SUPPLEMENTARY MATERIAL 1
Details for Diagnostic Methods

Diagnostic methods included morphology and immunohistochemistry for all cases; and for some selected cases, in situ hybridization for Epstein Barr virus-encoded RNA (Novocastra, Newcastle, UK), kappa and lambda light chain RNA (Ventana, Tucson, AZ, USA), and polymerase chain reaction-based techniques for the clonality analysis for B cell receptor and T cell receptor (IdentiClone Clonality Assay Kits based on BIOMED-2 protocols, Invivoscribe, CA, USA; or in house protocols), and BRAF V600E mutation test by pyrosequencing method (PyroMark® Q24, Qiagen, Hilden, Germany) were conducted. The used antibody for differential diagnosis of histiocytic and dendritic neoplasm from various types of mimics were as follows: CD68 (dilution 1:150; clone PG-M1; DAKO, Agilent, Santa Clara, CA, USA), CD163 (dilution 1:100; clone MRQ-26; Cell Marque, Rocklin, CA, USA), CD1a (dilution 1:50; clone 10; DAKO, Agilent), S100 (dilution 1:2000; DAKO, Agilent), langerin (CD207) (dilution 1:50; clone 12D6; Cell Marque), lysozyme (dilution 1:200; DAKO, Agilent), myeloperoxidase (RTU; DAKO, Agilent), CD21 (dilution 1:50; clone 1F8; DAKO, Agilent), CD23 (RTU; clone DAK-CD23; DAKO, Agilent), CD123 (dilution 1:200; clone BR4MS; Novocastra, Leica, Newcastle Upon Tyne, UK), CD34 (dilution 1:100; clone QBEnd 10; DAKO, Agilent), CD45RO (dilution 1:50; clone CD45R, 4KB5; DAKO, Agilent), CD20 (dilution 1:100; clone L26, DAKO, Agilent), CD79a (dilution 1:50; clone JCB117; DAKO, Agilent), PAX5 (RTU; clone 1EW; Novocastra, Leica), BOB.1 (dilution 1:100; clone SP92; Cell Marque), OCT2 (dilution 1:50; MRQ-2; Cell Marque), CD138 (dilution 1:100; clone MI 15; DAKO, Agilent), MUM1 (dilution 1:150; clone MUM1P; DAKO, Agilent), CD3 (dilution 1:100; DAKO, Agilent), CD5 (dilution 1:25; clone 4C7; Novocastra, Leica), CD2 (RTU; clone 11F11; Novocastra, Leica), CD7 (dilution 1:100; clone LP 15; Novocastra, Leica), CD4 (RTU; clone CD4-1F6; Novocastra, Leica), CD8 (RTU; clone CB/144B; DAKO, Agilent), CD10 (dilution 1:50; clone 56C6; Novocastra, Leica), CD30 (dilution 1:50; clone Ber-H2, DAKO, Agilent), CD56 (dilution 1:100; clone CD564; Novocastra, Leica), ALK (dilution 1:50; clone ALK1, DAKO, Agilent), Ki-67 (dilution 1:150; clone MIB-1, DAKO, Agilent), PD1 (dilution 1:100; clone NAT105; Cell Marque), CXCL13 (dilution 1:100; R&D System, Minneapolis, MN, USA), Bcl2 (dilution 1:100; clone 124; DAKO, Agilent), Bcl6 (dilution 1:100; clone GI191E/A6; Cell Marque), cyclin D1 (dilution 1:100; clone SP4; Cell Marque), TIA-1 (dilution 1:100; clone 2G9A10F5, Beckman Coulter, Marseille, France), granzyme B (dilution 1:50; clone GrB-7, DAKO, Agilent), TdT (dilution 1:150; clone SEN28; Novocastra, Leica), cytokeratin (AE1/AE3) (dilution 1:600; clone AE1/AE3; DAKO, Agilent), epithelial membrane antigen (dilution 1:200; clone E29; DAKO, Agilent), and/or BRAF VE1 (RTU; clone VE1; Ventana, Tucson, AZ, USA). IHC and ISH were performed using Ventana Bench Mark XT Autostainer (Ventana XT).