

# Biodistribution of cisplatin revealed by imaging mass cytometry and collagen binding in tumor and normal tissues

Scientific Reports

6, 36641

DOI: [10.1038/srep36641](https://doi.org/10.1038/srep36641)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Imaging Mass Cytometry. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2017, 91, 160-169.	1.1	206
2	Analytical figures of merit for a novel tissue imaging system. <i>Journal of Analytical Atomic Spectrometry</i> , 2017, 32, 1044-1051.	1.6	16
3	Staining of Frozen and Formalin-Fixed, Paraffin-Embedded Tissues with Metal-Labeled Antibodies for Imaging Mass Cytometry Analysis. <i>Current Protocols in Cytometry</i> , 2017, 82, 12.47.1-12.47.8.	3.7	23
4	Control of Carbon Nanotube Solvatochromic Response to Chemotherapeutic Agents. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 37947-37953.	4.0	21
5	Cisplatin is retained in the cochlea indefinitely following chemotherapy. <i>Nature Communications</i> , 2017, 8, 1654.	5.8	278
6	Simultaneous Detection of Protein and mRNA in Jurkat and KG1a Cells by Mass Cytometry. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , 2017, 91, 1200-1208.	1.1	18
7	Transport of drugs from blood vessels to tumour tissue. <i>Nature Reviews Cancer</i> , 2017, 17, 738-750.	12.8	499
8	Ruthenium counterstaining for imaging mass cytometry. <i>Journal of Pathology</i> , 2018, 244, 479-484.	2.1	33
9	Opposing Roles of Dendritic Cell Subsets in Experimental GN. <i>Journal of the American Society of Nephrology: JASN</i> , 2018, 29, 138-154.	3.0	65
10	Laser-assisted delivery enhances topical uptake of the anticancer agent cisplatin. <i>Drug Delivery</i> , 2018, 25, 1877-1885.	2.5	22
11	Mass Spectrometry Imaging and Integration with Other Imaging Modalities for Greater Molecular Understanding of Biological Tissues. <i>Molecular Imaging and Biology</i> , 2018, 20, 888-901.	1.3	113
12	Long-term serum platinum changes and their association with cisplatin-related late effects in testicular cancer survivors. <i>Acta Oncologica</i> , 2018, 57, 1392-1400.	0.8	11
13	Mechanisms and impact of altered tumour mechanics. <i>Nature Cell Biology</i> , 2018, 20, 766-774.	4.6	201
14	Connecting the in vitro and in vivo experiments in electrochemotherapy - a feasibility study modeling cisplatin transport in mouse melanoma using the dual-porosity model. <i>Journal of Controlled Release</i> , 2018, 286, 33-45.	4.8	18
15	Clickable and High-Sensitivity Metal-Containing Tags for Mass Cytometry. <i>Bioconjugate Chemistry</i> , 2018, 29, 2028-2038.	1.8	12
16	Models and Approaches Describing the Metabolism, Transport, and Toxicity of Drugs Administered by the Ocular Route. <i>Drug Metabolism and Disposition</i> , 2018, 46, 1670-1683.	1.7	16
17	Tumor Platinum Concentrations and Pathological Responses Following Cisplatin-Containing Chemotherapy in Gastric Cancer Patients. <i>Journal of Gastrointestinal Cancer</i> , 2019, 50, 801-807.	0.6	9
18	Multidimensional profiling of drug-treated cells by Imaging Mass Cytometry. <i>FEBS Open Bio</i> , 2019, 9, 1652-1669.	1.0	33

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19	Signal Amplification for Imaging Mass Cytometry. <i>Bioconjugate Chemistry</i> , 2019, 30, 2805-2810.	1.8	5
20	DNA-Conjugated Gold Nanoparticles as High-Mass Probes in Imaging Mass Cytometry. <i>ACS Applied Bio Materials</i> , 2019, 2, 4316-4323.	2.3	12
21	Methods for analyzing tellurium imaging mass cytometry data. <i>PLoS ONE</i> , 2019, 14, e0221714.	1.1	5
22	Laser Ablation-Inductively Coupled Plasma Time-of-Flight Mass Spectrometry Imaging of Trace Elements at the Single-Cell Level for Clinical Practice. <i>Analytical Chemistry</i> , 2019, 91, 8207-8212.	3.2	41
23	The Role of the Extracellular Matrix in Cancer Stemness. <i>Frontiers in Cell and Developmental Biology</i> , 2019, 7, 86.	1.8	238
25	Mass Cytometry Imaging for the Study of Human Diseases—Applications and Data Analysis Strategies. <i>Frontiers in Immunology</i> , 2019, 10, 2657.	2.2	139
26	Beyond the message: advantages of snapshot proteomics with single-cell mass cytometry in solid tumors. <i>FEBS Journal</i> , 2019, 286, 1523-1539.	2.2	26
27	Mass spectrometry imaging and its application in pharmaceutical research and development: A concise review. <i>International Journal of Mass Spectrometry</i> , 2019, 437, 99-112.	0.7	111
28	Spatially resolved proteomics in osteoarthritis: State of the art and new perspectives. <i>Journal of Proteomics</i> , 2020, 215, 103637.	1.2	7
29	Mass Spectrometry Imaging of atherosclerosis-affine Gadofluorine following Magnetic Resonance Imaging. <i>Scientific Reports</i> , 2020, 10, 79.	1.6	9
30	Predicting tubular reabsorption with a human kidney proximal tubule tissue-on-a-chip and physiologically-based modeling. <i>Toxicology in Vitro</i> , 2020, 63, 104752.	1.1	28
31	Immune monitoring using mass cytometry and related high-dimensional imaging approaches. <i>Nature Reviews Rheumatology</i> , 2020, 16, 87-99.	3.5	131
32	The Opportunities and Use of Imaging to Measure Target Engagement. <i>SLAS Discovery</i> , 2020, 25, 127-136.	1.4	4
33	Characterization of an Aggregated Three-Dimensional Cell Culture Model by Multimodal Mass Spectrometry Imaging. <i>Analytical Chemistry</i> , 2020, 92, 12538-12547.	3.2	39
34	Rare earth elements (REE) in biology and medicine. <i>Rendiconti Lincei</i> , 2020, 31, 821-833.	1.0	33
35	Spatial heterogeneity of nanomedicine investigated by multiscale imaging of the drug, the nanoparticle and the tumour environment. <i>Theranostics</i> , 2020, 10, 1884-1909.	4.6	30
36	Cadherin 11 Promotes Immunosuppression and Extracellular Matrix Deposition to Support Growth of Pancreatic Tumors and Resistance to Gemcitabine in Mice. <i>Gastroenterology</i> , 2021, 160, 1359-1372.e13.	0.6	41
37	Research Techniques Made Simple: Experimental Methodology for Imaging Mass Cytometry. <i>Journal of Investigative Dermatology</i> , 2021, 141, 467-473.e1.	0.3	9

#	ARTICLE	IF	CITATIONS
38	Application of ICP-MS to the development of metal-based drugs and diagnostic agents: where do we stand?. <i>Journal of Analytical Atomic Spectrometry</i> , 2021, 36, 254-266.	1.6	16
39	Method to Investigate the Distribution of Water-Soluble Drug-Delivery Systems in Fresh Frozen Tissues Using Imaging Mass Cytometry. <i>Analytical Chemistry</i> , 2021, 93, 3742-3749.	3.2	3
40	The matrix-dependent 3D spheroid model of the migration of non-small cell lung cancer: a step towards a rapid automated screening. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 610407.	1.6	5
41	Mass spectrometry techniques for imaging and detection of metallodrugs. <i>Current Opinion in Chemical Biology</i> , 2021, 61, 123-134.	2.8	28
42	Therapeutic Targeting of the Tumor Microenvironment. <i>Cancer Discovery</i> , 2021, 11, 933-959.	7.7	646
43	Genetically engineered oncolytic bacteria as drug delivery systems for targeted cancer theranostics. <i>Acta Biomaterialia</i> , 2021, 124, 72-87.	4.1	29
44	Emerging technologies provide insights on cancer extracellular matrix biology and therapeutics. <i>IScience</i> , 2021, 24, 102475.	1.9	9
45	Imaging the cellular components of the immune system for advancing diagnosis and immunotherapy of cancers. <i>Materials Today Advances</i> , 2021, 10, 100138.	2.5	1
46	PEGylated recombinant human hyaluronidase (PEGPH20) pre-treatment improves intra-tumour distribution and efficacy of paclitaxel in preclinical models. <i>Journal of Experimental and Clinical Cancer Research</i> , 2021, 40, 286.	3.5	18
47	3D bioprinting technology to mimic the tumor microenvironment: tumor-on-a-chip concept. <i>Materials Today Advances</i> , 2021, 12, 100160.	2.5	13
48	Biomarker Discovery in Patients with Immunotherapy-Treated Melanoma with Imaging Mass Cytometry. <i>Clinical Cancer Research</i> , 2021, 27, 1987-1996.	3.2	38
49	The microenvironment and cytoskeletal remodeling in tumor cell invasion. <i>International Review of Cell and Molecular Biology</i> , 2020, 356, 257-289.	1.6	6
51	Clinical and Genome-Wide Analysis of Multiple Severe Cisplatin-Induced Neurotoxicities in Adult-Onset Cancer Survivors. <i>Clinical Cancer Research</i> , 2020, 26, 6550-6558.	3.2	9
53	The immune niche of the liver. <i>Clinical Science</i> , 2021, 135, 2445-2466.	1.8	39
54	Metallomics Imaging. <i>NeuroMethods</i> , 2021, , 267-304.	0.2	0
55	Cisplatin Uptake in Macrophage Subtypes at the Single-Cell Level by LA-ICP-TOFMS Imaging. <i>Analytical Chemistry</i> , 2021, 93, 16456-16465.	3.2	16
56	Method To Visualize the Intratumor Distribution and Impact of Gemcitabine in Pancreatic Ductal Adenocarcinoma by Multimodal Imaging. <i>Analytical Chemistry</i> , 2022, 94, 1795-1803.	3.2	20
57	Emerging applications in mass spectrometry imaging; enablers and roadblocks. <i>Journal of Spectral Imaging</i> , 0, , .	0.0	1

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58	Metalloproteomics for Biomedical Research: Methodology and Applications. Annual Review of Biochemistry, 2022, 91, 449-473.	5.0	16
59	Application of High-Throughput Imaging Mass Cytometry Hyperion in Cancer Research. Frontiers in Immunology, 2022, 13, 859414.	2.2	19
60	Breaking through the barrier: Modelling and exploiting the physical microenvironment to enhance drug transport and efficacy. Advanced Drug Delivery Reviews, 2022, 184, 114183.	6.6	10
61	Biomedical analysis by ICP-MS: A focus on single cell strategies. Comprehensive Analytical Chemistry, 2022, , 109-140.	0.7	1
62	Intrinsic Differences in Spatiotemporal Organization and Stromal Cell Interactions Between Isogenic Lung Cancer Cells of Epithelial and Mesenchymal Phenotypes Revealed by High-Dimensional Single-Cell Analysis of Heterotypic 3D Spheroid Models. Frontiers in Oncology, 2022, 12, 818437.	1.3	7
63	Pt(IV) Prodrugs with Non-Steroidal Anti-inflammatory Drugs in the Axial Position. Journal of Medicinal Chemistry, 2022, 65, 8227-8244.	2.9	21
64	Use of Imaging Mass Cytometry in Studies of the Tissue Microenvironment. , 2022, , 345-364.		1
65	Profiling the <sc>3D</sc> interaction between germ cell tumors and microenvironmental cells at the transcriptome and secretome level. Molecular Oncology, 2022, 16, 3107-3127.	2.1	6
66	Colocation of Lipids, Drugs, and Metal Biomarkers Using Spatially Resolved Lipidomics with Elemental Mapping. Analytical Chemistry, 0, , .	3.2	3
67	Loss of the Volume-regulated Anion Channel Components LRRC8A and LRRC8D Limits Platinum Drug Efficacy. Cancer Research Communications, 2022, 2, 1266-1281.	0.7	3
68	Tellurophene-Tagging of Teniposide Facilitates Monitoring by Mass Cytometry. ChemBioChem, 0, , .	1.3	1
69	Combined Targeting of the Glutathione and Thioredoxin Antioxidant Systems in Pancreatic Cancer. ACS Pharmacology and Translational Science, 2022, 5, 1070-1078.	2.5	5
70	A Pt(IV)-conjugated brain penetrant macrocyclic peptide shows pre-clinical efficacy in glioblastoma. Journal of Controlled Release, 2022, 352, 623-636.	4.8	5
71	Insights into highly multiplexed tissue images: A primer for Mass Cytometry Imaging data analysis. TrAC - Trends in Analytical Chemistry, 2022, 157, 116794.	5.8	2
72	In Vitro Veritas: From 2D Cultures to Organ-on-a-Chip Models to Study Immunogenic Cell Death in the Tumor Microenvironment. Cells, 2022, 11, 3705.	1.8	6
73	Single-cell high-dimensional imaging mass cytometry: one step beyond in oncology. Seminars in Immunopathology, 0, , .	2.8	4
74	Reagents for Mass Cytometry. Chemical Reviews, 2023, 123, 1166-1205.	23.0	6
76	Different approaches to Imaging Mass Cytometry data analysis. Bioinformatics Advances, 2023, 3, .	0.9	10

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83	Components of cancer stem cells microenvironment: influence on the tumorigenic property and stemness in cancer stem cells. , 2024, , 549-579.		0