

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

11 Citing papers mapped	12 Citation edges	2 Home papers mapped	103 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.

72.7% independent of 11 classified citing papers

Citation type	Count
Independent	8
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 pioneered the molecular classification of diffuse large B-cell lymphoma using gene expression profiling, establishing a foundational framework for understanding disease heterogeneity.

CLAIM: The researcher’s seminal contribution is the identification of distinct molecular subtypes of diffuse large B-cell lymphoma through gene expression profiling, as detailed in their 2000 paper. This work serves as the cornerstone of their research line, with no subsequent follow-up papers by the same author listed in this specific context.

ORIGINALITY: The titles indicate a shift from traditional histological classification toward a data-driven, molecular approach. By applying gene expression profiling to this aggressive cancer, the researcher appears to have addressed the critical gap of understanding biological heterogeneity within what was previously considered a single disease entity, suggesting a novel method for stratifying patients based on molecular signatures rather than morphology alone.

SIGNIFICANCE: The core paper has accumulated 13,192 citations, indicating it is a highly influential and widely recognized reference in the field. Furthermore, citation analysis reveals that 72.7% of citing papers originate from independent researchers, demonstrating that the work has been adopted and built upon by the broader scientific community rather than just the researcher’s immediate circle, underscoring its broad impact and utility.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

[Distinct types of diffuse large B-cell lymphoma identified by gene expression profiling](#)

2000 · 13,192 citations (GS)

Field-normalised: 10,217 Semantic Scholar citations place it in the top 1% of Medicine papers from 2000 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	K-means clustering algorithms: A comprehensive review, variants analysis, and advances in the era of big data (2022)	Al Al-Bayt University, Sanning University, University of KwaZulu-Natal	China, South Africa	—
2	Toward a foundation model of causal cell and tissue biology with a Perturbation Cell and Tissue Atlas (2024)	Genentech	United States	—
3	Genetics and Pathogenesis of Diffuse Large B-Cell Lymphoma (2018)	BC Cancer Agency, City of Hope National Medical Center, Frederick National Laboratory for Cancer Research	Canada, Germany, Singapore	—
4	Advances in single-cell RNA sequencing and its applications in cancer research (2023)	Army Medical University	China	—
5	Impact of tumor microenvironment on efficacy of anti-CD19 CAR T cell therapy or chemotherapy and transplant in large B cell lymphoma (2024)	Kite, a Gilead Company	United States	—
6	Combination Targeted Therapy in Relapsed Diffuse Large B-Cell Lymphoma (2024)	Adaptive Biotechnologies, Greenebaum Comprehensive Cancer Center, University of Maryland Medical Center, National Cancer Institute	United States	—

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 developed a robust computational method for enumerating cell subsets from tissue expression profiles, establishing a foundational standard for single-cell data analysis.

The researcher’s primary contribution is the development of a robust computational framework for enumerating cell subsets from tissue expression profiles, as detailed in a seminal 2015 paper published in Nature Methods. This work stands as a core achievement in the field, providing a critical tool for analyzing complex biological data without reliance on subsequent follow-up publications by the same author.

This line of work appears to address the challenge of accurately identifying and quantifying distinct cell populations within heterogeneous tissue samples. By focusing on robustness, the method likely improved the reliability of cell subset enumeration, offering a standardized approach that researchers could apply to diverse expression profiles. The absence of follow-up papers by the researcher suggests the core method was sufficiently complete and impactful on its own.

The significance of this contribution is evidenced by its extensive adoption within the scientific community, with the core paper accumulating over 12,000 citations. Furthermore, analysis of citing literature indicates that 72.7% of citations originate from independent researchers, demonstrating that the method has been widely embraced and utilized by the broader field beyond the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 2

CORE PAPER

[Robust enumeration of cell subsets from tissue expression profiles](#)

2015 · Nature Methods · 12,890 citations (GS)

Field-normalised: 5,142 Semantic Scholar citations place it in the top 1% of Biology papers from 2015 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	TIMER2.0 for analysis of tumor-infiltrating immune cells (2020)	Dana Farber Cancer Institute, Harvard T.H. Chan School of Public Health, The University of Texas Southwestern Medical Center, West China Hospital of Stomatology, Sichuan University	China, United States	—
2	Cell type and gene expression deconvolution with BayesPrism enables Bayesian integrative analysis across bulk and single-cell RNA sequencing in oncology (2022)	Cornell University, Dalian University of Technology, Memorial Sloan Kettering Cancer Center	China, United States	—

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.

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
National Cancer Institute, National Institutes of Health	United States	—	3
National Cancer Institute	United States	SCImago #219	3
Stanford University	United States	SCImago #18 · THE =5 · QS 3	2
National Institutes of Health	United States	SCImago #44	2
Memorial Sloan Kettering Cancer Center	United States	SCImago #210	2
University of Texas MD Anderson Cancer Center	United States	—	1
Dana-Farber Cancer Institute	United States	SCImago #197	1
University of Pittsburgh School of Medicine	United States	—	1
The University of Texas Southwestern Medical Center	United States	SCImago #562	1
Weill Cornell Medicine	United States	SCImago #220	1
Mayo Clinic	United States	SCImago #88	1
University of California, San Francisco	United States	SCImago #98	1
BC Cancer	Canada	—	1
City of Hope National Medical Center	United States	SCImago #640	1
Sage Bionetworks	United States	—	1

Geographic distribution of citing authors

Country	Citing papers
United States	9
China	4
Canada	3
Germany	2
Spain	2
Russia	1
France	1
Belgium	1
Singapore	1
South Africa	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	Distinct types of diffuse large B-cell lymphoma identified by gene expression profiling	6	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Robust enumeration of cell subsets from tissue expression profiles	2	8 CFR 204.5(h)(3)(v) – Criterion 5