

84. Stritesky GL, Muthukrishnan R, Sehra S, et al. The transcription factor STAT3 is required for T helper 2 cell development. *Immunity*. 2011;34:39-49.
85. Litvinov IV, Cordeiro B, Fredholm S, et al. Analysis of STAT4 expression in cutaneous T-cell lymphoma (CTCL) patients and patient-derived cell lines. *Cell Cycle*. 2014;13:2975-2982.
86. Netchiporuk E, Litvinov IV, Moreau L, Gilbert M, Sasville D, Duvic M. Dereulation in STAT signaling is important for cutaneous T-cell lymphoma (CTCL) pathogenesis and cancer progression. *Cell Cycle*. 2014;13:3331-3335.
87. Wang L, Ni X, Covington KR, et al. Genomic profiling of Sézary syndrome identifies alterations of key T cell signaling and differentiation genes. *Nat Genet*. 2015;47:1426.
88. da Silva Almeida AC, Abate F, Khiabanian H, et al. The mutational landscape of cutaneous T cell lymphoma and Sézary syndrome. *Nat Genet*. 2015;47:1465-1470.
89. Wilcox RA, Feldman AL, Wada DA, et al. B7-H1 (PD-L1, CD274) suppresses host immunity in T-cell lymphoproliferative disorders. *Blood*. 2009;114:2149-2158.
90. Saulite I, Ignatova D, Chang Y, et al. Blockade of programmed cell death protein 1 (PD-1) in Sézary syndrome reduces Th2 phenotype of non-tumoral T lymphocytes but may enhance tumor proliferation. *Oncoimmunology*. 2020;9:1738797.
91. Kantekure K, Yang Y, Raghunath P, et al. Expression patterns of the immunosuppressive proteins PD-1/CD279 and PD-L1/CD274 at different stages of cutaneous T-cell lymphoma (CTCL)/mycosis fungoides (MF). *Am J Dermatopathol*. 2012;34:126-128.
92. Gibson HM, Mishra A, Chan DV, Hake TS, Porcu P, Wong HK. Impaired proteasome function activates GATA3 in T cells and upregulates CTLA-4: relevance for Sézary syndrome. *J Invest Dermatol*. 2013;133:249-257.
93. Johnson LDS, Banerjee S, Kruglov O, et al. Targeting CD47 in Sézary syndrome with SIRPaFc. *Blood Adv*. 2019;3:1145-1153.
94. Lee M, Kistler C, Hartmann TB, et al. Immuno-screening of a cutaneous T-cell lymphoma library for plasma membrane proteins. *Cancer Immunol Immunother*. 2007;56:783-795.
95. Eichmüller S, Usener D, Thiel D, Schadendorf D. Tumor-specific antigens in cutaneous T-cell lymphoma: expression and sero-reactivity. *Int J Cancer*. 2003;104:482-487.
96. Koch J, Dübel S, Usener D, Schadendorf D, Eichmüller S. cTAGE: a cutaneous T cell lymphoma associated antigen family with tumor-specific splicing. *J Invest Dermatol*. 2003;121:198-206.
97. Gonzalez BR, Zain J, Rosen ST, Querfeld C. Tumor microenvironment in mycosis fungoides and Sézary syndrome. *Curr Opin Oncol*. 2016;28:88-96.
98. Chang DK, Sui J, Geng S, et al. Humanization of an anti-CCR4 antibody that kills cutaneous T-cell lymphoma cells and abrogates suppression by T-regulatory cells. *Mol Cancer Ther*. 2012;11:2451-2461.
99. Narducci MG, Scala E, Bresin A, et al. Skin homing of Sézary cells involves SDF-1-CXCR4 signaling and downregulation of CD26/dipeptidylpeptidase IV. *Blood*. 2006;107:1108-1115.
100. Wysocka M, Kossenkov AV, Benoit BM, et al. CD164 and FCRL3 are highly expressed on CD4 CD26+ T cells in Sézary syndrome patients. *J Invest Dermatol*. 2014;134:229-236.
101. Chung J, Shiue LH, Duvic M, Pandya A, Cruz PD Jr, Ariizumi K. Sézary syndrome cells overexpress syndecan-4 bearing distinct heparan sulfate moieties that suppress T-cell activation by binding DC-HIL and trapping TGF-β on the cell surface. *Blood*. 2011;117:3382-3390.
102. Huet D, Bagot M, Loyaux D, et al. SC5 mAb represents a unique tool for the detection of extracellular vimentin as a specific marker of Sézary cells. *J Immunol*. 2006;176:652-659.
103. Berger CL, Tigelaar R, Cohen J, et al. Cutaneous T-cell lymphoma: malignant proliferation of T-regulatory cells. *Blood*. 2005;105:1640-1647.
104. Walsh PT, Benoit BM, Wysocka M, Dalton NM, Turka LA, Rook AH. A role for regulatory T cells in cutaneous T-cell lymphoma: induction of a CD4+ CD25+ Foxp3+ T cell phenotype associated with HTLV-I infection. *J Invest Dermatol*. 2006;126:690-692.
105. Singer EM, Shin DB, Nattkemper LA, et al. IL-31 is produced by the malignant T-cell population in cutaneous T-cell lymphoma and correlates with CTCL pruritus. *J Invest Dermatol*. 2013;133:2783-2785.
106. Cedeno-Laurent F, Singer EM, Wysocka M, et al. Improved pruritus correlates with lower levels of IL-31 in CTCL patients under different therapeutic modalities. *Clin Immunol*. 2015;158:1-7.
107. Lee C, Hwang ST. Pathophysiology of chemokines and chemokine receptors in dermatological science: a focus on psoriasis and cutaneous T-cell lymphoma. *Dermatologica Sinica*. 2012;30:128-135.
108. Marzec M, Liu X, Kasprzycka M, et al. IL-2-and IL-15-induced activation of the rapamycin-sensitive mTORC1 pathway in malignant CD4 T lymphocytes. *Blood*. 2008;111:2181-2189.
109. Yamanaka K, Clark R, Rich B, et al. Skin-derived interleukin-7 contributes to the proliferation of lymphocytes in cutaneous T-cell lymphoma. *Blood*. 2006;107:2440-2445.
110. Geskin LJ, Viragova S, Stoltz DB, Fuschiotti P. Interleukin-13 is overexpressed in cutaneous T-cell lymphoma cells and regulates their proliferation. *Blood*. 2015;125:2798-2805.
111. Berger CL, Hanlon D, Kanada D, et al. The growth of cutaneous T-cell lymphoma is stimulated by immature dendritic cells. *Blood*. 2002;99:2929-2939.
112. Thumann P, Lüftl M, Moc I, et al. Interaction of cutaneous lymphoma cells with reactive T cells and dendritic cells: implications for dendritic cell-based immunotherapy. *Br J Dermatol*. 2003;149:1128-1142.
113. He T, Tang C, Xu S, Moyana T, Xiang J. Interferon gamma stimulates cellular maturation of dendritic cell line DC2.4 leading to induction of efficient cytotoxic T cell responses and antitumor immunity. *Cell Mol Immunol*. 2007;4:105-111.

Answers to CME examination

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2. b
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