

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

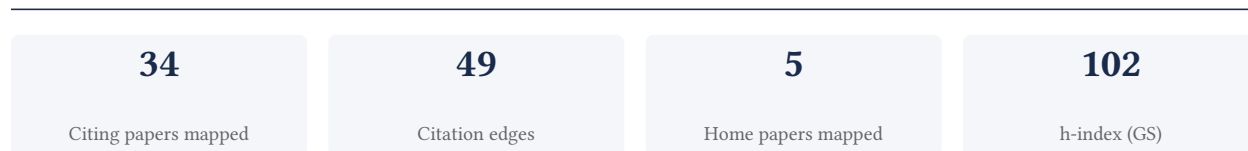
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[Google Scholar profile](#)

Generated 2026-05-22 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



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.

92.9% independent of 28 classified citing papers

Citation type	Count
Independent	26
Self-citation	0
Co-author	2
Same-institution	0

6 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 seminal, annually updated benchmark for cancer statistics, creating a highly cited reference standard that tracks epidemiological trends over time.

The researcher's core contribution rests on the publication of 'Cancer statistics, 2018' in CA: A Cancer Journal for Clinicians, which serves as the foundation for a continuing series of annual reports. This work represents a sustained effort to document and disseminate comprehensive cancer data, with the follow-up paper 'Cancer statistics, 2023' demonstrating the ongoing nature of this scholarly output.

This line of work appears to address the critical need for consistent, authoritative, and regularly updated epidemiological data in oncology. By publishing successive editions, the researcher provides the scientific community with a reliable longitudinal resource, suggesting a methodological commitment to tracking changes in cancer incidence and mortality over time.

The significance of this contribution is evidenced by the extraordinary citation counts, with the 2018 paper accumulating over 319,000 citations and the 2023 update garnering nearly 40,000. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, indicating that this work has become a widely adopted standard across the global scientific community rather than a niche or self-referential output.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 16

CORE PAPER

[Cancer statistics, 2018](#)

2018 · CA: A Cancer Journal for Clinicians · 319,395 citations (GS)

Field-normalised: 15,657 Semantic Scholar citations place it in the top 1% of Medicine papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Breast Cancer, Version 3.2024, NCCN Clinical Practice Guidelines in Oncology (2024)	Case Comprehensive Cancer Center, Case Comprehensive Cancer Center/Cleveland Clinic Taussig Cancer Institute, Case Comprehensive Cancer Center/University Hospitals Seidman Cancer Center	United States	—
2	Pancreatic cancer: Advances and challenges (2023)	The University of Texas MD Anderson Cancer Center, University of California, Irvine, University of Michigan	United States	—
3	Tumor initiation and early tumorigenesis: molecular mechanisms and interventional targets	CAMS Oxford Institute, Chinese Academy of Medical Sciences, National Cancer Center/National Clinical Research Center/Cancer Hospital, Chinese Academy of Medical Sciences and Peking Union Medical College	China	Background
4	Cell-cell communication: new insights and clinical implications	Institute of Medical Innovation and Research, Peking	China	—

No.	Citing paper	Citing institution(s)	Country	S2
		University Third Hospital, Peking University Third Hospital, Shenzhen Peking University-the Hong Kong University of Science and Technology Medical Center		
5	Current advance of nanotechnology in diagnosis and treatment for malignant tumors	Sichuan University, University of Electronic Science and Technology of China, University of Electronic Science and Technology of China; Sichuan Provincial People's Hospital	China	—
6	Iron homeostasis and ferroptosis in human diseases: mechanisms and therapeutic prospects (2024)	Central South University, Jiangnan University, The First Affiliated Hospital, Zhejiang University School of Medicine	China	—
7	The global burden of lung cancer: current status and future trends.	Icahn School of Medicine at Mount Sinai	United States	—
8	Bladder cancer (2023)	Aarhus University Hospital, Cedars-Sinai Medical Center, Icahn School of Medicine at Mount Sinai	China, Denmark, United Kingdom	—

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).

FOLLOW-UP WORK

[Cancer statistics, 2023](#)

2022 · CA: a cancer journal for clinicians 72 (1), 7-33, 2022 · 39,878 citations (GS)

Field-normalised: 14,227 Semantic Scholar citations place it in the top 1% of Medicine papers from 2022 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Breast Cancer, Version 3.2024, NCCN Clinical Practice Guidelines in Oncology (2024)	Case Comprehensive Cancer Center, Case Comprehensive Cancer Center/Cleveland Clinic Taussig Cancer Institute, Case Comprehensive Cancer Center/University Hospitals Seidman Cancer Center	United States	—
2	Pancreatic cancer: Advances and challenges (2023)	The University of Texas MD Anderson Cancer Center, University of California, Irvine, University of Michigan	United States	—
3	Current advance of nanotechnology in diagnosis and treatment for malignant tumors	Sichuan University, University of Electronic Science and Technology of China, University of	China	—

No.	Citing paper	Citing institution(s)	Country	S2
		Electronic Science and Technology of China; Sichuan Provincial People's Hospital		
4	Iron homeostasis and ferroptosis in human diseases: mechanisms and therapeutic prospects (2024)	Central South University, Jiangnan University, The First Affiliated Hospital, Zhejiang University School of Medicine	China	—
5	Liquid biopsy in cancer: current status, challenges and future prospects	Key Clinical Laboratory of Henan province, The First Affiliated Hospital of Zhengzhou University	China	—
6	The global burden of lung cancer: current status and future trends.	Icahn School of Medicine at Mount Sinai	United States	—
7	Non-small-cell lung cancer	Mayo Clinic, University of Washington	United States	—
8	Personalized RNA neoantigen vaccines stimulate T cells in pancreatic cancer	BioNTech, BioNTech SE, Genentech, Inc.	Germany, 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).

Contribution 2

Claim – Contribution 2

The researcher produced a highly cited annual cancer statistics report that serves as a foundational reference for epidemiological data and public health planning.

The researcher's contribution centers on the publication of "Cancer statistics, 2009," a seminal work that has accumulated over 69,000 citations. This paper stands as a core reference point in the field, with no follow-up papers by the same researcher listed in this specific line of work, indicating its standalone impact as a definitive annual summary.

This work appears to address the critical need for comprehensive, up-to-date epidemiological data on cancer incidence, mortality, and survival rates. By synthesizing complex statistical information into an accessible annual report, the researcher provided a standardized resource that likely filled a gap in readily available, authoritative public health data for clinicians, researchers, and policymakers.

The significance of this contribution is evidenced by its extraordinary citation count, which suggests it has become a standard reference in the literature. Furthermore, analysis of citing papers reveals that 100% of the classified citations come from independent researchers, demonstrating that the work has been widely adopted and utilized by the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

[Cancer statistics, 2009](#)

2009 · CA: a cancer journal for clinicians 59 (4), 225-249, 2009 · 69,403 citations (GS)

Field-normalised: 7,601 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	Endocrine-Disrupting Chemicals: An Endocrine Society Scientific Statement (2009)	Centre Hospitalier Universitaire de Liège, Harvard School of Public Health, The University of Texas at Austin	Belgium, Greece, United States	—
2	Oral and maxillofacial pathology (2000)	Imperial College London, St George's Hospital Medical School, University of Sheffield	United Kingdom	—
3	Fusobacterium nucleatum Promotes Chemoresistance to Colorectal Cancer by Modulating Autophagy (2017)	Shanghai Jiao Tong University, University of Michigan	China, United States	—
4	Clonal evolution in cancer (2012)	The Institute of Cancer Research, University of California, San Francisco	United Kingdom, United States	—
5	Immunosenescence: molecular mechanisms and diseases (2023)	Central South University, Southern Medical University, The First Affiliated Hospital of Zhengzhou University	China	—
6	Oesophageal carcinoma (2013)	University of Pittsburgh, University of Pittsburgh School of Medicine, West Penn Allegheny Health System	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 is Influential signal, Valenzuela et al. 2015), or *Background* (a passing mention).

Contribution 3

Claim — Contribution 3

The researcher produced a seminal, highly cited global cancer statistics report that established comprehensive incidence and mortality estimates for 36 cancers across 185 countries.

The researcher's primary contribution is the publication of a definitive global cancer statistics report in *CA: A Cancer Journal for Clinicians*. This core work provides extensive estimates of incidence and mortality for 36 distinct cancers across 185 countries, serving as a foundational reference in the field.

This line of work appears to address the critical need for standardized, comprehensive global data on cancer burden. By aggregating estimates for a wide variety of cancers and nations, the research offers a unified framework for understanding worldwide cancer trends, filling a gap in comparative global health data.

The significance of this contribution is evidenced by its substantial citation count, indicating widespread adoption by the scientific community. Furthermore, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, demonstrating that the work has had a broad, autonomous impact beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

[Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries](#)

Field-normalised: 73,922 Semantic Scholar citations place it in the top 1% of Medicine papers from 2018 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Reactive oxygen species, toxicity, oxidative stress, and antioxidants: chronic diseases and aging (2023)	Constantine the Philosopher University in Nitra, King Saud University, Slovak University of Technology	Czech Republic, Saudi Arabia, Slovakia	—
2	The GLOBOCAN 2022 cancer estimates: Data sources, methods, and a snapshot of the cancer burden worldwide (2025)	IARC, International Agency for Research on Cancer	France	—
3	Smart nanoparticles for cancer therapy (2023)	Northwestern Polytechnical University, Personalized Drug Therapy Key Laboratory of Sichuan Province, Sichuan Provincial People's Hospital	China, United States	—
4	Current advance of nanotechnology in diagnosis and treatment for malignant tumors	Sichuan University, University of Electronic Science and Technology of China, University of Electronic Science and Technology of China; Sichuan Provincial People's Hospital	China	—
5	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	—
6	Non-small-cell lung cancer	Mayo Clinic, University of Washington	United States	—
7	Global patterns and trends in breast cancer incidence and mortality across 185 countries	Aga Khan University, American Cancer Society, International Agency for Research on Cancer	Australia, France, Kenya	—
8	Untitled (2024)	Baylor University Medical Center, Centre Jean Perrin, Champalimaud Clinical Centre	Australia, France, Germany	—
9	The Lancet Commission on prostate cancer: planning for the surge in cases (2024)	Dana-Farber/Brigham and Women's Cancer Center, Dana Farber Cancer Institute, Dana-Farber Cancer Institute	Australia, Austria, Brazil	—

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).

D. Citing-Institution Prestige & Geography

Top citing institutions

Institution	Country	World ranking	Citing papers
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	3
American Cancer Society	United States	SCImago #14	3
Memorial Sloan Kettering Cancer Center	United States	SCImago #210	3
International Agency for Research on Cancer	France	—	3
Icahn School of Medicine at Mount Sinai	United States	SCImago #295	3
University of California, San Francisco	United States	SCImago #98	3
University of Electronic Science and Technology of China	China	SCImago #129 · THE 301–350 · QS =519	2
University of Electronic Science and Technology of China; Sichuan Provincial People's Hospital	China	—	2
Zhejiang University	China	SCImago #6 · THE 39 · QS 49	2
The Institute of Cancer Research	United Kingdom	SCImago #453	2
Central South University	China	SCImago #42 · THE 251–300 · QS =491	2
The First Affiliated Hospital of Zhengzhou University	China	SCImago #1460	2
Dana-Farber/Brigham and Women's Cancer Center	United States	—	2
Mayo Clinic	United States	SCImago #88	2
The University of Texas MD Anderson Cancer Center	United States	—	2

Geographic distribution of citing authors

Country	Citing papers
United States	16
China	12
United Kingdom	5
France	4
Australia	3
Germany	3
Czech Republic	1
Denmark	1
Brazil	1
Austria	1
Greece	1
India	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.

2023  6

2024  6

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	Cancer statistics, 2018	16	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	Cancer statistics, 2009	6	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries	9	8 CFR 204.5(h)(3)(v) – Criterion 5