Table S1. Exposure-rPFS HR Cox proportional-hazards model parameter estimates.

Parameter	Estimate	Standard Error	95% Confidence Interval	P-value
$AUC_{ss,event}$ as exposure metrics				
β	-0.0000739	0.0000619	(-0.000195, 0.0000473)	0.232
AUC_{ss} as exposure metrics				
β	-0.0000488	0.0000549	(-0.000156, 0.0000588)	0.374

$$\lambda(t) = \lambda_0(t)*\exp(\beta*AUC_i)$$

where $\lambda_0(t)$ is the baseline hazard function, β is the slope parameter, AUC_i is the exposure ($AUC_{ss,event}$ or AUC_{ss}) in subject i.

Table S2. Exposure-AE logistic regression model parameter estimates.

Parameter	Estimate	Standard Error	95% Confidence Interval	P-value
Diarrhea grade $\geq$ 2, AUC$_{ss,event}$ as exposure metrics				
α	-3.04	0.363	(-3.81,-2.38)	-
β	0.000769	0.000133	(0.000521,0.00104)	<0.001
Diarrhea grade $\geq$ 2, AUC$_{ss}$ as exposure metrics				
α	-2.94	0.354	(-3.69,-2.29)	-
β	0.000669	0.000120	(0.000444,0.000917)	<0.001
Diarrhea grade $\geq$ 3, AUC$_{ss,event}$ as exposure metrics				
α	-4.56	0.689	(-6.12,-3.38)	-
β	0.000798	0.000235	(0.000362,0.00130)	<0.001
Diarrhea grade $\geq$ 3, AUC$_{ss}$ as exposure metrics				
α	-4.38	0.661	(-5.87,-3.24)	-
β	0.000640	0.000204	(0.000259,0.00107)	0.00173
Rash grade $\geq$ 2, AUC$_{ss,event}$ as exposure metrics				
α	-5.53	0.840	(-7.45,-4.10)	-
β	0.00112	0.000251	(0.000669,0.00167)	<0.001
Rash grade $\geq$ 2, AUC$_{ss}$ as exposure metrics				
α	-5.73	0.932	(-7.89,-4.17)	-
β	0.00107	0.000251	(0.000627,0.00163)	<0.001
Rash grade $\geq$ 3, AUC$_{ss,event}$ as exposure metrics				
α	-6.04	0.984	(-8.32,-4.40)	-
β	0.00118	0.000282	(0.000684,0.00181)	<0.001
Rash grade $\geq$ 3, AUC$_{ss}$ as exposure metrics				
α	-6.47	1.16	(-9.19,-4.57)	-
β	0.00119	0.000300	(0.000673,0.00187)	<0.001

$$\text{logit}(P(AE_i=1)) = \alpha + \beta * AUC_i$$

where $P(AE_i=1)$ is the probability that adverse event from subject i occurs (ie, grade $\geq$2 diarrhea), α is the intercept parameter, β is the slope parameter, and AUC_i the exposure (AUC$_{ss,event}$ or AUC$_{ss}$) of subject i.