Brentuximab as a treatment for CD30+ mycosis fungoides and Sézary syndrome

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IMPORTANCE
The prognosis of advanced cutaneous T-cell lymphoma (CTCL), including Sézary syndrome and mycosis fungoides (MF), is poor. So far, no curative option apart from allogeneic stem cell transplantation is available. Large cell transformation often hallmarks cases with a more aggressive clinical course, and large tumor cells may express CD30. Recently, brentuximab vedotin, a conjugate of an anti-CD30 antibody and monomethylauristatin E, which inhibits the polymerization of microtubuli, has produced promising results in phase 2 trials in CD30+ Hodgkin lymphoma and anaplastic large cell lymphoma.

OBSERVATIONS
We describe 4 patients with advanced CTCL, 3 with MF and 1 with Sézary syndrome, who were treated with brentuximab. All patients had received multiple previous systemic therapies. In 2 cases of MF, a remission enabling subsequent allogeneic stem cell transplantation was achieved.

CONCLUSIONS AND RELEVANCE
Brentuximab is a well-tolerated, promising new treatment option for advanced CTCL that can be integrated in an allogeneic stem cell transplantation plan by selectively depleting malignant CD30+ cutaneous lymphoma cells.