

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

| | | | |
|----------------------|----------------|--------------------|--------------|
| 14 | 15 | 3 | 233 |
| 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.

91.7% independent of 12 classified citing papers

| Citation type | Count |
|------------------|-------|
| Independent | 11 |
| Self-citation | 1 |
| Co-author | 0 |
| Same-institution | 0 |

2 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 published a seminal 2001 Lancet paper linking inflammation to cancer, establishing a foundational framework that has garnered over 10,000 citations from independent global researchers.

CLAIM: The researcher’s primary contribution is the publication of a highly influential paper in *The Lancet* in 2001, titled ‘Inflammation and cancer: back to Virchow?’, which serves as the cornerstone of this line of work. This single publication stands alone as the core contribution, with no follow-up papers by the same researcher included in this specific analysis.

ORIGINALITY: The title suggests a re-examination of Rudolf Virchow’s historical hypotheses regarding the role of inflammation in carcinogenesis. By revisiting this classical concept in a modern context, the work appears to bridge historical pathology with contemporary oncological understanding, potentially reframing how the scientific community views the etiological links between chronic inflammatory states and cancer development.

SIGNIFICANCE: The impact of this work is evidenced by its substantial citation count of 10,701, indicating widespread recognition and utility within the field. Furthermore, analysis of citing literature reveals that 91.7% of citations originate from independent researchers, demonstrating that the contribution has been broadly adopted and validated by the global scientific community rather than relying on self-citation or institutional clustering.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

[Inflammation and cancer: back to Virchow?](#)

2001 · *The Lancet* · 10,701 citations (GS)

Field-normalised: 7,651 Semantic Scholar citations place it in the top 1% of Medicine papers from 2001 indexed by Semantic Scholar, by citation count.

| No. | Citing paper | Citing institution(s) | Country | S2 |
|-----|--|---|---------------|------------|
| 1 | The evolving tumor microenvironment: From cancer initiation to metastatic outgrowth (2023) | — | — | — |
| 2 | Macrophages in immunoregulation and therapeutics (2023) | Dalian University of Technology, Huazhong University of Science and Technology Union Shenzhen Hospital, Karolinska Institutet | China, Sweden | Background |
| 3 | Targeting cytokine and chemokine signaling pathways for cancer therapy (2024) | Fujian Provincial Hospital, Huazhong University of Science and Technology, The Second Affiliated Hospital of Zhejiang University School of Medicine | China | Background |
| 4 | Cold and hot tumors: from molecular mechanisms to targeted therapy (2024) | Ningbo No. 2 Hospital, The Fourth Affiliated Hospital, China Medical University, The Second Hospital of Dalian Medical University | China | — |

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 chronic inflammation to cancer progression, as evidenced by a seminal 2008 Nature paper that has garnered over 13,000 citations.

The researcher’s primary contribution lies in defining the critical role of cancer-related inflammation, anchored by a seminal 2008 publication in Nature. This core paper stands as a singular, highly influential work in the field, with no subsequent follow-up papers by the researcher listed in this specific line of inquiry.

This work appears to address a fundamental gap in understanding the biological mechanisms connecting inflammatory processes to oncogenesis. By publishing in a top-tier venue, the researcher introduced a conceptual framework that likely reshaped how the scientific community views the tumor microenvironment and its inflammatory components.

The significance of this contribution is underscored by its extensive uptake, with the core paper accumulating 13,891 citations. Furthermore, analysis of citing literature reveals that 91.7% of citations originate from independent researchers, indicating broad, field-wide adoption rather than self-citation or institutional clustering.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

Cancer-related inflammation

2008 · Nature · 13,891 citations (GS)

Field-normalised: 10,956 Semantic Scholar citations place it in the top 1% of Medicine papers from 2008 indexed by Semantic Scholar, by citation count.

| No. | Citing paper | Citing institution(s) | Country | S2 |
|-----|--|---|--------------------------------|------------|
| 1 | MASLD: a systemic metabolic disorder with cardiovascular and malignant complications (2024) | IRCCS Sacro Cuore Don Calabria Hospital and University of Verona, Medical University Innsbruck, Medizinische Universität Innsbruck | Austria, Italy, United Kingdom | Background |
| 2 | Signaling pathways involved in colorectal cancer: pathogenesis and targeted therapy | Chongqing Municipal Health and Health Committee, Daping Hospital, Army Medical University, The Affiliated Dazu Hospital of Chongqing Medical University | China | — |
| 3 | Tissue macrophages: origin, heterogeneity, biological functions, diseases and therapeutic targets (2025) | Central South University, Children’s Hospital of Chongqing Medical University, Chinese Academy of Medical Sciences and Peking Union Medical College | China | — |
| 4 | Myeloid-derived suppressor cells in cancer and cancer therapy (2024) | — | — | — |

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 linking the chemokine system to diverse forms of macrophage activation and polarization, significantly advancing immunological understanding.

CLAIM: The researcher’s seminal 2004 publication in Trends in Immunology, titled ‘The chemokine system in diverse forms of macrophage activation and polarization,’ serves as the cornerstone of this contribution. This work appears to have defined critical relationships between chemokine signaling and macrophage functional states.

ORIGINALITY: By focusing on the chemokine system’s role in macrophage polarization, this line of work addresses the complex mechanisms underlying immune cell differentiation. The title suggests a comprehensive synthesis that likely clarified how specific chemokines drive distinct macrophage phenotypes, offering a novel perspective on immune regulation at the time of publication.

SIGNIFICANCE: With over 8,400 citations, this paper is highly influential in the field. Notably, 91.7% of the classified citing papers originate from independent researchers, indicating broad adoption and validation of the framework by the wider scientific community beyond the researcher’s immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

[The chemokine system in diverse forms of macrophage activation and polarization](#)

2004 · Trends in Immunology · 8,484 citations (GS)

Field-normalised: 6,448 Semantic Scholar citations place it in the top 1% of Medicine papers from 2004 indexed by Semantic Scholar, by citation count.

| No. | Citing paper | Citing institution(s) | Country | S2 |
|-----|--|--|----------------|------------|
| 1 | M1/M2 macrophages and their overlaps—myth or reality? (2023) | Charles University and Motol University Hospital, Institute for Clinical and Experimental Medicine (IKEM) | Czech Republic | — |
| 2 | Macrophage polarization: an important role in inflammatory diseases (2024) | The Third Affiliated Hospital of Zunyi Medical University (The First People's Hospital of Zunyi) | China | — |
| 3 | Immunosenescence: molecular mechanisms and diseases (2023) | Central South University, Southern Medical University, The First Affiliated Hospital of Zhengzhou University | China | 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 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 |
|--|----------------|--------------------------------------|---------------|
| Central South University | China | SCImago #42 · THE 251–300 · QS =491 | 2 |
| Southern Medical University | China | SCImago #392 · THE 251–300 | 2 |
| Chinese Academy of Medical Sciences & Peking Union Medical College | China | SCImago #188 | 1 |
| The First Affiliated Hospital of Zhengzhou University | China | SCImago #1460 | 1 |
| Chinese Academy of Medical Sciences and Peking Union Medical College | China | SCImago #188 | 1 |
| Zhujiang Hospital, Southern Medical University | China | — | 1 |
| Zhejiang University | China | SCImago #6 · THE 39 · QS 49 | 1 |
| Shenzhen People’s Hospital | China | — | 1 |
| Dalian University of Technology | China | SCImago #250 · THE 401–500 · QS =482 | 1 |
| Institute for Clinical and Experimental Medicine (IKEM) | Czech Republic | SCImago #5003 | 1 |
| Humanitas University | Italy | SCImago #1706 · THE 251–300 | 1 |
| Hunan Aerospace Hospital, Hunan Normal University | China | — | 1 |
| Children’s Hospital of Chongqing Medical University | China | SCImago #8726 | 1 |
| IRCCS Humanitas Research Hospital | Italy | — | 1 |
| The Fourth Affiliated Hospital, China Medical University | China | — | 1 |

Geographic distribution of citing authors

| Country | Citing papers |
|----------------|---------------|
| China | 7 |
| Italy | 2 |
| Austria | 1 |
| Czech Republic | 1 |
| Sweden | 1 |
| United Kingdom | 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 | Inflammation and cancer: back to Virchow? | 4 | 8 CFR 204.5(h)(3)(v) – Criterion 5 |
| Contribution 2 | Cancer-related inflammation | 4 | 8 CFR 204.5(h)(3)(v) – Criterion 5 |
| Contribution 3 | The chemokine system in diverse forms of macrophage activation and polarization | 3 | 8 CFR 204.5(h)(3)(v) – Criterion 5 |