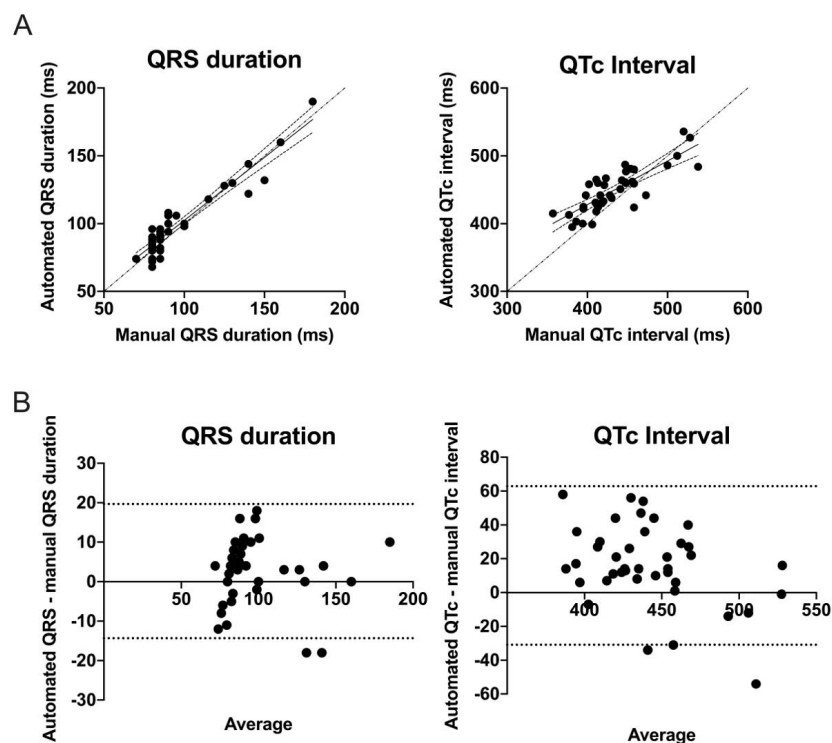
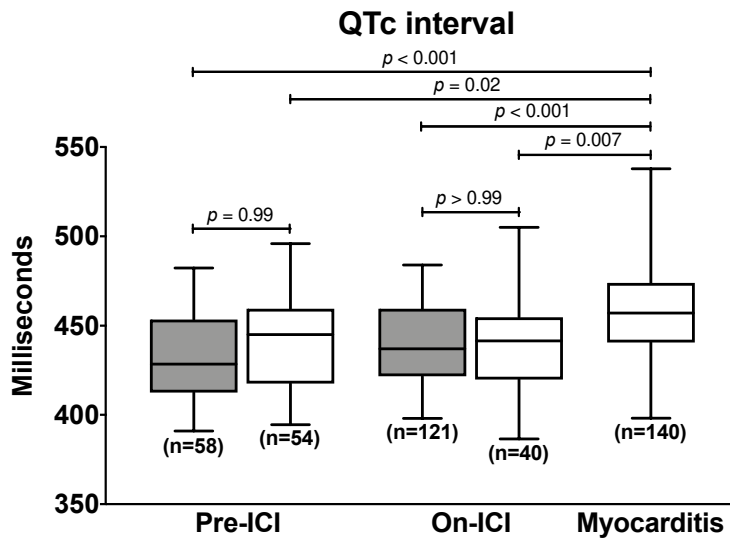


SUPPLEMENTAL MATERIAL



Supplemental Figure 1. Relationship between automated and manual ECG measurements.

40 ECGs (20 from controls and 20 from cases at time of myocarditis) were randomly selected and a blinded reader manually measured the QRS duration and QTc interval. (A) Scatter-plots of manual vs automated QRS duration (left) and QTc interval measurements (right). Each dot represents a single ECG. The line of linear regression (solid line) and its 95% CI is shown (dashed line), along with the line of identity (alternating dashes/dots line). The slope of the linear regression line for the QRS data was 0.93 (95% CI 0.82 to 1.04), and for QTc data was 0.64 (95% CI 0.50 to 0.79). (B) Bland-Altman plots depicting the same data. The dotted lines represent the 95% limits of agreement. QRS measurements showed a bias of +2.7 ms towards the automated values (95% limits of agreement -14.3 to 19.7); the QTc measurements showed a bias of +16 ms towards the automated values (95% limits of agreement -30.9 to 62.9).

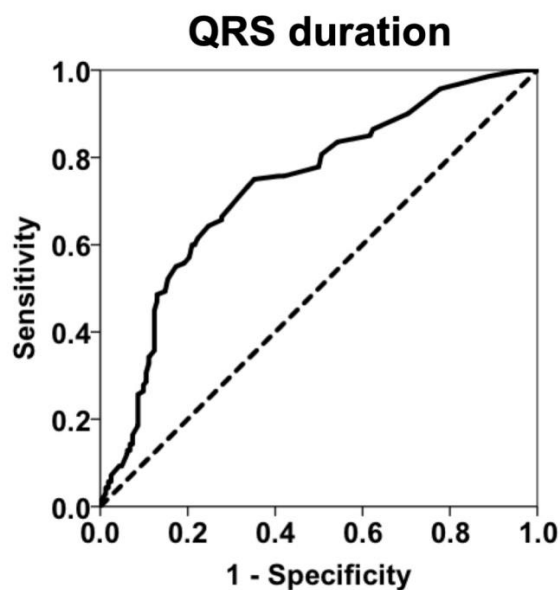


Supplemental Figure 2. QTc interval changes (corrected by Bazett) with ICI myocarditis.

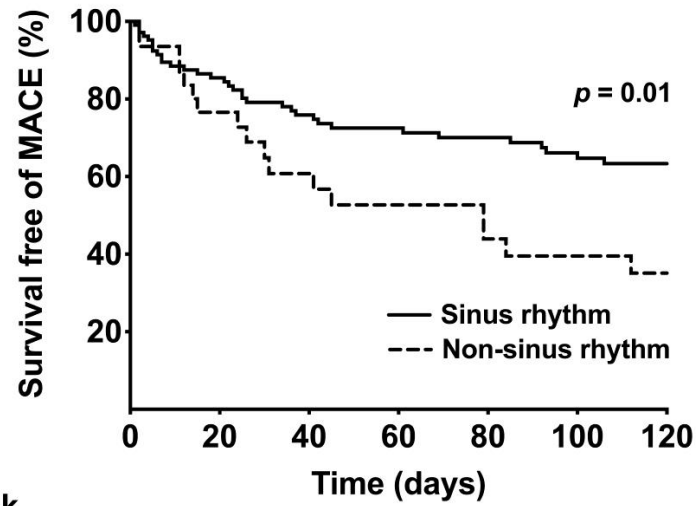
QTc interval values were derived from ECGs obtained pre-ICI therapy (“Pre-ICI”), after initiating ICI therapy (“On-ICI”), or at the time of myocarditis (for cases only; “Myocarditis”). Shown are box-and-whisker plots with the central line indicating the median value, the margins of the box indicating the 25th/75th percentiles, and the whiskers indicating the 5th/95th percentiles.

	QRS duration (ms)			Δ QRS (ms)		
	>110	>120	>130	>10	>20	>30
Sensitivity (%)	48.6	27.9	16.4	51.7	31.0	21.6
Specificity (%)	87.0	90.1	92.6	n/a	n/a	n/a

Supplemental Table 1. Sensitivities and specificities of QRS duration towards the diagnosis of myocarditis. QRS duration was measured at time of diagnosis of myocarditis. Δ QRS is equal to the QRS duration at time of myocarditis minus the QRS duration at baseline prior to myocarditis.



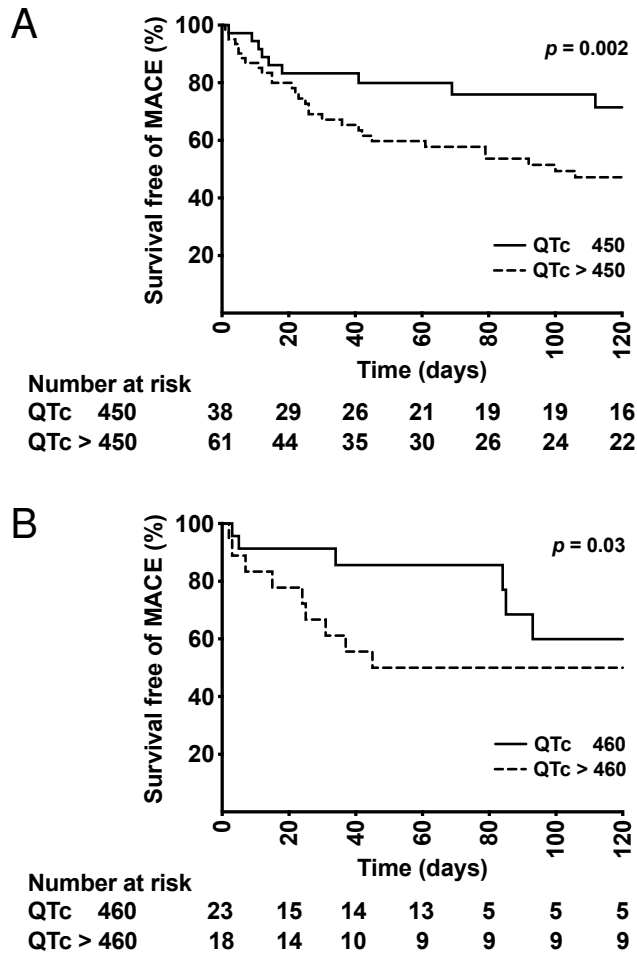
Supplemental Figure 3. Receiver operating characteristic (ROC) curve. (A) ROC curve for QRS duration towards the diagnosis of ICI myocarditis for all patients in the myocarditis cohort. Area under the curve is 0.73.



Number at risk		Time (days)						
		0	20	40	60	80	100	120
Sinus rhythm		108	82	70	61	54	48	42
Non-sinus rhythm		32	20	15	12	10	9	8

Supplemental Figure 4. Association between rhythm at presentation and MACE risk.

Kaplan-Meier curves indicate the occurrence of MACE over 120 days from time of diagnosis for myocarditis patients stratified by type of rhythm at presentation.



Supplemental Figure 5. Association between QTc interval (corrected by Bazett) and MACE risk. Kaplan-Meier curves indicate the occurrence of MACE over 120 days from time of diagnosis for male (A) and female (B) myocarditis cases stratified by QTc interval at presentation.