## **Supplementary Appendix**

Immune adverse events (irAEs) with adjuvant ipilimumab in melanoma, use of immunosuppressants and association with outcome: ECOG-ACRIN E1609 study analysis

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**Figure S1.** Kaplan-Meier plots of relapse free survival (RFS) [Figure S1A: 5-year RFS 49% (95% CI: 45%-52%) versus 41% (95% 31%-50%)] and overall survival (OS) [Figure S1B] with Grade 1-4 irAEs versus no irAE, respectively.

## Figure S1A

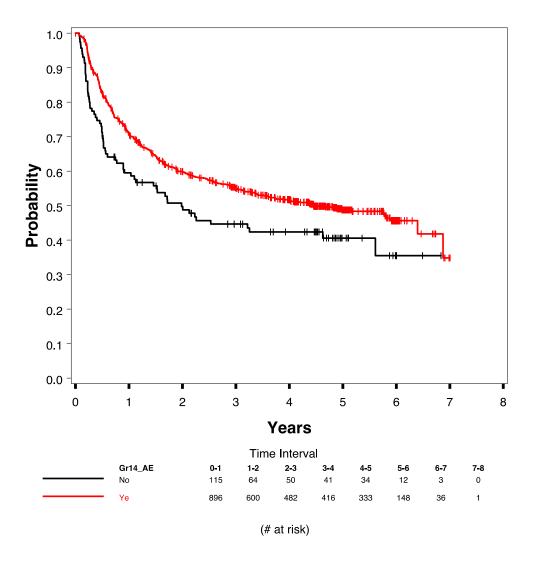


Figure S1B

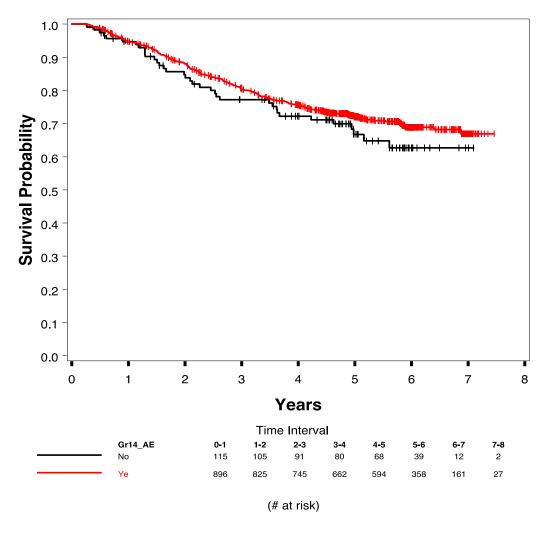


Table S5. Multivariate models: irAE CTCAE Grade 1-2 or Grade 1-4 versus Grade 0.

Variable	Hazard Ratio	95% CI	<i>P-</i> value	
(a) RFS outcomes in the multivariate model for any irAE Grade 1-2				
irAE	0.75	0.5, 1.03	0.072	
Age	1.31	1.01, 1.69	0.039	
Gender	0.73	0.55, 0.97	0.030	
Stage	1.33	1.10, 1.60	0.002	
Clark	1.50	1.21, 1.85	< 0.001	
(b) RFS outcomes	s in the multivariate mo	odel for <b>any</b> irAE Grad	de 1-4	
irAE	0.73	0.55, 0.99	0.041	
Age	1.26	1.02, 1.54	0.030	
Stage	1.34	1.16, 1.54	< 0.001	
Thickness	1.31	1.05, 1.65	0.019	
Clark	1.27	1.07, 1.50	0.006	
(c) RFS outcomes in the multivariate model for rash irAE Grade 1-2				
Rash	0.71	0.57, 0.87	0.001	
Age	1.31	1.01, 1.62	0.013	
Thickness	1.29	1.02, 1.63	0.036	
Clark	1.31	1.10,1.56	0.003	
PS	1.31	1.01, 1.70	0.041	
Stage	1.36	1.17,1.57	<0.001	
(d) OS outcomes	in the multivariate mod	del for <b>rash</b> irAE Grad	e 1-2	
Rash	0.72	0.55, 0.96	0.024	
Age	1.38	1.04, 1.82	0.025	
Clark level	1.40	1.13, 1.74	0.002	
(e) RFS outcomes in the multivariate model for rash irAE Grade 1-4				
Rash	0.71	0.58, 0.88	0.001	

Age	1.25	1.02, 1.54	0.032		
Thickness	1.29	1.02, 1.63	0.018		
Clark	1.28	1.08,1.51	0.005		
PS	1.26	0.97, 1.62	0.080		
Stage	1.34	1.16,1.54	<0.001		
(f) OS outcomes	in the multivariate mod	del for <b>rash</b> irAE Grad	e 1-4		
Rash	0.76	0.58, 1.00	0.047		
Age	1.29	0.98, 1.69	0.067		
Clark	1.33	1.06, 1.67	0.015		
Thickness	1.29	0.95, 1.75	0.094		
(g) RFS outcomes	(g) RFS outcomes in the multivariate model for rash and endocrine irAE Grade 1-2				
Endocrine	0.68	0.54, 0.84	<0.001		
Age	1.29	1.04, 1.61	0.024		
Gender	0.77	0.60, 0.98	0.031		
Stage	1.34	1.16, 1.58	<0.001		
Clark	1.40	1.18, 1.67	<0.001		
PS	1.30	0.99, 1.71	0.057		
(h) OS outcomes	in the multivariate mod	del for rash and endo	crine irAE Grade 1-2		
Rash and endocrine	0.68	0.51, 0.92	0.008		
Age	1,33	0.99, 1.79	0.014		
Gender	0.75	0.54, 1.04	0.080		
Clark	1.38	1.10, 1.74	0.006		
(i) RFS outcomes in the multivariate model for <b>rash and endocrine</b> irAE Grade 1-4					
Rash and endocrine	0.71	0.55, 0.91	0.008		
Age	1.28	1.03, 1.55	0.028		
Thickness	1.31	1.04, 1.64	0.021		
Stage	1.33	1.16, 1.54	<0.001		
Clark	1.26	1.07, 1.49	0.007		
PS	1.24	0.96, 1.59	0.010		
(j) OS outcomes in the multivariate model for rash and endocrine irAE Grade 1-4					
Rash and endocrine	0.76	0.58, 1.00	0.054		

Age	1.30	0.99, 1.71	0.056
Clark	1.32	1.06, 1.67	0.016
Thickness	1.29	0.95, 1.75	0.097