

Supplementary Figure 1: SITC ICI Monotherapy Resistance Definitions

Abbreviations: CR, complete response; PD, progressive disease; PR, partial response; SD, stable disease

Definitions of Primary and Secondary Resistance for ICI Monotherapy²

Resistance Phenotype	Drug Exposure Requirement	Best response	Confirmatory Scan for PD Requirement	Confirmatory Scan Time Frame
Primary Resistance	≥ 6 Weeks	PD; SD for < 6 months*	Yes**	At least 4 weeks after initial disease progression***
Secondary Resistance	≥ 6 Months	CR, PR, SD for > 6 months*	Yes**	At least 4 weeks after disease progression***

*Indolent tumor types might require modification of the timeframe

**Other than when tumor growth is very rapid and patients are deteriorating clinically

***Per RECIST1.1

Definitions of Adjuvant Therapy Resistance for ICI Monotherapy²

Adjuvant Therapy	Timing of Last Dose Prior to PD	Confirmatory Biopsy Requirement*
Primary Resistance/ Early Relapse	< 12 weeks	Yes
Late Relapse	≥ 12 Weeks	Yes

*In this setting, a confirmatory biopsy would supplant a confirmatory scan

Definitions of Neoadjuvant Therapy Resistance for ICI Monotherapy²

Major Pathological Response	Yes	No
Resistance Definition Recommendations	Follow Secondary Resistance Definitions	Follow Primary Resistance Definitions

Definitions of Resistance after Discontinuing Treatment with ICI Monotherapy²

Stopped Therapy (CR/PR/end of study/other social rationale)	Duration of time after last dose of PD-(L)1 Inhibitor	Confirmatory Scan Requirement
Primary Resistance	No CR/PR prior to discontinuation	No
Secondary Resistance	Prior CR/PR and \leq 12 Weeks from last dose	Yes
Late Progression	Prior CR/PR and $>$ 12 weeks from last dose	Yes