Supplemental table 1. Primers used in STAT3 sequencing.

<table>
<thead>
<tr>
<th>Primer name</th>
<th>Forward</th>
<th>Reverse</th>
<th>Amplicon size (bp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>STAT3-exon20</td>
<td>GGGCCATCTTGAGCACTAA</td>
<td>TGCAACTAGAAGCAGTGATGA</td>
<td>173</td>
</tr>
<tr>
<td>STAT3-exon21</td>
<td>ACAGGTAAGACCCAGATCCA</td>
<td>CTCCTTGGGAATGTCAGGATAG</td>
<td>156</td>
</tr>
</tbody>
</table>
Supplemental table 2. Clinical and pathologic findings in previously published cases resembling indolent T-LPD of the GI tract.

<table>
<thead>
<tr>
<th>Case</th>
<th>Age (yrs)/sex</th>
<th>Clinical presentation/ sites of involvement</th>
<th>Endoscopic findings</th>
<th>Immunophenotype/ Clonality†</th>
<th>Therapy and response</th>
<th>Follow-up (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbonnel et al (5, 8)</td>
<td>28/M</td>
<td>Diarrhea, malabsorption, recurrent episodes of intestinal obstruction/ small intestine, mesenteric lymph nodes; mediastinal lymph nodes, lungs and skin later in disease</td>
<td>Thickened small bowel wall with numerous white lesions, 1-2 cm in diameter</td>
<td>CD2+, CD3+, CD4+/CD8-, CD5+, CD7+ Clonal</td>
<td>Cyclophosphamide, doxorubicine and prednisone-no response; 2-deoxycoformycin-partial response; chlorambucil-partial response</td>
<td>*D (58)</td>
</tr>
<tr>
<td>Carbonnel et al (8)</td>
<td>43/M</td>
<td>Diarrhea, weight loss/small intestine, mesenteric and retroperitoneal lymph nodes; colon and liver involvement with ascites in advanced phase of disease</td>
<td>NA</td>
<td>CD2+, CD3+, CD4+/CD8-, CD5+, CD7+ Clonality not done</td>
<td>Tetracycline-no response; chlorambucil-partial response; cyclophosphamide, teniposide and prednisone-partial response; holoxan, doxorubicin and etoposide-partial response; chloraminophene-poor compliance</td>
<td>DOD (176)</td>
</tr>
<tr>
<td>Carbonnel et al (8)</td>
<td>59/F</td>
<td>Diarrhea, weight loss, night sweats/small intestine</td>
<td>NA</td>
<td>CD2+, CD3+, CD4+/CD8-, CD5+, CD7+, TCR-BF1+, TCR-G-Clonal</td>
<td>Methotrexate, cytarabine, cyclophosphamide, vincristine, prednisone and bleomycin (MACOP-B) followed by cyclophosphamide, teniposide, and prednisone-partial response; tetracycline-partial response</td>
<td>AWD (66)</td>
</tr>
<tr>
<td>Carbonnel et al (8)</td>
<td>57/M</td>
<td>Diarrhea, weight loss/stomach, small intestine</td>
<td>NA</td>
<td>CD2+, CD3+, CD4+/CD8-, CD5+, CD7-TCR-BF1+, TCR-G-Oligo-clonal</td>
<td>Chlorambucil-no response; Total parenteral nutrition, corticosteroids, and antibiotics-no response</td>
<td>AWD (26)</td>
</tr>
<tr>
<td>Egawa et al (6)</td>
<td>51/M</td>
<td>Abdominal pain and occult blood in stool; relapsing, self-limiting ulcers of the oral cavity/ oral cavity, colon</td>
<td>Multiple colorectal ulcers</td>
<td>CD3+, CD4+ (partial) /CD8-, CD56-Clonal</td>
<td>Prednisolone and salicylazosulfapyridine-no response</td>
<td>AWD (60)</td>
</tr>
<tr>
<td>Hirakawa et al (7)</td>
<td>47/M</td>
<td>Asymptomatic/stomach, small intestine, colon</td>
<td>Multiple polyps in stomach, duodenum and terminal ileum; aphthous lesions in colon</td>
<td>CD2+, CD3+, CD4+/CD8-Clonal</td>
<td>Four cycles of cyclophosphamide, vindesine, pirarubicin, and prednisolone-no response</td>
<td>AWD (12)</td>
</tr>
<tr>
<td>Isomoto et al (10)</td>
<td>67/M</td>
<td>Abdominal pain and diarrhea; oral ulcers/ oral cavity, colon</td>
<td>Numerous polyps in the colon; rectal erosions</td>
<td>CD3+, UCHL-1+ Clonal</td>
<td>Vincristine, cyclophosphamide, adriamycin and prednisolone-complete response</td>
<td>ANED (36)</td>
</tr>
<tr>
<td>Reference</td>
<td>Gender</td>
<td>Initial Symptoms</td>
<td>Clinical Findings</td>
<td>Immunophenotype</td>
<td>Treatment</td>
<td>Outcome</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------</td>
<td>------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Zivny et al (11)</td>
<td>60/M</td>
<td>Diarrhea, weight loss/stomach, duodenum</td>
<td>Gastric and duodenal erythema; nodularity and thickening of the mucosa in the stomach, duodenum, and jejunum</td>
<td>CD3+, CD4+/CD8- Clonal</td>
<td>Cyclophosphamide, vincristine, and prednisone-partial response</td>
<td>AWD (84)</td>
</tr>
<tr>
<td>Svrcek et al (12)</td>
<td>23/M</td>
<td>Diarrhea, weight loss, massive abdominal distention (small bowel obstruction)/duodenum, ileum, mesenteric and retroperitoneal lymph nodes, bone marrow</td>
<td>Resected ileum showed edematous mucosa; the tumour appeared as a main ulcerating mucosal mass with multiple small nodules all over</td>
<td>CD2+, CD3+, CD4+/CD8-, CD5+, CD7-, TCR-BF1+ Clonal</td>
<td>Doxorubicin, cyclophosphamide, vindesine, bleomycin, prednisone (ACVBP) and anti-CD52 antibody therapy-partial response</td>
<td>AWD (36)</td>
</tr>
<tr>
<td>Margolskee et al (13)</td>
<td>53/M</td>
<td>Diarrhea, weight loss, night sweats, vitamin deficiency/small intestine</td>
<td>Small intestine-mucosal nodularity, scalloping, erythema</td>
<td>CD2+, CD3+, CD4+/CD8-, CD5+-, CD7-, TCR-BF1+ Clonal</td>
<td>Budesonide-no response</td>
<td>AWD (55)</td>
</tr>
<tr>
<td>Margolskee et al (13)</td>
<td>37/M</td>
<td>Diarrhea, weight loss, vitamin and iron deficiency/stomach, small intestine, colon; peripheral blood; liver at the time of transformation to large cell lymphoma</td>
<td>Small intestine-mucosal nodularity, scalloping</td>
<td>CD2+, CD3+, CD4+/CD8-, CD5+-, CD7+-, TCR-BF1+ Clonal</td>
<td>Budesonide, azathioprine, prednisone-no response; transformation to aggressive, large T-cell lymphoma</td>
<td>DOD (132)</td>
</tr>
<tr>
<td>Margolskee et al (13)</td>
<td>50/F</td>
<td>Diarrhea, weight loss/ stomach, small intestine, colon</td>
<td>Small intestine-mucosal nodularity, scalloping</td>
<td>CD2+, CD3+, CD4+/CD8-, CD5+, CD7-, TCR-BF1+ Clonal</td>
<td>Budesonide-no response</td>
<td>AWD (30)</td>
</tr>
</tbody>
</table>

ANED, alive no evidence of disease; AWD, alive with disease; D, died; DOD, died of disease; NA, not available
†T-cell receptor gamma chain gene rearrangement
*Patient died of progressive multifocal leukoencephalopathy