

SARS-CoV-2-Specific T Cells Exhibit Phenotypic Features of Terminal Differentiation, and High Proliferation Potential

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Citation Report

#	ARTICLE	IF	CITATIONS
1	T cell responses in patients with COVID-19. Nature Reviews Immunology, 2020, 20, 529-536.	10.6	706
2	Evaluation of the mRNA-1273 Vaccine against SARS-CoV-2 in Nonhuman Primates. New England Journal of Medicine, 2020, 383, 1544-1555.	13.9	936
3	SARS-CoV-2 Vaccine Development: Current Status. Mayo Clinic Proceedings, 2020, 95, 2172-2188.	1.4	96
4	A Testimony of the Surgent SARS-CoV-2 in the Immunological Panorama of the Human Host. Frontiers in Cellular and Infection Microbiology, 2020, 10, 575404.	1.8	4
5	A 21st Century Evil: Immunopathology and New Therapies of COVID-19. Frontiers in Immunology, 2020, 11, 562264.	2.2	8
6	An Effective COVID-19 Vaccine Needs to Engage T Cells. Frontiers in Immunology, 2020, 11, 581807.	2.2	75
7	BTK/ITK dual inhibitors: Modulating immunopathology and lymphopenia for COVID-19 therapy. Journal of Leukocyte Biology, 2021, 109, 49-53.	1.5	26
8	Ageing in COVID-19: Vulnerability, immunity and intervention. Ageing Research Reviews, 2021, 65, 101205.	5.0	601
9	T cell immunity to SARS-CoV-2 following natural infection and vaccination. Biochemical and Biophysical Research Communications, 2021, 538, 211-217.	1.0	88
10	HIV/SARS-CoV-2 co-infection: T cell profile, cytokine dynamics and role of exhausted lymphocytes. International Journal of Infectious Diseases, 2021, 102, 163-169.	1.5	37
11	Prevalence and determinants of serum antibodies to SARS-CoV-2 in the general population of the Gardena valley. Epidemiology and Infection, 2021, 149, e194.	1.0	8
13	Immunological memory to SARS-CoV-2 assessed for up to 8 months after infection. Science, 2021, 371, .	6.0	2,268
14	T-Helper Cell Subset Response Is a Determining Factor in COVID-19 Progression. Frontiers in Cellular and Infection Microbiology, 2021, 11, 624483.	1.8	110
15	Evolution of immune responses to SARS-CoV-2 in mild-moderate COVID-19. Nature Communications, 2021, 12, 1162.	5.8	316
17	Adaptive immunity to SARS-CoV-2 and COVID-19. Cell, 2021, 184, 861-880.	13.5	1,364
18	Cellular and Humoral Immune Responses in Covid-19 and Immunotherapeutic Approaches. ImmunoTargets and Therapy, 2021, Volume 10, 63-85.	2.7	40
21	Does reactivation of cytomegalovirus contribute to severe COVID-19 disease?. Immunity and Ageing, 2021, 18, 12.	1.8	38
23	SARS-CoV-2-specific CD8+ T cell responses in convalescent COVID-19 individuals. Journal of Clinical Investigation, 2021, 131, .	3.9	213

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24	Evidence of a dysregulated vitamin D endocrine system in SARS-CoV-2 infected patient's lung cells. <i>Scientific Reports</i> , 2021, 11, 8570.	1.6	11
25	Protection against SARS-CoV-2 infection by a mucosal vaccine in rhesus macaques. <i>JCI Insight</i> , 2021, 6, .	2.3	52
27	Endothelial cell, myeloid, and adaptive immune responses in SARS-CoV-2 infection. <i>FASEB Journal</i> , 2021, 35, e21577.	0.2	13
28	Features of HLA class I expression and its clinical relevance in SARS-CoV-2: What do we know so far?. <i>Reviews in Medical Virology</i> , 2021, 31, e2236.	3.9	9
29	Integrative overview of antibodies against SARS-CoV-2 and their possible applications in COVID-19 prophylaxis and treatment. <i>Microbial Cell Factories</i> , 2021, 20, 88.	1.9	37
30	Antigen-dependent multistep differentiation of T follicular helper cells and its role in SARS-CoV-2 infection and vaccination. <i>European Journal of Immunology</i> , 2021, 51, 1325-1333.	1.6	31
31	Infection and Immune Memory: Variables in Robust Protection by Vaccines Against SARS-CoV-2. <i>Frontiers in Immunology</i> , 2021, 12, 660019.	2.2	15
32	Adaptive immune responses to SARS-CoV-2. <i>Advanced Drug Delivery Reviews</i> , 2021, 172, 1-8.	6.6	6
33	COVID-19 and pulmonary fibrosis: therapeutics in clinical trials, repurposing, and potential development. <i>Archives of Pharmacal Research</i> , 2021, 44, 499-513.	2.7	18
34	Immune profiling of COVID-19: preliminary findings and implications for the pandemic. , 2021, 9, e002550.		15
35	Identification and characterization of a SARS-CoV-2 specific CD8+ T cell response with immunodominant features. <i>Nature Communications</i> , 2021, 12, 2593.	5.8	94
36	A Virus-Specific Immune Rheostat in the Immunome of Patients Recovering From Mild COVID-19. <i>Frontiers in Immunology</i> , 2021, 12, 674279.	2.2	5
37	Deconvoluting the T Cell Response to SARS-CoV-2: Specificity Versus Chance and Cognate Cross-Reactivity. <i>Frontiers in Immunology</i> , 2021, 12, 635942.	2.2	20
39	Relationship of SARS-CoV-2-specific CD4 response to COVID-19 severity and impact of HIV-1 and tuberculosis coinfection. <i>Journal of Clinical Investigation</i> , 2021, 131, .	3.9	113
40	Alterations in T and B cell function persist in convalescent COVID-19 patients. <i>Med</i> , 2021, 2, 720-735.e4.	2.2	87
41	The contributory role of lymphocyte subsets, pathophysiology of lymphopenia and its implication as prognostic and therapeutic opportunity in COVID-19. <i>International Immunopharmacology</i> , 2021, 95, 107586.	1.7	26
42	The Role of Th17 Response in COVID-19. <i>Cells</i> , 2021, 10, 1550.	1.8	86
43	Distinctive features of SARS-CoV-2-specific T cells predict recovery from severe COVID-19. <i>Cell Reports</i> , 2021, 36, 109414.	2.9	75

#	ARTICLE	IF	CITATIONS
44	SARS-CoV-2-specific circulating T follicular helper cells correlate with neutralizing antibodies and increase during early convalescence. <i>PLoS Pathogens</i> , 2021, 17, e1009761.	2.1	66
45	Reactive T Cells in Convalescent COVID-19 Patients With Negative SARS-CoV-2 Antibody Serology. <i>Frontiers in Immunology</i> , 2021, 12, 687449.	2.2	26
46	Insights into the virologic and immunologic features of SARS-COV-2. <i>World Journal of Clinical Cases</i> , 2021, 9, 5007-5018.	0.3	3
47	Detection of IFN γ -Secreting CD4+ and CD8+ Memory T Cells in COVID-19 Convalescents after Stimulation of Peripheral Blood Mononuclear Cells with Live SARS-CoV-2. <i>Viruses</i> , 2021, 13, 1490.	1.5	18
48	Surviving Older Patients Show Preserved Cellular and Humoral Immunological Memory Several Months After SARS-CoV-2 Infection. <i>Journals of Gerontology - Series A Biological Sciences and Medical Sciences</i> , 2022, 77, 33-40.	1.7	6
49	Immunological mechanisms of vaccine-induced protection against COVID-19 in humans. <i>Nature Reviews Immunology</i> , 2021, 21, 475-484.	10.6	434
50	Risk factors for adverse outcomes of COVID-19 patients: Possible basis for diverse responses to the novel coronavirus SARS-CoV-2. <i>Life Sciences</i> , 2021, 277, 119503.	2.0	17
51	Ageing and CMV Infection Affect Pre-existing SARS-CoV-2-Reactive CD8+ T Cells in Unexposed Individuals. <i>Frontiers in Aging</i> , 2021, 2, .	1.2	16
52	Protracted yet Coordinated Differentiation of Long-Lived SARS-CoV-2-Specific CD8+ T Cells during Convalescence. <i>Journal of Immunology</i> , 2021, 207, 1344-1356.	0.4	14
53	Integrated single-cell analysis unveils diverging immune features of COVID-19, influenza, and other community-acquired pneumonia. <i>ELife</i> , 2021, 10, .	2.8	12
55	Breathing more breadth into COVID-19 T γ cell responses. <i>Med</i> , 2021, 2, 999-1001.	2.2	1
56	Follicular Helper T Cells in the Immunopathogenesis of SARS-CoV-2 Infection. <i>Frontiers in Immunology</i> , 2021, 12, 731100.	2.2	32
57	T cell response to SARS-CoV-2 infection in humans: A systematic review. <i>PLoS ONE</i> , 2021, 16, e0245532.	1.1	228
58	Potential SARS-CoV-2 Immune Correlates of Protection in Infection and Vaccine Immunization. <i>Pathogens</i> , 2021, 10, 138.	1.2	60
59	Severely ill patients with COVID-19 display impaired exhaustion features in SARS-CoV-2-reactive CD8 ⁺ T cells. <i>Science Immunology</i> , 2021, 6, .	5.6	185
60	T cell phenotypes in COVID-19 - a living review. <i>Oxford Open Immunology</i> , 2021, 2, iqaa007.	1.2	19
61	The single-cell landscape of immunological responses of CD4+ T cells in HIV versus severe acute respiratory syndrome coronavirus 2. <i>Current Opinion in HIV and AIDS</i> , 2021, 16, 36-47.	1.5	6
69	Healthy donor T cell responses to common cold coronaviruses and SARS-CoV-2. <i>Journal of Clinical Investigation</i> , 2020, 130, 6631-6638.	3.9	75

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70	Post-acute COVID-19 associated with evidence of bystander T-cell activation and a recurring antibiotic-resistant bacterial pneumonia. <i>ELife</i> , 2020, 9, .	2.8	26
71	mRNA vaccine-induced T cells respond identically to SARS-CoV-2 variants of concern but differ in longevity and homing properties depending on prior infection status. <i>ELife</i> , 2021, 10, .	2.8	63
72	SARS-CoV-2 and lung injury: Dysregulation of immune response but not hyperimmune response as in "cytokine storm syndrome". <i>Clinical Respiratory Journal</i> , 2022, 16, 13-16.	0.6	6
74	T helper type (Th1/Th2) responses to SARS-CoV-2 and influenza A (H1N1) virus: From cytokines produced to immune responses. <i>Transplant Immunology</i> , 2022, 70, 101495.	0.6	58
75	Are COVID-19 Vaccine Boosters Needed? The Science behind Boosters. <i>Journal of Virology</i> , 2022, 96, JVI0197321.	1.5	35
76	Single-Cell Immunogenomic Approach Identified SARS-CoV-2 Protective Immune Signatures in Asymptomatic Direct Contacts of COVID-19 Cases. <i>Frontiers in Immunology</i> , 2021, 12, 733539.	2.2	6
77	Regulatory T Cells as Predictors of Clinical Course in Hospitalised COVID-19 Patients. <i>Frontiers in Immunology</i> , 2021, 12, 789735.	2.2	23
78	The adaptation of SARS-CoV-2 to humans. <i>Memorias Do Instituto Oswaldo Cruz</i> , 2022, 116, e210127.	0.8	4
79	Single-cell immunology of SARS-CoV-2 infection. <i>Nature Biotechnology</i> , 2022, 40, 30-41.	9.4	78
80	Potential Immune Indicators for Predicting the Prognosis of COVID-19 and Trauma: Similarities and Disparities. <i>Frontiers in Immunology</i> , 2021, 12, 785946.	2.2	7
81	TNF-Producing CD4 ⁺ T Cells Dominate the SARS-CoV-2-Specific T Cell Response in COVID-19 Outpatients and Are Associated with Durable Antibodies. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
82	Deep Phenotypic Analysis of Blood and Lymphoid T and NK Cells From HIV+ Controllers and ART-Suppressed Individuals. <i>Frontiers in Immunology</i> , 2022, 13, 803417.	2.2	12
83	CD4+ T Cell Immune Specificity Changes After Vaccination in Healthy And COVID-19 Convalescent Subjects. <i>Frontiers in Immunology</i> , 2021, 12, 755891.	2.2	10
84	Guidelines for the use of flow cytometry and cell sorting in immunological studies (third edition). <i>European Journal of Immunology</i> , 2021, 51, 2708-3145.	1.6	198
85	Selection of Optimum Formulation of RBD-Based Protein Sub-Unit COVID19 Vaccine (Corbevax) Based on Safety and Immunogenicity in an Open-Label, Randomized Phase-1 and 2 Clinical Studies. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
86	Selection of Optimum Formulation of RBD-Based Protein Sub-Unit Covid19 Vaccine (Corbevax) Based on Safety and Immunogenicity in an Open-Label, Randomized Phase-1 and 2 Clinical Studies. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0
87	T cell responses to SARS-CoV-2 in humans and animals. <i>Journal of Microbiology</i> , 2022, 60, 276-289.	1.3	8
90	Severe Acute Respiratory Syndrome Coronavirus 2 Cross-Reactive B and T Cell Responses in Kidney Transplant Patients. <i>Transplantation Proceedings</i> , 2022, 54, 1455-1464.	0.3	3

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93	Safety and immunogenicity of a synthetic multiantigen modified vaccinia virus Ankara-based COVID-19 vaccine (COH04S1): an open-label and randomised, phase 1 trial. <i>Lancet Microbe</i> , The, 2022, 3, e252-e264.	3.4	29
94	Tacrolimus-resistant SARS-CoV-2-specific T cell products to prevent and treat severe COVID-19 in immunosuppressed patients. <i>Molecular Therapy - Methods and Clinical Development</i> , 2022, 25, 52-73.	1.8	11
96	Analysis of TCR Repertoire by High-Throughput Sequencing Indicates the Feature of T Cell Immune Response after SARS-CoV-2 Infection. <i>Cells</i> , 2022, 11, 68.	1.8	12
97	A Promising Vaccination Strategy against COVID-19 on the Horizon: Heterologous Immunization. <i>Journal of Microbiology and Biotechnology</i> , 2021, 31, 1601-1614.	0.9	8
98	Providing a Helping Hand: Metabolic Regulation of T Follicular Helper Cells and Their Association With Disease. <i>Frontiers in Immunology</i> , 2022, 13, 864949.	2.2	3
99	Assessment of changes in immune status linked to COVID-19 convalescent and its clinical severity in patients and uninfected exposed relatives. <i>Immunobiology</i> , 2022, 227, 152216.	0.8	2
100	T helper cell subsets and related target cells in acute COVID-19. <i>Russian Journal of Infection and Immunity</i> , 2022, 12, 409-426.	0.2	4
101	Immunouniverse of SARS-CoV-2. <i>Immunological Medicine</i> , 2022, 45, 186-224.	1.4	8
102	TNF- α + CD4+ T α cells dominate the SARS-CoV-2 specific T cell response in COVID-19 outpatients and are associated with durable antibodies. <i>Cell Reports Medicine</i> , 2022, 3, 100640.	3.3	15
103	Distinct miRNAs associated with various clinical presentations of SARS-CoV-2 infection. <i>IScience</i> , 2022, 25, 104309.	1.9	9
104	Dysregulated Immune Responses in SARS-CoV-2-Infected Patients: A Comprehensive Overview. <i>Viruses</i> , 2022, 14, 1082.	1.5	20
106	An Update on Protective Effectiveness of Immune Responses After Recovery From COVID-19. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	7
107	Anti-SARS-CoV-2 T-stem cell memory persists in ocrelizumab-treated MS patients. <i>Multiple Sclerosis Journal</i> , 2022, 28, 1937-1943.	1.4	6
108	High and Sustained Ex Vivo Frequency but Altered Phenotype of SARS-CoV-2-Specific CD4+ T-Cells in an Anti-CD20-Treated Patient with Prolonged COVID-19. <i>Viruses</i> , 2022, 14, 1265.	1.5	5
109	The Dynamic Role of FOXP3+ Tregs and Their Potential Therapeutic Applications During SARS-CoV-2 Infection. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	13
110	Short and long-term immune changes in different severity groups of COVID-19 disease. <i>International Journal of Infectious Diseases</i> , 2022, 122, 776-784.	1.5	4
111	Single-cell glycomics analysis by CyTOF-Lec reveals glycan features defining cells differentially susceptible to HIV. <i>ELife</i> , 0, 11, .	2.8	11
112	The deciphering of the immune cells and marker signature in COVID-19 pathogenesis: An update. <i>Journal of Medical Virology</i> , 2022, 94, 5128-5148.	2.5	12

#	ARTICLE	IF	CITATIONS
114	Humoral and Cellular Immune Responses of COVID-19 vaccines against SARS-Cov-2 Omicron variant: a systemic review. <i>International Journal of Biological Sciences</i> , 2022, 18, 4629-4641.	2.6	24
116	T cell perturbations persist for at least 6 months following hospitalization for COVID-19. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	16
117	Humoral and cellular response in convalescent COVID-19 lupus patients. <i>Scientific Reports</i> , 2022, 12, .	1.6	1
118	Heterogenous humoral and cellular immune responses with distinct trajectories post-SARS-CoV-2 infection in a population-based cohort. <i>Nature Communications</i> , 2022, 13, .	5.8	18
119	Angiotensin II Exaggerates SARS-CoV-2 Specific T-Cell Response in Convalescent Individuals following COVID-19. <i>International Journal of Molecular Sciences</i> , 2022, 23, 8669.	1.8	8
120	Adoptive transfer of functional < scp>SARSâ€COV</scp>â€specific immunity from donor graft to hematopoietic stem cell transplant recipients. <i>American Journal of Hematology</i> , 2022, 97, .	2.0	3
121	Heterogenous CD8+ T Cell Maturation and â€Polarizationâ€™™ in Acute and Convalescent COVID-19 Patients. <i>Viruses</i> , 2022, 14, 1906.	1.5	16
122	In Vitro Stimulation with Live SARS-CoV-2 Suggests Th17 Dominance In Virus-Specific CD4+ T Cell Response after COVID-19. <i>Vaccines</i> , 2022, 10, 1544.	2.1	0
123	Single-cell analysis of the adaptive immune response to SARS-CoV-2 infection and vaccination. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	4
124	COVIDâ€™19 immunopathology: From acute diseases to chronic sequelae. <i>Journal of Medical Virology</i> , 2023, 95, .	2.5	24
125	T-cells in human trigeminal ganglia express canonical tissue-resident memory T-cell markers. <i>Journal of Neuroinflammation</i> , 2022, 19, .	3.1	3
126	The Perspective of Covid-19 Vaccines: What Needs to Be Known and Its Expected Effect on the Human Population?. <i>Journal of Biosciences and Medicines</i> , 2022, 10, 34-46.	0.1	0
127	Coronavirus (COVID-19) and the Human Immunity: A Review. , 0, 14, 281-286.		0
128	Booster dose of mRNA vaccine augments waning T cell and antibody responses against SARS-CoV-2. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	16
129	Humoral and cellular immune responses to CoronaVac up to one year after vaccination. <i>Frontiers in Immunology</i> , 0, 13, .	2.2	8
130	SARS-CoV-2 vaccines: What we know, what we can do to improve them and what we could learn from other well-known viruses. <i>AIMS Microbiology</i> , 2022, 8, 422-453.	1.0	1
131	Immunogenicity and Efficacy of Monovalent and Bivalent Formulations of a Virus-Like Particle Vaccine against SARS-CoV-2. <i>Vaccines</i> , 2022, 10, 1997.	2.1	4
133	Cytomegalovirus Seropositivity in Older Adults Changes the T Cell Repertoire but Does Not Prevent Antibody or Cellular Responses to SARS-CoV-2 Vaccination. <i>Journal of Immunology</i> , 2022, 209, 1892-1905.	0.4	7

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134	Immune responses in mildly versus critically ill COVID-19 patients. <i>Frontiers in Immunology</i> , 0, 14, .	2.2	18
135	Advances in HIV Research Using Mass Cytometry. <i>Current HIV/AIDS Reports</i> , 0, , .	1.1	0
136	Defending against SARS-CoV-2: The T cell perspective. <i>Frontiers in Immunology</i> , 0, 14, .	2.2	20
138	T Cell Response to SARS-CoV-2 Coinfection and Comorbidities. <i>Pathogens</i> , 2023, 12, 321.	1.2	4
139	Functionality of immune cells in COVID-19 infection: development of cell-based therapeutics. <i>Biolmpacts</i> , 0, , .	0.7	0
140	Allogeneic hematopoietic stem cell transplantation in the COVID-19 era. <i>Frontiers in Immunology</i> , 0, 14, .	2.2	3
141	Functional SARS-CoV-2-specific T cells of donor origin in allogeneic stem cell transplant recipients of a T-cell-replete infusion: A prospective observational study. <i>Frontiers in Immunology</i> , 0, 14, .	2.2	3
142	Differential regulatory T cell signature after recovery from mild COVID-19. <i>Frontiers in Immunology</i> , 0, 14, .	2.2	2
143	SARS-CoV-2 epitope-specific T cells: Immunity response feature, TCR repertoire characteristics and cross-reactivity. <i>Frontiers in Immunology</i> , 0, 14, .	2.2	1
144	Dynamic changes in radiological parameters, immune cells, selected miRNAs, and cytokine levels in peripheral blood of patients with severe COVID-19. <i>Biomedical Reports</i> , 2023, 18, .	0.9	0
145	Virus-Specific Stem Cell Memory CD8+ T Cells May Indicate a Long-Term Protection against Evolving SARS-CoV-2. <i>Diagnostics</i> , 2023, 13, 1280.	1.3	0
161	Long COVID manifests with T cell dysregulation, inflammation and an uncoordinated adaptive immune response to SARS-CoV-2. <i>Nature Immunology</i> , 2024, 25, 218-225.	7.0	3