

Supplemental Table 1. The top 10 most active journals that published articles in anesthesia and cancer research (sorted by total citation)

Rank	Journal Title	Frequency	Total citations	Average citation per paper	Impact factor (2020)	Country	JCR
1	Cancer Research	23	220	9.57	12.701	USA	Q1
2	Clinical Cancer Research	20	148	7.40	12.531	USA	Q1
3	International Journal of Cancer	16	136	8.5	7.396	Switzerland	Q2
4	Breast Cancer Research and Treatment	10	107	10.7	4.872	Netherlands	Q2
5	Brain Behavior and Immunity	14	84	6.00	7.217	USA	Q2
6	Proceedings of the National Academy of Sciences of the United States of America	7	82	11.71	11.205	USA	Q1
7	Oncology Reports	22	80	3.64	3.906	Greece	Q3
8	Cancer Biology & Therapy	9	75	8.33	4.742	USA	/
9	Plos One	26	73	2.81	3.240	USA	/
10	Nature Medicine	4	56	14	53.440	USA	Q1

Supplemental Table 3. The top 25 references with the strongest citation bursts

Rank	Title	DOI	Year	Begin	End	Strength
1	Chronic stress promotes tumor growth and angiogenesis in a mouse model of ovarian carcinoma	10.1038/nm1447	2006	2010	2014	12.4806
2	Stress Hormone–Mediated Invasion of Ovarian Cancer Cells	10.1158/1078-0432.CCR-05-1698	2006	2008	2013	11.9407
3	The norepinephrine-driven metastasis development of PC-3 human prostate cancer cells in BALB/c nude mice	10.1002/ijc.21723	2006	2008	2013	11.5378
4	The Sympathetic Nervous System Induces a Metastatic Switch in Primary Breast Cancer	10.1158/0008-5472.CAN-10-0522	2010	2012	2018	9.888
5	Beta-Blocker Drug Therapy Reduces Secondary Cancer Formation in Breast Cancer and Improves Cancer Specific Survival	10.18632/oncotarget.197	2010	2012	2017	9.6033
6	Glutamate antagonists limit tumor growth	10.1073/pnas.091113598	2001	2004	2009	8.6972
7	Autonomic Nerve Development Contributes to Prostate Cancer Progression	10.1126/science.1236361	2013	2015	2021	8.5748
8	Norepinephrine Up-regulates the Expression of Vascular Endothelial Growth Factor, Matrix Metalloproteinase (MMP)-2, and MMP-9 in Nasopharyngeal Carcinoma Tumor Cells	10.1158/0008-5472.CAN-06-2496	2006	2009	2013	8.3859
9	Beta-Blocker Use Is Associated With Improved Relapse-Free Survival in Patients With Triple-Negative Breast Cancer	10.1200/JCO.2010.33.4441	2011	2013	2019	8.3057
10	Hallmarks of Cancer: The Next Generation	10.1016/j.cell.2011.02.013	2011	2015	2019	7.4241
11	Glutamate release promotes growth of malignant gliomas	10.1038/nm0901-1010	2001	2005	2009	6.882
12	Molecular Pathways: Beta-Adrenergic Signaling in Cancer	10.1158/1078-0432.CCR-11-0641	2012	2013	2021	6.6998
13	Induction of a metastatogenic tumor cell type by neurotransmitters and its pharmacological inhibition by established drugs	10.1002/ijc.20410	2004	2009	2012	6.663
14	Beta Blockers and Breast Cancer Mortality: A Population- Based Study	10.1200/JCO.2010.33.5422	2011	2013	2019	6.5868
15	Novel small molecule alpha v integrin antagonists: comparative anti-cancer efficacy with known angiogenesis inhibitors	/	2001	2003	2005	6.3313
16	Triple therapy with octreotide, galanin and serotonin induces necrosis and increases apoptosis of a rat colon	10.1016/S0167-0115(02)00106-4	2002	2003	2005	6.3313

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17	GABAB receptor is a novel drug target for pancreatic cancer	10.1002/cncr.23231	2008	2009	2013	6.1659
18	Norepinephrine-induced migration of SW 480 colon carcinoma cells is inhibited by beta-blockers	/	2001	2003	2009	6.0473
19	Triple therapy with octreotide, galanin, and serotonin reduces the size and blood vessel density and increases apoptosis of a rat colon carcinoma.	10.1016/s0167-0115(02)00280-X	2003	2004	2005	6.001
20	A comparison between double and triple therapies of octreotide, galanin and serotonin on a rat colon carcinoma	10.14670/HH-18.103	2003	2004	2005	6.001
21	Genome-wide shRNA screen revealed integrated mitogenic signaling between dopamine receptor D2 (DRD2) and epidermal growth factor receptor (EGFR) in glioblastoma	10.18632/oncotarget.1801	2014	2019	2021	5.9323
22	Colonic endocrine cells in patients with carcinoma of the colon.	10.1097/00042737-199806000-00015	2001	2003	2005	5.7532
23	Behavioral stress accelerates prostate cancer development in mice	10.1172/JCI63324	2013	2015	2018	5.7349
24	Cancer Statistics, 2017	10.3322/caac.21387	2017	2018	2021	5.673
25	Overexpression of glycine-extended gastrin in transgenic mice results in increased colonic proliferation	10.1172/JCI4910	2001	2018	2021	5.52

Supplemental Table 2. The top 10 high-cited papers in neurotransmitter and cancer research during 2001 to 2021

Rank	Title	First Author	Journal	Year	Cited Frequency	DOI
1	Beta-blocker use is associated with improved relapse-free survival in patients with triple-negative breast cancer.	Melhem-Bertrandt A	J CLIN ONCOL	2011	28	10.1200/JCO.2010.33.4441
2	The sympathetic nervous system induces a metastatic switch in primary breast cancer.	Sloan EK	Cancer Research	2010	27	10.1158/0008-5472.CAN-10-0522
3	Beta-blocker drug therapy reduces secondary cancer formation in breast cancer and improves cancer specific survival.	Powe DG	Oncotarget	2010	24	10.18632/oncotarget.101009
4	Molecular pathways: beta-adrenergic signaling in cancer.	Cole SW	Clinical Cancer Research	2012	24	10.1158/1078-0432.CCR-11-0641
5	Beta blockers and breast cancer mortality: a population- based study	Barron TI	J CLIN ONCOL	2011	23	10.1200/JCO.2010.33.5422
6	Metabolite profiling identifies a key role for glycine in rapid cancer cell proliferation.	Jain M	Science	2013	21	10.1126/science.1218595
7	Autonomic nerve development contributes to prostate cancer progression.	Magnon C	Science	2013	17	10.1126/science.1236361
8	Stress hormone-mediated invasion of ovarian cancer cells.	Sood AK	Clinical Cancer Research	2006	16	10.1158/1078-0432.CCR-05-1698
9	The norepinephrine-driven metastasis development of PC-3 human prostate cancer cells in BALB/c nude mice is inhibited by beta-blockers.	Palm D	International Journal of Cancer	2006	15	10.1002/ijc.21723
10	Behavioral stress accelerates prostate cancer development in mice.	Hassan S	J CLIN INVEST	2013	15	10.1172/JCI63324