|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Patient | Sex | Age (years) | Ethnicity | Diagnosis | Molecular driver | Leukemia status | Phase of Therapy | Prior Transplant History |
| 1 | F | 21 | Hispanic | Pre-B-ALL | CRLF2 fusion | CR2 | s/p transplant | Yes |
| 2 | F | 16 | Hispanic | Pre-B-ALL | iAMP21; KRAS mutation | M3 (relapse) | Re-induction | Yes |
| 3 | M | 16 | Non-Hispanic | B/Myeloid MPAL | TCF3/ZNF384 fusion | M3 (initial diagnosis) | Induction | Yes |
| 4 | F | 16 | Hispanic | MDS-AML | GATA2 mutation | CR2 | 2 months s/p second HSCT | Yes |
| 5 | M | 20 | Non-Hispanic | Pre-B-ALL | NRAS, KRAS mutations | CR1 | Consolidation, DI, maintenance | No |
| 6 | F | 7 | Non-Hispanic | Pre-B-ALL | ETV6-RUNX1, MYC amp | CR2 | s/p transplant | Yes |
| 7 | F | 25 | Unknown | AML | t(8;21) | M3 (initial diagnosis) | Induction | No |
| 8 | F | 8 | Unknown | Mature T-cell lymphoma | CDKN2A/B deletion | CR1 | Throughout lymphoma and HLH-directed therapy | No |
| 9 | F | 13 | Non-Hispanic | Pre-B-ALL | PAX5, CDKN2A/2B deletion | CR2 | s/p transplant | Yes |
| 10 | F | 19 | Hispanic | Pre-B-ALL | BCR-ABL | CR2 | s/p transplant | Yes |
| 11 | F | 23 | Hispanic | Ph+ pre-B-ALL | BCR-ABL | CR1 | Consolidation, DI | No |
| 12 | M | 17 | Unknown | DLBCL; h/o T-ALL | NT5C2 missense mutation | CR1 | DLBCL induction | No |
| 13 | M | 15 | Unknown | Pre-B-ALL | iAMP21; TP53, CDKN2A/B del | CR2 | s/p CAR-T | No |
| 14 | M | 22 | Non-Hispanic | AML | inv 16 | M3 (initial diagnosis) | Induction | No |
| 15 | M | 15 | Non-Hispanic | Burkitt-type leukemia | 11q aberration | M3 (initial diagnosis) | Induction and Consolidation | No |

# TABLE 1 Patient demographics and cancer diagnosis at the time of TPO-RA initiation

Abbreviations: ALL= acute lymphoblastic leukemia; TPO = Thrombopoietin receptor agonists; CR = Complete Remission; HSCT = Hematopoietic stem cell transplant; M3= >25% blasts detected in bone marrow

TABLE 3 Clinical course and survival outcomes

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Patient | Major  Comorbidities\* | Myelosuppressive concomitant medications\* | Vital status | Relapse after receiving TPO-RA | Relapse-free survival (months) | Overall survival (months from diagnosis) |
| 1 | Disseminated aspergillus, AIHA, cardiac thrombus | sirolimus | Deceased | No | 37 | 37 |
| 2 | Hyperinflammation, bacteremia | VPLD | Deceased | Yes | 29 | 37 |
| 3 | Type I diabetes mellitus, retinal hemorrhage | VPLD | Alive | Yes | 13 | 41 |
| 4 | BK viremia, hemorrhagic cystitis | letermovir | Deceased | Yes | 8 | 11 |
| 5 | Type I diabetes mellitus | cyclophosphamide, cytarabine | Alive | No | 24 | 24 |
| 6 | VOD, CMV viremia | valacyclovir, defibrotide | Deceased | Yes | 11 | 30 |
| 7 | Fungal pneumonia, ESBL E. coli bacteremia | cytarabine, daunorubicin | Alive | No | 50 | 50 |
| 8 | HLH, lymphomatous bowel involvement | dexamethasone, etoposide | Deceased | No | 40 | 40 |
| 9 | TA-TMA, GI bleeding | None | Deceased | No | 69 | 69 |
| 10 | TA-TMA, uremia | valganciclovir | Deceased | No | 15 | 15 |
| 11 | N/A | VPLD + dasatinib | Alive | Yes | 6 | 45 |
| 12 | Cerebral hemorrhage | cytarabine | Alive | No | 46 | 46 |
| 13 | Septic shock, invasive fungal sinusitis | none | Deceased | No | 10 | 15 |
| 14 | Retinal hemorrhage | cytarabine, daunorubicin | Alive | No | 48 | 48 |
| 15 | N/A | Burkitt leukemia-directed therapy | Alive | No | 46 | 46 |

Abbreviations: AIHA= autoimmune hemolytic anemia; VOD= venooclusive disease; CMV= cytomegalovirus; DI= Delayed intensification; ESBL= Extended-spectrum beta-lactamase; HSCT= hematopoietic stem cell transplant; HLH= hemophagocytic lymphohistiocytosis; TA-TMA= transplant associated microangiopathy; GI= gastrointestinal; VPLD= vincristine, prednisone, asparaginase, and daunorubicin; \* at the time of TPO-RA administration