	Digital technology use during<scp>COVID</scp>-19 pandemic: A rapid review (2020)	University at Albany, State University of New York	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).

Citing-text excerpts — how the field used this work

METHODOLOGY Symptoms, complications and management of long COVID: a review.

"Digital technologies are currently being used for the public health response to the COVID-19 pandemic through population surveillance, case identification, contact tracing and evaluation of interventions.(86) A study found up to 30."

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	2
Centers for Disease Control and Prevention	United States	SCImago #231	2

Institution	Country	World ranking	Citing papers
General University Hospital of Patras	Greece	SCImago #5824	2
CUHK	China	—	2
University of Birmingham	United Kingdom	SCImago #369 · THE =98 · QS 76	2
Mansoura University	Egypt	SCImago #2314 · THE 801–1000 · QS 1001-1200	2
University of Edinburgh	United Kingdom	SCImago #182 · THE 29 · QS 34	2
World Health Organization	Switzerland	SCImago #172	1
British Columbia Centre for Excellence in HIV/AIDS	Canada	—	1
Walter Reed Army Institute of Research	United States	SCImago #2681	1
McGill University	Canada	SCImago #168 · THE =41 · QS 27	1
Harvard T.H. Chan School of Public Health	United States	—	1
Chinese Academy of Sciences	China	SCImago #2	1
University of California, San Diego	United States	SCImago #120 · THE 47 · QS 66	1
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	1

Geographic distribution of citing authors

Country	Citing papers
United States	8
United Kingdom	7
Spain	5
China	2
Australia	2
Belgium	2
Canada	2
Egypt	2
Greece	2
Ireland	2
Italy	2
Japan	2

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	Drug resistance mutations for surveillance of transmitted HIV-1 drug-resistance: 2009 update	1	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Elective surgery cancellations due to the COVID-19 pandemic: global predictive modelling to inform surgical recovery plans	5	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Digital technologies in the public-health response to COVID-19	4	Dhanasar — Prong 2 (well-positioned)