Manual for the Completion of CDISC Aligned NCI Standard Case Report Form (CRF) Modules

Introduction

In 2006, members of the National Cancer Institute's Center for Biomedical Informatics and Information Technology (NCI CBIIT) in conjunction with the cancer Data Standards Registry and Repository (caDSR) user community initiated a Case Report Form (CRF) harmonization activity. CRFs submitted from the community were reviewed and inventoried. The Harmonization group then reviewed all questions on the CRF and partitioned them into four categories:

- Mandatory A data collection variable that must be on the CRF (e.g., a regulatory requirement (if applicable)).
- Conditional A data collection variable that must be collected on the CRF for specific cases that may be dictated by local or sponsor defined business rules.
- Optional A data collection variable that is available for use if needed. There is no regulatory or business requirement for inclusion of this element on the CRF; if the design and scientific questions posed in the study dictate the need to collect this type of data; this is the element to include on the CRF.
- Non-harmonized A data collection variable that is, by consensus, to primarily belong to a different CRF module or is not belonging to any defined module.

A template form with modules that contain questions or variables representing data to be collected and a companion electronic CRF instruction manual was developed. These CRF modules were vetted and adopted by the caDSR stakeholder community as metadata standards.

Since the original CRFs and manuals were adopted, the Food & Drug Administration (FDA) published guidelines for submission of clinical trial study data using the Clinical Data Interchange Standards Consortium (CDISC) Study Data Tabulation Model (SDTM) for Investigational New Drug (IND) trials starting after December 2017. In response, NCI CBIIT has aligned the NCI Standard CRF modules with the CDISC data collection standard, Clinical Data Acquisition Standards Harmonization (CDASH) where data is expected to be submitted to FDA in SDTM format.

The instruction manual is a set of directions to guide data collection in each module template. Specific implementation instructions are not present; various groups may wish to implement the contents of a module in a variety of software applications.

The instructions include the field name, description or definition of each field, and any special formatting notes that apply to entries – such as the inclusion of full dates, use of values from a choice list only, etc. Finally, each question (or data item) is noted as Mandatory (m), Conditional (c), or Optional (o).

NCI Standard irRECIST CDISC Aligned NCI Standard Template Module Definitions

Mapping to the CDASH:

This NCI Standard Template Form maps to the following domains in the CDASHIG v2.0 and CDASHIG v2.1 metadata tables:

- TU Tumor/Lesion Identification (v2.1)
- TR Tumor/Lesion Results (v2.1)
- RS Disease Response and Clin Classification (v2.1)
- CO Comments (v2.0)

Mapping to the SDTM:

This NCI Standard Template Form maps to the following domains in the SDTMIG v3.3 metadata table:

- TU Tumor/Lesion Identification (v3.3)
- TR Tumor/Lesion Results (v3.3)
- RS Disease Response and Clin Classification (v3.3)
- CO Comments (v3.3)

NCI Standard irRECIST CDISC Aligned NCI Standard Template Module Template Instructions

Field Descriptions and Instructions

Field Name (Partition Status) CDE ID # Short Name	Definition CDISC Mapping and Instruction	Format
Target Lesion Present Ind-2 (m) 58514 TGT_LES_PRES_IND-2	a yes/no indicator to ask whether any target (or indicator) lesions are present at baseline or follow-up evaluation, including absence of target lesions by surgical removal.	CHARACTER. Use choice list.
	Not for FDA submission	

Field Name (Partition Status) CDE ID # Short Name	Definition CDISC Mapping and Instruction	Format
Non-Target Lesion Indicator (m) 6941894 TUNTRGNY	An indication of whether any non-target lesions are present at a baseline or follow-up evaluation.	CHARACTER. Use choice list.
	CDASH: TUORRES (No CDE) where TUTEST (No CDE) = "Non-Target Indicator"; SDTM: TUORRES (6659635) where TUTESTCD (6659640) = "NTIND", TUTEST (6659638)= "Non-Target Indicator"	
Link ID (m) 6635925 TULNKID	A sequence of characters used as a linkage between related tumor identifier records. CDASH: TULNKID (No CDE);	CHARACTER
Method of Identification (m) 6621680 TUMETHOD	SDTM: TULNKID (6635925) The technique used to administer the tumor identification assessment. CDASH: TUMETHOD (No CDE); SDTM: TUMETHOD (6621680)	CHARACTER. Use choice list.
Tumor Assessment Date (m) 6922524 TRASMDAT	The date of tumor measurement(s) represented in an unambiguous date format (e.g., DD-MON-YYYY). CDASH: TUDAT (No CDE);	DATE
Tumor/Lesion Location Description (m) 6922525 TULOCDSC	SDTM: TUDTC (6651955) Text description of the site in or on the body at which the tumor identification test or result is performed or collected. CDASH: TULOC (No CDE); SDTM: TULOC (6621372)	CHARACTER

Field Name (Partition Status) CDE ID # Short Name	Definition CDISC Mapping and Instruction	Format
Non-Target Lesion irRECIST Response Type (m) 6974586 RSNTRSP	The disease response in a non- target lesion using Immune- related Response Evaluation Criteria In Solid Tumors (irRECIST) criteria.	CHARACTER. Use choice list.
	CDASH: RSORRES (No CDE) where RSTEST (No CDE) = "Non-Target Response", RSCAT (No CDE) = "irRECIST"; SDTM: If RSNTRSP (6974586) = "Not done", RSTAT (6622054) = "NOT DONE" ELSE RSORRES (6642369) where RSTESTCD (6620609) = "NTRGRESP" and RSTEST (6620604) = "Non-Target Response", RSCAT (6659633) = "irRECIST"	
New Lesion Indicator (c) 6922023	An indication of whether a new lesion is present.	CHARACTER. Use choice list.
TUNWLSNY	CDASH: TUORRES (No CDE) where TUTEST (No CDE) = "New Lesion Indicator"; SDTM: TUORRES (6659635) where TUTESTCD (6659640) = "NEWLIND", TUTEST (6659638) = "New Lesion Indicator"; Conditionality Rule: This CDE is to be collected as part of follow-up data.	
Tumor Location ICD-O-3 Code (c) 6922526 TULOCICD	The ICD-O-3 code for the site in or on the body at which the tumor identification test or result is performed or collected.	CHARACTER. Use choice list.
	CDASH: No Match; SDTM: No Match, Can be a supplemental qualifier in SDTM; Conditionality Rule: This CDE is to be used for those trials that require collection of the primary tumor location using a ICD-O-3 code.	

Field Name (Partition Status) CDE ID # Short Name	Definition CDISC Mapping and Instruction	Format
Tumor Location SNOMED-CT Code (c) 6922527 TULOCSMD	The SNOMED-CT code for the site in or on the body at which the tumor identification test or result is performed or collected. CDASH: No Match; SDTM: No Match, Can be a supplemental qualifier in SDTM; Conditionality Rule: This CDE is to be used for those trials that require collection of the primary tumor location using a SNOMED-CT code.	CHARACTER
Location of the Tumor/Lesion (c) 6621372 TULOC	The site in or on the body at which the tumor identification test or result is performed or collected. CDASH: TULOC (No CDE); SDTM: TULOC (6621372); Conditionality Rule: This CDE is to be used for those trials that are not using either the SNOMED-CT codes or ICD-O-3 codes to report location of the primary tumor.	CHARACTER. Use choice list.
Tumor Long Axis Size Result (c) 6922528 LDIAM	Result of the measurement of the tumor long axis dimension. CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Longest Diameter"; SDTM: TRORRES (6642371)where TRTESTCD (6659342) = "LDIAM", TRTEST = 6659339) = "Longest Diameter"; Conditionality Rule: Use for Target lesion form; Optional for Non-target lesion form.	CHARACTER

Field Name (Partition Status) CDE ID # Short Name	Definition CDISC Mapping and Instruction	Format
Tumor Result Original Unit (c) 7044518 TRORUNIT	The unit of measure for the result of the tumor measurement as originally received or collected.	CHARACTER. Use choice list.
	CDASH: TRORRESU (No CDE); SDTM: TRORRESU (6619597); Conditionality Rule: Use for Target lesion form; Optional for Non-target lesion form.	
Tumor Short Axis Size Result (c)	Result of the measurement of the tumor short axis dimension.	CHARACTER
6922529 TRSAXIS	CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Longest Perpendicular"; SDTM: TRORRES (6642371) where TRTESTCD (6659342) = "LPERP", TRTEST (6659339) = "Longest Perpendicular"; Conditionality Rule: Use for Target lesion form; Optional for Non-target lesion form.	
Tumor Result Original Unit (c) 7044518 TRORUNIT	The unit of measure for the result of the tumor measurement as originally received or collected.	CHARACTER. Use choice list.
	CDASH: TRORRESU (No CDE); SDTM: TRORRESU (6619597); Conditionality Rule: Conditionality Rule: Use for Target lesion form; Optional for Non-target lesion form.	
Tumor Sum of Diameters Result (c) 6941900 SUMDIAM	The calculated sum of the diameters (long axis for non-nodal lesions, short axis for nodal lesions) of a tumor.	CHARACTER
	CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Sum of Diameter"; SDTM: TRORRES (6642371) where TRTESTCD (6659342) = "SUMDIAM", TRTEST (6659339) = "Sum of Diameter"	

Field Name (Partition Status) CDE ID # Short Name	Definition CDISC Mapping and Instruction	Format
Tumor Result Original Unit (c) 7044518 TRORUNIT	The unit of measure for the result of the tumor measurement as originally received or collected.	CHARACTER. Use choice list.
	CDASH: TRORRESU (No CDE); SDTM: TRORRESU (6619597); Conditionality Rule: Use for Target lesion form; Optional for Non-target lesion form.	
Tumor Product Dimension Result (c) 6922530	Calculated result obtained by multiplying two perpendicular tumor measurements.	CHARACTER
PDDIAM	CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Product of diameters" (6922528); SDTM: TRORRES (6642371) where TRTESTCD (6659342) = "PDDIAM", TRTEST (6659339) = "Product of diameters"; Conditionality Rule: Use for Target or Index lesion form; Optional for Non-target or Non-index lesion form.	
Tumor Result Original Unit (c) 7044518 TRORUNIT	The unit of measure for the result of the tumor measurement as originally received or collected.	CHARACTER. Use choice list.
	CDASH: TRORRESU (No CDE); SDTM: TRORRESU (6619597); Conditionality Rule: Conditionality Rule: Use for Target or Index lesion form; Optional for Non-target or Non-index lesion form.	

Field Name (Partition Status) CDE ID # Short Name	Definition CDISC Mapping and Instruction	Format
Tumor Sum Product Dimension Result (c) 6922531	The sum of the products of the greatest diameter tumor measurements.	CHARACTER
SUMPDIAM	CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Sum of product of diameters"; SDTM: TRORRES (6642371) where TRTESTCD (6659342) = "SUMPDIAM", TRTEST (6659339) = "Sum of product of diameters"; Conditionality Rule: Use for Target or Index lesion form; Optional for Non-target or Non-index lesion form.	
Tumor Result Original Unit (c) 7044518 TRORUNIT	The unit of measure for the result of the tumor measurement as originally received or collected.	CHARACTER. Use choice list.
	CDASH: TRORRESU (No CDE); SDTM: TRORRESU (6619597); Conditionality Rule: Use for Target or Index lesion form; Optional for Non-target or Non-index lesion form.	
Target Lesion RECIST Overall Response Status (c) 6941946 RSTGORSP	The overall response status for target lesions at a particular time, using Response Evaluation Criteria in Solid Tumors version 1.1 (RECISTv1.1).	CHARACTER. Use choice list.
	CDASH: RSORRES (No CDE) where RSTEST (No CDE) = "Target Lesion Overall Response", RSCAT (6659633) = "irRECIST"; SDTM: If TRGORSP (6941946) = "Not done", RSTAT (6622054) = "irRECIST"; Conditionality Rule: Use on Follow up form to capture the overall response of all Target lesions.	

Field Name (Partition Status) CDE ID # Short Name	Definition CDISC Mapping and Instruction	Format
Non-Target Lesion RECIST Overall Response Status (c) 6941951 RSNTORSP	The overall response status for non-target lesions at a particular time, using Response Evaluation Criteria in Solid Tumors version 1.1 (RECISTv1.1).	CHARACTER. Use choice list.
	CDASH: RSORRES (No CDE) where RSTEST (No CDE) = "Non-Target Lesion Overall Response", RSCAT (No CDE) = "irRECIST"; SDTM: If NTRGORSP (6941951) = "Not done", RSSTAT (6622054) = "NOT DONE" ELSE RSORRES (6642369) where RSTESTCD (6620609) = "NTRGORSP", RSTEST (6620604) = "Non-Target Lesion Overall Response" and RSCAT (6659633) = "irRECIST"; Conditionality Rule: Use on Follow up form to capture the overall response of all Nontarget lesions.	
Target Lesion irRECIST Type (o) 6944815 RSTGIRRSP	The disease response in a target lesion using the Immune-related Response Evaluation Criteria in Solid Tumors (irRECIST).	CHARACTER. Use choice list.
	CDASH: RSORRES (No CDE) where RSTEST (No CDE) = "Target Response", RSCAT (No CDE) = "irRECIST"; SDTM: If RSTGIRRSP (6944815) = "Not Done", RSSTAT (6622054) = "NOT DONE" ELSE RSORRES (6642369) where RSTESTCD (6620609) = "TRGRESP", RSTEST (6620604) = "Target Response", RSCAT (6659633) = "irRECIST"	

Field Name (Partition Status) CDE ID # Short Name	Definition CDISC Mapping and Instruction	Format
Lymph Node Indicator (o) 6941959	An indication of whether a lymph node is present.	CHARACTER. Use choice list.
TRLMNDNY	CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Lymph Node Indicator", RSCAT (No CDE) = "irRECIST"; SDTM: TRORRES (6642371) where TRTESTCD (6659342) = "LYNDIND", RSCAT (6659633) = "irRECIST"	
Tumor Measurable Category (o) 6941899 TRMRSCAT	An indication of whether a lesion or lymph node is measurable or non-measurable.	CHARACTER. Use choice list.
	CDASH: No Match; SDTM: No Match, Can be a supplemental qualifier in SDTM	
Baseline Measurable Tumor RECIST Type (o) 6941964 TUBMTRTP	The kind of lesion or lymph node identified at baseline that meets the minimum size requirements as defined in the Response Evaluation Criteria in Solid Tumors version 1.1 (RECISTv1.1).	CHARACTER. Use choice list.
	CDASH: TUORRES (No CDE) where TUTEST (No CDE) = "Baseline measurable lesion", RSCAT (No CDE) = "irRECIST"; SDTM: TUORRES (6659635) where TUTESTCD (6659640) = "Baseline measurable lesion", RSCAT (6659633) = "irRECIST"	

Field Name (Partition Status) CDE ID # Short Name	Definition CDISC Mapping and Instruction	Format
Baseline Non-Measurable Tumor RECIST Type (o) 6941965 TUBNMTTP	The kind of lesion or lymph node identified at baseline not meeting minimum size requirements as defined in the Response Evaluation Criteria in Solid Tumors version 1.1 (RECISTv1.1).	CHARACTER. Use choice list.
	CDASH: TUORRES (No CDE) where TUTEST (No CDE) = "Baseline non-measurable lesion", RSCAT (No CDE) = "irRECIST"; SDTM: TUORRES (6659635) where TUTESTCD (6659640) = "BLNMRLES", TUTEST (6659638) = "Baseline non-measurable lesion", RSCAT (6659633) = "irRECIST"	
Lesion Overall Response irRECIST Type (o) 6944816 RSOVRSP	The overall disease response in a target, non-target, or new lesion using the Immune-related Response Evaluation Criteria in Solid Tumors (irRECIST).	CHARACTER. Use choice list.
	CDASH: RSORRES (No CDE) where RSTEST (No CDE) = "Overall Response", RSCAT (No CDE) = "irRECIST"; SDTM: RSORRES (6642369) where RSTESTCD (6620609) = "OVRLRESP", RSTEST = "Overall Response", RSCAT (6659633) = "irRECIST"	
Overall Response Duration (o) 6941972 RSOVRDUR	The maximum length of time over which response is maintained, measured from a date when criteria for complete or partial response are met until a date when recurrent or progressive disease is reported.	CHARACTER
	CDASH: No Match; SDTM: No Match, Can be a supplemental qualifier in SDTM	

Field Name (Partition Status) CDE ID # Short Name	Definition CDISC Mapping and Instruction	Format
Best Overall irRECIST Response Type (o) 6944817 RSBOIRSP	The best overall disease response recorded from the start of the study treatment until the end of treatment using the Immune-related Response Evaluation Criteria in Solid Tumors (irRECIST).	CHARACTER. Use choice list.
	CDASH: RSORRES (No CDE) where RSTEST (No CDE) = "Best Overall Response", RSCAT (No CDE) - "irRECIST"; SDTM: RSORRES (6642369) where RSTESTCD (6620609) = "BESTRESP", RSTEST (6620604) = "Best Overall Response", "RSCAT (6659633) = "irRECIST"	
Comment	A free text comment.	CHARACTER
(o) 6355806 COVAL	CDASH: COVAL (6355806); SDTM: COVAL (No CDE)	
Evaluation Time Point (o) 6964665	A point in time that the response evaluation takes place.	CHARACTER. Use choice list.
RSEVLTP	CDASH: No Match; SDTM: No Match, Can be a supplemental qualifier in SDTM	
Tumor Imaging Technique Date (o)	The date of the tumor imaging procedure.	DATE
6922534 TRIMGDAT	CDASH: TUDAT (No CDE); SDTM: TUDTC (6651955)	
Baseline No Disease or Disorder Indicator (o) 6922535	An indication of whether there was no measurable or non-measurable disease at baseline.	CHARACTER. Use choice list.
TUNDISNY	CDASH: No Match; SDTM: No Match, Can be a supplemental qualifier in SDTM	

Field Name (Partition Status) CDE ID # Short Name	Definition CDISC Mapping and Instruction	Format
Total Measured Tumor Burden Result (o) 6944820 TOTBURDN	The total tumor size calculated as the sum of the longest diameters of non-nodal target and new non-nodal measurable lesions and the short axes of nodal target and new nodal measurable lesions.	CHARACTER
	CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Total measured tumor burden"; SDTM: TRORRES (6642371) where TRTEST (6659339) = "Total measured tumor burden" and TRTESTCD (6659342) = "TOTBURDN"	
Tumor Result Original Unit (o) 7044518 TRORUNIT	The unit of measure for the result of the tumor measurement as originally received or collected. CDASH: TRORRES (No CDE); SDTM: TRORRESU (6619597)	CHARACTER. Use choice list.

Annotated CRF: irRECIST CDISC Aligned NCI Standard Template

This annotated CRF is ONLY used to show CDISC mapping without consideration of the CRF layout. CDASH mapping is in **Blue**, and SDTM mapping is in **Red**.

Form Name: irRECIST CDISC Aligned NCI Standard Template

Mandatary Questions

CRF Question		Value Domain
Are there any target lesions? (58514) CDE Short Name: TGT_LES_PRES_IND-2		CHARACTER – Maximum Length = 3
		□ No – No
	CDASH: Not for FDA submission	☐ Yes – Yes
	SDTM: Not for FDA submission	
	there any non-target lesions? (6941894) E Short Name: TUNTRGNY	CHARACTER – Maximum Length = 2
		□ N – No
	CDASH: TUORRES (No CDE) where	□ NA – Not Applicable
	TUTEST (No CDE) = "Non-Target Indicator"	U – Unknown
	Indicator	☐ Y – Yes
	SDTM: TUORRES (6659635) where TUTESTCD (6659640) = "NTIND", TUTEST (6659638)= "Non-Target Indicator"	
Les	sion # (6635925)	CHARACTER – Maximum Length = 40
CD	E Short Name: TULNKID	
	CDASH: TULNKID (No CDE)	
	CDTM: THENKID (CC25025)	
	SDTM: TULNKID (6635925)	
Method of assessment (6621680)		CHARACTER – Maximum Length = 200
CD	E Short Name: TUMETHOD	List of 388 PVs
	02.001.7111.771102.410271	LIST OF 300 F VS
	CDASH: TUMETHOD (No CDE)	
	CDTM, TUMETUOD (CCC4CCC)	
	SDTM: TUMETHOD (6621680)	

CRF Question	Value Domain
Assessment date (6922524) CDE Short Name: TRASMDAT	DATE – Maximum Length = 11
CDASH: TUDAT (No CDE)	
SDTM: TUDTC (6651955)	
Description of lesion (6922525) CDE Short Name: TULOCDSC	CHARACTER – Maximum Length = 200
CDASH: TULOC (No CDE)	
SDTM: TULOC (6621372)	
Non-target lesion (6974586) CDE Short Name: RSNTRSP	CHARACTER – Maximum Length = 30
CDASH: RSORRES (No CDE) where RSTEST (No CDE) = "Non-Target Response", RSCAT (No CDE) = "irRECIST"	 irNN − irNN irPD − irPD Not done − Not done
SDTM: : If RSNTRSP (6974586) = "Not done", RSTAT (6622054) = "NOT DONE" ELSE RSORRES (6642369) where RSTESTCD (6620609) = "NTRGRESP" and RSTEST (6620604) = "Non-Target Response", RSCAT (6659633) = "irRECIST"	

Conditional Questions

CRF Question	Value Domain	
Was the appearance of any new lesions documented? (6922023) CDE Short Name: TUNWLSNY CDASH: TUORRES (No CDE) where TUTEST (No CDE) = "New Lesion Indicator"	CHARACTER – Maximum Length = 2 N – No NA – Not Applicable U – Unknown Y – Yes	
SDTM: TUORRES (6659635) where TUTESTCD (6659640) = "NEWLIND", TUTEST (6659638) = "New Lesion Indicator"		
Location of tumor (6922526) CDE Short Name: TULOCICD	CHARACTER – Maximum Length = 7 List of 409 PVs	
CDASH: No Match		
SDTM: No Match, Can be a supplemental qualifier in SDTM		
Location of tumor (6922527) CDE Short Name: TULOCSMD	CHARACTER – Maximum Length = 100	
CDASH: No Match		
SDTM: No Match, Can be a supplemental qualifier in SDTM		
Location of tumor (6621372)	CHARACTER – Maximum Length = 200	
CDE Short Name: TULOC	List of 1113 PVs	
CDASH: TULOC (No CDE)		
SDTM: TULOC (6621372)		

CRF Question	Value Domain
Long axis (6922528) CDE Short Name: LDIAM	CHARACTER – Maximum Length = 100
CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Longest Diameter"	
SDTM: TRORRES (6642371)where TRTESTCD (6659342) = "LDIAM", TRTEST = 6659339) = "Longest Diameter"	
Original Units (7044518) CDE Short Name: TRORUNIT	CHARACTER – Maximum Length = 20
CDASH: TRORRESU (No CDE)	□ cm – Centimeter □ mm – Millimeter
ODAGH. INGINIZOG (NO ODE)	mm – Millimeter
SDTM: TRORRESU (6619597)	
Short axis (6922529) CDE Short Name: TRSAXIS	CHARACTER – Maximum Length = 100
CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Longest Perpendicular"	
SDTM: TRORRES (6642371) where TRTESTCD (6659342) = "LPERP", TRTEST (6659339) = "Longest Perpendicular"	
Original Units (7044518)	CHARACTER – Maximum Length = 20
CDE Short Name: TRORUNIT	□ cm – Centimeter
CDASH: TRORRESU (No CDE)	mm – Millimeter
SDTM: TRORRESU (6619597)	

CRF Question	Value Domain
Sum of diameters (6941900)	CHARACTER – Maximum Length = 100
CDE Short Name: SUMDIAM	
CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Sum of Diameter"	
SDTM: TRORRES (6642371) where TRTESTCD (6659342) = "SUMDIAM", TRTEST (6659339) = "Sum of Diameter"	
Original Units (7044518)	CHARACTER – Maximum Length = 20
CDE Short Name: TRORUNIT	
CDASH: TRORRESU (No CDE)	cm – Centimeter
CDACH. INCINIZED (NO CDE)	☐ mm – Millimeter
SDTM: TRORRESU (6619597)	
Product of diameters (6922530) CDE Short Name: PDDIAM	CHARACTER – Maximum Length = 100
CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Product of diameters" (6922528)	
SDTM: TRORRES (6642371) where TRTESTCD (6659342) = "PDDIAM", TRTEST (6659339) = "Product of diameters"	
Original Units (7044518)	CHARACTER – Maximum Length = 20
CDE Short Name: TRORUNIT	
CDASH: TRORRESU (No CDE)	 □ cm² – Square Centimeter □ mm² – Square Millimeter
SDTM: TRORRESU (6619597)	

Sum of product of diameters (6922531) CDE Short Name: SUMPDIAM	CHARACTER – Maximum Length = 100
CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Sum of product of diameters"	
SDTM: TRORRES (6642371) where TRTESTCD (6659342) = "SUMPDIAM", TRTEST (6659339) = "Sum of product of diameters"	
Original Units (7044518)	CHARACTER – Maximum Length = 20
CDE Short Name: TRORUNIT	
ODAGU TROPREGUAL ODE)	cm² – Square Centimeter
CDASH: TRORRESU (No CDE)	☐ mm² – Square Millimeter
SDTM: TRORRESU (6619597)	
Target lesion overall response (6941946) CDE Short Name: RSTGORSP	CHARACTER – Maximum Length = 20
CDASH: RSORRES (No CDE) where RSTEST (No CDE) = "Target Lesion Overall Response", RSCAT (6659633) = "irRECIST" SDTM: If TRGORSP (6941946) = "Not done", RSTAT (6622054) =	 □ CR – Complete Remission □ NE – Unevaluable □ Not all evaluated – Not All Tumors Evaluated □ Not done – Not Done □ PD – Progressive Disease □ PR – Partial Remission
"irRECIST"	□ SD – Stable Disease
Non-target lesion overall response (6941951 CDE Short Name: RSNTORSP	CHARACTER – Maximum Length = 20
	☐ CR – Complete Remission
CDASH: RSORRES (No CDE) where RSTEST (No CDE) = "Non-Target Lesion Overall Response", RSCAT (No CDE) = "irRECIST"	 □ NE – Unevaluable □ Non-CR/non-PD – Non Complete Response/Non Progressive Disease □ Not all evaluated – Not All Tumors
	Evaluated – Not All Turnors
SDTM: If NTRGORSP (6941951) = "Not done", RSSTAT (6622054) =	☐ Not done – Not Done
"NOT DONE" ELSE RSORRES	□ PD – Progressive Disease
(6642369) where RSTESTCD (6620609) = "NTRGORSP", RSTEST (6620604) = "Non-Target Lesion Overall Response" and RSCAT (6659633) = "irRECIST"	☐ Unequivocal PD – Unequivocal Progressive Disease

Optional Questions

CRF Question	Value Domain	
Target lesion (6944815)	CHARACTER – Maximum Length = 30	
CDE Short Name: RSTGIRRSP CDASH: RSORRES (No CDE) where RSTEST (No CDE) = "Target Response", RSCAT (No CDE) = "irRECIST" SDTM: If RSTGIRRSP (6944815) = "Not Done", RSSTAT (6622054) = "NOT DONE" ELSE RSORRES (6642369) where RSTESTCD (6620609) = "TRGRESP", RSTEST	 irCR − irCR irPD − irPD irPR − irPR irSD − irSD Not done − Not Done Not evaluated − Unevaluable 	
(6620604) = "Target Response", RSCAT (6659633) = "irRECIST" Baseline: Target and Non-Target Lymph Node Lesion (6941959) CDE Short Name: TRLMNDNY	CHARACTER – Maximum Length = 2	
CDE SHOIT Name. TREWINDINT	□ N – No	
CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Lymph Node Indicator", RSCAT (No CDE) = "irRECIST"	□ NA – Not Applicable□ U – Unknown□ Y – Yes	
SDTM: TRORRES (6642371) where TRTESTCD (6659342) = "LYNDIND", RSCAT (6659633) = "irRECIST"		
Measurable/non-measurable (6941899) CDE Short Name: TRMRSCAT	CHARACTER – Maximum Length = 14	
	☐ Measurable – Measurable	
CDASH: No Match	☐ Non-measurable – Non-Measurable	
SDTM: No Match, Can be a supplemental qualifier in SDTM		

CRF Question		Val	lue Domain
Baseline measurable lesion type (6941964) CDE Short Name: TUBMTRTP		СН	ARACTER – Maximum Length = 50
			Bone lesions – Bone Lesion
	CDASH: TUORRES (No CDE) where		Brain lesions – Brain Lesion
	TUTEST (No CDE) = "Baseline measurable lesion", RSCAT (No CDE)		Cystic lesions – Cystic Lesion
	= "irRECIST"		Lesions with prior local treatment – Lesion With Prior Local Therapy
	SDTM: TUORRES (6659635) where TUTESTCD (6659640) = "Baseline		Malignant lymph node – Malignant Lymph Node
	measurable lesion", RSCAT (6659633) = "irRECIST"		Tumor lesions – Neoplasm Lesion
	seline non-measurable lesion type 41965)	СН	ARACTER – Maximum Length = 50
CD	E Short Name: TUBNMTTP		Abdominal masses – Abdominal Mass
			Abdominal organomegaly – Abdominal
	CDASH: TUORRES (No CDE) where		Organomegaly
	TUTEST (No CDE) = "Baseline non- measurable lesion", RSCAT (No CDE)		Ascites – Ascites
	= "irRECIST"		Bone lesions – Bone Lesion
			Cystic lesions – Cyst Lesion
	SDTM: TUORRES (6659635) where TUTESTCD (6659640) =		Inflammatory breast disease – Inflammatory Breast Disease or Disorder
	"BLNMRLES", TUTEST (6659638) = "Baseline non-measurable lesion", RSCAT (6659633) = "irRECIST"		Leptomeningeal disease – Leptomeninges Disease or Disorder
	NOCAT (0009000) = IINECIOT		Lesions with prior local treatment – Lesion With Prior Local Therapy
			Lymphangitic involvement of skin or lung – Involvement Skin Lung Lymphatic System
			Malignant lymph node – Malignant Lymph Node
			Pleural or pericardial effusion – Pericardial or pleural effusions
			Tumor lesions – Neoplasm Lesion

CRF Question	Value Domain	
Overall response (6944816) CDE Short Name: RSOVRSP	CHARACTER – Maximum Length = 30 ☐ irCR – irCR	
CDASH: RSORRES (No CDE) where RSTEST (No CDE) = "Overall Response", RSCAT (No CDE) = "irRECIST" SDTM: RSORRES (6642369) where RSTESTCD (6620609) = "OVRLRESP", RSTEST = "Overall Response", RSCAT (6659633) = "irRECIST"	irND - irND irNE - irNE irNN - irNN irPD - irPD irPR - irPR irSD - irSD	
Overall response duration (6941972) CDE Short Name: RSOVRDUR	CHARACTER – Maximum Length = 200	
CDASH: No Match SDTM: No Match, Can be a supplemental qualifier in SDTM		
Best overall response (6944817) CDE Short Name: RSBOIRSP	CHARACTER – Maximum Length = 30 irCR – irCR	
CDASH: RSORRES (No CDE) where RSTEST (No CDE) = "Best Overall Response", RSCAT (No CDE) - "irRECIST"	☐ irND — irND ☐ irNE — irNE ☐ irNN — irNN ☐ irPD — irPD ☐ irPR — irPR	
RSTESTCD (6620609) = "BESTRESP", RSTEST (6620604) = "Best Overall Response", "RSCAT (6659633) = "irRECIST"	☐ irSD – irSD	
Comment (6355806) CDE Short Name: COVAL	CHARACTER – Maximum Length = 200	
CDASH: COVAL (6355806)		
SDTM: COVAL (No CDE)		

Time point (6964665) CDE Short Name: RSEVLTP CDASH: No Match SDTM: No Match, Can be a supplemental qualifier in SDTM Date of imaging (6922534) CDE Short Name: TRIMGDAT CDASH: TUDAT (No CDE) SDTM: TUDTC (6651955) No disease at baseline (6922535) CDE Short Name: TUNDISNY CDASH: No Match SDTM: No Match, Can be a supplemental qualifier in SDTM SDTM: No Match SDTM: No Match SDTM: No Match, Can be a supplemental qualifier in SDTM Total measured tumor burden (6944820) CDE Short Name: TOTBURDN CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6642371) where TRTEST (6669342) = "Total measured tumor burden" and TRTESTCD (6659342) = "TOTBURDN" CDASH: TRORRESU (No CDE) CHARACTER – Maximum Length = 100 CHARACTER – Maximum Length = 20	CRF Question	Value Domain	
CDASH: No Match SDTM: No Match, Can be a supplemental qualifier in SDTM Date of imaging (6922534) CDE Short Name: TRIMGDAT CDASH: TUDAT (No CDE) SDTM: TUDTC (6661955) No disease at baseline (6922535) CDE Short Name: TUNDISNY CDASH: No Match SDTM: No Match SDTM: No Match SDTM: No Match CDASH: No Match CDASH: No Match SDTM: No Match CDASH: TOTAL measured tumor burden (6944820) CDE Short Name: TOTBURDN CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6642371) where TRTEST (6659339) = "Total measured tumor burden" COIginal Units (7044518) CDE Short Name: TRORUNIT CHARACTER – Maximum Length = 100 CHARACTER – Maximum Length = 20 CHARACTER – Maximum Length = 20 CHARACTER – Maximum Length = 20	1	CHARACTER – Maximum Length = 100	
SDTM: No Match, Can be a supplemental qualifier in SDTM Date of imaging (6922534) CDE Short Name: TRIMGDAT CDASH: TUDAT (No CDE) SDTM: TUDTC (6651955) No disease at baseline (6922535) CDE Short Name: TUNDISNY CDASH: No Match SDTM: No Match, Can be a supplemental qualifier in SDTM Total measured tumor burden (6944820) CDE Short Name: TOTBURDN CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6642371) where TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6669339) = "Total measured tumor burden" and TRTESTCD (6659342) = "TOTBURDN" CHARACTER – Maximum Length = 100 CHARACTER – Maximum Length = 20	CDE SHOR Name. ROEVETF	List of 700 PVs	
Supplemental qualifier in SDTM	CDASH: No Match		
Supplemental qualifier in SDTM	CDTM: No Motob Con ho o		
CDE Short Name: TRIMGDAT CDASH: TUDAT (No CDE) SDTM: TUDTC (6651955) No disease at baseline (6922535) CDE Short Name: TUNDISNY CDASH: No Match SDTM: No Match, Can be a supplemental qualifier in SDTM Total measured tumor burden (6944820) CDE Short Name: TOTBURDN CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6642371) where TRTEST (6659339) = "Total measured tumor burden" SDTM: TRORRES (6659342) = "TOTBURDN" CHARACTER – Maximum Length = 100 CHARACTER – Maximum Length = 20			
SDTM: TUDTC (6651955) No disease at baseline (6922535) CHARACTER – Maximum Length = 2 CDE Short Name: TUNDISNY No Natch N – No NA – Not Applicable U – Unknown Y – Yes Total measured tumor burden (6944820) CHARACTER – Maximum Length = 100 CDE Short Name: TOTBURDN CHARACTER – Maximum Length = 100 CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6642371) where TRTEST (6659339) = "Total measured tumor burden" TOTBURDN" CHARACTER – Maximum Length = 20 CHARACTER – Maximum Length = 20 CHARACTER – Maximum Length = 20 CHARACTER – Maximum Length = 20 C	1	DATE – Maximum Length = 11	
No disease at baseline (6922535) CDE Short Name: TUNDISNY	CDASH: TUDAT (No CDE)		
CDE Short Name: TUNDISNY CDASH: No Match SDTM: No Match, Can be a supplemental qualifier in SDTM Total measured tumor burden (6944820) CDE Short Name: TOTBURDN CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6642371) where TRTEST (6659339) = "Total measured tumor burden" and TRTESTCD (6659342) = "TOTBURDN" Original Units (7044518) CDE Short Name: TRORUNIT CHARACTER – Maximum Length = 20 CHARACTER – Maximum Length = 20 CHARACTER – Maximum Length = 20	SDTM: TUDTC (6651955)		
CDASH: No Match SDTM: No Match, Can be a supplemental qualifier in SDTM Total measured tumor burden (6944820) CDE Short Name: TOTBURDN CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6642371) where TRTEST (6659339) = "Total measured tumor burden" and TRTESTCD (6659342) = "TOTBURDN" Original Units (7044518) CDE Short Name: TRORUNIT CHARACTER − Maximum Length = 20	1	CHARACTER – Maximum Length = 2	
SDTM: No Match, Can be a supplemental qualifier in SDTM Total measured tumor burden (6944820) CDE Short Name: TOTBURDN CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6642371) where TRTEST (6659339) = "Total measured tumor burden" and TRTESTCD (6659342) = "TOTBURDN" Original Units (7044518) CDE Short Name: TRORUNIT CHARACTER – Maximum Length = 20 CHARACTER – Maximum Length = 20		□ N – No	
SDTM: No Match, Can be a supplemental qualifier in SDTM Total measured tumor burden (6944820) CDE Short Name: TOTBURDN CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6642371) where TRTEST (6659339) = "Total measured tumor burden" and TRTESTCD (6659342) = "TOTBURDN" Original Units (7044518) CDE Short Name: TRORUNIT	CDASH: No Match	□ NA – Not Applicable	
Total measured tumor burden (6944820) CDE Short Name: TOTBURDN CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6642371) where TRTEST (6659339) = "Total measured tumor burden" and TRTESTCD (6659342) = "TOTBURDN" CHARACTER – Maximum Length = 100 CHARACTER – Maximum Length = 20	077444444		
CDE Short Name: TOTBURDN CDASH: TRORRES (No CDE) where TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6642371) where TRTEST (6659339) = "Total measured tumor burden" and TRTESTCD (6659342) = "TOTBURDN" Original Units (7044518) CDE Short Name: TRORUNIT CM — Centimeter		☐ Y – Yes	
TRTEST (No CDE) = "Total measured tumor burden" SDTM: TRORRES (6642371) where TRTEST (6659339) = "Total measured tumor burden" and TRTESTCD (6659342) = "TOTBURDN" Original Units (7044518) CDE Short Name: TRORUNIT CHARACTER – Maximum Length = 20	1	CHARACTER – Maximum Length = 100	
TRTEST (6659339) = "Total measured tumor burden" and TRTESTCD (6659342) = "TOTBURDN" Original Units (7044518) CDE Short Name: TRORUNIT CM – Centimeter	TRTEST (No CDE) = "Total measured		
CDE Short Name: TRORUNIT	TRTEST (6659339) = "Total measured tumor burden" and TRTESTCD (6659342) =		
□ cm – Centimeter	, , ,	CHARACTER – Maximum Length = 20	
	CDE Short Name: TRORUNIT		
1	CDASH: TRORRESU (No CDE)		
SDTM: TRORRESU (6619597)	SDTM: TRORRESU (6619597)		