Supplemental Material

Table S1. Summary of treatment-related adverse events in the total study population

	TRAEs, n (%) N = 72	
	Any grade n (%)	Grade 3 to 5 n (%)
Patients with no TRAEs	26 (36.1)	44 (61.1)
Patients with ≥1 TRAE	46 (63.9)	28 (38.9)
Decreased neutrophils[a]	14 (19.4)	13 (18.1)
Nausea	12 (16.7)	0 (0)
Fatigue	11 (15.3)	1 (1.4)
Platelet count decreased	11 (15.3)	7 (9.7)
Anemia	8 (11.1)	3 (4.2)
Diarrhea	8 (11.1)	1 (1.4)
Pyrexia	6 (8.3)	1 (1.4)
Lymphocyte count decreased	6 (8.3)	5 (6.9)
White blood cell count decreased	5 (6.9)	3 (4.2)
Tumor lysis syndrome	5 (6.9)	3 (4.2)
Aspartate aminotransferase increased	4 (5.6)	1 (1.4)

Febrile neutropenia	3 (4.2)	3 (4.2)
Thrombocytopenia	3 (4.2)	1 (1.4)
Blood creatinine increased	3 (4.2)	1 (1.4)
Alanine aminotransferase increased	2 (2.8)	0 (0)
Hyperglycemia	2 (2.8)	1 (1.4)
Hyponatremia	2 (2.8)	1 (1.4)
Flank pain	2 (2.8)	1 (1.4)
Cough	2 (2.8)	0 (0)
Hypoxia	2 (2.8)	1 (1.4)
Disseminated tuberculosis	1 (1.4)	1 (1.4)
Pneumonia	1 (1.4)	1 (1.4)
Pulmonary sepsis	1 (1.4)	1 (1.4)
Hemoglobin decreased	1 (1.4)	1 (1.4)
Acute kidney injury	1 (1.4)	1 (1.4)
Pneumonitis	1 (1.4)	1 (1.4)
Hypothyroidism	1 (1.4)	0 (0)

[a]Includes National Cancer Institute Common Terminology Criteria for Adverse Events, version 4.0, preferred terms neutrophil count decreased and neutropenia.

TRAEs, treatment-related adverse events.

Table S2. Immune-related adverse events and infusion reactions in disease cohorts and the total study population

	Pembrolizumab + Dinaciclib			
irAEs, n (%)	**rrCLL n = 17**	**rrDLBCL n = 38**	**rrMM n = 17**	**All disease cohorts N = 72**
No irAEs	14 (82.4)	36 (94.7)	16 (94.1)	66 (91.7)
One or more irAEs	3 (17.6)	2 (5.3)	1 (5.9)	6 (8.3)
Hyperthyroidism	0 (0)	1 (2.6)	0 (0)	1 (1.4)
Hypothyroidism	1 (5.9)	0 (0)	0 (0)	1 (1.4)
Infusion reactions	2 (11.8)	1 (2.6)	0 (0)	3 (4.2)
Pneumonitis	0 (0)	0 (0)	1 (5.9)	1 (1.4)

CLL, chronic lymphocytic leukemia; DLBCL, diffuse large B-cell lymphoma; irAEs, immune-related adverse events; MM, multiple myeloma; rr, relapsed or refractory.