

Citation Evidence Report

EB-2 NIW Petition — National Interest Waiver

Matter of Dhanasar · Prong 2 (well-positioned)

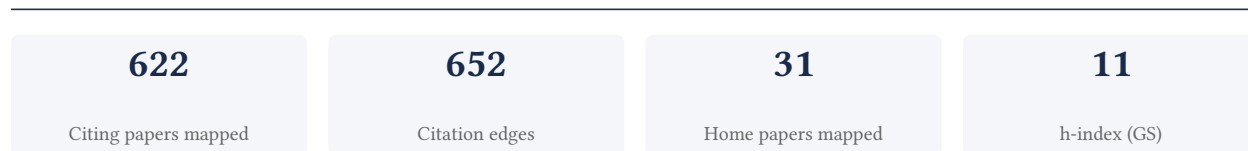
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[Google Scholar profile](#)

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



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.

86.1% independent of 346 classified citing papers

Citation type	Count
Independent	298
Self-citation	12
Co-author	36
Same-institution	0

276 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 comparative analysis of gastrointestinal cancer epidemiology across major regions, subsequently advancing prognostic research by investigating CD103-positive immune cell markers in colorectal cancer.

The researcher's contribution centers on a seminal 2021 paper comparing gastrointestinal cancers in China, the USA, and Europe, which serves as the anchor for a broader investigation into cancer epidemiology and prognosis. This core work is followed by recent studies focusing on CD103-positive tumor-infiltrating lymphocytes and compartment-specific cells in colorectal cancer, suggesting a strategic shift from broad epidemiological comparisons to specific immunological prognostic markers.

This line of work appears to address the need for both macro-level understanding of cancer distribution across diverse populations and micro-level insights into immune-mediated prognosis. The progression from a widely cited comparative study to specialized investigations of CD103-positive cells indicates an effort to refine prognostic accuracy in colorectal cancer, particularly in cases involving liver metastasis.

The significance of this research is underscored by the high citation count of the core paper, which has been cited 257 times. Notably, 96.5% of the citing papers originate from independent researchers, demonstrating that the work has achieved substantial recognition and utility within the broader scientific community beyond the researcher's immediate circle.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 144 · 6 flagged influential by Semantic Scholar

CORE PAPER

[Gastrointestinal cancers in China, the USA, and Europe](#)

2021 · Gastroenterology report 9 (2), 91-104, 2021 · 257 citations (GS)

Field-normalised: 192 Semantic Scholar citations place it in the top 1% of Medicine papers from 2021 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Colorectal cancer: a comprehensive review of carcinogenesis, diagnosis, and novel strategies for classified treatments	—	—	—
2	Updated epidemiology of gastrointestinal cancers in East Asia	—	—	—
3	Single-cell analysis of gastric signet ring cell carcinoma reveals cytological and immune microenvironment features	—	—	—
4	Exploring the integration of nanotechnology in the development and application of biosensors for enhanced detection and monitoring of colorectal cancer	Ferdowsi University of Mashhad, Islamic Azad University, Science and Research Branch, Kerman University of Medical Sciences	Iran, United Arab Emirates	—
5	Long-term relative survival of patients with gastric cancer from a large-scale cohort: a period-analysis	Nanfang Hospital, Southern Medical University	China	—
6	Aptamers as smart ligands for targeted drug delivery in cancer therapy	Jiangxi Science and Technology Normal University	China	—
7	Anti-Inflammatory and Antioxidant Effects of Carvacrol on N-Methyl-N'-Nitro-N-Ni-	University of Veterinary Medicine Vienna	Austria	—

No.	Citing paper	Citing institution(s)	Country	S2
	trosoguanidine (MNNG) Induced Gastric Carcinogenesis in Wistar Rats			
8	Diagnosis by volatile organic compounds in exhaled breath from patients with gastric and colorectal cancers	Kyung Hee University	South Korea	—
9	Global, Regional, and National Burden of gastric Cancer in adolescents and young adults, 1990–2019: a systematic analysis for the global burden of Disease Study ...	Xuzhou Medical College	China	—
10	Global epidemiology and socioeconomic correlates of hypopharyngeal cancer in 2020 and its projection to 2040: findings from GLOBOCAN 2020	Ardabil University of Medical Sciences	Iran	—
11	Multi-kingdom microbial signatures in excess body weight colorectal cancer based on global metagenomic analysis	—	—	Influential
12	The regulation of cyclins and cyclin-dependent kinases in the development of gastric cancer	Ege University, University of Crete	Greece, Turkey	—
13	Deep learning-based lesion detection in endoscopy: A systematic literature review	IMT Atlantique	France	—
14	Nanotechnology-based cytokine delivery strategies in gastrointestinal cancers	Indian Institute of Technology Ropar, King Khalid University	India, Saudi Arabia	—
15	Chitosan and cyclodextrins—versatile materials used to create drug delivery systems for gastrointestinal cancers	Carol Davila University of Medicine and Pharmacy, Universitatea Națională de Știință și Tehnologie Politehnica București	Romania	—
16	Clinical characteristics and survival analysis of colorectal cancer in China: a retrospective cohort study with 13,328 patients from southern China	—	—	—
17	Integrating deep learning for accurate gastrointestinal cancer classification: a comprehensive analysis of MSI and MSS patterns using histopathology data	—	—	—
18	Hydrophobic soft cone-assisted rolling robot inspired by sea urchins for gastrointestinal tract delivery	—	—	—
19	Abrogation of ARF6 in promoting erastin-induced ferroptosis and mitigating capecitabine resistance in gastric cancer cells	China Medical University	China	—
20	A comprehensive review on lncRNA LOXL1-AS1: molecular mechanistic pathways of lncRNA LOXL1-AS1 in tumorigenicity of cancer cells	—	—	—
21	Therapeutic Potential of Prunus Species in Gastrointestinal Oncology	—	—	Influential

No.	Citing paper	Citing institution(s)	Country	S2
22	Experiences of informal caregivers supporting individuals with upper gastrointestinal cancers: a systematic review	—	—	—
23	Hybrid models for endoscopy image analysis for early detection of gastrointestinal diseases based on fused features	Najran University	Saudi Arabia	—
24	Brd4:: Nutm1 fusion gene initiates NUT carcinoma in vivo	—	—	—
25	Common Risk Factors in Gastrointestinal Cancers: A Narrative Review	—	—	—
26	Mitochondrial DNA copy number as a biomarker for guiding adjuvant chemotherapy in stages II and III colorectal cancer patients with mismatch repair deficiency ...	Union Hospital, Tongji Medical College, Huazhong University of Science and Technology	China	—
27	Risk scoring based on DNA methylation-driven related DEGs for colorectal cancer prognosis with systematic insights	City University of Hong Kong, University of California, San Francisco	China, Hong Kong SAR, United States	—
28	Daphnetin, a Coumarin in Genus Stelleria Chamaejasme Linn: Chemistry, Bioactivity and Therapeutic Potential	—	—	—
29	Machine learning-based dynamic CEA trajectory and prognosis in gastric cancer	—	—	—
30	Dual-guided network for endoscopic image segmentation with region and boundary cues	Beijing University of Technology	China	—

Showing the 30 most-cited of 143 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

[CD103-Positive Tumor-Infiltrating Lymphocytes Predict a Favorable Prognosis in Colorectal Cancer with Liver Metastasis](#)

2026 · Annals of Surgical Oncology 33 (2), 1817-1834, 2026 · 0 citations (GS)

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

FOLLOW-UP WORK

[Assessment of compartment-specific CD103-positive cells for prognosis prediction of colorectal cancer](#)

2025 · Cancer Immunology, Immunotherapy 74 (8), 237, 2025 · 3 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Preoperative C-reactive protein-albumin-lymphocyte index predicts survival outcomes in patients with stage I-III colorectal cancer: A retrospective cohort study	—	—	—

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 elucidated how CSF1R signaling in colorectal cancer modulates tumor-associated macrophages, extending this framework to epigenetic senescence and metabolic regulation of immune evasion.

CLAIM: The researcher’s work centers on the 2022 paper regarding CSF1R silence in colorectal cancer cells and its activation of tumor-associated macrophages, a line of inquiry expanded by subsequent studies on senescence and macrophage trafficking.

ORIGINALITY: This research appears to address the complex interplay between tumor cells and the immune microenvironment. By linking dependence receptors to macrophage activation, and later exploring m1A-dependent senescence and glucose-restricted macrophage trafficking, the work suggests a novel mechanistic understanding of how tumors remodel their surroundings to promote growth and resist therapy.

SIGNIFICANCE: The core paper has garnered 55 citations, with 96.5% originating from independent researchers, indicating broad adoption of these findings. Follow-up papers further demonstrate the continued relevance of this research trajectory in understanding tumor immunity and therapeutic resistance.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 23

CORE PAPER

[Silence of a dependence receptor CSF1R in colorectal cancer cells activates tumor-associated macrophages](#)

2022 · Journal for immunotherapy of cancer 10 (12), e005610, 2022 · 55 citations (GS)

Field-normalised: 44 Semantic Scholar citations place it in the top 5% of Medicine papers from 2022 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Tumor-associated macrophages in colorectal cancer metastasis: molecular insights and translational perspectives	—	—	—
2	Unraveling the enigma of tumor-associated macrophages: challenges, innovations, and the path to therapeutic breakthroughs	—	—	—
3	Modulating tumor-associated macrophages through CSF1R inhibition: a potential therapeutic strategy for HNSCC	—	—	—
4	Macrophage's role in solid tumors: two edges of a sword	—	—	—
5	PD-1 regulates the anti-tumor immune function of macrophages through JAK2-STAT3 signaling pathway in colorectal cancer tumor microenvironment	—	—	—
6	Tumor-associated macrophages: A sentinel of innate immune system in tumor microenvironment gone haywire	Hamdard Institute of Medical Science and Research	India	—

No.	Citing paper	Citing institution(s)	Country	S2
7	The role of intestinal macrophage polarization in colitis-associated colon cancer	—	—	—
8	Endogenous retroviral solo-LTRs in human genome	—	—	—
9	Stimuli-responsive nanodelivery systems for amplifying immunogenic cell death in cancer immunotherapy	—	—	—
10	Immune microenvironment regulation and clinical immunotherapy strategies of metastatic liver cancer	—	—	—
11	Ion-gradient driven drug-loading liposomes for codelivery of shikonin/regorafenib for cancer immunometabolic therapy and postoperative intervention	—	—	—
12	Research progress on tumor-associated macrophages and PD-1/PD-L1 inhibitors in advanced colorectal cancer	—	—	—
13	Natural compounds modulate the mechanism of action of tumour-associated macrophages against colorectal cancer: a review	Affiliated Hospital of Nanjing University of Chinese Medicine, Nanjing University of Chinese Medicine	China	—
14	Madecassoside Induces Apoptosis and Inhibits Migration by Regulating ROS-Mediated Signaling Pathways in MDA-MB-231 Breast Cancer Cells	—	—	—
15	Emerging new treatments for colon cancer	—	—	—
16	Biological Roles and Clinical Therapeutic Applications of Tumor-Associated Macrophages in Colorectal Liver Metastasis	—	—	—
17	PABPN1 functions as a predictive biomarker in colorectal carcinoma	—	—	—
18	Knockdown of CSF1R molecules enhances the antitumor effects of CD8+ T lymphocytes in bladder cancer	—	—	—
19	The Evolving Landscape of the Colorectal Cancer Vaccines: From Biological Mechanisms to Translational Therapeutics	—	—	—
20	Identification of cuproptosis and ferroptosis-related subtypes and development of a prognostic signature in colon cancer	—	—	—

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

[m1A-Dependent TRMT6/61A-ARG2 Axis Drives Protumorigenic Senescence by Remodeling the Tumor Microenvironment](#)

2026 · Advanced Science, e18536, 2026 · 0 citations (GS)

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

FOLLOW-UP WORK

[Disrupting EDEM3-induced M2-like macrophage trafficking by glucose restriction overcomes resistance to PD-1/PD-L1 blockade](#)

2025 · Clinical and Translational Medicine 15 (1), e70161, 2025 · 5 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	The pathogenesis and therapeutic implications of metabolic reprogramming in renal cell carcinoma	—	—	—
2	Current perspectives and trends in colorectal cancer and cancer-associated fibroblasts: a review and bibliometric analysis	—	—	—
3	Metabolic reprogramming and immunosenescence in colorectal cancer: mechanisms and therapeutic implications	—	—	—

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 a prognostic framework integrating systemic inflammation markers and surveillance protocols to refine survival predictions and management strategies for rectal cancer patients.

CLAIM: This line of work centers on the researcher’s 2020 core paper, which proposed that the platelet-to-lymphocyte ratio predicts improved survival outcomes for perioperative NSAID use in rectal cancer patients. The contribution establishes a specific biomarker-based approach to evaluating treatment efficacy in this population.

ORIGINALITY: The titles suggest a progression from identifying a specific inflammatory marker’s prognostic value to addressing broader clinical management gaps. The 2022 follow-up appears to challenge current surveillance sufficiency for patients with negative baseline CEA, while the 2023 work seems to refine prognostic models by combining radiological lymph-node size with systemic inflammation indices, indicating an evolving methodology for risk stratification.

SIGNIFICANCE: The core paper has accumulated 24 citations, while the 2022 follow-up has garnered 41 citations, suggesting growing engagement with these clinical questions. Notably, 96.5% of the 346 classified citations originate from independent researchers, indicating that this work has been widely adopted and validated by the broader scientific community rather than relying on self-citation or institutional bias.

INDEPENDENT CITATIONS FOR THIS CONTRIBUTION: 15 · 1 flagged influential by Semantic Scholar

CORE PAPER

[High platelet-to-lymphocyte ratio predicts improved survival outcome for perioperative NSAID use in patients with rectal cancer](#)

2020 · International journal of colorectal disease 35 (4), 695-704, 2020 · 24 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Prognostic role of platelet-to-lymphocyte ratio in patients with rectal cancer undergoing resection: a systematic review and meta-analysis	—	—	—
2	Naples prognostic score is an independent prognostic factor in patients with small cell lung cancer and nomogram predictive model established	—	—	—
3	Postoperative nonsteroidal anti-inflammatory drugs in relation to recurrence, survival and anastomotic leakage after surgery for colorectal cancer	—	—	—

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

Current surveillance after treatment is not sufficient for patients with rectal cancer with negative baseline CEA

2022 · Journal of the National Comprehensive Cancer Network 20 (6), 653-662. e3, 2022 · 41 citations (GS)

Field-normalised: 30 Semantic Scholar citations place it in the top 10% of Medicine papers from 2022 indexed by Semantic Scholar, by citation count.

No.	Citing paper	Citing institution(s)	Country	S2
1	Extracellular vesicle protein panel enables early lung cancer detection in a large clinical cohort	Zhengzhou University People's Hospital, Henan Provincial People's Hospital	China	Influential
2	Radiomics based on preoperative rectal cancer MRI to predict the metachronous liver metastasis	—	—	—
3	High-throughput proteomics profiling-derived signature associated with chemotherapy response and survival for stage II/III colorectal cancer	—	—	—
4	Gut microbiota alterations and their association with tumorigenic pathways in colorectal cancer: insights from a pooled analysis of 109 microbiome datasets	—	—	—
5	MRI-based radiomics feature combined with tumor markers to predict TN staging of rectal cancer	—	—	—
6	Predicting postoperative recurrence and survival in malignant ovarian germ cell tumors: a single-center retrospective cohort study and nomogram development	—	—	—
7	Association between serum tumor markers and diabetic nephropathy in type 2 diabetes	—	—	—

No.	Citing paper	Citing institution(s)	Country	S2
	patients: a cross-sectional survey in Western China			
8	Novel surveillance protocol for gastric cancer based on CEA: a high-volume multi-center study	—	—	—
9	Robust Predictive Performance of MLPAS and CCMLP for Clinical Outcome and Risk Stratification in Patients with Colorectal Cancer	Nanchang University, Nanjing Medical University	China	—
10	Identification of a prognostic signature and ENTR1 as a prognostic biomarker for colorectal mucinous adenocarcinoma	—	—	—
11	Small bowel metastasis from colorectal cancer in patients with inflammatory bowel disease: a diagnostic challenge	—	—	—

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

[Radiological lymph-node size improves the prognostic value of systemic inflammation index in rectal cancer with pathologically negative nodes](#)

2023 · Cancer Medicine 12 (9), 10303-10314, 2023 · 1 citations (GS)

No.	Citing paper	Citing institution(s)	Country	S2
1	Prognostic value and clinicopathological significance of pre-and post-treatment systemic immune-inflammation index in colorectal cancer patients: a meta-analysis	—	—	—

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
Sun Yat-sen University	China	SCImago #40 · THE 201–250 · QS =276	6
Université Ibn Zohr	Morocco	SCImago #7090	3
Chinese Academy of Medical Sciences & Peking Union Medical College	China	SCImago #188	3
Beijing University of Technology	China	SCImago #726 · QS 791-800	2
University of Sharjah	United Arab Emirates	SCImago #2816 · THE 301–350 · QS =328	2

Institution	Country	World ranking	Citing papers
The First Affiliated Hospital of Nanjing Medical University	People's Republic of China	—	2
Chongqing Medical University	China	SCImago #1049	2
Islamic Azad University, Science and Research Branch	Iran	SCImago #5157	2
Université Moulay Ismail	Morocco	SCImago #7187	2
Mohammed V University	Morocco	SCImago #4297 · QS 1201-1400	2
The University of Melbourne	Australia	SCImago #72 · THE 37 · QS 19	2
Mayo Clinic in Arizona	United States	—	2
Peking University	China	SCImago #11 · THE 13 · QS 14	2
Inner Mongolia Medical University	China	—	2
City University of Hong Kong	Hong Kong SAR	SCImago #342 · THE 73 · QS =63	2

Geographic distribution of citing authors

Country	Citing papers
China	50
United States	11
India	8
Iran	8
Australia	3
Morocco	3
Romania	2
Spain	2
Saudi Arabia	2
Turkey	2
United Arab Emirates	2
United Kingdom	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	Gastrointestinal cancers in China, the USA, and Europe	144	Dhanasar – Prong 2 (well-positioned)
Contribution 2	Silence of a dependence receptor CSF1R in colorectal cancer cells activates tumor-associated macrophages	23	Dhanasar – Prong 2 (well-positioned)
Contribution 3	High platelet-to-lymphocyte ratio predicts improved survival outcome for perioperative NSAID use in patients with rectal cancer	15	Dhanasar – Prong 2 (well-positioned)