

ORIGINAL RESEARCH ARTICLE

Emerging trends and research landscape of the tumor microenvironment in head-and-neck cancer: A comprehensive bibliometric analysis

Supplementary File

Table S1. List of top 50 publications on tumor microenvironment in head-and-neck cancer

Article	Year	Journal	First author	Affiliated institution	Citations	Reference
Radiomics: The bridge between medical imaging and personalized medicine	2017	Nature Reviews Clinical Oncology	Lambin <i>et al.</i>	Precision Medicine, GROW-School for Oncology and Developmental Biology, Maastricht University Medical Center, Universiteitssingel 40, Maastricht, 6229 ER, Netherlands	3,769	1
Cancer drug resistance: An evolving paradigm	2013	Nature Reviews Cancer	Holohan <i>et al.</i>	Drug Resistance Group, Center for Cancer Research and Cell Biology, Queen's University Belfast, Belfast BT9 7BL, 97 Lisburn Road, United Kingdom	3,687	2
IFN- γ -related mRNA profile predicts clinical response to PD-1 blockade	2017	Journal of Clinical Investigation	Ayers <i>et al.</i>	Profiling and Expression, Biologics Discovery, Merck Research Laboratories, 901 California Avenue, Palo Alto, 94304, CA, United States	2,585	3
Head-and-neck squamous cell carcinoma	2020	Nature Reviews Disease Primers	Johnson <i>et al.</i>	Department of Otolaryngology-Head-and-Neck Surgery, University of California at San Francisco, San Francisco, CA, United States	2,351	4
Approaches to treat immune hot, altered and cold tumors with combination immunotherapies	2019	Nature Reviews Drug Discovery	Galon and Bruni	INSERM, Laboratory of Integrative Cancer Immunology, Sorbonne Université, Sorbonne Paris Cité, Université Paris Descartes, Université Paris Diderot, Center de Recherche des Cordeliers, Paris, France	2,268	5
PD-L1 (B7-H1) and PD-1 pathway blockade for cancer therapy: Mechanisms, response biomarkers, and combinations	2016	Science Translational Medicine	Zou <i>et al.</i>	Department of Surgery, University of Michigan School of Medicine, Ann Arbor, 48109, MI, United States	1,901	6
Single-Cell Transcriptomic Analysis of Primary and Metastatic Tumor Ecosystems in Head-and-Neck Cancer	2017	Cell	Puram <i>et al.</i>	Department of Pathology and Center for Cancer Research, Massachusetts General Hospital and Harvard Medical School, Boston, 02114, MA, United States	1,607	7
The immune contexture in cancer prognosis and treatment	2017	Nature Reviews Clinical Oncology	Fridman <i>et al.</i>	Cancer Immune Control and Escape Team, Cordeliers Research Center, NSERM UMRS 1138, France	1,568	8

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Immune checkpoint inhibitors: recent progress and potential biomarkers	2018	Experimental and Molecular Medicine	Darvin <i>et al.</i>	Cancer Research Center, Qatar Biomedical Research Institute, College of Science and Engineering, Hamad Bin Khalifa University, Qatar Foundation, Doha, Qatar	1,508	9
YAP/TAZ at the roots of cancer	2016	Cancer Cell	Zanconato <i>et al.</i>	Department of Molecular Medicine, University of Padua School of Medicine, viale Colombo 3, Padua, 35126, Italy	1,434	10
NK Cells Stimulate Recruitment of cDC1 into the Tumor Microenvironment Promoting Cancer Immune Control	2018	Cell	Böttcher <i>et al.</i>	Immunobiology Laboratory, The Francis Crick Institute, 1 Midland Road, London, NW1 1AT, United Kingdom	1,279	11
Turning foes to friends: targeting cancer-associated fibroblasts	2019	Nature Reviews Drug Discovery	Chen and Song	Guangdong Provincial Key Laboratory of Malignant Tumor Epigenetics and Gene Regulation, Medical Research Center, Sun Yat-Sen Memorial Hospital, Sun Yat-Sen University, Guangzhou, China	1,232	12
Oncolytic viruses: A new class of immunotherapy drugs	2015	Nature Reviews Drug Discovery	Kaufman <i>et al.</i>	Rutgers Cancer Institute of New Jersey, 195 Little Albany Street, New Brunswick, 08901, NJ, United States	1,156	13
Targeting Notch, Hedgehog, and Wnt pathways in cancer stem cells: Clinical update	2015	Nature Reviews Clinical Oncology	Takebe <i>et al.</i>	Investigational Drug Branch, Division of Cancer Treatment and Diagnosis, National Cancer Institute, 9609 Medical Center Drive, Bethesda, 20852, MD, United States	1,073	14
Patient-derived tumor xenografts as models for oncology drug development	2012	Nature Reviews Clinical Oncology	Tentler <i>et al.</i>	Department of Medicine, School of Medicine, University of Colorado Anschutz Medical Campus, Aurora, CO 80045, 12801 East 17 th Avenue, United States	1,052	15
Monoclonal antibodies: Versatile platforms for cancer immunotherapy	2010	Nature Reviews Immunology	Weiner <i>et al.</i>	Lombardi Comprehensive Cancer Center, Georgetown University Medical Center, Washington, DC 20057, United States	1,008	16
Dangerous liaisons: STAT3 and NF- κ B collaboration and crosstalk in cancer	2010	Cytokine and Growth Factor Reviews	Grivennikov and Karin	Laboratory of Gene Regulation and Signal Transduction, Department of Pharmacology, School of Medicine, La Jolla, CA 92093, 9500 Gilman Drive, United States	953	17
The biology and role of CD44 in cancer progression: Therapeutic implications	2018	Journal of Hematology and Oncology	Chen <i>et al.</i>	Department of Cell Systems and Anatomy, University of Texas, Health Science Center at San Antonio, San Antonio, TX, United States	899	18
NicheNet: modeling intercellular communication by linking ligands to target genes	2020	Nature Methods	Browaeys <i>et al.</i>	Data Mining and Modeling for Biomedicine, VIB Center for Inflammation Research, Ghent, Belgium	899	19

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Macrophages as tools and targets in cancer therapy	2022	Nature Reviews Drug Discovery	Mantovani <i>et al.</i>	Department of Biomedical Sciences, Humanitas University, Milan, Italy	884	20
TGF- β -mediated epithelial-mesenchymal transition and cancer metastasis	2019	International Journal of Molecular Sciences	Hao <i>et al.</i>	Department of Cell and Chemical Biology and Onco Institute, Leiden University Medical Center, Einthovenweg 20, Leiden, 2300, RC, Netherlands	812	21
Radiotherapy and immunotherapy: A beneficial liaison?	2017	Nature Reviews Clinical Oncology	Weichselbaum <i>et al.</i>	Department of Radiation and Cellular Oncology, Ludwig Center for Metastasis Research, University of Chicago, BOX 9006, 5758 South Maryland Avenue, Chicago, 60637, IL, United States	807	22
Targeting the EGFR signaling pathway in cancer therapy	2012	Expert Opinion on Therapeutic Targets	Seshacharyulu <i>et al.</i>	Eppley Institute for Research in Cancer and Allied Diseases, University of Nebraska Medical Center, Department of Biochemistry and Molecular Biology, Omaha, NE 68198-5870, United States	745	23
Inflammation: Gearing the journey to cancer	2008	Mutation Research - Reviews in Mutation Research	Kundu and Surh	National Research Laboratory of Molecular Carcinogenesis and Chemoprevention, College of Pharmacy, Seoul National University, Seoul, 151 742, South Korea	720	24
Role of Matrix Metalloproteinases in Angiogenesis and Cancer	2019	Frontiers in Oncology	Quintero-Fabián <i>et al.</i>	Multidisciplinary Research Laboratory, Military School of Graduate of Health, Mexico City, Mexico	697	25
The unfolded protein response protects human tumor cells during hypoxia through regulation of the autophagy genes <i>MAP1LC3B</i> and <i>ATG5</i>	2010	Journal of Clinical Investigation	Rouschop <i>et al.</i>	Department of Radiation Oncology (Maastrro Lab.), GROW School for Oncology and Developmental Biology, Maastricht University, Maastricht, Netherlands	694	26
Mechanisms of receptor tyrosine kinase activation in cancer	2018	Molecular Cancer	Du and Lovly	Vanderbilt University Medical Center, Department of Medicine, Division of Hematology and Oncology, Nashville, 37232, TN, United States	692	27
Unraveling cancer stem cell potential	2013	Nature Reviews Cancer	Beck and Blanpain	Institut de Recherche Interdisciplinaire en Biologie Humaine et Moléculaire (IRIBHM), Université Libre de Bruxelles (ULB), 1070 Brussels, 808 route de Lennik, Belgium	692	28
Chemo-photothermal therapy combination elicits anti-tumor immunity against advanced metastatic cancer	2018	Nature Communications	Nam <i>et al.</i>	Department of Pharmaceutical Sciences, University of Michigan, Ann Arbor, 48109, MI, United States	666	29
Essentials of oral cancer	2015	International Journal of Clinical and Experimental Pathology	Rivera	Department of Basic Biomedical Sciences, University of Talca (UTALCA), Talca, Maule Region, Chile	662	30

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Article	Year	Journal	First author	Affiliated institution	Citations	Reference
Conserved pan-cancer microenvironment subtypes predict response to immunotherapy	2021	Cancer Cell	Bagaev <i>et al.</i>	BostonGene, Waltham, 02453, MA, United States	650	31
CXCL12/CXCR4/CXCR7 chemokine axis and cancer progression	2010	Cancer and Metastasis Reviews	Sun <i>et al.</i>	Department of Biochemistry and Molecular and Cell Biology, Institute of Medical Science, Shanghai Jiao Tong University School of Medicine, Shanghai 200025, China	647	32
Cancer related mutations in NRF2 impair its recognition by Keap1-Cul3 E3 ligase and promote malignancy	2008	Proceedings of the National Academy of Sciences of the United States of America	Shibata <i>et al.</i>	Cancer Genomics Project, Pathology Division, National Cancer Center Research Institute, Chuo-ku, Tokyo, 104-0045, Japan	636	33
PD-L1 expression in human cancers and its association with clinical outcomes	2016	OncoTargets and Therapy	Yu <i>et al.</i>	School of Medicine and Life Sciences, University of Jinan – Shandong Academy of Medical Sciences, Jinan, China	621	34
Next generation of immune checkpoint therapy in cancer: New developments and challenges	2018	Journal of Hematology and Oncology	Marin-Acevedo <i>et al.</i>	Department of Internal Medicine, Mayo Clinic, Jacksonville, FL, United States	617	35
Metabolic targets for cancer therapy	2013	Nature Reviews Drug Discovery	Galluzzi <i>et al.</i>	Université Paris Descartes, Sorbonne Paris Cité, F-75006 Paris, France	594	36
The secret ally: Immunostimulation by anticancer drugs	2012	Nature Reviews Drug Discovery	Galluzzi <i>et al.</i>	INSERM U848, Institut Gustave Roussy, Pavillon de Recherche 1, F-94805 Villejuif, 39 rue Camille Desmoulins, France	592	37
Biomarkers for predicting efficacy of PD-1/PD-L1 inhibitors	2018	Molecular Cancer	Yi <i>et al.</i>	Huazhong University of Science and Technology, Department of Oncology, Tongji Hospital of Tongji Medical College, Wuhan, 430030, China	591	38
Tumor-associated neutrophils: Friend or foe?	2012	Carcinogenesis	Fridlender and Albelda	Institute of Pulmonary Medicine, Department of Medicine, Hadassah-Hebrew University Medical Center, Jerusalem 91120, Israel	563	39
TGF β biology in cancer progression and immunotherapy	2021	Nature Reviews Clinical Oncology	Derynck <i>et al.</i>	Department of Cell and Tissue Biology, University of California at San Francisco (UCSF), San Francisco, CA, United States	552	40
Regulatory T cells in tumor microenvironment: New mechanisms, potential therapeutic strategies, and future prospects	2020	Molecular Cancer	Li <i>et al.</i>	Department of Radiation Oncology, Peking University Third Hospital, Beijing, 100191, China	546	41
PD-1-expressing tumor-infiltrating T cells are a favorable prognostic biomarker in HPV-Associated head-and-neck cancer	2013	Cancer Research	Badoual <i>et al.</i>	INSERM U970 PARCC, Paris, France	538	42
Immunology and immunotherapy of head-and-neck cancer	2015	Journal of Clinical Oncology	Ferris	University of Pittsburgh Cancer Institute, Hillman Cancer Center Research Pavilion, 5117 Center Ave, Room 2.26b, Pittsburgh, 15213-1863, PA, United States	536	43

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Article	Year	Journal	First author	Affiliated institution	Citations	Reference
Amino acids in cancer	2020	Experimental and Molecular Medicine	Lieu <i>et al.</i>	Department of Biochemistry and Molecular Genetics, University of Illinois at Chicago, Chicago, IL, United States	533	44
Clinical significance of PD-L1 ⁺ exosomes in plasma of head-and-neck cancer patients	2018	Clinical Cancer Research	Theodoraki <i>et al.</i>	Department of Pathology, University of Pittsburgh, School of Medicine, Pittsburgh, PA, United States	513	45
Radiation oncology: A century of achievements	2004	Nature Reviews Cancer	Bernier <i>et al.</i>	Department of Radio-Oncology, Oncol. Inst. of Southern Switzerland, CH-6504 Bellinzona, Switzerland	507	46
Tumor-associated macrophages and neutrophils in cancer	2013	Immunobiology	Galdiero <i>et al.</i>	Humanitas Clinical and Research Center, Rozzano, Milan 20089, via Manzoni 56, Italy	504	47
Navigating metabolic pathways to enhance antitumor immunity and immunotherapy	2019	Nature Reviews Clinical Oncology	Li <i>et al.</i>	Department of Fundamental Oncology, University of Lausanne, Lausanne, Vaud, Switzerland	503	48
Understanding and targeting cancer stem cells: therapeutic implications and challenges	2013	Acta Pharmacologica Sinica	Chen <i>et al.</i>	CAS Key Laboratory of Pathogenic Microbiology and Immunology, Institute of Microbiology, Chinese Academy of Sciences (CAS), Beijing 100101, China	502	49
The Society for Immunotherapy of Cancer consensus statement on immunotherapy for the treatment of squamous cell carcinoma of the head and neck (HNSCC)	2019	Journal for ImmunoTherapy of Cancer	Cohen <i>et al.</i>	Moore's Cancer Center, University of California San Diego, San Diego, CA, United States	500	50

Abbreviations: CXCL: Chemokine (C-X-C motif) ligand; CXCR: CXC chemokine receptors; EGFR: Epidermal growth factor receptor; IFN: Interferon; NF- κ B: Nuclear factor-kappa B; PD-1: Programmed cell death 1; PD-L1: Programmed death ligand 1; TGF- β : Transforming growth factor-beta.

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