eTable 1. 31-GEP accuracy for 5-year melanoma-specific mortality risk prediction for stages I-III and stage I alone.

	1. Class 1A vs. Class 2B		2. Class 1 vs. Class 2		3. Class 2B vs non-2B		4. Class 1A vs non-1A	
	Stage I-III	Stage I	Stage I-III	Stage I	Stage I-III	Stage I	Stage I-III	Stage I
Sensitivity	91.1%	66.7%	87.0%	40.0%	73.9%	40.0%	92.8%	80.0%
Specificity	73.4%	92.7%	68.4%	85.0%	79.7%	94.2%	56.1%	73.9%
PPV	29.1%	8.0%	23.7%	3.3%	29.1%	8.0%	19.3%	3.7%
NPV	98.6%	99.7%	97.9%	99.1%	96.4%	99.2%	98.6%	99.7%
LR+	3.4	9.1	2.8	2.7	3.6	6.9	2.1	3.1
LR-	0.1	0.4	0.2	0.7	0.3	0.6	0.1	0.3

Accuracy based on 5-year melanoma-specific mortality (MSM). An MSM event was any melanoma-specific mortality that occurred within five years after diagnosis. Any patient that had at least five years of follow-up and did not die due to melanoma by five years after diagnosis was not considered to have an MSM event for 5-year MSM accuracy. Accuracy was calculated based on common clinical utilities of the 31-GEP test. **1**) Class 1A was a negative test and Class 2B was a positive test. Class 1B/2A were intermediate and did not count toward accuracy. **2**) Class 1 (Classes 1A and 1B) was counted as a negative test and Class 2 (Classes 2A and 2B) was counted as a positive test. **3**) All non-Class 2B (Classes 1A, 1B, and 2A) was considered a negative test and Class 2B was considered a positive test. **4**) Class 1A was considered a negative result and non-Class 1A (Classes 1B, 2A, and 2B) was considered a positive result in the AJCC. LR+, positive likelihood ratio; LR-, negative likelihood ratio; NPV, negative predictive value; PPV, positive predictive value.

eTable 2. Distant metastasis-free survival by 31-GEP Class and AJCC stage.

GEP Class	5-year DMFS		
	Stage I	Stage II	Stage III
Overall	95.4%	69.5%	54.5%
Class 1A	98.0%	88.0%	68.7%
Class 1B/2A	88.6%	83.4%	63.2%
Class 2B	89.5%	58.5%	44.0%

Five-year DMFS estimates derived from Kaplan-Meier analysis. Notably, in stage I CM, there is no significant difference between Class 2B and 1B/2A for events (Fischer's Exact Test, P = .759), while there is a significant difference between Class 1A and non-1A (1B/2A, and 2B, P < .001). GEP: gene expression profile. DMFS: distant metastasis-free survival.