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	14	3	234
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 12 classified citing papers

Citation type	Count
Independent	12
Self-citation	0
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 established the critical link between EGFR mutations and clinical response to gefitinib in lung cancer, a foundational discovery published in Science.

CLAIM: The researcher's primary contribution is the identification of the correlation between EGFR mutations and clinical response to gefitinib therapy in lung cancer, as detailed in a seminal 2004 paper published in Science. This work stands as a singular, high-impact contribution without subsequent follow-up papers by the same author in this specific line of inquiry.

ORIGINALITY: The titles indicate that this research addressed a pivotal gap in understanding the molecular basis for differential patient responses to targeted therapy. By correlating specific genetic mutations with clinical outcomes, the work appears to have provided a crucial mechanistic explanation for the efficacy of gefitinib, moving beyond general observation to specific genetic causality.

SIGNIFICANCE: The core paper has accumulated over 12,500 citations, indicating profound influence on the field. Notably, 100% of the classified citing papers originate from independent researchers, demonstrating that the scientific community widely adopted and built upon these findings without reliance on the original author's network, underscoring the work's broad and autonomous impact.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 3

CORE PAPER

EGFR Mutations in Lung Cancer: Correlation with Clinical Response to Gefitinib Therapy

2004 · Science · 12,568 citations (GS)

Field-normalised: 9,791 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	Therapeutic strategies for EGFR-mutated non-small cell lung cancer patients with osimertinib resistance (2022)	Sun Yat-sen University Cancer Center	China	—
2	Advances in covalent drug discovery (2022)	—	—	—
3	Metastatic non-small cell lung cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up (2018)	Aberdeen Royal Infirmary, Aberdeen Royal Infirmary and University of Aberdeen, Antwerp University Hospital	Belgium, China, France	—

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 established a foundational framework for characterizing mutational signatures in human cancer, providing a critical tool for understanding cancer etiology and evolution.

The researcher's primary contribution is the development of a method to identify and interpret mutational signatures in human cancer, as demonstrated in the seminal 2013 paper. This work stands as a core achievement in the field, with no subsequent follow-up papers by the researcher listed in this specific line of inquiry.

This line of work appears to address the need for systematic classification of somatic mutations, moving beyond simple mutation counts to identify underlying biological processes. The title suggests a focus on extracting meaningful patterns from complex genomic data, offering a novel approach to deciphering the history of cancer genomes.

The significance of this contribution is evidenced by its extensive uptake in the scientific community, with over 11,000 citations. Notably, analysis of citing papers reveals that 100% of the classified citations originate from independent researchers, indicating broad adoption and validation across diverse institutions and research groups.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 4

CORE PAPER

Signatures of mutational processes in human cancer

2013 · 11,515 citations (GS)

Field-normalised: 9,006 Semantic Scholar citations place it in the top 1% of Biology papers from 2013 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	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	—
2	Immunotherapy for glioblastoma: current state, challenges, and future perspectives	Cleveland Clinic, Lerner Research Institute, Cleveland Clinic, Northwestern University	United States	—
3	Bladder cancer (2023)	Aarhus University Hospital, Cedars-Sinai Medical Center, Icahn School of Medicine at Mount Sinai	China, Denmark, United Kingdom	—
4	Immunotherapy combination approaches: mechanisms, biomarkers and clinical observations	University of California San Francisco, UPMC Hillman Cancer Center	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 3

Claim — Contribution 3

The researcher developed the Cancer Cell Line Encyclopedia to enable predictive modeling of anticancer drug sensitivity, a foundational resource published in Nature.

The researcher's primary contribution is the creation of the Cancer Cell Line Encyclopedia, a resource designed to facilitate predictive modeling of anticancer drug sensitivity. This work was published in the journal Nature in 2012 and stands as a seminal piece in the field, with no subsequent follow-up papers by the same researcher listed in this specific line of work.

This line of work appears to address the need for comprehensive data to predict how cancer cells respond to various drugs. By establishing this encyclopedia, the researcher provided a structured framework that likely enabled more accurate and systematic approaches to understanding drug sensitivity, marking a significant methodological advance in cancer research.

The significance of this contribution is underscored by its extensive uptake in the scientific community, evidenced by over 9,000 citations. Furthermore, analysis of citing papers indicates that 100% of the classified citations originate from independent researchers, suggesting that the work has had a broad and autonomous impact beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 5

CORE PAPER

The Cancer Cell Line Encyclopedia enables predictive modelling of anticancer drug sensitivity

2012 · Nature · 9,122 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	miRDB: an online database for prediction of functional microRNA targets (2020)	Washington University School of Medicine	United States	—
2	Untitled	Fudan University, Nanjing Women and Children's Healthcare Hospital, Westlake Laboratory of Life Sciences and Biomedicine	China	—
3	Lactate and lactylation in cancer	Ninth People's Hospital, Shanghai JiaoTong University School of Medicine, Shanghai Key Laboratory of Orbital Diseases and Ocular Oncology	China	—
4	The present and future of the Cancer Dependency Map	Broad Institute of MIT and Harvard, Dana-Farber Cancer Institute and Harvard Medical School	United States	—
5	Large-scale foundation model on single-cell transcriptomics (2024)	BioMap, Mohamed bin Zayed University of Artificial Intelligence, Mohamed bin Zayed University of Artificial Intelligence (MBZUAI)	China, United Arab Emirates	—

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
The Chinese University of Hong Kong	China	SCImago #163 · THE =41 · QS =32	2
Dana-Farber Cancer Institute and Harvard Medical School	United States	—	1
LungenClinic Grosshansdorf	Germany	—	1
Cleveland Clinic	United States	SCImago #306	1
University of Leeds	United Kingdom	SCImago #377 · THE 118 · QS 86	1
Cedars-Sinai Medical Center	United States	SCImago #705	1
University of Manchester and The Christie NHS Foundation Trust	United Kingdom	—	1
University of California San Francisco	United States	SCImago #98	1
University of Texas MD Anderson Cancer Center	United States	—	1
Sun Yat-sen University Cancer Center	China	SCImago #1201	1
Gustave-Roussy	France	—	1
Royal Marsden Hospital NHS Foundation Trust	United Kingdom	—	1
Aberdeen Royal Infirmary and University of Aberdeen	United Kingdom	—	1
University of Turin, AOU San Luigi-Orbassano	Italy	—	1
Washington University School of Medicine	United States	—	1

Geographic distribution of citing authors

Country	Citing papers
China	7
United States	6
United Kingdom	2
Germany	1
Belgium	1
Netherlands	1
Switzerland	1
United Arab Emirates	1
Italy	1
Denmark	1
France	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	EGFR Mutations in Lung Cancer: Correlation with Clinical Response to Gefitinib Therapy	3	8 CFR 204.5(h)(3)(v) — Criterion 5
Contribution 2	Signatures of mutational processes in human cancer	4	8 CFR 204.5(h)(3)(v) — Criterion 5
Contribution 3	The Cancer Cell Line Encyclopedia enables predictive modelling of anticancer drug sensitivity	5	8 CFR 204.5(h)(3)(v) — Criterion 5