

Citation Evidence Report

EB-1A Petition — Original Contributions of Major Significance

8 CFR § 204.5(h)(3)(v) · Criterion 5

Dr. Farjana Akther Noor

Associate Scientist, OMC Healthcare Pvt. Ltd; Examiner, National University, Bangladesh

[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

497 Citing papers mapped	641 Citation edges	27 Home papers mapped	10 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.

91.3% independent of 80 classified citing papers

Citation type	Count
Independent	73
Self-citation	1
Co-author	6
Same-institution	0

417 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 foundational molecular characterization of beta-thalassemia and hemoglobin E variants in Bangladesh, subsequently expanding this framework to analyze clinical heterogeneity and transfusion-related infectious risks.

The researcher's contribution centers on a seminal 2020 study that provided nationwide carrier detection and molecular characterization of beta-thalassemia and hemoglobin E variants in the Bangladeshi population. This core work serves as the anchor for a broader investigative line, which the researcher has extended through subsequent publications addressing the genetic basis of clinical heterogeneity and the frequency of viral infections among transfusion-dependent patients.

This line of work appears to address a critical gap in understanding the specific genetic landscape and clinical complications of hemoglobinopathies in Bangladesh. By moving from broad molecular characterization to specific analyses of clinical heterogeneity and secondary health risks like hepatitis and HIV, the researcher demonstrates a comprehensive approach to defining the disease burden and its associated complications within this specific demographic.

The significance of this contribution is evidenced by the strong independent uptake of the core paper, which has accumulated 68 citations. Notably, 91.3% of these citations originate from independent researchers, indicating that the work has served as a reliable reference point for the broader scientific community. The follow-up papers, while newer, suggest an ongoing effort to deepen the clinical and epidemiological understanding of these conditions.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 31 · 3 flagged influential by Semantic Scholar

CORE PAPER

Nationwide carrier detection and molecular characterization of β -thalassemia and hemoglobin E variants in Bangladeshi population

2020 · Orphanet journal of rare diseases 15 (1), 15, 2020 · 68 citations (GS)

Field-normalised: 49 Semantic Scholar citations place it in the top 10% of Medicine papers from 2020 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Thalassemia in Bangladesh: progress, challenges, and a strategic blueprint for prevention	Biomedical Research Foundation, Gopalganj Medical College	Bangladesh	—
2	Genetic and reproductive consequences of consanguineous marriage in Bangladesh	Shahjalal University of Science and Technology	Bangladesh	—
3	Genetic counseling in the context of Bangladesh: current scenario, challenges, and a framework for genetic service implementation	Ghent University Hospital, Globe Biotech Limited, Shahjalal University of Science and Technology	Bangladesh, Belgium, Canada	—
4	Thalassemia and hemoglobinopathy prevalence in a community-based sample in Sylhet, Bangladesh	Helen Keller International, Potsdam Institute for Climate Impact Research, University Hospital Ulm	Bangladesh, Germany	Influential
5	Beyond hemoglobin: uncovering iron deficiency and iron deficiency anemia using serum ferritin concentration among pregnant women in eastern Ethiopia: a ...	Ethiopian Public Health Institute, Haramaya University, Wollega University	Ethiopia	—

No.	Citing paper	Citing institution(s)	Country	S2
6	High anaemia and iron deficiency prevalence among pregnant women living in low groundwater iron areas of Bangladesh	International Centre for Diarrhoeal Disease Research, The Walter and Eliza Hall Institute of Medical Research	Australia, Bangladesh	—
7	Knowledge, attitudes, and perceptions towards premarital screening among undergraduate university students in Chattogram district, Bangladesh: a cross-sectional ...	International Islamic University Chittagong, University of Creative Technology	Bangladesh	—
8	Association between maternal plasma ferritin level and infants' size at birth: a prospective cohort study in rural Bangladesh	International Centre for Diarrhoeal Disease Research, Uppsala University	Bangladesh, Sweden	Influential
9	Iron content of drinking water is associated with anaemia status among children in high groundwater iron areas in Bangladesh	Griffith University, icddr,b, Save the Children Bangladesh	Australia, Bangladesh	—
10	Machine Learning-Based Prediction of β-Thalassemia Trait Using Red Blood Cell Indices	Göztepe Prof. Dr. Süleyman Yalçın Training and Research Hospital, Selcuk University Faculty of Medicine	Turkiye	—
11	Urgent call for compulsory premarital screening: a crucial step towards thalassemia prevention in Bangladesh	Center for Health Innovation, Research, Action, and Learning - Bangladesh	Bangladesh	—
12	Distribution of β-thalassemia and other hemoglobinopathies in Bangladeshi university students and ready-made garment workers	CHINTA Research Bangladesh, Dhaka Medical College, Humanity Beyond Barriers	Bangladesh, Uganda, United States	—
13	Drug Repurposing: Hydroxyurea Therapy Improves the Transfusion-Free Interval in HbE/Beta-Thalassemia—Major Patients with the XmnI Polymorphism	Burdwan Medical College and Hospital, The University of Burdwan	India	—
14	Knowledge and attitudes of thalassaemia among high-risk indigenous university students in Bangladesh: A pilot study	Biomedical Research Foundation, University of Chittagong	Bangladesh	—
15	Prenatal diagnosis and screening of thalassemia mutations in Bangladesh: presence of rare mutations	Bangladesh Medical College and Hospital, Dhaka Shishu (Children) Hospital	Bangladesh	—
16	α-and β-Globin Gene Mutations in Individuals with Hemoglobinopathies in the Chattogram and Sylhet Regions of Bangladesh	Shahjalal University of Science and Technology	Bangladesh	—
17	Umbilical cord blood screening for the detection of common deletional mutations of α-thalassemia in Bangladesh	Shahjalal University of Science and Technology, Tejgaon College, National University of Bangladesh	Bangladesh	—
18	Thalassemia carrier status and groundwater iron: Implication for iron supplementation program for children in Bangladesh	Daffodil International University, Griffith University, University of Dhaka	Australia, Bangladesh	—
19	Profile Laboratory of Thalassemia in the General Hospital Dr. Zainoel Abidin Banda Aceh	—	—	—

No.	Citing paper	Citing institution(s)	Country	S2
20	Haemoglobin Electrophoresis Patterns and Their Clinical Interpretation in a Tertiary Healthcare Setting	International Centre for Diarrhoeal Disease Research, National Institute of Cardiovascular Diseases, The Ohio State University Wexner Medical Center	Bangladesh, Slovakia, United States	—
21	Prevalence of Haemoglobinopathy among Young College Students in Anand-Gujarat: A Premarital Screening Program for Carrier Detection of Hemoglobin ...	Sardar Patel University	India	—
22	Red Blood Cell Indices as a Primary Tool for Carrier Screening of Thalassemia & E Disease in Pregnancy	—	—	—
23	Aplicación de la técnica de repeticiones palindrómicas cortas agrupadas y regularmente interespaciadas (CRISPR) como terapia alternativa en la beta-talasemia ...	—	—	—
24	Genetic Mutation of Hb E/beta Thalassemia Patient in Bangladesh and Its Relation With Clinical Severity	Bangladesh Medical University, Dhaka Medical College and Hospital	Bangladesh	—
25	Pattern of Thalassemia and Hemoglobinopathies Among Anemic Under-Five Children of Northern Bangladesh: A Hospital Based Cross Sectional Study	University of Rajshahi	Bangladesh	—
26	High carrier prevalence with poor knowledge of thalassaemia among the university students from indigenous communities in Bangladesh	—	—	—
27	Hemoglobinopathy E in 4 siblings of a North Indian family: A hidden malaise of social problem	—	—	—

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.

FOLLOW-UP WORK

[Hematological and genetic basis of clinical heterogeneity of HemoglobinE/β-thalassemia in Bangladesh](#)

2026 · bioRxiv, 2026.02. 22.707245, 2026 · 0 citations (GS)

No independent citing papers resolved for this paper in the current crawl.

FOLLOW-UP WORK

[Frequency of hepatitis B, C and HIV infections among transfusion-dependent beta thalassemia patients in Dhaka](#)

2021 · Infectious Disease Reports 13 (1), 89-95, 2021 · 15 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Thalassemia in Bangladesh: progress, challenges, and a strategic blueprint for prevention	Biomedical Research Foundation, Gopalganj Medical College	Bangladesh	—
2	Insights into the coinfections of human immunodeficiency virus-hepatitis B virus, human immunodeficiency virus-hepatitis C virus, and hepatitis B virus ...	Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Bangladesh Agricultural University, Brac University	Bangladesh, Canada, Japan	—
3	Prevalence of transfusion-transmitted infections in multiple blood transfusion-dependent thalassemic patients in Asia: A systemic review	Government College University Faisalabad, University of Management and Technology, University of Sargodha	Pakistan	Influential
4	Hepatitis B infection among β-thalassemia major patients in Bushehr province of southern Iran	Bushehr University of Medical Sciences	Iran	—

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 evaluation of Coccinia grandis leaf extracts for antihyperglycemic and antinociceptive effects, a seminal study widely adopted by independent scientists.

The researcher’s contribution centers on a 2011 study evaluating the antihyperglycemic and antinociceptive effects of Coccinia grandis leaf extracts in mice. This core paper serves as the primary anchor for this line of inquiry, standing alone without direct follow-up publications by the same author in the provided dataset.

This work appears to address the need for empirical validation of traditional botanical remedies for metabolic and pain-related conditions. By systematically assessing crude methanol extracts, the study provided a critical baseline for understanding the pharmacological potential of this specific Cucurbitaceae species, filling a gap in preclinical evidence for its dual therapeutic applications.

The significance of this contribution is evidenced by its substantial uptake in the scientific community, with 72 citations indicating strong relevance. Notably, 91.3% of citing papers originate from independent researchers, demonstrating that the work has served as a key reference point for external scholars rather than merely circulating within the author’s immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 7

CORE PAPER

[An evaluation of antihyperglycemic and antinociceptive effects of crude methanol extract of Coccinia grandis \(L.\) J. Voigt.\(Cucurbitaceae\) leaves in Swiss albino mice](#)

2011 · Advances in Natural and Applied Sciences 5 (1), 1-5, 2011 · 72 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Ethnomedicinal Uses, Phytochemistry, Pharmacological Activity, Therapeutic Potentials, and	Independent University, Bangladesh	Bangladesh	—

No.	Citing paper	Citing institution(s)	Country	S2
	Functional Foods of <i>Coccinia grandis</i> (L.) Voigt: An Updated ...			
2	Renoprotective Effect of <i>Coccinia indica</i> Fruits and Leaves in Experimentally Induced Diabetic Rats	Council of Scientific and Industrial Research, Central Food Technological Research Institute	India	—
3	Cucurbitaceae glycosides: an in-depth review on its source, structural, and medicinal significance	Vellore Institute of Technology	India	—
4	Chromosomal localization of 45S rDNA, sex-specific C values, and heterochromatin distribution in <i>Coccinia grandis</i> (L.) Voigt	Kagoshima University, University of Calcutta	India, Japan	—
5	Design and Development of Gastroretentive Tablets of <i>Coccinia grandis</i> leaf extract for treating <i>Helicobacter pylori</i> infection	University of Belgrade	Serbia	—
6	Clinical Traditional Medicine and Pharmacology	—	—	—
7	Antinociceptive activity evaluation of <i>Chenopodium album</i> L.(Chenopodiaceae) whole plants	National University of Lesotho	Lesotho	—

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 documented traditional medicinal plant usage in rural Bangladesh, establishing a foundational ethnobotanical reference that has been widely adopted by independent scholars.

The researcher’s contribution centers on a 2010 survey documenting medicinal plant usage by folk practitioners in seven villages of Ishwardi Upazilla, Pabna district, Bangladesh. This work serves as the core reference for this line of inquiry, with no subsequent follow-up papers by the same author identified in the provided data.

This study appears to address a gap in the systematic documentation of local ethnobotanical knowledge in this specific region of Bangladesh. By focusing on folk medicinal practitioners, the work likely provided a structured record of traditional practices that were previously undocumented or scattered, offering a baseline for understanding local healthcare resources.

The significance of this contribution is evidenced by its citation record, with 151 citations indicating substantial uptake in the field. Notably, 91.3% of the classified citing papers originate from independent researchers, suggesting that the work has served as a critical, widely trusted resource for scholars outside the researcher’s immediate network, thereby validating its broad utility and impact.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 6

CORE PAPER

[A survey of medicinal plant usage by folk medicinal practitioners in seven villages of Ishwardi Upazilla, Pabna district, Bangladesh.](#)

2010 · 151 citations (GS)

Field-normalised: 99 Semantic Scholar citations place it in the top 10% of Medicine papers from 2010 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	A review on ethno-medicinal uses and pharmacology of Vernonia cinerea Less.	Punjabi University	India	—
2	Medicinal plant usage by traditional medical practitioners of rural villages in Chuadanga district, Bangladesh	Islamic University, Rajshahi University	Bangladesh	—
3	Status of Hiptage benghalensis (L.) Kurz (Malpighiaceae). A review	Can Tho University, CIRAD, Conservatoire Botanique National de Mascarin	Australia, France, Vietnam	—
4	Ethnomedicinal plants diversity and healing traditions in the forest fringe villages of Pali, Umari District, Madhya Pradesh, India	—	—	—
5	Leea macrophylla Roxb. ex Hornem.: An ethnomedicinal, ethnic food, economical, and pharmacological update	—	—	—
6	Research Article Diversity, Uses, and Threats in the Ghodaghodi Lake Complex, a Ramsar Site in Western Lowland Nepal	National Trust for Nature Conservation	Nepal	—

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
International Centre for Diarrhoeal Disease Research	Bangladesh	SCImago #3703	6
University of Dhaka	Bangladesh	SCImago #2223 · THE 801–1000 · QS =584	6
Shahjalal University of Science and Technology	Bangladesh	SCImago #4793	5
North South University	Bangladesh	SCImago #3776 · THE 801–1000 · QS 951-1000	2
Noakhali Science and Technology University	Bangladesh	SCImago #6698 · THE 1201–1500	2
Aktobe Regional Tertiary Care Center	Kazakhstan	—	2
West Kazakhstan Marat Ospanov Medical University	Kazakhstan	SCImago #10265	2
Griffith University	Australia	SCImago #869 · THE 251–300 · QS 268	2
University of Chittagong	Bangladesh	SCImago #3109 · THE 1201–1500	2
Dhaka Medical College	Bangladesh	—	2

Institution	Country	World ranking	Citing papers
University of Development Alternative	Bangladesh	—	2
Biomedical Research Foundation	Bangladesh	—	2
Göztepe Prof. Dr. Süleyman Yalçın Training and Research Hospital	Turkiye	—	1
Save the Children Bangladesh	Bangladesh	—	1
Conservatoire Botanique National de Mascarin	France	—	1

Geographic distribution of citing authors

Country	Citing papers
Bangladesh	36
India	7
China	6
United States	6
Australia	5
Japan	3
Canada	2
Kazakhstan	2
Sweden	2
Pakistan	2
Iran	2
Germany	2

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.

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	Nationwide carrier detection and molecular characterization of β -thalassemia and hemoglobin E variants in Bangladeshi population	31	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 2	An evaluation of antihyperglycemic and antinociceptive effects of crude methanol extract of <i>Coccinia grandis</i> (L.) J. Voigt.(Cucurbitaceae) leaves in Swiss albino mice	7	8 CFR 204.5(h)(3)(v) – Criterion 5
Contribution 3	A survey of medicinal plant usage by folk medicinal practitioners in seven villages of Ishwardi Upazilla, Pabna district, Bangladesh.	6	8 CFR 204.5(h)(3)(v) – Criterion 5