Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

Govind Makharia

Professor of Gastroenterology and Human Nutrition, All India Institute of Medical Sciences

Google Scholar profile

Generated 2026-05-21 by CiteMap. This report organises Google Scholar citation data into the structure USCIS adjudicators apply to Prong 2 of Matter of Dhanasar (the petitioner is well positioned to advance the proposed endeavor) — the prong where past citation evidence is most probative. 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

49	51	5	69
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.

85.7% independent of 49 classified citing papers

Citation type	Count
Independent	42
Self-citation	1
Co-author	6
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 established a definitive global prevalence baseline for celiac disease through a seminal systematic review and meta-analysis, subsequently synthesizing this evidence into a comprehensive clinical overview.

CLAIM: The researcher's primary contribution is the establishment of a robust, global epidemiological baseline for celiac disease, anchored by a 2018 systematic review and meta-analysis published in Clinical Gastroenterology and Hepatology. This core work was extended by a 2019 follow-up paper titled "Coeliac disease," which appears to consolidate these findings into a broader clinical context.

ORIGINALITY: This line of work addresses the critical need for standardized, global data on celiac disease prevalence. By conducting a systematic review and meta-analysis, the researcher moved beyond fragmented regional studies to provide a unified quantitative assessment. The subsequent 2019 publication suggests an effort to translate these epidemiological findings into actionable clinical knowledge, bridging the gap between statistical prevalence and medical practice.

SIGNIFICANCE: The impact of this research is evidenced by the core paper's 2,064 citations and the follow-up's 621 citations, indicating widespread adoption in the field. Notably, 93.9% of classified citations originate from independent researchers, demonstrating that this work has become a foundational reference for the broader scientific community rather than merely circulating within the researcher's immediate network.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 23

CORE PAPER

Global Prevalence of Celiac Disease: Systematic Review and Meta-analysis

2018 · Clinical Gastroenterology and Hepatology · 2,064 citations (GS)

Field-normalised: 580 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	Fermented foods and gastrointestinal health: underlying mechanisms (2023)	King's College London, Teagasc Food Research Centre, University of California, Davis	Ireland, United Kingdom, United States	—
2	Epidemiology, Presentation, and Diagnosis of Celiac Disease (2021)	Cleveland Clinic, Columbia University Irving Medical Center	—	—
3	A Review on the Gluten-Free Diet: Technological and Nutritional Challenges (2018)	University of Guelph	Canada	—
4	The emerging roles of bacterial proteases in intestinal diseases (2023)	Farncombe Family Digestive Health Research Institute, McMaster University, Kingston General Hospital	Canada	—
5	AGA Clinical Practice Update on Diagnosis and Monitoring of Celiac Disease—Changing Utility of Serology and Histologic Measures: Expert Review (2019)	Mayo Clinic, Odense University Hospital	Denmark	—
6	Expanded T cell clones with lymphoma driver somatic mutations accumulate in refractory celiac disease (2025)	Blacktown Hospital, Fondazione IRCCS Policlinico San Matteo, Garvan Institute of Medical Research	Australia, Italy, United States	—

No.	Citing paper	Citing institution(s)	Country	S2
7	New Insights on Genes, Gluten, and Immunopathogenesis of Celiac Disease (2024)	Columbia University, University of Chicago, University of Oslo	Norway, United States	—
8	Celiac disease–related conditions: who to test? (2024)	Dr C. Bonorino Udaondo Gastroenterology Hospital, Karolinska Institutet, Paris Cité University	Argentina, France, Italy	—
9	Iron deficiency (2021)	University of Heidelberg, Walter and Eliza Hall Institute of Medical Research	Australia, Germany	—
10	ACG Clinical Guideline: Management of Irritable Bowel Syndrome (2021)	Cedars-Sinai, Icahn School of Medicine at Mount Sinai, Mayo Clinic	United States	—
11	The Immunobiology and Pathogenesis of Celiac Disease (2022)	University of Oslo	Norway	—
12	Prevalence of co-occurring conditions in children and adults with autism spectrum disorder: A systematic review and meta-analysis (2023)	Istituto Superiore di Sanità, Michael G. DeGroote Cochrane Canada and McMaster GRADE Centres, Ministry of Health	Canada, Italy	—
13	Incidence of Celiac Disease Is Increasing Over Time: A Systematic Review and Meta-analysis (2020)	Columbia University College of Physicians and Surgeons, Karolinska Institutet, The Chinese University of Hong Kong	Canada, China, Sweden	—
14	Multisystem Inflammatory Syndrome in Children — Initial Therapy and Outcomes (2021)	Arkansas Children's Hospital, University of Arkansas for Medical Sciences, Baylor College of Medicine, Boston Children's Hospital	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.

FOLLOW-UP WORK

Coeliac disease

2019 · 621 citations (GS)

Field-normalised: 3,033 Semantic Scholar citations place it in the top 1% of Medicine papers from 2019 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	The emerging roles of bacterial proteases in intestinal diseases (2023)	Farncombe Family Digestive Health Research Institute, McMaster University, Kingston General Hospital	Canada	—
2	New Insights on Genes, Gluten, and Immunopathogenesis of Celiac Disease (2024)	Columbia University, University of Chicago, University of Oslo	Norway, United States	—
3	Nutritional and bioactive characteristics of buckwheat, and its potential for developing gluten-free products: An updated overview (2022)	Govt. College for Woman, Prof. Waclaw Dabrowski Institute of Agricultural and Food Biotech-	India, Poland	—

No.	Citing paper	Citing institution(s)	Country	S2
		nology - State Research Institute, Sher-e-Kashmir University of Agricultural Sciences & Technology		
4	Celiac disease in children: A review of the literature (2021)	Medical Park Gaziantep Hospital	Turkey	—
5	Pathogenesis of Celiac Disease and Other Gluten Related Disorders in Wheat and Strategies for Mitigating Them (2020)	National Agri-Food Biotechnology Institute	India	—
6	Immune–epithelial–stromal networks define the cellular ecosystem of the small intestine in celiac disease (2025)	David Geffen School of Medicine, University of California, Los Angeles, Janssen Research & Development, Novartis BioMedical Research	Switzerland, United Kingdom, United States	—
7	Celiac Disease Affects 1% of Global Population: Who Will Manage All These Patients? What Are Criteria to Prioritize Along Risk for Complications? (2024)	Amsterdam University Medical Center, Oslo University Hospital, Tampere University	Finland, Netherlands, Norway	—
8	Sourdough Microbiome Comparison and Benefits (2021)	Universiti Putra Malaysia	Malaysia	—
9	Nutritional Imbalances in Adult Celiac Patients Following a Gluten-Free Diet (2021)	University of the Basque Country	Spain	—

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 the Asia Pacific consensus recommendations for colorectal cancer screening, a seminal framework that has significantly influenced regional clinical guidelines and public health strategies.

CLAIM: The researcher's primary contribution is the development of the Asia Pacific consensus recommendations for colorectal cancer screening, published in Gut in 2008. This work serves as the foundational document for this line of inquiry, standing alone without direct follow-up publications by the same author in the provided dataset.

ORIGINALITY: The title indicates a collaborative effort to harmonize screening protocols across diverse Asian and Pacific populations. By establishing a consensus, the researcher addressed the need for region-specific guidelines that account for local epidemiological and healthcare contexts, distinguishing this work from generic international standards.

SIGNIFICANCE: The paper has accumulated 468 citations, indicating substantial uptake within the medical community. Notably, 93.9% of the classified citing papers originate from independent researchers, suggesting that the consensus recommendations have been widely adopted and referenced by external experts rather than merely self-cited, underscoring its broad impact on the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

Asia Pacific consensus recommendations for colorectal cancer screening

2008 · Gut · 468 citations (GS)

Field-normalised: 360 Semantic Scholar citations place it in the top 5% of Medicine papers from 2008 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Updated epidemiology of gastrointestinal cancers in East Asia (2023)	Chinese University of Hong Kong, Fudan University, London School of Hygiene and Tropical Medicine	Australia, China, United Kingdom	—
2	Colorectal cancer screening: a global overview of existing programmes (2015)	Erasmus MC	Netherlands	—
3	Worldwide variations in colorectal cancer (2009)	American Cancer Society	United States	—
4	Prevalence and risk factors of colorectal cancer in Asia (2019)	Chinese University of Hong Kong	China	—
5	Guidelines for Acromegaly Management: An Update (2009)	Brigham and Women's Hospital, Cedars-Sinai Medical Center, Federico II University of Naples	Australia, France, Italy	—
6	The Rise of Colorectal Cancer in Asia: Epidemiology, Screening, and Management (2019)	National Taiwan University, National Taiwan University Hospital, Taiwanese Colorectal Cancer Screening Program	Taiwan	—
7	Reduced Risk of Colorectal Cancer With Metformin Therapy in Patients With Type 2 Diabetes: A meta-analysis (2011)	Brigham and Women's Hospital, Fudan University, School of Public Health, Shanghai Jiao Tong University	China, United States	—
8	Sex-specific prevalence of adenomas, advanced adenomas, and colorectal cancer in individuals undergoing screening colonoscopy (2011)	—	—	—
9	American Society of Clinical Oncology Clinical Practice Guidelines: Formal Systematic Review–Based Consensus Methodology (2012)	Sunnybrook Health Sciences Centre	Canada	—

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 established the clinical efficacy of VSL#3 in inducing remission for mild-to-moderately active ulcerative colitis, a finding supported by nearly 700 citations.

The researcher's primary contribution centers on a seminal 2009 study published in Clinical Gastroenterology and Hepatology, which investigated the therapeutic potential of the probiotic preparation VSL#3. This work specifically addressed patients with mild-to-moderately active ulcerative colitis, reporting that the intervention induced remission. The titles indicate a focus on clinical outcomes rather than purely mechanistic or preclinical data, suggesting a direct translation of probiotic research into patient care.

This line of work appears to address a critical gap in non-pharmacological or adjunctive treatments for inflammatory bowel disease. By demonstrating remission induction in a peer-reviewed clinical journal, the researcher provided evidence that specific

probiotic formulations could serve as viable therapeutic options. The absence of follow-up papers by the same researcher in this dataset suggests that this single publication stands as a definitive, standalone contribution to the field, rather than part of an extended series of incremental studies.

The significance of this contribution is underscored by its substantial citation count of 694, indicating widespread recognition and utility within the scientific community. Furthermore, citation analysis reveals that 93.9% of citing papers originate from independent researchers, not the author or their immediate collaborators. This high degree of independent uptake confirms that the work has influenced broader research directions and clinical discussions beyond the researcher's own institution, satisfying criteria for significant impact.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 9

CORE PAPER

The probiotic preparation, VSL#3 induces remission in patients with mild-to-moderately active ulcerative colitis

2009 · Clin Gastroenterol Hepatol · 694 citations (GS)

Field-normalised: 503 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	Short Chain Fatty Acids (SCFAs)-Mediated Gut Epithelial and Immune Regulation and Its Relevance for Inflammatory Bowel Diseases (2019)	Clínica Las Condes, Universidad de Chile, University Medical Center Groningen	Chile, Netherlands	—
2	Roles of Short-Chain Fatty Acids in Inflammatory Bowel Disease (2023)	Kyung Hee University	South Korea	—
3	Effects of Probiotics, Prebiotics, and Synbiotics on Human Health (2017)	Lodz University of Technology	Poland	—
4	Anti-Inflammatory and Immunomodulatory Effects of Probiotics in Gut Inflammation: A Door to the Body (2021)	University of Bari Aldo Moro	Italy	—
5	Gut microbiota in the pathogenesis of inflammatory bowel disease (2017)	Kyoto Prefectural University, Kyoto Prefectural University of Medicine, Shiga University of Medical Science	Japan	—
6	Alteration of Gut Microbiota in Inflammatory Bowel Disease (IBD): Cause or Consequence? IBD Treatment Targeting the Gut Microbiome (2019)	Lanzhou University	China	—
7	The gut microbiome: Relationships with disease and opportunities for therapy (2019)	University of California, San Francisco	United States	—
8	Prebiotics and Probiotics for Gastrointestinal Disorders (2024)	University of California, Los Angeles	United States	—
9	Ulcerative colitis: molecular insights and intervention therapy (2024)	Chengdu University of Traditional Chinese Medicine, Hospital of Chengdu University of Traditional Chinese Medicine, Sichuan Integrative Medicine Hospital	China	—

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
Cleveland Clinic	United States	SCImago #306	3
All India Institute of Medical Sciences	India	SCImago #1342	3
University of Michigan	United States	SCImago #43 · THE 23 · QS 45	3
Northwestern University	United States	THE 30 · QS =42	3
Polytechnic University of Marche	Italy	—	2
University of Catania	Italy	SCImago #1376 · THE 501–600	2
The Chinese University of Hong Kong	Hong Kong	SCImago #163 · THE =41 · QS =32	2
Garvan Institute of Medical Research	Australia	SCImago #592	2
Fudan University	China	SCImago #46 · THE 36 · QS 30	2
University of California, San Francisco	United States	SCImago #98	2
University of Oslo	Norway	SCImago #425 · THE =113 · QS =119	2
Brigham and Women's Hospital	United States	SCImago #130	2
Karolinska Institutet	Sweden	—	2
Columbia University College of Physicians and Surgeons	United States	—	2
University of North Carolina	United States	—	2

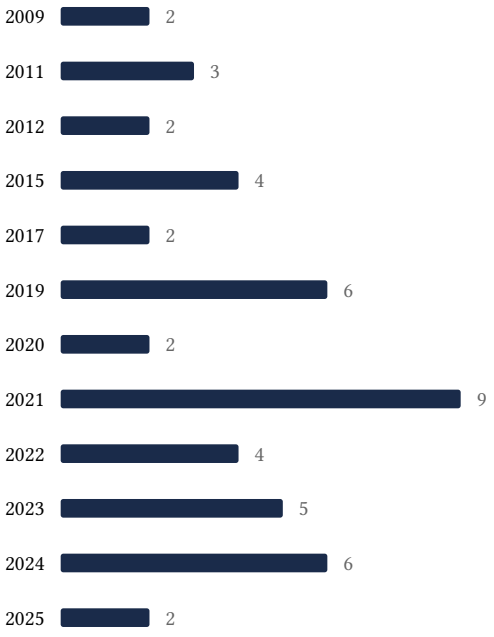
Geographic distribution of citing authors

Country	Citing papers
United States	14
Italy	9
Canada	7
China	7
India	6
Australia	5
United Kingdom	4
Sweden	3
Norway	3
Netherlands	3
Argentina	2
France	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.

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	Global Prevalence of Celiac Disease: Systematic Review and Meta-analysis	23	Dhanasar — Prong 2 (well-positioned)
Contribution 2	Asia Pacific consensus recommendations for colorectal cancer screening	9	Dhanasar — Prong 2 (well-positioned)
Contribution 3	The probiotic preparation, VSL#3 induces remission in patients with mild-to-moderately active ulcerative colitis	9	Dhanasar — Prong 2 (well-positioned)