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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author** | **Country** | **Number of** **cases** | **Mean age at diagnosis** | **Eczema** | **Infections** | **Bleeding**  | **Autoimmunity**  | **Malignancy**  |
| Sullivan KE et al. (38) 1995             | USACanada            | 154 | 1.75 months(0-24.8)              | **Total patients with Eczema: 81%**                | **Total patients with infections: n/a**Otitis media: 118/154, 78%Pneumonia: 68/154, 45%Diarrhea: 20/154, 13%Sinusitis: 36/154, 24%Sepsis: 36/154, 24%Meningitis: 11/154, 7%Varicella: 25/154, 16%EBV: 4/154, 3%; CMV: 4/154, 3%HSV I or HSV II: 24/154, 6%Polyomavirus: 2/154, 1%Molluscum contagiosum: 13/154, 9%; Warts: 10/154, 7%Yeast/Fungi: 18/154, 12%Pneumocystis carinii: 13/154, 9%Other infections:58/154, 38%Other opportunistic infections: 10/154, 7% | **Total patients with bleeding: 84%**Petechiae and purpura: 78%Hematemesis and melena: 28%Epistaxis, 16% Oral bleeding: 6%Intracranial hemorrhage: 2%Others: 5% (Unusual bleed from umbilical stump; Postsurgical, and post-traumatic bleeding; Testicular hemorrhage; and several subconjunctival hemorrhages)    | **Total patients with autoimmunity: 61/ 154, 40%** AIHA: 22/154, 14%Vasculitis: 20/154, 13%Renal disease: 18/154, 12%Transient arthritis: 17/154, 11%Chronic arthritis: 15/154, 10%Schönlein-Henoch purpura: 8/154, 5%IBD: 5/154, 3%Dermatomyositis: 1/154, 0.6%Others: 14/154, 9% (Recurrent angioedema; Neutropenia; Cerebral vasculitis; Uveitis Myositis; Auto-immune hepatitis; Pyoderma gangrenosum; Erythema nodosum; cardiac vasculitis)  | **Total patients with malignancy: 21/ 154, 13%** (Lymphoreticular: 18, and non-lympho-reticular: 3)Lymphoma: 14/21, 66%Reticuloendothelial: 1, 4.7%Glioma: 1, 4.7%Reticulum cell sarcoma: 1, 4.7%Lymphoblastic leukemia: 1, 4.7%Malignant histiocytosis: 1, 4.7%Testicular carcinoma: 1, 4.7%Acoustic neuroma: 1, 4.7%    |
| Imai et al., (42)2004             | Japan             | 50 | n/a             | **Total patients with Eczema: 40/50, 80%**Transient: 8/50, 16%Moderate: 20/50, 40%Severe: 12/50, 24%(5)Others:Asthma: 4/50, 8%Food allergy: 4/50, 8%  | **Total patients with infections: 44/50, 88%**Details of bacterial infections: n/aCMV: 5/50, 10% Candidiasis: 9/50, 18%Pneumocystis carinii pneumonia: 2/50, 4%HSV I: 13/115 episodes, 11.3%Recurrent herpes: 2/50, 4%Severe varicella: 1/50, 2%Measles pneumonitis: 2/50, 4%Mumps meningitis: 2/50, 4%EBV reactivation: 1/50, 2%Molluscum contagiosum: 5/50, 10%Aspergillosis: 3/50, 6% | **Total patients with bleeding: n/a**ICH: 11/50, 24%Intestinal bleeding: 18/50, 36%           | **Total patients with autoimmunity: 12/50, 24%**Vasculitis: 4/50, 8%Arthritis: 3/50, 6%IBD: 2/50, 4%AIHA: 3/50, 6%IgA nephropathy: 5/50, 10%Chronic renal failure: 2/50, 4%     | **Total patients with Malignancy: 5/50, 10%**Malignant lymphoma: 2/50, 4%Myelodysplasia: 3/50, 6%     |
| Lee et al.(39) 2009 | China | 35 | 11 months (1- 42 months) | **Total patients with Eczema:****35/35, 100%** | **Total patients with infections: n/a**Pneumonia:13, 37%Respiratory tract infection: 12/35, 28.5%Skin abscess: 7/35, 20%Otitis media: 6/35, 17%Neisseria meningitidis: 1/35, 2.8%Streptococcus pneumoniae: 1/35, 2.8%Herpetic gingivo- stomatitis: 1/35, 2.8%CMV interstitial pneumonitis: 1/35, 2.8% | **Total patients with bleeding: n/a**ICH: 2/35, 5.7%Massive hematemesis: 1/35, 2.8%Chronic per-rectal bleeding: 19/35, 54.3%Recurrent epistaxis: 11, 34%Petechiae: 12/35, 34.3% | **Total patients with autoimmunity: 12/35, 34.2%**AIHA: 6/35, 17.1%Neutropenia: 6/35, 17.1%  | **Total patients with Malignancy: 1/35, 2.8%**EBV related high-grade large B-cell lymphoma: 1/35, 2.8% |
| Albert MH et al.(41)2010          | FranceJapanUnited States of AmericaUnited KingdomGermanySwedenSpainRussiaIsraelNetherlands | 173 cases of XLT |   **-**         |    **-**      | **Total patients with infections: 12/173, 6.3%**Total No. of events: 17Episodes ofPneumonia: 6/17, 35%Bacterial meningitis: 4/17, 23.5Sepsis: 4/17, 23.5Salmonellosis: 1/17, 5.8%Orchitis: 1/17, 5.8%Tuberculosis: 1/17, 5.8% | **Total patients with bleeding: 24, 13.8%**No. of events: 33ICH: 18/ 33, 54.5%Gastrointestinal: 6/ 33, 18.1%Ear/nose/throat: 4/ 33, 12%Pulmonary: 2/ 33, 6%Traumatic, not ICH: 2/ 33, 6%Retinal: 1/33, 3% | **Total patients with autoimmunity: 21/ 173, 12%** No. of events: 26Nephropathy: 9/26, 35%AIHA: 6/26, 23%Vasculitis: 3/26, 11.5%ITP: 4/26, 15%Arthritis: 3/26, 11.5Colitis: 1/26, 3.8% | **Total patients with malignancy: 9/ 173, 5.2%**No. of events: 10Lymphoma/EBV-LPD: 4/10, 25%MDS: 1/10, 10%Spinalioma: 2/10, 20%Seminoma: 1/10, 10%ALL: 1/10, 10%Pancreatic cancer: 1/10, 10% |
| Shin CR et al., (43) 2012 | Cincinnati, USA | 47  | 1.52 months (0.26-19) | **Total patients with Eczema: 28/47, 59%** | **Total patients with infections: 24/47, 51%** | **Total patients with bleeding: 17, 40%** | **Total patients with autoimmunity: 15/47, 32%** | **Total patients with malignancy: 2, 4.2%** |
| Jin YY et al.,(40) 2019      | China        | 42 | 5.6 months        | **Total patients with Eczema: 29/ 42, 69%**Drug allergy: 1, 2.3%    | **Total patients with infections: 41, 97.6%**Pneumonia: 23/42, 55%Diarrhea: 23/42, 55%Otitis media: 3/42, 7.1%Thrush: 3/42, 7.1%Lymphadenitis: 1/42, 2.3%CMV infection: 1/42, 2.3%EBV infection: 1/42, 2.3% | **Total patients with bleeding: 38, 90%**Skin spots or petechial: 27/42, 64.2%Per-rectal bleeding:21/42, 50%Epistaxis: 7/42, 16.6%ICH: 2/42, 4.7%Multiple-system bleeding: 12/42, 28.5% | **Total patients with autoimmunity: 3/ 42, 7%** AIHA: 2/42, 4.7%AIHA with IgA nephropathy: 1/42, 2.3%   |   **-**   |
| Haskologlu et al., (37)2020 | Turkey | 23 | 24 months (1- 132 months) |   **-** | **Total patients with infections: n/a**Two patients died due to severe infections | **Total patients with bleeding**: 91% Skin spots or petechia: 91%**(11 [48%] patients misdiagnosed as ITP initially)** | **Total patients with autoimmunity: 3/ 23, 9%** Chronic renal failure: 3/23, 9%(2 with IgA nephropathy, and Leukocytoclastic vasculitis; and 1 with only leukocytoclastic vasculitis) | **Total patients with malignancy: 1/23, 4.3%**EBV associated non-Hodgkin’s lymphoma: 1/23, 4.3% |
| Present study | India  | 95 | **WAS:** 12 months (5.5- 36)**XLT:** 51 months (10- 102) | **Total patients with Eczema: 75/95, 79%** | **Total patients with infections: 80/95, 84.2%**Pneumonia: 52, 54.7%Otitis Media: 43, 35.7%CMV: 7, 7.3%; Varicella: 4, 4.2%MC virus infection: 5, 5.3%EBV: 2, 2.1% | **Total patients with bleeding: 88/95, 92.6%**Blood-stained stool: 67, 70.5% Skin bleed: 54, 56% Epistaxis: 11, 11.5%Hematuria: 5, 5.3% | **Total patients with autoimmunity: 38/95, 40%** AIHA: 9, 9.5%Skin vasculitis: 9, 9.5%Takayasu arteritis: 1, 1%Positive antinuclear antibody: 9, 9.5%. | **Total patients with malignancy: 2/95, 2.1%**NHL: 2, 2.1% |

**Supplementary table 5: Clinical profile in large published cohorts**

**Abbreviations:** EBV: Epstein Barr virus; HSV: Herpes Simplex virus; AIHA: Autoimmune hemolytic anemia; IBD: Inflammatory Bowel Disease; ITP: Immune thrombocytopenic purpura; LPD: Lymphoproliferative Disease; ALL: Acute lymphoid leukemia; CMV: Cytomegalovirus; ICH: Intracranial hemorrhage; MC virus: Molluscum contagiosum; NHL: Non-Hodgkin lymphoma.