

Table 1. Comparison of Key Elements in the Radiographic Assessment of Solid Tumors [Eisenhauer 2009, Wolchock 2009]

New, measurable lesions (i.e., $\geq 5 \times 5$ mm)	
irRC	Incorporated in tumor burden
mWHO	Always represent progressive disease
RECIST 1.1	Always represent progressive disease
New, non- measurable lesions (i.e., $\geq 5 \times 5$ mm)	
irRC	Do not define progression (but preclude immune-related complete response)
mWHO	Always represent progressive disease
RECIST 1.1	Always represent progressive disease
Non-index lesions	
mWHO	Changes contribute to defining best overall response of complete or partial response and stable or progressive disease
irRC	Contribute to defining immune-related complete response (complete disappearance required)
RECIST 1.1	Changes contribute to defining best overall response of complete or partial response and stable or progressive disease
Complete Response (CR)	
irRC	Disappearance of all lesions in two consecutive observations ≥ 4 weeks apart
mWHO	Disappearance of all lesions in two consecutive observations ≥ 4 weeks apart
RECIST 1.1	Disappearance of all target lesions. Any pathological lymph nodes (whether target or non-target) must have reduction in short axis to < 10 mm. Disappearance of all non-target lesions and normalization of tumor marker level. All lymph nodes must be non-pathological in size (< 10 mm short axis).
Partial Response (PR)	
irRC	≥ 50 % decrease in tumor burden vs. baseline in two observations at least 4 weeks apart
mWHO	≥ 50 % decrease in SPD* of all index lesions vs. baseline in two observations at least 4 weeks apart, in absence of new lesions or unequivocal progression of non-index lesions
RECIST 1.1	At least a 30% decrease in the sum of diameters of target lesions, taking as reference the baseline sum diameters.
Stable Disease (SD)	
irRC	50 % decrease in tumor burden vs. baseline cannot be established nor 25 % increase vs. nadir
mWHO	50 % decrease in SPD vs. baseline cannot be established nor 25 % increase vs. nadir, in absence of new lesions or unequivocal progression of non-index lesions
RECIST 1.1	Neither sufficient shrinkage to qualify for PR nor sufficient increase to qualify for PD, taking as reference the smallest sum diameters while on study. Persistence of one or more non-target lesion(s) and/or maintenance of tumour marker level above the normal limits.^
Progressive Disease (PD)	
irRC	At least 25 % increase in tumor burden vs. nadir (at any single time point) in two consecutive observations at least 4 weeks apart
mWHO	At least 25 % increase in SPD vs. nadir and/or unequivocal progression of non-index lesions and/or appearance of new lesions (at any single time point)
RECIST 1.1	At least a 20% increase in the sum of diameters of target lesions, taking as reference the smallest sum on study (this includes the baseline sum if that is the smallest on study). In addition to the relative increase of 20%, the sum must also demonstrate an absolute increase of at least 5 mm. Unequivocal progression of existing non-target lesions. The appearance of one or more new lesions is also considered progression.

*SPD = sum of products of the 2 largest perpendicular diameters

^ = Non-complete response/non-progressive disease is preferred over stable disease when assessing non-target lesion disease