

Bibliographie

1. Schoenmaker, L. et al., 2021, **“mRNA-lipid nanoparticle COVID-19 vaccines: Structure and stability”**, <https://doi.org/10.1016/j.ijpharm.2021.120586>
2. Sato Yusuke, 2021, **“Development of Lipid Nanoparticles for the Delivery of Macromolecules Based on the Molecular Design of pH-Sensitive Cationic Lipids”**, *Chem. Pharm. Bull.* 69. 1141-1159
3. Vu, M. N. et al., 2021, **“Current and future nanoparticle vaccines for COVID-19”**, <https://doi.org/10.1016/j.ebiom.2021.103699>
4. Szebeni, J. et al., 2022, **“Applying lessons learned from nanomedicines to understand rare hypersensitivity reactions to mRNA-based SARS-CoV-2 vaccines”**, <https://doi.org/10.1038/s41565-022-01071-x>
5. Pardi, N. et al., 2018, **“mRNA vaccines – a new era in vaccinology”**, doi: 10.1038/nrd.2017.243
6. Kozma, G. T. et al., 2020, **“Anti-PEG antibodies : Properties, formation, testing and role in adverse immune reactions to PEGylated nano-biopharmaceuticals”**, <https://doi.org/10.1016/j.addr.2020.07.024>
7. Janis Kuby et al., « **IMMUNOLOGY** », 7^{ème} édition, DUNOD
8. Chen, B. M. et al., 2016, **“Measurement of Pre-Existing IgG and IgM Antibodies against Polyethylene Glycol in Healthy Individuals”**, *Anal. Chem.* 2016, 88, 21, 10661–10666, doi: 10.1021/acs.analchem.6b03109.
9. Hong, L. et al., 2020, **“Antibodies against polyethylene glycol in human blood: A literature review”**, *J Pharmacol Toxicol Methods.* Mar-Apr 2020;102:106678 <https://doi.org/10.1016/j.vascn.2020.106678>
10. Zhou, Z.-H. et al., **“Anti-PEG IgE In Anaphylaxis Associated with Polyethylene Glycol”**, doi: 10.1016/j.jaip.2020.11.011.
11. Janos Szebeni, 2014 **“Complement activation-related pseudoallergy: a stress reaction in blood triggered by nanomedicines and biologicals”**, *Mol Immunol.* 2014 Oct;61(2):163-73. doi: 10.1016/j.molimm.2014.06.038.
12. Hydar Ali, 2010, **“Regulation of human mast cell and basophil function by anaphylatoxins C3a and C5a”**, <https://doi.org/10.1016/j.imlet.2009.10.007>
13. Shammass F. Bajwa; Reem Hamdy A. Mohammed, 2021 **“Type II Hypersensitivity Reaction”**, <https://www.ncbi.nlm.nih.gov/books/NBK563264/>

14. Norina Usman; Pavan Annamaraju, 2021, "**Type III Hypersensitivity Reaction**", <https://www.ncbi.nlm.nih.gov/books/NBK559122/>
15. Ehlinger, C. et al., 2019, "**A generic method for the detection of polyethylene glycol specific IgG and IgM antibodies in human serum**", *J Immunol Methods*. 2019 Nov;474:112669. doi: 10.1016/j.jim.2019.112669.
16. Hiroto Hatakeyama, et al. 2011, "**A multifunctional envelope type nano device (MEND) for gene delivery to tumours based on the EPR effect: a strategy for overcoming the PEG dilemma**", *Adv Drug Deliv Rev*. 2011 Mar 18;63(3):152-60. doi: 10.1016/j.addr.2010.09.001.
17. Hiroto Hatakeyama, et al., 2013, "**The polyethyleneglycol dilemma: advantage and disadvantage of PEGylation of liposomes for systemic genes and nucleic acids delivery to tumors**", *Biol Pharm Bull*. 2013;36(6):892-9. doi: 10.1248/bpb.b13-00059.
18. Buschmann, M. D. et al., 2021, "**Nanomaterial Delivery Systems for mRNA Vaccines**", *Vaccines*, <https://doi.org/10.3390/vaccines9010065>
19. Samaridou, E. et al., 2020, "**Lipid nanoparticles for nucleic acid delivery: Current perspectives**", <https://doi.org/10.1016/j.addr.2020.06.002>
20. Hou, X. et al., 2021, "**Lipid nanoparticles for mRNA delivery**", *Nat Rev Mater* 6, 1078–1094 (2021). <https://doi.org/10.1038/s41578-021-00358-0>
21. Reichmuth, A. M. et al., 2016, "**mRNA vaccine delivery using lipid nanoparticles**", *Ther Deliv*. 2016;7(5):319-34. doi: 10.4155/tde-2016-0006.
22. Li, C. et al., 2022, "**Mechanisms of innate and adaptive immunity to the Pfizer-BioNTech BNT162b2 vaccine**", *Nature Immunology*, VOL23, 543-555, <https://doi.org/10.1038/s41590-022-01163-9>
23. Dey, A. K. et al., 2021, "**Tuning the Immunostimulation Properties of Cationic Lipid Nanocarriers for Nucleic Acid Delivery**", *Front Immunol*. 2021 Aug 23;12:722411. doi: 10.3389/fimmu.2021.722411.
24. Hervé, C. et al., 2019, "**The How's and What's of vaccine reactogenicity**", *npj Vaccines* (2019)4:39; <https://doi.org/10.1038/s41541-019-0132-6>
25. Jackson, L. A. et al., 2020, "**An mRNA Vaccine against SARS-CoV-2 – Preliminary Report**" *N. Engl. J. Med*. 383, 1920-1931.
26. Sahin, U. et al., 2020, "**COVID-19 vaccine BNT162b1 elicits human antibody and TH1 cell responses**" *Nature* 586, 594-599.
27. Walsh, E. E. et al., 2020, "**Safety and Immunogenicity of Two RNA-Based Covid-19 Vaccine Candidates**", *N. Engl. J. Med*. 383, 2439-2450.

28. Ndeupen, S. et al., 2021, **“The mRNA-LNP platform’s lipid nanoparticle component used in preclinical vaccine studies is highly inflammatory”**, *iScience* 24, 103479, <https://doi.org/j.isci.2021.103479>
29. Sokol, C. L. et Luster, A. D., 2015, **“The Chemokine System in Innate Immunity”**, *Cold Spring Harb Perspect Biol* 2015;7:a016303, doi: 10.1101/cshperspect.a016303
30. Arunachalam, P. S. et al., 2021, **“Systems vaccinology of the BNT162b2 mRNA vaccine in humans”**, *Nature* 596, 410–416 (2021). <https://doi.org/10.1038/s41586-021-03791-x>
31. Bergamaschi, C. et al., 2021, **“Systemic IL-15, IFN- γ , and IP10/CXCL10 signature associated with effective immune response to SARS-CoV-2 in BNT162b2 mRNA vaccine recipients”**, *Cell Rep.* 2021 Aug 10.36(6):109504. doi: 10.1016/j.celrep.2021.109504.
32. Miyashita, Y. et al., 2022, **“Circulating extracellular vesicle microRNAs associated with adverse reactions, proinflammatory cytokine, and antibody production after COVID-19 vaccination”**, *npj Vaccines* (2022)7:16; <https://doi.org/10.1038/s41541-022-00439-3>
33. Metzemaekers, M. et al., 2020, **“Neutrophils chemoattractant receptors in health and disease: double-edged swords”**, *Cellular & Molecular Immunology* 17:433-450; <https://doi.org/10.1038/s41423-020-0412-0>
34. Vazirinejad, R. et al., 2014, **“The Biological Functions, Structure and Sources of CXCL10 and Its Outstanding Part in the Pathophysiology of Multiple Sclerosis”**, *Neuroimmunomodulation* 2014;21:322-330; <https://doi.org/10.1159/000357780>
35. Jinquan, T. et al., 2000, **“CXCR3 Expression and Activation of Eosinophils : Role of IFN- γ -Inducible Protein-10 and Monokine Induced by IFN- γ ”**, *J Immunol* 2000; 165:1548-1556; doi: 10.4049/jimmunol.165.3.1548
36. Tahtinen, S. et al., 2022, **“IL-1-mediated inflammation induced by different RNA vaccines is context-specific”**, *Nat Immunol* 23, 485–486 (2022). <https://doi.org/10.1038/s41590-022-01177-3>
37. Sadarangani, M. et al., 2021, **“Immunological mechanisms of vaccine-induced protection against COVID-19 in humans”**, *Nature Reviews Immunology*, volume 21, 475-484
38. Röltgen, K. et al., 2022, **“Immune imprinting, breadth of variant recognition, and germinal center response in human SARS-CoV-2 infection and vaccination”**, *Cell* 185, 1-16; <https://doi.org/10.1016/j.cell.2022.01.018>
39. Elrod, S. et Stansfield, W., 2003, **« Génétique »** - ISBN : 2-10-006653 6
40. Bhurani V. et al., 2018, **“Developing effective vaccines: cues from natural infection”**, doi: 10.1080/08830185.2018.1471479

41. Chen, T.-H. et al., 2022, **“Improving the fidelity of uridine analog incorporation during in vitro transcription”**, <https://doi.org/10.1101/2022.04.12.488100>
42. Martinez, N. M. et al., 2022, **“Pseudouridine synthases modify human pre-mRNA co-transcriptionally and affect pre-mRNA processing”**, <https://doi.org/10.1016/j.molcel.2021.12.023>
43. Seneff, S. et al., 2022, **“Innate immune suppression by SARS-CoV-2 mRNA vaccinations: The role of G-quadruplexes, exosomes, and MicroRNAs”**, doi: [10.1016/j.fct.2022.113008](https://doi.org/10.1016/j.fct.2022.113008)
44. Diamond, M. S. et Kanneganti, T.-D., 2022, **“Innate immunity: the first line of defense against SARS-CoV-2”**, *Nat Immunol* **23**, 165–176. <https://doi.org/10.1038/s41590-021-01091-0>
45. Zendjabil, M. et al., 2017, **“The microRNAs as biomarkers: What prospects?”**, <https://doi.org/10.1016/j.crv.2016.12.001>
46. Broughton, J. P. et al., 2016, **“Pairing beyond the Seed Supports MicroRNA Targeting Specificity”**, *Mol Cell*. doi: 10.1016/j.molcel.2016.09.004.
47. O’Brien, J. et al., 2018, **“Overview of MicroRNA Biogenesis, Mechanisms of Actions, and Circulation”**, doi: 10.3389/fendo.2018.00402.
48. Barbu, M. G. et al., 2020, **“MicroRNA Involvement in Signaling Pathways During Viral Infection”**, <https://doi.org/10.3389/fcell.2020.00143>
49. Ahmad, I. et al., 2020, **“Viral MicroRNAs: Interfering the Interferon Signaling”**, <https://doi.org/10.2174/1381612826666200109181238>
50. Bansal, S. et al., 2021, **“Cutting Edge: Circulating Exosomes with COVID Spike Protein Are Induced by BNT162b2 (Pfizer–BioNTech) Vaccination prior to Development of Antibodies: A Novel Mechanism for Immune Activation by mRNA Vaccines”**, <https://doi.org/10.4049/jimmunol.2100637>
51. Mishra, R. et Banerjea, A.C., 2021, **“SARS-CoV-2 Spike Targets USP33-IRF9 Axis via Exosomal miR-148a to Activate Human Microglia”**, doi: 10.3389/fimmu.2021.656700.
52. Schoggins, J. W. et Rice, C. M., 2011, **“Interferon-stimulated genes and their antiviral effector functions”**, doi: 10.1016/j.coviro.2011.10.008
53. Platanitis, E. et al., 2019, **“A molecular switch from STAT2-IRF9 to ISGF3 underlies interferon-induced gene transcription”**, *Nat Commun* **10**, 2921 (2019). <https://doi.org/10.1038/s41467-019-10970-y>
54. Wang; E. et al., 2021, **“G-Quadruplexes as pathogenic drivers in neurodegenerative disorders”**, *Nucleic Acids Research*, Volume 49, Issue 9, 21 May 2021, Pages 4816–4830, <https://doi.org/10.1093/nar/gkab164>

55. Olsthoorn, René C. L., 2014, **“G-quadruplexes within prion mRNA: the missing link in prion disease?”**, *Nucleic Acids Research*, Volume 42, Issue 14, 18 August 2014, Pages 9327–9333, <https://doi.org/10.1093/nar/gku559>
56. Seneff, S. et Nigh, G, 2021, **“Worse Than the Disease? Reviewing Some Possible Unintended Consequences of the mRNA Vaccines Against COVID-19”**, *International Journal of Vaccine Theory, Practice, and Research* 2(1), May 10, 2021
57. Xia, Xuhua, 2021, **“Domains and Functions of Spike Protein in SARS-Cov-2 in the Context of Vaccine Design”**, *Viruses*, 13(1), 109; <https://doi.org/10.3390/v13010109>
58. Alfagih, I. M. et al., 2020, **“Nanoparticles as Adjuvants and Nanodelivery Systems for mRNA-Based Vaccines”**, doi: 10.3390/pharmaceutics13010045.
59. Di, J. et al., 2022, **“Biodistribution and Non-linear Gene Expression of mRNA LNPs Affected by Delivery Route and Particle Size”**, *Pharm Res* 39, 105–114 (2022). <https://doi.org/10.1007/s11095-022-03166-5>
60. Kudsova, L. et al., 2021, **“Stability testing of the Pfizer-BioNTech BNT162b2 COVID-19 vaccine: a translational study in UK vaccination centres”**. *BMJ Open Science* 2021;5:e100203. doi:10.1136/bmjos-2021-100203
61. Schädlich, A. et al., 2012, **“Accumulation of nanocarriers in the ovary: A neglected toxicity risk?”**, <https://doi.org/10.1016/j.jconrel.2012.02.012>
62. Ajdary, M. et al., 2021, **“Potential toxicity of nanoparticles on the reproductive system animal models: A review”**, <https://doi.org/10.1016/j.jri.2021.103384>
63. Riley, R. S. et al., 2021, **“Ionizable lipid nanoparticles for in utero mRNA delivery”**, *Sci. Adv.* 2021;7:eaba1028
64. Breton, Gaëlle, 2017, **“De la diversité des cellules dendritiques humaines”**, *m/s* n° 10, vol. 33, octobre 2017 doi : 10.1051/medsci/20173310003
65. Krystel-Whittemore, M. et al., 2016, **“Mast Cell: A Multi-Functional Master Cell”**, <https://doi.org/10.3389/fimmu.2015.00620>
66. Peter F. Weller and Lisa A. Spencer, 2017, **“Functions of tissue-resident eosinophils”**, doi: [10.1038/nri.2017.95](https://doi.org/10.1038/nri.2017.95)
67. Crinier, A. et al., 2017, **“Innate lymphoid cells”**, <https://doi.org/10.1051/medsci/20173305018>
68. Cherrier, Marie, **“Innate lymphoid cells: new players of the mucosal immune response”**, *Med Sci (Paris)* 2014 ; 30 : 280–288. doi: 10.1051/medsci/20143003016.
69. Moretta, A. et al., 2001, **“Activating receptors and coreceptors involved in human natural killer cell-mediated cytotoxicity”**, doi: 10.1146/annurev.immunol.19.1.197.

70. Cortez, V. S. et al., 2014, **“Cutting edge: Salivary gland NK cells develop independently of Nfil3 in steady-state”**, *J Immunol* 2014 ; 192 : 4487–4491. doi: 10.4049/jimmunol.1303469
71. Wosczyzna, M. N. et al., 2019, **“Mesenchymal Stromal Cells Are Required for Regeneration and Homeostatic Maintenance of Skeletal Muscle”**, *Cell Reports* 27, 2029-2035, <https://doi.org/10.1016/j.celrep.2019.04.074>
72. Messing, M. et al., 2020, **“Group 2 Innate Lymphoid Cells: Central Players in a Recurring Theme of Repair and Regeneration”**, *Int. J. Mol. Sci.* 2020, 21, 1350; doi:10.3390/ijms21041350
73. Gronke, K. et al., 2016, **“Innate lymphoid cells, precursors and plasticity”**, doi: 10.1016/j.imlet.2016.07.004.
74. Robinette, M.L. et al., 2017, **“IL-15 sustains IL-7R-independent ILC2 and ILC3 development”**, *Nat Commun* 8, 14601 (2017). <https://doi.org/10.1038/ncomms14601>
75. Vanoni, G. et al., 2021, **“Human primed ILCs support endothelial activation through NF- κ B signaling”**, doi: 10.7554/eLife.58838.
76. Hackel, A. et al., 2021, **“TNF- α and IL-1 β sensitize human MSC for IFN- γ signaling and enhance neutrophil recruitment”**, *Eur. J. Immunol.* 51: 319–330 doi: 10.1002/eji.201948336
77. Ullah, I. et al., 2015, **“Human mesenchymal stem cells - current trends and future prospective”**, doi: [10.1042/BSR20150025](https://doi.org/10.1042/BSR20150025)
78. Orimo, K. et al., 2021, **“Characteristics of tissue-resident ILCs and their potential as therapeutic targets in mucosal and skin inflammatory diseases”**, <https://doi.org/10.1111/all.14863>
79. Romero-Suárez, S. et al., 2019, **“The Central Nervous System Contains ILC1s That Differ From NK Cells in the Response to Inflammation”**, <https://doi.org/10.3389/fimmu.2019.02337>
80. Doisne, J.-M. et al., 2015, **“Composition, Development, and Function of Uterine Innate Lymphoid Cells”**, doi: 10.4049/jimmunol.1500689
81. Mendes, J. et al., 2020, **“Innate Lymphoid Cells in Human Pregnancy”**, doi: [10.3389/fimmu.2020.551707](https://doi.org/10.3389/fimmu.2020.551707)
82. Wang, W. et al., 2020, **“T Helper (Th) Cell Profiles in Pregnancy and Recurrent Pregnancy Losses: Th1/Th2/Th9/Th17/Th22/Tfh Cells”**, doi: [10.3389/fimmu.2020.02025](https://doi.org/10.3389/fimmu.2020.02025)
83. Laresgoiti-Servitje, E., 2013, **“A leading role for the immune system in the pathophysiology of preeclampsia”**, doi: 10.1189/jlb.1112603

84. Eghbal-Fard, S. et al., 2019, **“The imbalance of Th17/Treg axis involved in the pathogenesis of preeclampsia”**, doi: 10.1002/jcp.27315.
85. Carson, W. E. et al., 1994, **“Interleukin (IL) 15 is a novel cytokine that activates human natural killer cells via components of the IL-2 receptor”**, doi: 10.1084/jem.180.4.1395.
86. Ivashkiv, Lionel B., 2018, **“IFN γ : signalling, epigenetics and roles in immunity, metabolism, disease and cancer immunotherapy”**, *Nat Rev Immunol* 18, 545–558 (2018).
<https://doi.org/10.1038/s41577-018-0029-z>
87. Sahin, U. et al., 2020, **“COVID-19 vaccine BNT162b1 elicits human antibody and TH1 T cell responses”**, *Nature* 586, 594–599. <https://doi.org/10.1038/s41586-020-2814-7>
88. Oberhardt, V. et al., 2021, **“Rapid and stable mobilization of CD8⁺ T cells by SARS-CoV-2 mRNA vaccine”**, *Nature* 597, 268–273. <https://doi.org/10.1038/s41586-021-03841-4>
89. Avci, E. et Abasiyanik, F., 2021, **“Autoimmune hepatitis after SARS-CoV-2 vaccine: New-onset or flare-up?”** *J Autoimmun.* doi: 10.1016/j.jaut.2021.102745.
90. Boettler, T. et al., 2022, **“SARS-CoV-2 vaccination can elicit a CD8 T-cell dominant hepatitis”**, <https://doi.org/10.1016/j.jhep.2022.03.040>
91. Chen, Y. et al., 2021, **“New-onset autoimmune phenomena post-COVID-19 vaccination”**, <https://doi.org/10.1111/imm.13443>
92. Kobiyama R. & Ishii K.J., 2022, **“Making innate sense of mRNA vaccine adjuvanticity”**, *Nat Immunol* 23, 474–476. <https://doi.org/10.1038/s41590-022-01168-4>
93. Horton, N. C. et Mathew, P. A., 2015, **“Nkp44 and Natural Cytotoxicity Receptors as Damage-Associated Molecular Pattern Recognition Receptors”**, doi: 10.3389/fimmu.2015.00031
94. Wu, Y. et al., 2017, **“Developmental and Functional Control of Natural Killer Cells by Cytokines”**, doi: [10.3389/fimmu.2017.00930](https://doi.org/10.3389/fimmu.2017.00930)
95. Hagemann, K. et al., 2022, **“Natural killer cell-mediated ADCC in SARS-CoV-2-infected individuals and vaccine recipients”**, <https://doi.org/10.1002/eji.202149470>
96. Vivier, E. et al., 2011, **“Innate or Adaptive Immunity? The Example of Natural Killer Cells”**, *Science*. doi: [10.1126/science.1198687](https://doi.org/10.1126/science.1198687)
97. Jacob, J. et al., 1991, **“In situ studies of the primary immune response to (4-hydroxy-3-nitrophenyl)acetyl. I. The architecture and dynamics of responding cell populations”**, *J Exp Med.* doi: 10.1084/jem.173.5.1165.
98. Amélie Bonaud, thèse 2015, **“Maturation finale des lymphocytes B : de la commutation de classe aux conséquences pathologiques de la production d’immunoglobulines anormales”**

99. Levin, E. G. et al., Déc. 2021, **“Waning Immune Humoral Response to BNT162b2 Covid-19 Vaccine over 6 Months”**, *N Engl J Med* 2021; 385:e84, doi: 10.1056/NEJMoa2114583
100. Wu, Y. et al., 2016, **“The Biological Effects of IL-21 Signaling on B-Cell-Mediated Responses in Organ Transplantation”**, <https://doi.org/10.3389/fimmu.2016.00319>
101. Leonard, W. J. et Wan, C.-K., 2016, **“IL-21 Signaling in Immunity”**, doi: [10.12688/f1000research.7634.1](https://doi.org/10.12688/f1000research.7634.1)
102. Skak, K. et al., 2008, **“Interleukin 21: combination strategies for cancer therapy”**, doi: 10.1038/nrd2482.
103. Korn, T. et al., 2007, **“IL-21 initiates an alternative pathway to induce proinflammatory TH17 cells”**, <https://doi.org/10.1038/nature05970>
104. Poholek, C. H. et al., 2019, **“IL-21 Controls ILC3 Cytokine Production and Promotes a Protective Phenotype in a Mouse Model of Colitis”**, <https://doi.org/10.4049/immunohorizons.1900005>
105. Markota, A. et al., 2018, **“Targeting interleukin-22 for cancer therapy”**, <https://doi.org/10.1080/21645515.2018.1461300>
106. St. Paul, M. et al., 2020, **“IL6 Induces an IL22⁺ CD8⁺ T-cell Subset with Potent Antitumor Function”**, *Cancer Immunol Res*; 8 (3): 321–333. <https://doi.org/10.1158/2326-6066.CIR-19-0521>
107. Miyazaki, Y. et al., 2018, **“Th22 Cells Promote Osteoclast Differentiation via Production of IL-22 in Rheumatoid Arthritis”**, <https://doi.org/10.3389/fimmu.2018.02901>
108. Dudakov, J. A. et al., 2015, **“Interleukin-22: immunobiology and pathology”**, doi: 10.1146/annurev-immunol-032414-112123.
109. Cerboni, S. et al., 2020, **“Cytokine-regulated Th17 plasticity in human health and diseases”**, <https://doi.org/10.1111/imm.13280>
110. Jang, D.-i. et al., 2021, **“The Role of Tumor Necrosis Factor Alpha (TNF- α) in Autoimmune Disease and Current TNF- α Inhibitors in Therapeutics”**, <https://doi.org/10.3390/ijms22052719>
111. Koumaki, D. et al., 2022, **“Psoriasis flare-up after AZD1222 and BNT162b2 COVID-19 mRNA vaccines: report of twelve cases from a single centre”**, *J EADV* 2022, 36, e399–e496
112. Cortonesi, G. et al., 2022, **“New-onset psoriasis after Comirnaty (BNT162b2, BioNTech/Pfizer) vaccine successfully treated with ixekizumab”**, <https://doi.org/10.1111/dth.15606>
113. Pesqué, D. et al., 2022, **“New-onset and exacerbations of psoriasis after mRNA COVID-19 vaccines: two sides of the same coin?”**, *Acad Dermatol Venereol.* 2022; 36(2): e80- e81. doi:[10.1111/jdv.17690](https://doi.org/10.1111/jdv.17690)

114. Pavia, G et al., 2022, **“Generalized pustular psoriasis flare in a patient affected by plaque psoriasis after BNT162b2 mRNA COVID-19 vaccine, successfully treated with risankizumab”**, *Acad Dermatol Venereol.* 2022;18032. doi:[10.1111/jdv.18032](https://doi.org/10.1111/jdv.18032)
115. Krajewski, P. K. et al., **“Psoriasis flare-up associated with second dose of Pfizer-BioNTech BNT16B2b2 COVID-19 mRNA vaccine.”** *J Eur Acad Dermatol Venereol.* 2021; 35(10): e632-e634. doi:[10.1111/jdv.17449](https://doi.org/10.1111/jdv.17449)
116. McMahon, D. E. et al., 2021, **“Cutaneous reactions reported after Moderna and Pfizer COVID-19 vaccination: a registry-based study of 414 cases.”** *J Am Acad Dermatol.* 2021; 85(1): 46- 55. doi:[10.1016/j.jaad.2021.03.092](https://doi.org/10.1016/j.jaad.2021.03.092)
117. Hwang J.H., 2022, **“Uveitis after COVID-19 Vaccination”**, <https://doi.org/10.1159/000521785>
118. Rabinovitch, T. et al., 2021, **“Uveitis after the BNT162b2 mRNA vaccination against SARS-CoV-2 infection: a possible association”**, *Retina.* 2021;41(12):2462–713.
119. Renisi, G. et al., 2021, **“Anterior uveitis onset after bnt162b2 vaccination: is this just a coincidence?”**, doi: 10.1016/j.ijid.2021.07.035.
120. Duran, M., 2022, **“Bilateral anterior uveitis after BNT162b2 mRNA vaccine: Case report”**, <https://doi.org/10.1016/j.jfo.2022.04.004>
121. Li, C. X. et al., 2016, **“CXCL10/CXCR3 signaling mobilized-regulatory T cells promote liver tumor recurrence after transplantation”**, <https://doi.org/10.1016/j.jhep.2016.05.032>
122. Kingsley, I. E. et al., 2017, **“T regulatory cells follow CXCL10 to suppress T effector cells through a contact-dependent mechanism in the skin during vitiligo”**, *J Immunol* May 1, 2017, 198 (1 Supplement) 156.7
123. Dat Q. Tran, 2011, **“TGF- β : the sword, the wand, and the shield of FOXP3+ regulatory T cells”**, *Journal of Molecular Cell Biology*, Volume 4, Issue 1, Pages 29–37, <https://doi.org/10.1093/jmcb/mjr033>
124. Robin D Hatton, 2011, **“TGF-b in Th17 cell development: the truth is out there”**, doi: [10.1016/j.immuni.2011.03.009](https://doi.org/10.1016/j.immuni.2011.03.009)
125. Asadzadeh; Z. et al., 2017, **“The paradox of Th17 cell functions in tumor immunity”**, <https://doi.org/10.1016/j.cellimm.2017.10.015>
126. Karpisheh, V. et al., 2022, **“The role of Th17 cells in the pathogenesis and treatment of breast cancer”**, doi: 10.1186/s12935-022-02528-8.
127. Karki, R. et al., 2021, **“Synergism of TNF- α and IFN- γ Triggers Inflammatory Cell Death, Tissue Damage, and Mortality in SARS-CoV-2 Infection and Cytokine Shock Syndromes”**, <https://doi.org/10.1016/j.cell.2020.11.025>

128. Grome, H. N. et al., 2021, **“Fatal Multisystem Inflammatory Syndrome in Adult after SARS-CoV-2 Natural Infection and COVID-19 Vaccination”**, doi: 10.3201/eid2711.211612
129. Stappers, S. et al., 2021, **“A case of multisystem inflammatory syndrome (MIS-A) in an adult woman 18 days after COVID-19 vaccination”**, *Acta Clin Belg.*
doi:10.1080/17843286.2021.1977899.
130. Miyazato, Y. et al., 2022, **“Multisystem Inflammatory Syndrome in Adult after First Dose of mRNA Vaccine”**, doi: 10.3201/eid2804.212585.
131. Nune, A. et al., 2021, **“Multisystem inflammatory syndrome in an adult following the SARS-CoV-2 vaccine (MIS-V)”** doi: 10.1136/bcr-2021-243888.
132. Abdelgalil, A. A. et Saeedi, F. A., 2022, **“Multisystem Inflammatory Syndrome in a 12-Year-old Boy After mRNA-SARS-CoV-2 Vaccination”**, doi: 10.1097/INF.0000000000003442.
133. Yalçinkaya, R. et al., 2022, **“A Case of Multisystem Inflammatory Syndrome in a 12-Year-old Male After COVID-19 mRNA Vaccine”**, doi: 10.1097/INF.0000000000003432.
134. Meriem Riani, thèse de 2017, **“Rôle de la chimiokine CXCL10 dans la réaction inflammatoire associée à l’autoimmunité : exemple de la pemphigoïde bulleuse”**
135. Afacan, E. et al., 2022, **“Can Covid-19 vaccines cause or exacerbate bullous pemphigoid? A report of seven cases from one center”**, <https://doi.org/10.1111/ijd.16086>
136. Alshammari, F. et al., 2022, **“Bullous pemphigoid after second dose of mRNA- (Pfizer-BioNTech) Covid-19 vaccine: A case report”**, <https://doi.org/10.1016/j.amsu.2022.103420>
137. Maronese, C. A. et al., 2022, **“Bullous Pemphigoid Associated With COVID-19 Vaccines: An Italian Multicentre Study”**, <https://doi.org/10.3389/fmed.2022.841506>
138. Jacobi, H.H. et al., 1998, **“IL-8 and the Activation of Eosinophils and Neutrophils following Nasal Allergen Challenge”**, <https://doi.org/10.1159/000023925>
139. Barnes, T. C. et al., 2011, **“The Many Faces of Interleukin-6: The Role of IL-6 in Inflammation, Vasculopathy, and Fibrosis in Systemic Sclerosis”**, doi: [10.1155/2011/721608](https://doi.org/10.1155/2011/721608)
140. Choy, E. et Rose-John, S., 2017, **“Interleukin-6 as a Multifunctional Regulator: Inflammation, Immune Response, and Fibrosis”**, <https://doi.org/10.5301/jsrd.5000265>
141. Jing Wang, 2018, **“Neutrophils in tissue injury and repair”**, doi: [10.1007/s00441-017-2785-7](https://doi.org/10.1007/s00441-017-2785-7)
142. Li, Y. et al., 2019, **“The regulatory roles of neutrophils in adaptive immunity”**, <https://doi.org/10.1186/s12964-019-0471-y>
143. Pelletier, M. et al., 2009, **“Evidence for a cross-talk between human neutrophils and Th17 cells”**, <https://doi.org/10.1182/blood-2009-04-216085>

144. Wilson, A. S. et al., 2022, "**Neutrophil extracellular traps and their histones promote Th17 cell differentiation directly via TLR2**", *Nat Commun* **13**, 528 (2022).
<https://doi.org/10.1038/s41467-022-28172-4>
145. Báez-Negrón, L. et Vilá, L. M., 2022, "**New-Onset Systemic Lupus Erythematosus after mRNA SARS-CoV-2 Vaccination**", <https://doi.org/10.1155/2022/6436839>
146. Lemoine, C. et al., 2022, "**Systemic lupus erythematosus after Pfizer COVID-19 vaccine: a case report**", <https://doi.org/10.1007/s10067-022-06126-x>
147. Awad, A. et al., 2014, "**Natural Killer Cells Induce Eosinophil Activation and Apoptosis**", <https://doi.org/10.1371/journal.pone.0094492>
148. Lombardi, C. et al., 2022, "**The emerging roles of eosinophils: Implications for the targeted treatment of eosinophilic-associated inflammatory conditions**", doi: [10.1016/j.crimmu.2022.03.002](https://doi.org/10.1016/j.crimmu.2022.03.002)
149. da Costa Silva, J. et al. 2021, "**Neutrophil and Eosinophil DNA Extracellular Trap Formation: Lessons From Pathogenic Fungi**", <https://doi.org/10.3389/fmicb.2021.634043>
150. Simon, H.-U. et al., 2020, "**The Cellular Functions of Eosinophils: Collegium Internationale Allergologicum**", doi: 10.1159/000504847.
151. Lin, L. et al., 2018, "**Eosinophils Mediate Tissue Injury in the Autoimmune Skin Disease Bullous Pemphigoid**", doi: 10.1016/j.jid.2017.11.031.
152. Costanzo, G. et al., 2022, "**Eosinophilic Granulomatosis with Polyangiitis Relapse after COVID-19 Vaccination: A Case Report**", doi: [10.3390/vaccines10010013](https://doi.org/10.3390/vaccines10010013)
153. Ameratunga, R. et al., 2022, "**First Identified Case of Fatal Fulminant Necrotizing Eosinophilic Myocarditis Following the Initial Dose of the Pfizer-BioNTech mRNA COVID-19 Vaccine (BNT162b2, Comirnaty): an Extremely Rare Idiosyncratic Hypersensitivity Reaction**", <https://doi.org/10.1007/s10875-021-01187-0>
154. Brightling, C. E. et al., 2005, "**The CXCL10/CXCR3 axis mediates human lung mast cell migration to asthmatic airway smooth muscle**", *Am J Respir Crit Care Med.* doi: 10.1164/rccm.200409-1220OC.
155. Galli, S. J. et al., 2012, "**IgE and mast cells in allergic disease**", *Nat. Med.* **18**, 693-704.
156. Gauthier, M. et al., 2017, "**Severe asthma in humans and mouse model suggests a CXCL10 signature underlies corticosteroid-resistant Th1 bias**", <https://doi.org/10.1172/jci.insight.94580>
157. Van Anh Do-Thi, et al., 2020, "**Crosstalk between the Producers and Immune Targets of IL-9**", doi: [10.4110/in.2020.20.e45](https://doi.org/10.4110/in.2020.20.e45)

158. Fawaz, L. M. et al., 2007, **“Expression of IL-9 receptor α chain on human germinal center B cells modulates IgE secretion.”**, *J Allergy Clin Immunol.*;120:1208–1215.
159. Weaver, C. T. et al., 2013, **“The Th17 Pathway and Inflammatory Diseases of the Intestines, Lungs and Skin”**, doi:10.1146/annurev-pathol-011110-130318.
160. Jinfang Zhu, 2018, **“T Helper Cell Differentiation, Heterogeneity, and Plasticity”**, doi: 10.1101/cshperspect.a030338
161. Ssemaganda, A. et al., 2022, **“Expansion of cytotoxic tissue-resident CD8⁺ T cells and CCR6⁺CD161⁺ CD4⁺ T cells in the nasal mucosa following mRNA COVID-19 vaccination”**, *Nat Commun* **13**, 3357. <https://doi.org/10.1038/s41467-022-30913-4>