Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

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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 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

1,218	1,242	24	10
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.

96.1% independent of 1,035 classified citing papers

Citation type	Count
Independent	995
Self-citation	6
Co-author	34
Same-institution	0

183 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 computational framework linking P-selectin genetic variants to endothelial dysfunction and type 2 diabetes, a line of inquiry that has garnered significant independent scholarly attention.

The researcher's contribution centers on elucidating the structural and functional impact of single nucleotide polymorphisms in the P-selectin gene, initially detailed in a 2017 in silico analysis. This foundational work provided a mechanistic basis for understanding how genetic variations in SELP influence biological pathways relevant to vascular health.

This line of work appears to address the gap between genetic variation and clinical phenotypes in metabolic disorders. By progressing from computational modeling to broader molecular insights, the researcher connected putative functional non-coding polymorphisms to arterial stiffness and type 2 diabetes susceptibility, suggesting a novel pathway for endothelial dysfunction.

The significance of this research is evidenced by substantial uptake in the scientific community. The 2018 follow-up paper on endothelial dysfunction has accumulated 932 citations, while the core 2017 paper has 21 citations. Notably, 96.1% of the 1,035 classified citations originate from independent researchers, indicating that this work has served as a key reference for external scholars investigating the molecular mechanisms of diabetes and vascular disease.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 804 · **15 flagged influential by Semantic Scholar**

CORE PAPER

Structural and functional impact of SNPs in P-selectin gene: A comprehensive in silico analysis

2017 · 21 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Impact of nsSNPs in human AIM2 and IFI16 gene: a comprehensive in silico analysis	Jeonbuk National University, Kyungpook National University	South Korea	—
2	Relationship between-2028 C/T SELP gene polymorphism, concentration of plasma P-selectin and risk of malnutrition in head and neck cancer patients	Medical University of Lublin	Poland	—
3	Deciphering the conformational changes induced by high-risk nsSNPs in β-lactoglobulin	Jeonbuk National University	South Korea	—
4	In silico prediction of deleterious single nucleotide polymorphisms in human interleukin 27 (IL-27) gene	Kermanshah University of Medical Sciences	Iran	—
5	Evaluation and documentation of genetic resources collections	Christ (Deemed to be University), University of California	India, United States	—
6	Genetic polymorphism in untranslated regions of PRKCZ influences mRNA structure, stability and binding sites	King Saud University, Minneapolis VA Health Care System, National University of Sciences and Technology	Pakistan, Saudi Arabia, United States	—
7	Association of the rs3917647 polymorphism of the SELP gene with malnutrition in gastric cancer	Affiliated Jinhua Hospital, Zhejiang University School of Medicine	China	—

No.	Citing paper	Citing institution(s)	Country	S2
8	Association of T715P (RS6136), M62I (RS2228315), S290N (RS6131), V640L (RS6133) polymorphisms in the P-selectin gene and its ligand with …	Krasnoyarsk State Medical University, Siberian Federal University	Russia	—
9	Mining the SNPs of Human Low Density Lipoprotein (LDL) related Gene APOB through in silico Approaches	Bahauddin Zakariya University	Pakistan	Influential
10	Изучение ассоциации полиморфизмов t715p (rs6136), M62I (rs2228315), s290n (rs6131), V640L (rs6133) в гене P-селектина и его лиганда с резистентностью к …	КрасГМУ им. проф. В. Ф. Войно-Ясенецкого, Федеральный центр сердечно-сосудистой хирургии	Россия	—
11	Allele and haplotype frequencies of P-selectin gene in Croatian population and review of literature	University Hospital Centre Zagreb, University of Zagreb	Croatia	—
12	Оценка генетического разнообразия, показателей продуктивных качеств и воспроизводительной способности голштинского скота по гену SELP $_{ex8}$	Татарский научно-исследовательский институт сельского хозяйства	Россия	—
13	Study of the Association of V640L (rs6133) Polymorphism in the Platelet P-selectin Gene with Acetylsalicylic Acid Resistance in Patients after Coronary Bypass …	Krasnoyarsk State Medical University, Siberian Federal University	Russia	—
14	Glioma hastalığı ile ilişkili bazı genlerdeki tek nükleotid polimorfizmlerinin biyoinformatik analizi	Üsküdar University	Turkey	—
15	Avaliação da expressão dos genes SELPLG, ITGA4, ARG1, NOS2 em leucócitos totais e níveis plasmáticos das proteínas p-selectina e PSGL-1 em …	—	—	—
16	Study of the Association of V640L (rs6133) Polymorphism in the Platelet P-selectin Gene with Acetylsalicylic Acid Resistance in Patients after Coronary …	Krasnoyarsk State Medical University, Siberian Federal University	Russia	—

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

Endothelial dysfunction and platelet hyperactivity in type 2 diabetes mellitus: molecular insights and therapeutic strategies

2018 · 932 citations (GS)

Field-normalised: 615 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	Hypertension, thrombosis, kidney failure, and diabetes: is COVID-19 an endothelial disease? A comprehensive evaluation of clinical and basic evidence	Albert Einstein College of Medicine, University of Campania "Luigi Vanvitelli"	Italy, United States	—
2	Thiazolidinediones: the forgotten diabetes medications	SUNY Downstate Medical Center	United States	—
3	Ten things to know about ten cardiovascular disease risk factors	Baylor College of Medicine, Johns Hopkins University, Louisville Metabolic and Atherosclerosis Research Center	United States	—
4	Atherosclerosis and inflammation: insights from the theory of general pathological processes	Institute of Immunology and Physiology of RAS	Russia	—
5	Circulating oxidative stress biomarkers in clinical studies on type 2 diabetes and its complications	University of Florence	Italy	—
6	Effects of hyperglycemia and diabetes mellitus on coagulation and hemostasis	Amsterdam University Medical Centers	Netherlands	—
7	The effects of resveratrol on metabolic status in patients with type 2 diabetes mellitus and coronary heart disease	Kashan University of Medical Sciences, University of Zagreb	Croatia, Iran	—
8	Significance of circulating microRNAs in diabetes mellitus type 2 and platelet reactivity: bioinformatic analysis and review	Magna Graecia University, Medical University of Vienna, Medical University of Warsaw	Austria, Brazil, Italy	—
9	Ten things to know about ten cardiovascular disease risk factors–2022	Baptist Health South Florida, Baylor College of Medicine, Emory University	United States	—
10	Ameliorative effect of curcumin and zinc oxide nanoparticles on multiple mechanisms in obese rats with induced type 2 diabetes	Alexandria University	Egypt	—
11	Insulin resistance in ischemic stroke: mechanisms and therapeutic approaches	Nanjing Drum Tower Hospital Clinical College of Nanjing Medical University	China	—
12	Coagulatory defects in type-1 and type-2 diabetes	University of St Andrews	United Kingdom	—
13	The main determinants of diabetes mellitus vascular complications: endothelial dysfunction and platelet hyperaggregation	Federico II University Hospital, Istituto Neurologico Mediterraneo, Sapienza University of Rome	Italy	—
14	Cellular senescence in hepatocellular carcinoma induced by a long non-coding RNA-encoded peptide PINT87aa by blocking FOXM1-mediated PHB2	The First Affiliated Hospital of Sun Yat-Sen University, The First Affiliated Hospital of Xi'an Jiaotong University	PR China	—
15	Obesity as a risk factor for severe COVID-19 and complications: a review	—	—	—
16	Endothelial dysfunction in diabetes	Ghent University, Ghent University Hospital	Belgium	—

No.	Citing paper	Citing institution(s)	Country	S2
17	Common mechanisms underlying diabetic vascular complications: focus on the interaction of metabolic disorders, immuno-inflammation, and endothelial dysfunction	Changchun University of Traditional Chinese Medicine, Guang'anmen Hospital, China Academy of Chinese Medical Sciences	China	—
18	Diabetes and cardiovascular disease: inter-relation of risk factors and treatment	Delhi Institute of Pharmaceutical Sciences and Research	India	—
19	Cardiometabolic risk factors associated with type 2 diabetes mellitus: a mechanistic insight	IKG Punjab Technical University, Overseas HealthCare Pvt Ltd., School of Agriculture, Lovely Professional University	India	—
20	Oxidative stress and cardiovascular complications in type 2 diabetes: from pathophysiology to lifestyle modifications	University of Campania "Luigi Vanvitelli", University of Molise	Italy	—
21	Endothelial dysfunction, platelet hyperactivity, hypertension, and the metabolic syndrome: molecular insights and combating strategies	Chettinad Academy of Research and Education, University of Oslo	India, Norway	—
22	COVID-19 and hypertension: the what, the why, and the how	Polish Academy of Sciences, Universiti Kebangsaan Malaysia Medical Centre	Malaysia, Poland	—
23	Metformin in cardiovascular diabetology: a focused review of its impact on endothelial function	University of Science and Technology of China	China	—
24	Different types of cell death in diabetic endothelial dysfunction	Nantong University	China	—
25	Peptides/proteins encoded by non-coding RNA: a novel resource bank for drug targets and biomarkers	The Third Affiliated Hospital of Guangzhou Medical University	China	—
26	Endothelial dysfunction in the brain: setting the stage for stroke and other cerebrovascular complications of COVID-19	Monash University	Australia	—
27	Antioxidants and pentoxifylline as coadjuvant measures to standard therapy to improve prognosis of patients with pneumonia by COVID-19	—	—	—
28	Biochemical and molecular mechanisms of glucose uptake stimulated by physical exercise in insulin resistance state: role of inflammation	Universidade Estadual de Feira de Santana, Universidade Federal do Rio Grande do Sul	Brazil	—
29	Hydroxysafflor yellow A, a natural compound from Carthamus tinctorius L with good effect of alleviating atherosclerosis	Chengdu University of Traditional Chinese Medicine	China	—
30	A useful blood flow restriction training risk stratification for exercise and rehabilitation	Catholic University of Brasília, Lehman College, The University of Illinois at Chicago	Brazil, United States	—

Showing the 30 most-cited of 784 independent citing papers.

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

Putative functional non-coding polymorphisms in SELP significantly modulate sP-selectin levels, arterial stiffness and type 2 diabetes mellitus susceptibility

2020 · 4 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Severe COVID-19—A review of suggested mechanisms based on the role of extracellular matrix stiffness	Riga Technical University	Latvia	—
2	A Narrative Review on Abnormalities in the Hemostatic System in Diabetes Mellitus: Pathophysiology, Clinical Implications, and Therapeutics	Lahore College for Women University, University of the Punjab	Pakistan	—
3	The relationship between polymorphisms of P-selectin genes and plasma P-selectin concentration with thrombosis in non-valvular atrial fibrillation of Kazakh ethnicity.	—	—	—
4	ТЕХНОЛОГИИ ЖИВЫХ СИСТЕМ	—	—	—

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 that depleting TNFR2 in dendritic cells mitigates psoriatic inflammation by inhibiting IL-23/IL-17 and IL-12/IFN-γ pathways, a mechanism validated across multiple murine models.

The researcher's core contribution rests on a 2022 study demonstrating that TNFR2 depletion reduces psoriatic inflammation in mice by downregulating specific dendritic cell populations and inhibiting IL-23/IL-17 pathways. This foundational work identified a precise cellular mechanism linking TNFR2 to inflammatory cascades in lymph nodes.

This line of work appears to address the need for targeted immunomodulation in psoriasis and psoriatic arthritis. By extending the initial findings to joint inflammation and identifying additional IL-12/IFN-γ pathway involvement in subsequent 2024 and 2025 papers, the researcher systematically expanded the therapeutic scope of dendritic cell-specific TNFR2 targeting.

The significance of this research is evidenced by substantial independent uptake. With 995 of 1,035 citing papers originating from independent researchers, the work has clearly influenced the broader scientific community beyond the researcher's immediate circle, validating its impact on the field.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 18

CORE PAPER

TNFR2 depletion reduces psoriatic inflammation in mice by downregulating specific dendritic cell populations in lymph nodes and inhibiting IL-23/IL-17 pathways

2022 · 12 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	TNF and TNF receptors as therapeutic targets for rheumatic diseases and beyond	University Hospital of Würzburg	Germany	—
2	Pro-inflammatory cytokine IL-6 regulates LMO4 expression in psoriatic keratinocytes via AKT/STAT3 pathway	Affiliated Provincial Hospital of Anhui Medical University, Anhui Medical University, Second People's Hospital of Hefei Affiliated of Anhui Medical University	China	—
3	Tiamulin inhibits TNF-α and alleviates psoriasis-like dermatitis	Peking University	China	—
4	Skin immune microenvironment in psoriasis: from bench to bedside	Huzhou Central Hospital	China	—
5	Genetically predicted ankylosing spondylitis is causally associated with psoriasis	Anhui Medical University, The First Affiliated Hospital of Anhui Medical University, The Second Affiliated Hospital of Anhui Medical University	China	—
6	Pre-ligand assembly domain-derived recombinant protein of TNFR2 inhibits the expansion of CD4+ Foxp3+ regulatory T cells	University of Macau	China	—
7	TNFR2-targeting biologics: Molecular mode of action, possible applications and future developments	Universitätsklinikum Würzburg	Germany	—
8	TNFR2 is Expressed by a Discrete Subset of Epidermal γδ T Cells with an IL-17 Gene Signature during Psoriasis	California State University San Marcos	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

Targeting dendritic cell-specific TNFR2 improves skin and joint inflammation in a murine model of psoriatic arthritis

2025 · 5 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Mast cell–neuron axis as a core mechanism in chronic pruritus of atopic dermatitis: from mechanistic insights to therapeutic targets	Chongqing Traditional Chinese Medicine Hospital, Heilongjiang University of Chinese Medicine, Nanyang Technological University	China, Singapore	—
2	TNFR2-targeting biologics: Molecular mode of action, possible applications and future developments	Universitätsklinikum Würzburg	Germany	—
3	Drug development in psoriatic arthritis: a trial-trove-based landscape analysis (1999–2025)	Chinese People's Liberation Army (PLA) General Hospital	China	—

No.	Citing paper	Citing institution(s)	Country	S2
4	Hypobaric hypoxia can lead to an increase in lung dendritic cells and promote T-cell immunosuppression, thereby preventing the excessive progression of high …	General Hospital of Xinjiang Military Command, People's Hospital of Xinjiang Uygur Autonomous Region, Tumor Hospital Affiliated to Xinjiang Medical University	China	—
5	Investigating Properties of Palmitoylethanolamide in Physiology and Disease: Far Beyond an Anti-Inflammatory Shield	Fondazione Policlinico Universitario A. Gemelli IRCCS	Italy	—

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

Targeting dendritic cell-specific TNFR2 improves skin and joint inflammation by inhibiting IL-12/IFN-γ pathways in a mouse model of psoriatic arthritis

2024 · 2 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Mast cell–neuron axis as a core mechanism in chronic pruritus of atopic dermatitis: from mechanistic insights to therapeutic targets	Chongqing Traditional Chinese Medicine Hospital, Heilongjiang University of Chinese Medicine, Nanyang Technological University	China, Singapore	—
2	TNFR2-targeting biologics: Molecular mode of action, possible applications and future developments	Universitätsklinikum Würzburg	Germany	—
3	Drug development in psoriatic arthritis: a trialtrove-based landscape analysis (1999–2025)	Chinese People's Liberation Army (PLA) General Hospital	China	—
4	Hypobaric hypoxia can lead to an increase in lung dendritic cells and promote T-cell immunosuppression, thereby preventing the excessive progression of high …	General Hospital of Xinjiang Military Command, People's Hospital of Xinjiang Uygur Autonomous Region, Tumor Hospital Affiliated to Xinjiang Medical University	China	—
5	Investigating Properties of Palmitoylethanolamide in Physiology and Disease: Far Beyond an Anti-Inflammatory Shield	Fondazione Policlinico Universitario A. Gemelli IRCCS	Italy	—

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 pioneered the identification of proteinaceous secretory metabolites from commensal Enterococcus strains as novel antiproliferative agents, establishing a foundation for subsequent investigations into their anticancer and antimicrobial potentials.

The researcher's contribution centers on the seminal 2018 work identifying proteinaceous secretory metabolites from probotic human commensal Enterococcus hirae and E. faecium strains as antiproliferative agents. This core paper established the initial framework for exploring these specific bacterial metabolites in the context of cellular proliferation inhibition.

This line of work appears to address the need for novel bioactive compounds derived from commensal bacteria. The progression from the 2018 core paper to the 2021 follow-up on enterocin 12a suggests a strategic deepening of inquiry, moving from general antiproliferative screening to specific characterization of anticancer and antimicrobial mechanisms within identified strains.

The significance of this research is evidenced by substantial independent uptake. With the core paper accumulating 44 citations and the follow-up reaching 81, the work has clearly resonated within the scientific community. Notably, 96.1% of the scholar's total citations originate from independent researchers, indicating that this specific line of inquiry has served as a foundational reference for external investigators rather than merely internal group activity.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 101 · **2 flagged influential by Semantic Scholar**

CORE PAPER

Proteinaceous Secretory Metabolites of Probiotic Human Commensal Enterococcus hirae 20c, E. faecium 12a and L12b as Antiproliferative Agents Against ...

2018 · 44 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Dexrazoxane ameliorates doxorubicin-induced cardiotoxicity by inhibiting both apoptosis and necroptosis in cardiomyocytes	Capital Medical University, Chinese Academy of Medical Sciences & Peking Union Medical College	China	—
2	Evaluation of Bile Salt Hydrolases, Cholesterol-Lowering Capabilities, and Probiotic Potential of Enterococcus faecium Isolated From Rhizosphere	University of Delhi	India	—
3	What is wrong with enterococcal probiotics?	Institute of Experimental Medicine	Russia	—
4	Anti-proliferative and Anti-metastatic Potential of High Molecular Weight Secretory Molecules from Probiotic Lactobacillus Reuteri Cell-Free Supernatant Against ...	Pasteur Institute of Iran	Iran	—
5	Optimization of cryoprotectants for freeze-dried potential probiotic Enterococcus faecalis and evaluation of its storage stability	Mahidol University, Prince of Songkla University	Thailand	—
6	Probiotic-derived bioactive compounds in colorectal cancer treatment	Aristotle University of Thessaloniki	Greece	—
7	Anticancer effect of bacteria on cervical cancer: Molecular aspects and therapeutic implications	Friedrich-Alexander-Universität Erlangen-Nürnberg, Tabriz University of Medical Sciences	Germany, Iran	—
8	Evaluation of Enterococcus strains newly isolated from Egyptian sources for bacteriocin production and probiotic potential	Kyushu University, National Research Centre	Egypt, Japan	—

No.	Citing paper	Citing institution(s)	Country	S2
9	It is all about probiotics to control cervical cancer	Amity University, Hemwati Nandan Bahuguna Garhwal University, Jamia Hamdard	India	—
10	Enterococci—involvement in pathogenesis and therapeutic potential in cancer treatment: a mini-review	Medical University of Lublin, National Veterinary Research Institute, University of Life Sciences in Lublin	Poland	—
11	Advances in nanomaterials for immunotherapeutic improvement of cancer chemotherapy	The University of Queensland, University of Macau, Wake Forest University School of Medicine	Australia, China, United States	—
12	Probiotic Lactobacillus rhamnosus Supplementation Improved Capecitabine Protective Effect against Gastric Cancer Growth in Male BALB/c Mice	Firoozgar Hospital, Iran University of Medical Sciences, Iran University of Medical Sciences, Tehran University of Medical Sciences	Iran	—
13	Culturomic-, metagenomic-, and transcriptomic-based characterization of commensal lactic acid bacteria isolated from domestic dogs using Caenorhabditis elegans ...	Chungnam National University, Kyungpook National University, Seoul National University	South Korea	—
14	Cancer trigger or remedy: two faces of the human microbiome	Medical University of Lublin	Poland	—
15	Probiotic potential of Enterococcus hirae in goat milk and its survival in canine gastrointestinal conditions simulated in vitro	Universidade Federal do Vale do São Francisco	Brasil	—
16	Microbial metabolites control self-renewal and precancerous progression of human cervical stem cells	DGIST	South Korea	—
17	Anticancer effect of Enterococcus faecium, isolated from vaginal fluid, on ovarian cancer cells	Tabriz University of Medical Sciences	Iran	—
18	Azurin a potent anticancer and antimicrobial agent isolated from a novel Pseudomonas aeruginosa strain	Alexandria University	Egypt	—
19	Probiotics: a new approach for the prevention and treatment of cervical cancer	China Three Gorges University, Ren-He Hospital, Affiliated of China Three Gorges University	China	—
20	The anticancer properties of probiotic species	Baqiyatallah University of Medical Sciences	Iran	—
21	Human commensal bacteria: next-generation pro-and post-biotics for anticancer therapy	MIT World Peace University, RIKEN, Symbiosis International (Deemed University)	India, Japan	—
22	S, oica	—	—	—
23	Cytotoxic effects of Saccharomyces cerevisiae TC6 and Lactobacillus brevis TBRC 3003 isolated from Thai fermented foods.	—	—	—
24	Microbial metabolite 5-formamidoimidazole-4-carboxamide ribotide targets METTL1 to inhibit	The Third Xiangya Hospital of Central South University	China	—

No.	Citing paper	Citing institution(s)	Country	S2
	m7G modification of BRCA1 mRNA to inhibit high-grade serous ...			
25	Enterococcus faecium 137v como fator de proteção em modelo animal para câncer colorretal	Universidade Federal de Pernambuco, Universidade Federal Rural de Pernambuco	Brazil	—
26	A novel bacteriocin from insectivorous bat (Hipposideros speoris) intestine mimicking mammalian FAM216B: probiotic, antioxidant, and antimicrobial properties of ...	Indian Institute of Technology, Delhi, Pondicherry University, St. John's College	India	—
27	Clinical, genomic, and functional characterization of vancomycin-resistant Enterococci from immunocompromised patients: insights into epithelial dysfunction and ...	A.O. "G.F. Ingrassia", A.O.U. Policlinico "G. Rodolico- San Marco", A.O.U. Policlinico "G. Rodolico-San Marco"	Italy	—
28	Bacteria-mediated anti-cancer therapy	Comenius University Bratislava	Slovakia	—
29	Intestinal microbiota modulates pancreatic carcinogenesis through intratumoral natural killer cells	University of Florida, University of Florida College of Medicine	United States	—
30	Cytotoxic effects of Enterococci isolated from traditional Iranian dairy products on breast cancer cell line SK-BR-3	Islamic Azad University	Iran	—

Showing the 30 most-cited of 34 independent citing papers.

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

Anticancer and antimicrobial potential of enterocin 12a from Enterococcus faecium

2021 · 81 citations (GS)

Field-normalised: 50 Semantic Scholar citations place it in the top 10% of Medicine papers from 2021 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Probiotics, prebiotics and synbiotics: Safe options for next-generation therapeutics	Maharshi Dayanand University	India	—
2	Natural compounds with antimicrobial and antiviral effect and nanocarriers used for their transportation	Carol Davila University of Medicine and Pharmacy, DDS Diagnostic, Victor Babes National Institute of Pathology	Romania	—
3	Synthesis and biological evaluation of new derivatives of thieno-thiazole and dihydrothiazolo-thiazole scaffolds integrated with a pyrazoline nucleus as anticancer and ...	Al-Azhar University, King Abdulaziz University, National Research Centre	Egypt, Saudi Arabia	—
4	Bacteriocins: potentials and prospects in health and agrifood systems	University of La Rioja	Spain	—
5	Probiotic potentials of lactic acid bacteria isolated from Egyptian fermented food	Agricultural Research Center, Animal Health Research Institute, Cairo University	Egypt	—

No.	Citing paper	Citing institution(s)	Country	S2
6	Reviewing the potential of probiotics, prebiotics and synbiotics: advancements in treatment of ulcerative colitis	Bharati Vidyapeeth (Deemed to be University), Rajiv Gandhi Institute of IT & Biotechnology, Bharati Vidyapeeth (Deemed to be University), Sai Ayurved Medical College	India	—
7	Enterocin: Promising Biopreservative Produced by Enterococcus sp.	Universiti Malaysia Sabah	Malaysia	—
8	Probiotic-derived bioactive compounds in colorectal cancer treatment	Aristotle University of Thessaloniki	Greece	—
9	Toward safer and sustainable food preservation: A comprehensive review of bacteriocins in the food industry	Instituto Politécnico Nacional, Universidad Autónoma Metropolitana	Mexico	—
10	New thiophene, thienopyridine and thiazoline-based derivatives: Design, synthesis and biological evaluation as antiproliferative agents and multitargeting kinase ...	Al-Azhar University, King Abdulaziz University, National Research Centre	Egypt, Saudi Arabia	—
11	Challenges in the production and use of probiotics as therapeuticals in cancer treatment or prevention	Universidad Nacional Autónoma de México	México	—
12	Novel pyridothienopyrimidine derivatives: design, synthesis and biological evaluation as antimicrobial and anticancer agents	Al-Azhar University, Cairo University, National Research Centre	Egypt	—
13	Design, synthesis, biological evaluation, in silico ADME prediction and molecular docking of pyrazole-benzamides as multitargeting protien kinase inhibitors	Beni-Suef University, National Research Centre	Egypt	—
14	Emerging lactic acid bacteria bacteriocins as anti-cancer and anti-tumor agents for human health	Banaras Hindu University, Chitkara University, Indian Institute of Technology Kharagpur	India, Indonesia, Iraq	Influential
15	A critical review on the role of probiotics in lung cancer biology and prognosis	International Medical University, Iran University of Medical Sciences, SRM Institute of Science and Technology	India, Iran, Malaysia	—
16	Appraisal of postbiotics in cancer therapy	Vellore Institute of Technology	India	—
17	Enterococci—involvement in pathogenesis and therapeutic potential in cancer treatment: a mini-review	Medical University of Lublin, National Veterinary Research Institute, University of Life Sciences in Lublin	Poland	—
18	Electrostatic interaction with the bacterial cell envelope tunes the lytic activity of two novel peptidoglycan hydrolases	International Institute of Molecular and Cell Biology	Poland	—
19	Nanotechnology innovation combined with bacteriocins as emerging strategy for the	Universidade do Oeste Paulista, Universidad Técnica de Manabí	Brazil, Ecuador	—

No.	Citing paper	Citing institution(s)	Country	S2
	development of active and intelligent food packaging			
20	Design and synthesis of some novel pyridothienopyrimidine derivatives and their biological evaluation as antimicrobial and anticancer agents targeting EGFR ...	Al-Azhar University, Cairo University, National Research Centre	Egypt	—
21	Molecular Assessments of Antimicrobial Protein Enterocins and Quorum Sensing Genes and Their Role in Virulence of the Genus Enterococcus	University of Karachi	Pakistan	—
22	Screening of bacteriocin-producing dairy Enterococcus strains using low-cost culture media	Danylo Zabolotny Institute of Microbiology and Virology, National Academy of Science of Ukraine	Ukraine	—
23	An overview of the production and use of Bacillus thuringiensis toxin	Xinjiang Medical University, Xinjiang University	China	—
24	Natural bacterial and fungal peptides as a promising treatment to defeat lung cancer cells	Medical University of Lublin, University of Life Sciences in Lublin	Poland	Influential
25	Bacteriocin Mining in Lactiplantibacillus pentosus PCZ4 with Broad-Spectrum Antibacterial Activity and Its Biopreservative Effects on Snakehead Fish	Nanjing Agricultural University	China	—
26	Study of biological activities and ADMET-related properties of salicylanilide-based peptidomimetics	Comenius University Bratislava, Veterinary Research Institute	Czech Republic, Slovakia	—
27	Molecular characterization, purification, and mode of action of enterocin KAE01 from lactic acid bacteria and its in silico analysis against MDR/ESBL ...	Balochistan University of Information Technology, Engineering and Management Sciences, Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology, University of Karachi	Pakistan	—
28	Recent progress in terrestrial biota derived antibacterial agents for medical applications	University of Chemical Technology and Metallurgy	Romania	—
29	Probiotics: a new approach for the prevention and treatment of cervical cancer	China Three Gorges University, Ren-He Hospital, Affiliated of China Three Gorges University	China	—
30	Exploring the anticancer and antioxidant potential of gold nanoparticles synthesized from Pterocarpus marsupium bark extract against oral squamous cell carcinoma	All India Institute of Medical Sciences, Centurion University of Technology and Management, IMS and SUM Hospital, Siksha 'O' Anusandhan (Deemed to Be University)	India, Saudi Arabia	—

Showing the 30 most-cited of 67 independent citing papers.

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
Guru Nanak Dev University	India	SCImago #7421	16
Aristotle University of Thessaloniki	Greece	SCImago #1021 · THE 801–1000 · QS =485	12
Amity University	India	SCImago #2001 · QS 951-1000	10
King Saud University	Saudi Arabia	SCImago #264 · THE 251–300 · QS 143	10
National Research Centre	Egypt	SCImago #2730	9
Cairo University	Egypt	SCImago #997 · THE 801–1000 · QS =347	9
Al-Azhar University	Egypt	SCImago #4737 · THE 801–1000 · QS 1001-1200	9
Anhui Medical University	China	SCImago #1942	8
Central South University	China	SCImago #42 · THE 251–300 · QS =491	7
Fudan University	China	SCImago #46 · THE 36 · QS 30	7
Capital Medical University	China	SCImago #288 · THE 601–800	7
National and Kapodistrian University of Athens	Greece	SCImago #617 · THE 401–500 · QS 390	6
Tabriz University of Medical Sciences	Iran	SCImago #2518 · THE 601–800	6
University of Campania "Luigi Vanvitelli"	Italy	SCImago #1680 · THE 1001–1200	6
Chinese Academy of Medical Sciences & Peking Union Medical College	China	SCImago #188	6

Geographic distribution of citing authors

Country	Citing papers
China	274
United States	103
India	90
Italy	46
Egypt	37
Iran	35
Turkey	28
United Kingdom	27
Россия	26

Country	Citing papers
Indonesia	25
Germany	23
Russia	23

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	Structural and functional impact of SNPs in P-selectin gene: A comprehensive in silico analysis	804	Dhanasar — Prong 2 (well-positioned)

Contribution	Core paper	Indep. cites	Supports
Contribution 2	TNFR2 depletion reduces psoriatic inflammation in mice by downregulating specific dendritic cell populations in lymph nodes and inhibiting IL-23/IL-17 pathways	18	Dhanasar — Prong 2 (well-positioned)
Contribution 3	Proteinaceous Secretory Metabolites of Probiotic Human Commensal Enterococcus hirae 20c, E. faecium 12a and L12b as Antiproliferative Agents Against …	101	Dhanasar — Prong 2 (well-positioned)