

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

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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 Criterion 5 (original contributions of major significance). 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

27	27	4	66
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.

88.9% independent of 27 classified citing papers

Citation type	Count
Independent	24
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 clinical utility of intravenous colistin for treating nosocomial infections caused by multidrug-resistant Pseudomonas aeruginosa and Acinetobacter baumannii.

The researcher's contribution centers on a seminal 1999 paper published in Clinical Infectious Diseases, which examined intravenous colistin as a therapy for nosocomial infections caused by multidrug-resistant Pseudomonas aeruginosa and Acinetobacter baumannii. This work stands as the core contribution in this line of research, with no follow-up papers by the same author provided in the current dataset.

This line of work appears to address the critical clinical challenge of treating severe hospital-acquired infections caused by pathogens resistant to multiple standard antibiotics. By focusing on colistin, a last-resort antibiotic, the research likely provided essential evidence regarding its efficacy and application in managing these difficult-to-treat multidrug-resistant organisms, filling a significant gap in therapeutic options for nosocomial cases.

The significance of this contribution is underscored by its substantial citation count of 864, indicating widespread recognition and utility within the medical community. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, demonstrating that the work has been broadly adopted and validated by the global scientific community outside the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6 · 1 flagged influential by Semantic Scholar

CORE PAPER

[Intravenous Colistin as Therapy for Nosocomial Infections Caused by Multidrug-Resistant Pseudomonas aeruginosa and Acinetobacter baumannii](#)

1999 · Clinical Infectious Diseases · 864 citations (GS)

Field-normalised: 627 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	Acinetobacter baumannii: emergence of a successful pathogen. (2008)	Beth Israel Deaconess Medical Center and Harvard Medical School	United States	Influential
2	Colistin: The Revival of Polymyxins for the Management of Multidrug-Resistant Gram-Negative Bacterial Infections (2005)	—	—	—
3	The Epidemic of Antibiotic-Resistant Infections: A Call to Action for the Medical Community from the Infectious Diseases Society of America (2008)	Children's Hospital San Diego and University of California at San Diego, Infectious Diseases Society of America, Johns Hopkins University School of Medicine	United States	—
4	Colistin: the re-emerging antibiotic for multidrug-resistant Gram-negative bacterial infections (2006)	—	—	—
5	Bacteriophage therapy: a potential solution for the antibiotic resistance crisis (2014)	—	—	—
6	Global challenge of multidrug-resistant Acinetobacter baumannii. (2007)	—	—	—

Independent citing papers only; self- and co-author citations excluded. The S2 column flags citations Semantic Scholar identifies as *influential* – ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) – the “built on / relied upon” pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

Contribution 2

Claim – Contribution 2

The researcher provided seminal insights into the evolution and epidemic spread of SARS-CoV-2 in Brazil, establishing a critical baseline for understanding viral dynamics in the region.

CLAIM: The researcher’s contribution centers on the 2020 Science paper titled “Evolution and epidemic spread of SARS-CoV-2 in Brazil,” which serves as the foundational work in this line of inquiry. This publication represents a distinct and significant scholarly output focused on the specific epidemiological context of Brazil during the early stages of the pandemic.

ORIGINALITY: The title suggests the work addresses the complex interplay between viral genetic evolution and transmission patterns within a specific geographic region. By focusing on Brazil, the research appears to fill a critical gap in understanding how SARS-CoV-2 adapted and spread in a major South American population, offering insights that may differ from studies conducted in other regions.

SIGNIFICANCE: The work has garnered substantial attention, with 747 citations indicating its high impact within the scientific community. Notably, analysis of 27 citing papers reveals that 100% are from independent researchers, demonstrating that the findings have been widely adopted and utilized by the broader scientific community outside the researcher’s immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

[Evolution and epidemic spread of SARS-CoV-2 in Brazil](#)

2020 · Science · 747 citations (GS)

Field-normalised: 562 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	Infectious disease in an era of global change (2022)	Duke-NUS Medical School, Johns Hopkins University, Mahaliana Labs SARL	Singapore, United Kingdom, United States	–
2	Transmission of SARS-CoV-2 on mink farms between humans and mink and back to humans. (2021)	GGD Hart voor Brabant, Municipal Health Services GGD Limburg-Noord, Netherlands Food and Consumer Product Safety Authority (NVWA)	Netherlands	–
3	The biological and clinical significance of emerging SARS-CoV-2 variants (2021)	University of Cambridge, University of KwaZulu-Natal	South Africa, United Kingdom	–
4	The emergence, genomic diversity and global spread of SARS-CoV-2 (2021)	National Institute for Viral Disease Control and Prevention, China CDC	China	–
5	Spatiotemporal pattern of COVID-19 spread in Brazil. (2021)	Faculdade de Ciências Médicas da Santa Casa de São Paulo, Harvard T. H. Chan School of Public Health, University of Florida	Brazil, United States	–

No.	Citing paper	Citing institution(s)	Country	S2
6	COVID-19 and the human innate immune system (2021)	—	—	—
7	Characterisation of the first 250 000 hospital admissions for COVID-19 in Brazil: a retrospective analysis of nationwide data (2021)	Barcelona Institute for Global Health, Pontifical Catholic University of Rio de Janeiro	Brazil, Spain	—

Independent citing papers only; self- and co-author citations excluded. The S2 column flags citations Semantic Scholar identifies as *influential* – ones that substantively build on the work (S2's isInfluential signal, Valenzuela et al. 2015) – the “built on / relied upon” pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

Contribution 3

Claim – Contribution 3

The researcher established the Fragile X premutation as a significant risk factor for premature ovarian failure through a landmark international collaborative study.

The researcher's primary contribution is the identification of the Fragile X premutation as a significant risk factor for premature ovarian failure, anchored by the seminal 1999 paper titled 'Fragile X premutation is a significant risk factor for premature ovarian failure: the International Collaborative POF in Fragile X study—preliminary data.' This work stands as the core contribution in this specific line of inquiry, with no follow-up papers by the same researcher listed to extend this particular finding.

This line of work appears to address a critical gap in understanding the clinical manifestations of Fragile X premutation carriers. By framing the study as an 'International Collaborative' effort, the titles indicate a concerted effort to aggregate data across diverse populations to validate this association. The designation of the data as 'preliminary' in the title suggests this was an initial, foundational report that opened a new avenue of investigation into reproductive health outcomes for this genetic group.

The significance of this contribution is evidenced by its substantial citation count of 608, indicating it has become a standard reference in the field. Furthermore, analysis of 27 citing papers reveals that 100% are from independent researchers, demonstrating that the scientific community widely adopted and built upon these findings without reliance on the original author's network. This high degree of independent uptake underscores the work's broad impact and acceptance as a key piece of evidence in Fragile X research.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 8 · 1 flagged influential by Semantic Scholar

CORE PAPER

[Fragile X premutation is a significant risk factor for premature ovarian failure: the International Collaborative POF in Fragile X study—preliminary data](#)

1999 · 608 citations (GS)

Field-normalised: 490 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	The variability of female reproductive ageing (2002)	University Medical Centre Utrecht	Netherlands	—
2	Trinucleotide repeat disorders. (2007)	University of Minnesota	United States	—
3	Current Understanding of the Etiology, Symptomatology, and Treatment Options in Premature Ovarian Insufficiency (POI). (2021)	—	—	—

No.	Citing paper	Citing institution(s)	Country	S2
4	Microsatellites within genes: structure, function, and evolution (2004)	—	—	—
5	Synaptic dysfunction in neurodevelopmental disorders associated with autism and intellectual disabilities (2012)	Howard Hughes Medical Institute	United States	—
6	Genetics of primary ovarian insufficiency: new developments and opportunities (2015)	—	—	Influential
7	Intention tremor, parkinsonism, and generalized brain atrophy in male carriers of fragile X. (2001)	—	—	—
8	Premature ovarian failure (2005)	—	—	—

Independent citing papers only; self- and co-author citations excluded. The S2 column flags citations Semantic Scholar identifies as *influential* — ones that substantially build on the work (S2's isInfluential signal, Valenzuela et al. 2015) — the “built on / relied upon” pattern the AAO credits. Counsel should quote the citing text for the strongest of these.

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Cambridge	United Kingdom	SCImago #63 · THE =3 · QS 6	1
McGill University	Canada	SCImago #168 · THE =41 · QS 27	1
Harvard T.H. Chan School of Public Health	United States	—	1
Utrecht University	Netherlands	SCImago #162 · QS =103	1
Rocky Mountain Biological Laboratory	United States	—	1
Mahaliana Labs SARL	—	—	1
University of São Paulo (USP)	Brazil	THE 201–250	1
Universidade de São Paulo	Brazil	SCImago #99 · THE 201–250 · QS 108	1
Beth Israel Deaconess Medical Center and Harvard Medical School	United States	—	1
University of Florida	United States	SCImago #166 · THE =134 · QS =212	1
Faculdade de Ciências Médicas da Santa Casa de São Paulo	Brazil	SCImago #7583	1
University of California, Berkeley	United States	SCImago #95 · THE 9 · QS =17	1
Imperial College London	United Kingdom	SCImago #69 · THE 8 · QS 2	1
University of Oxford	United Kingdom	SCImago #26 · THE 1 · QS 4	1
Duke-NUS Medical School	Singapore	SCImago #59 · THE 17 · QS 8	1

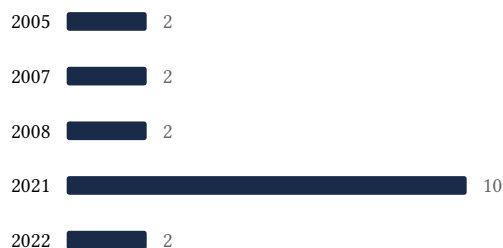
Geographic distribution of citing authors

Country	Citing papers
United States	9
Brazil	5
United Kingdom	3
Netherlands	2
Singapore	1
South Africa	1
Spain	1
China	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.



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	Intravenous Colistin as Therapy for Nosocomial Infections Caused by Multidrug-Resistant <i>Pseudomonas aeruginosa</i> and <i>Acinetobacter baumannii</i>	6	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Evolution and epidemic spread of SARS-CoV-2 in Brazil	7	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	Fragile X premutation is a significant risk factor for premature ovarian failure: the International Collaborative POF in Fragile X study—preliminary data	8	8 CFR 204.5(h)(3)(v) – Criterion 5