Schema	MoHCCN Clinical Field (Fields in italics are identifier fields. Fields in bold are required for data integrity purposes.)	Requirements	Field Description	Type	Permissible Values	Source	mCODE Profile Name(s)	mCODE FHIR Element / ARGO Data Element Name	Notes
Sample Registration	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	
Sample Registration	***submitter_donor_id***	Required	Unique identifier for the donor, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient: Identifier	
Sample Registration	**gender**	Required	Description of the donor self reported gender. Gender is described as the assemblage of properties that distinguish people on the basis of their societal roles.	Text	Man Woman Non-binary	Statistics Canada		gender	
Sample Registration	**sex_at_birth**	Required	Indicate donor's sex assigned at birth.	Text	Male Female Other Unknown				
Sample Registration	***submitter_specimen_id***	Required	Unique identifier of the specimen, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: LAML_PO_00445, THY_099-tumour	mCODE STU 1	Genetic Specimen	Specimen.Identifier	
Sample Registration	**specimen_tissue_source**	Required	Tissue source of the biospecimen.	Text	Amniotic fluid Bile Fluid Whole blood Blood arterial Cord blood Blood venous Bone Serum, Convalescent Cerebral spinal fluid Cervical Mucus Duodenal fluid Blood, Fetal Fluid, Abdomen Genital vaginal Fluid, Hydrocele Fluid, Joint Fluid, Kidney Fluid, Lumbar Sac Marrow Pancreatic fluid Fluid, Pericardial Placenta Pleural fluid (thoracentesis fluid) Saliva Skin Seminal fluid Fluid, synovial (Joint fluid) Sputum Tissue Vitreous Fluid Wound	mCODE STU 1	Genetic Specimen	Specimen.type mCODE Value Set:Genetic Specimen Type Value Set	
Sample Registration	**tumour_normal_designation**	Required	Description of specimen's tumour/normal status for data processing.	Text	Normal Tumour	ICGC ARGO		tumour_normal_designation	
Sample Registration	**specimen_type**	Required	Description of the kind of specimen that was collected with respect to tumour/normal tissue origin.	Text	Cell line - derived from normal Cell line - derived from primary tumour Cell line - derived from metastatic tumour Cell line - derived from xenograft tumour Metastatic tumour - additional metastatic Metastatic tumour - metastasis local to lymph node Metastatic tumour - metastasis to distant location Metastatic tumour Normal - tissue adjacent to primary tumour Normal Primary tumour - additional new primary Primary tumour - adjacent to normal Primary tumour Recurrent tumour Xenograft - derived from primary tumour Xenograft - derived from metastatic tumour Xenograft - derived from tumour cell line	ICGC ARGO		specimen_type	
Sample Registration	***submitter_sample_id***	Required	Unique identifier of the sample, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: hnc_12_CCG_34_94583, BRCA47832-3239	ICGC ARGO		submitter_sample_id	
Sample Registration	**sample_type**	Required	Description of the type of molecular sample used for testing.	Text	Amplified DNA ctDNA Other DNA enrichments Other RNA fractions polyA+ RNA Protein rRNA-depleted RNA Total DNA Total RNA	ICGC ARGO		sample_type	
Donor	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	
Donor	***submitter_donor_id***	Required	Unique identifier of the donor, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64}} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient.Identifier	
Donor	**is_deceased**	Required	Indicate if donor's last known status is deceased.	Boolean	Yes No	mCODE STU 1	Cancer Patient	Patient.deceased.boolean	This field is required in order to submit ARGO's required "**vital_status**" field.
Donor	cause_of_death	Conditional Only required if "is_deceased" is "Yes"	Indicate the cause of a donor's death.	Text	Died of cancer Died of other reasons Unknown	ICGC ARGO		cause_of_death	
Donor	**date_of_birth**	Required	Indicate donor's date of birth.	Integer	Format YYYY-MM	mCODE STU 1	Cancer Patient	Patient.birthDate	This field is required in order to calculate ARGO's required "**age_at_diagnosis**" field, which is recorded in years.
Donor	**date_of_death**	Conditional Only required if "is_deceased" is "Yes"	Indicate donor's date of death.	Integer	Format YYYY-MM	mCODE STU 1	Cancer Patient	Patient.deceased.dateTime	This field is required in order to calculate ARGO's required "**survival_time**" field which is recorded in days.
Donor	primary_site	Required	The text term used to describe the primary site of disease, as categorized by the World Health Organization's (WHO) International Classification of Diseases for Oncology (ICD-O). This categorization groups cases into general categories.	Text	Click for drop-down list of controlled terminology	ICGC ARGO		primary_site	To include multiple values, separate values with a pipe delimiter ┬ within your file.
Specimen	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	
Specimen	***submitter_donor_id***	Required	Unique identifier for the donor, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient.Identifier	
Specimen	***submitter_specimen_id***	Required	Unique identifier of the specimen, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64}} Examples: LAML_PO_00445, THY_099-tumour	mCODE STU 1	Genetic Specimen	Specimen.Identifier	
Specimen	***submitter_primary_diagnosis_id***	Required	Indicate the primary diagnosis event in the clinical timeline that this specimen acquisition was related to	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: LAML_PO_00445, THY_099-tumour	mCODE STU 1	Primary Cancer Condition	Condition.identifier	
Specimen	pathological_tumour_staging_system	Conditional This field is only required if the specimen is a tumour, and if clinical staging was not submitted.	Specify the tumour staging system used to assess the cancer at the time the tumour specimen was resected. Pathological classification is based on the clinical stage information (acquired before treatment) and supplemented/modified by operative findings and pathological evaluation of the resected specimen.	Text	AJCC 8th edition AJCC 7th edition AJCC 6th edition Ann Arbor staging system Binet staging system Durie-Salmon staging system FIGO staging system Lugano staging system Rai staging system Revised International staging system (RISS) SEER staging system St Jude staging system	ICGC ARGO		pathological_tumour_staging_system	Either the clinical or pathological staging must be submitted.
Specimen	pathological_t_category	Conditional This field is required only if the selected pathological_tumour_staging_system is any edition of the AJCC cancer staging system	The code to represent the stage of cancer defined by the size or contiguous extension of the primary tumour (T), according to criteria based on multiple editions of the AJCC's Cancer Staging Manual.	Text	Click for drop-down list of AJCC T category values	mCODE STU 1	TNM Pathological Primary Tumor Category	Observation.value[x]:valueCodeableConcept ‡ AJCC values from TNM Primary Tumor Category Value Set	
Specimen	pathological_n_category	Conditional This field is required only if the selected pathological_tumour_staging_system is any edition of the AJCC cancer staging system	The code to represent the stage of cancer defined by whether or not the cancer has reached nearby lymph nodes (N), according to criteria based on multiple editions of the AJCC's Cancer Staging Manual.	Text	Click for drop-down list of AJCC N category values	mCODE STU 1	TNM Pathological Regional Nodes Category	Observation.value[x]:valueCodeableConcept ‡ AJCC values from TNM Regional Nodes Category Value Set	

Specimen	pathological_m_category	Conditional This field is required only if the selected pathological_tumour_staging_ system is any edition of the AJCC cancer staging system	The code to represent the stage of cancer defined by whether there are distant metastases (M), meaning spread of cancer to other parts of the body, according to criteria based on multiple editions of the AJCC's Cancer Staging Manual.	Text	Click for drop-down list of AJCC M category values	mCODE STU 1	TNM Pathological Distant Metastases Category	Observation.value[x]:valueCodeableConcept AJCC values from TNM Distant Metastases Category Value Set	
Specimen	pathological_stage_group	Conditional This field is only required if the specimen is a tumour, and if clinical staging was not submitted.	Specify the tumour stage, based on pathological_tumour_staging_system, used to assess the cancer at the time the tumour specimen was resected.	Text	Click for drop-down list of pathological stage groups	ICGC ARGO		pathological_stage_group	mCODE's TNM Stage Group Value Set only contains TNM stage groups, so for this reason the ARGO controlled terminology is suggested since it contains stage groups from non-TNM staging systems as well. This field is dependent on the selected pathological_tumour_staging_system. Please refer to the documentation for Tumour Staging Classifications: http://docs.icgc-argo.org/docs/submission/dictionary-overview#tumour-staging-classifications.
Specimen	**specimen_collection_date**	Required	Indicate the date when the specimen was collected from donor.	Text	Format YYYY-MM	mCODE STU 1	Genetic Specimen	Specimen.collection.collected.dateTime	This field is required in order to calculate the required ARGO "**specimen_acquisition_interval**" field which is recorded in days. ([specimen_collection_date] - [primary_diagnosis_date])
Specimen	**specimen_storage**	Required	Indicate the method of specimen storage for specimen that were not extracted freshly or immediately cultured.	Text	Cut slide Frozen in -70 freezer Frozen in liquid nitrogen Frozen in vapour phase Not Applicable Other Paraffin block RNA later frozen Unknown	ICGC ARGO		specimen_storage	
Specimen	tumour_histological_type	Conditional This field is only required if the specimen is a tumour.	The code to represent the histology (morphology) of neoplasms that is usually obtained from a pathology report, according to the International Classification of Diseases for Oncology, 3rd Edition (WHO ICD-O-3). Refer to the ICD-O-3 manual for guidelines at https://apps.who.int/iris/handle/10665/42344.	Text	ICD-O-3 morphology codes Values must meet the regular expression ^[8,9][1]{0-9}{3}/[0,1,2,3,6,9]{1}{1-9}{0,1}$ Examples: 8260/3, 9691/36	mCODE STU 1	Primary Cancer Condition or Secondary Cancer Condition	Condition.extension:histologyMorphologyBehavior ICD-O-3 codes from Histology Morphology Behavior Value Set	
Specimen	specimen_anatomic_location	Conditional This field is only required if the specimen is a tumour.	Indicate the ICD-O-3 topography code for the anatomic location of a specimen when it was collected. Refer to the guidelines provided in the ICD-O-3 manual at https://apps.who.int/iris/handle/10665/42344	Text	ICD-O-3 topography codes Values must meet the regular expression ^[C][0-9]{2}(.{0-9}{1})?$ Examples: C50.1, C18	mCODE STU 1	Primary Cancer Condition or Secondary Cancer Condition	Condition.bodySite ICD-O-3 topography codes from CancerBodyLocationVS ValueSet	
Specimen	reference_pathology_confirmed_diagnosis	Conditional This field is only required if the specimen is a tumour.	Indicate whether the pathological diagnosis was confirmed by a (central) reference pathologist.	Text	Yes No Not done Unknown	ICGC ARGO		reference_pathology_confirmed	
Specimen	reference_pathology_confirmed_tumour_presence	Conditional This field is only required if the specimen is a tumour.	Indicate whether the (central) reference pathologist confirmed the presence of tumour in the specimen.	Text	Yes No Not done Unknown				
Specimen	tumour_grading_system	Conditional This field is only required if the specimen is a tumour.	Specify the tumour grading system used to assess the description of a tumour based on how abnormal the tumour cells and the tumour tissue look under a microscope. Tumour grade is an indicator of how quickly a tumour is likely to grow.	Text	FNCLCC grading system Four-tier grading system Gleason grade group system Grading system for GISTs Grading system for GNETs ISUP grading system Nuclear grading system for DCIS Scarff-Bloom-Richardson grading system Three-tier grading system Two-tier grading system WHO grading system for CNS tumours	ICGC ARGO		tumour_grading_system	
Specimen	tumour_grade	Conditional This field depends on the selected tumour_grading_system, and is only required if the specimen is a tumour.	Grade of the tumour as assigned by the reporting tumour_grading_system.	Text	Low grade High grade GX G1 G2 G3 G4 Low High Grade I Grade II Grade III Grade IV Grade Group 1 Grade Group 2 Grade Group 3 Grade Group 4 Grade Group 5	ICGC ARGO		tumour_grade	Please refer to the documentation for Tumour Grading Classifications: http://docs.icgc-argo.org/docs/submission/dictionary-overview#tumour-grading-classifications
Specimen	percent_tumour_cells_range	Conditional This field is only required if the specimen is a tumour.	Select the range representing the percent of tumour cells compared to the number of total cells in a specimen. (Reference: NCIt: C159484)	Text	0-19% 20-50% 51-100%	ICGC ARGO		percent_tumour_cells	
Specimen	percent_tumour_cells_measurement_method	Conditional This field is only required if the specimen is a tumour.	Indicate method used to measure percent_tumour_cells.	Text	Genomics Image analysis Pathology estimate by percent nuclei Unknown				
Primary Diagnosis	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	
Primary Diagnosis	***submitter_donor_id***	Required	Unique identifier for the donor, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient.Identifier	
Primary Diagnosis	***submitter_primary_diagnosis_id***	Required	Indicate the primary diagnosis event in the clinical timeline that this specimen acquisition was related to.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Primary Cancer Condition or Secondary Cancer	Condition.identifier (Primary Cancer Condition) or Condition.identifier (Secondary Cancer Condition)	
Primary Diagnosis	**date_of_diagnosis**	Required	Date that the donor was first diagnosed with cancer. This date should be based on the *earliest* diagnosis.	Integer	Format YYYY-MM	mCODE STU 1	Primary Cancer Condition or Secondary Cancer Condition	Condition.extension:assertedDate (Primary Cancer Condition) or Condition.extension:assertedDate (Secondary Cancer Condition)	This field is required in order to calculate the required ARGO "**age_at_diagnosis**" field which is recorded in years (ie. [date_of_diagnosis]-[date_of_birth]).
Primary Diagnosis	**cancer_type_code**	Required	The code to represent the cancer type using the WHO ICD-10 code (https://icd.who.int/browse10/2019/en) classification.	Text	ICD-10 code	mCODE STU 1	Primary Cancer Condition or Secondary Cancer Condition	Condition.code (Primary Cancer Condition) or Condition.code (Secondary Cancer Condition) ICD-10 codes from PrimaryOrUncertainBehaviorCancerDisorderVS or SecondaryCancerDisorderVS	
Primary Diagnosis	basis_of_diagnosis	Required	Indicate the most valid basis of how the primary diagnosis was identified. If more than one diagnosis technique was used, select the term that has the highest code number	Text	Clinical investigation Clinical Cytology Death certificate only Histology of a metastasis Histology of a primary tumour Specific tumour markers Unknown	IACR Standard for Basis of Diagnosis/ICGC ARGO		basis_of_diagnosis	IACR Definitions: **Death certificate only**: Information provided is from a death certificate. **Clinical**: Diagnosis made before death. **Clinical investigation**: All diagnostic techniques, including X-ray, endoscopy, imaging, ultrasound, exploratory surgery (such as laparotomy), and autopsy, without a tissue diagnosis. **Specific tumour markers**: Including biochemical and/or immunologic markers that are specific for a tumour site. **Cytology**: Examination of cells from a primary or secondary site, including fluids aspirated by endoscopy or needle; also includes the microscopic examination of peripheral blood and bone marrow aspirates. **Histology of a metastasis**: Histologic examination of tissue from a metastasis, including autopsy specimens. **Histology of a primary tumour**: Histologic examination of tissue from primary tumour, however obtained, including all cutting techniques and bone marrow biopsies; also includes autopsy specimens of primary tumour. **Unknown**: No information on how the diagnosis has been made.
Primary Diagnosis	lymph_nodes_examined_status	Required	Indicate if lymph nodes were examined for metastases.	Text	Cannot be determined No No lymph nodes found in resected specimen Not applicable Yes	ICGC ARGO		lymph_nodes_examined_status	
Primary Diagnosis	lymph_nodes_examined_method	This field is only required if "lymph_nodes_examined_status" is "Yes"	Indicate method used to examine lymph nodes.	Text	Imaging Lymph node dissection/pathological exam Physical palpation of patient				
Primary Diagnosis	number_lymph_nodes_positive	This field is only required if "lymph_nodes_examined_status" is "Yes"	The number of regional lymph nodes reported as being positive for tumour metastases (Reference: NCI CDE ID: 6113694)	Integer		ICGC ARGO		number_lymph_nodes_positive	

Primary Diagnosis	clinical_tumour_staging_system	Conditional This field is only required if pathological staging is not submitted.	Indicate the tumour staging system used to stage the cancer at the time of primary diagnosis (prior to treatment).	Text	AJCC 8th edition AJCC 7th edition AJCC 6th edition Ann Arbor staging system Binet staging system Durie-Salmon staging system FIGO staging system Lugano staging system Rai staging system Revised International staging system (RISS) SEER staging system St Jude staging system	ICGC ARGO		clinical_tumour_staging_system	Either the clinical or pathological staging must be submitted.
Primary Diagnosis	clinical_t_category	Conditional This field is required only if the selected clinical_tumour_staging_system is any edition of the AJCC cancer staging system	The code to represent the extent of the primary tumour (T) based on evidence obtained from clinical assessment parameters determined at time of primary diagnosis and prior to treatment, according to criteria based on multiple editions of the AJCC's Cancer Staging Manual.	Text	Click for drop-down list of AJCC T category values	mCODE STU 1	TNM Clinical Primary Tumor Category	Observation.value[x]:valueCodeableConcept AJCC values from TNM Primary Tumor Category Value Set	
Primary Diagnosis	clinical_n_category	Conditional This field is required only if the selected clinical_tumour_staging_system is any edition of the AJCC cancer staging system	The code to represent the stage of cancer defined by the extent of the regional lymph node (N) involvement for the cancer based on evidence obtained from clinical assessment parameters determined at time of primary diagnosis and prior to treatment, according to criteria based on multiple editions of the AJCC's Cancer Staging Manual.	Text	Click for drop-down list of AJCC N category values	mCODE STU 1	TNM Clinical Regional Nodes Category	Observation.value[x]:valueCodeableConcept AJCC values from TNM Regional Nodes Category Value Set	
Primary Diagnosis	clinical_m_category	Conditional This field is required only if the selected clinical_tumour_staging_system is any edition of the AJCC cancer staging system	The code to represent the stage of cancer defined by the extent of the distant metastasis (M) for the cancer based on evidence obtained from clinical assessment parameters determined at time of primary diagnosis and prior to treatment, according to criteria based on multiple editions of the AJCC's Cancer Staging Manual. MX is NOT a valid category and cannot be assigned.	Text	Click for drop-down list of AJCC M category values	mCODE STU 1	TNM Clinical Distant Metastases Category	Observation.value[x]:valueCodeableConcept AJCC values from TNM Distant Metastases Category Value Set	
Primary Diagnosis	clinical_stage_group	Conditional This field is dependent on the selected clinical_tumour_staging_system. Please refer to the documentation for Tumour Staging Classifications: http://docs.icgc-argo.org/docs/submission/dictionary-overview#tumour-staging-classifications	Stage group of the tumour, as assigned by the reporting clinical_tumour_staging_system, that indicates the overall prognostic tumour stage (ie. Stage I, Stage II, Stage III etc.).	Text	Click for drop-down list of clinical stage groups	ICGC ARGO		clinical_stage_group	mCODE's TNM Stage Group Value Set only contains TNM stage groups, so for this reason the ARGO controlled terminology is suggested since it contains stage groups from non-TNM staging systems as well.
Treatment	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	
Treatment	***submitter_donor_id***	Required	Unique identifier for the donor, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient.Identifier	
Treatment	***submitter_treatment_id***	Required	Unique identifier of the treatment, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	CancerRelatedRadiationProcedure or CancerRelatedMedicationStatement or CancerRelatedS	Procedure.identifier	
Treatment	***submitter_primary_diagnosis_id***	Required	Indicate the primary diagnosis event in the clinical timeline that this specimen acquisition was related to	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Primary Cancer Condition or Secondary Cancer	Condition.identifier	
Treatment	**treatment_type**	Required	Indicate the type of treatment regimen that the donor completed.	Text	Ablation Bone marrow transplant Chemotherapy Endoscopic therapy Hormonal therapy Immunotherapy No treatment Other targeting molecular therapy Photodynamic therapy Radiation therapy Stem cell transplant Surgery	ICGC ARGO		treatment_type	Depending on the treatment_type(s) selected, additional treatment details may be required to be submitted. For example, if treatment_type includes 'Chemotherapy', the supplemental Chemotherapy treatment type file is required. To include multiple values, separate values with a pipe delimiter '|' within your file.
Treatment	is_primary_treatment	Required	Indicate if the treatment was the primary treatment following the initial diagnosis.	Text	Yes No Unknown	ICGC ARGO		is_primary_treatment	
Treatment	**treatment_start_date**	Required	Indicate the date treatment was initiated.	Integer	Format YYYY-MM	mCODE STU 1	If treatment_type = 'Radiation therapy' or 'Surgery': CancerRelatedRadiationProcedure or CancerRelatedSurgicalStatement Otherwise extend mCODE to use Procedure Profile	Procedure.performed.Period.start.dateTime (Radiation) or Procedure.performed.Period.start.dateTime (Surgery) or Procedure.performed.Period.start.dateTime (for all other treatment_types)	This field is required in order to calculate the ARGO required "**treatment_start_interval**" field which is recorded in days (ie. [treatment_start_date] - [date_of_diagnosis])
Treatment	**treatment_end_date**	Required	Indicate the date treatment ended.	Integer	Format YYYY-MM	mCODE STU 1	If treatment_type = 'Radiation therapy' or 'Surgery': CancerRelatedRadiationProcedure or CancerRelatedSurgicalStatement Otherwise extend mCODE to use Procedure Profile	Procedure.performed.Period.end.dateTime (Radiation) or Procedure.performed.Period.end.dateTime (Surgery) or Procedure.performed.Period.end.dateTime (for all other treatment_types)	This field is required in order to calculate the ARGO required "**treatment_duration**" field which is recorded in days (ie. [treatment_end_date] - [treatment_start_date])
Treatment	treatment_setting	Required	Indicate the treatment setting, which describes the treatment's purpose in relation to the primary treatment. (Reference: CDISC [NCIt code: C124308])	Text	Adjuvant Advanced/Metastatic Neoadjuvant Not applicable	ICGC ARGO		treatment_setting	
Treatment	treatment_intent	Required	Indicate the intended disease outcome for which the treatment is given. (Reference: CDISC [NCIt code: C124307])	Text	Curative Palliative	mCODE STU 1	CancerRelatedRadiationProcedure or CancerRelatedMedicationStatement or CancerRelatedS	extension:treatmentIntent mCODE Value Set: TreatmentIntentVS	
Treatment	days_per_cycle	Optional	Indicate the number of days in a treatment cycle.	Integer		ICGC ARGO		days_per_cycle	
Treatment	number_of_cycles	Optional	Indicate the number of treatment cycles.	Integer		ICGC ARGO		number_of_cycles	
Treatment	response_to_treatment_criteria_method	Required	Indicate the criteria used to assess the donor's overall response to the applied treatment regimen.	Text	Click for drop-down list of criteria methods				
Treatment	response_to_treatment	Required	Indicate the donor's response to the applied treatment regimen as assigned by the reporting response_to_treatment_criteria_method.	Text	Click for drop-down list of response criteria terms	ICGC ARGO		response_to_treatment	
Chemotherapy	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	
Chemotherapy	***submitter_donor_id***	Required	Unique identifier for the donor, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient.Identifier	
Chemotherapy	***submitter_treatment_id***	The Chemotherapy file is only required if "Chemotherapy" is selected in "treatment_type" field	Unique identifier of the treatment, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64}	mCODE STU 1	Cancer Related Medication Statement	MedicationStatement.identifier	

Chemotherapy	**drug_name**	Required	Name of agent or drug administered to patient as part of the treatment regimen.	Text	This field uses standardized vocabulary from the RxNorm database (https://www.nlm.nih.gov/research/umls/rxnorm), provided by the NIH.	ICGC ARGO		drug_name	You can search for RX Norm values through the web interface (https://mor.nlm.nih.gov/RxNav/) or API (https://lhncbc.nlm.nih.gov/RxNav/APIs/RxNormAPIs.html). For example, to find the rxnormcui based on drug name, you can use: https://rxnav.nlm.nih.gov/REST/rxcui.json?name=leucovorin or https://mor.nlm.nih.gov/RxNav/search?searchBy=String&searchTerm=leucovorin
Chemotherapy	**drug_rxnormcui**	Required	The unique RxNormID assigned to the treatment regimen drug.	Text	RxNorm CUI	mCODE STU 1	Cancer Related Medication Statement	MedicationStatement.medication[x]:medicationCodeableConcept RxNorm CUIs from US Core Medication Codes Value Set	This field is required in order to validate required ARGO '**drug_name**' field
Chemotherapy	chemotherapy_dosage_units	Required	Indicate units used to record chemotherapy drug dosage.	Text	mg/m2 IU/m2 ug/m2 g/m2 mg/kg	ICGC ARGO		chemotherapy_dosage_units	
Chemotherapy	cumulative_drug_dosage_prescribed	Optional	Indicate the total drug dose the donor was prescibed in the same units specified in the 'chemotherapy_dosage_units' field.	Number		ICGC ARGO		cumulative_drug_dosage	
Chemotherapy	cumulative_drug_dosage_actual	Optional	Indicate the actual total drug dose the donor received, in the same units specified in the 'chemotherapy_dosage_units' field.	Number		ICGC ARGO		cumulative_drug_dosage	
Hormone Therapy	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	
Hormone Therapy	***submitter_donor_id***	The Hormone Therapy file is only required if "Hormonal Therapy" is selected in "treatment_type" field	Unique identifier for the donor, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64}] Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient.Identifier	
Hormone Therapy	***submitter_treatment_id***	Required	Unique identifier of the treatment, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Related Medication Statement	MedicationStatement.identifier	
Hormone Therapy	**drug_name**	Required	Name of agent or drug administered to patient as part of the treatment regimen.	Text	This field uses standardized vocabulary from the RxNorm database (https://www.nlm.nih.gov/research/umls/rxnorm), provided by the NIH.	ICGC ARGO		drug_name	You can search for RX Norm values through the web interface (https://mor.nlm.nih.gov/RxNav/) or API (https://lhncbc.nlm.nih.gov/RxNav/APIs/RxNormAPIs.html). For example, to find the rxnormcui based on drug name, you can use: https://rxnav.nlm.nih.gov/REST/rxcui.json?name=leucovorin or https://mor.nlm.nih.gov/RxNav/search?searchBy=String&searchTerm=leucovorin
Hormone Therapy	**drug_rxnormcui**	Required	The unique RxNormID assigned to the treatment regimen drug.	Text	RxNorm CUI	mCODE STU 1	Cancer Related Medication Statement	MedicationStatement.medication[x]:medicationCodeableConcept RxNorm CUIs from US Core Medication Codes Value Set	This field is required in order to validate required ARGO '**drug_name**' field
Hormone Therapy	hormone_drug_dosage_units	Required	Indicate the units used to record hormone drug dosage.	Text	mg/m2 IU/m2 ug/m2 g/m2 mg/kg	ICGC ARGO		hormone_drug_dosage_units	
Hormone Therapy	cumulative_drug_dosage_prescribed	Optional	Indicate the total drug dose the donor was prescibed in the same units specified in the 'hormone_drug_dosage_units' field.	Number		ICGC ARGO		cumulative_drug_dosage	
Hormone Therapy	cumulative_drug_dosage_actual	Optional	Indicate the actual total drug dose the donor received, in the same units specified in the 'hormone_drug_dosage_units' field.	Number		ICGC ARGO		cumulative_drug_dosage	
Radiation	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	
Radiation	***submitter_donor_id***	The Radiation file is only required if "Radiation therapy" is selected in "treatment_type" field	Unique identifier for the donor, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64}] Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient.Identifier	
Radiation	***submitter_treatment_id***	Required	Unique identifier of the treatment, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64}] Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Related Radiation Procedure	Procedure.identifier	
Radiation	radiation_therapy_modality	Required	Indicate the method of radiation treatment or modality.	Text	Megavoltage radiation therapy using photons (procedure) Teleradiotherapy using electrons (procedure) Teleradiotherapy protons (procedure) Teleradiotherapy neutrons (procedure) Brachytherapy (procedure) Other	mCODE STU 1	Cancer Related Radiation Procedure	Procedure.code mCODE Value Set: Radiation Procedure Value Set	
Radiation	radiation_therapy_type	Required	Indicate type of radiation therapy administered.	Text	External Internal	ICGC ARGO		radiation_therapy_type	
Radiation	radiation_therapy_fractions	Required	Indicate the total number of fractions delivered as part of treatment.	Integer		mCODE STU 1	Cancer Related Radiation Procedure	RadiationFractionsDelivered	
Radiation	radiation_therapy_dosage	Required	Indicate the total dose given in units of Gray (Gy).	Integer		mCODE STU 1	Cancer Related Radiation Procedure	TotalRadiationDoseDelivered	
Radiation	anatomical_site_irradiated	Required	Indicate localization site where radiation therapy was administered.	Text	Value from Radiation Target Body Site Value Set	mCODE STU 1	Cancer Related Radiation Procedure	Procedure.bodySite Radiation Target Body Site Value Set	
Radiation	radiation_boost	Optional	A radiation boost is an extra radiation treatment targeted at the tumor bed, given after the regular sessions of radiation is complete (Reference NCIt: C137812). Indicate if this radiation treatment was a radiation boost.	Text	Yes No				
Radiation	reference_radiation_treatment_id	Required/Conditional Only required if 'radiation_boost' = 'Yes'	If a radiation boost was given, indicate the 'submitter_treatment_id' of the primary radiation treatment the radiation boost treatment is linked to.	Text					
Immunotherapy	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	
Immunotherapy	***submitter_donor_id***	The Hormone Therapy file is only required if "Hormonal Therapy" is selected in "treatment_type" field	Unique identifier for the donor, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64}] Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient.Identifier	
Immunotherapy	***submitter_treatment_id***	Required	Unique identifier of the treatment, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Related Medication Statement	MedicationStatement.identifier	
Immunotherapy	immunotherapy_type	Required	Indicate the type of immunotherapy administered to donor.	Text	Cell-based Immune checkpoint inhibitors Monoclonal antibodies other than immune checkpoint inhibitors Other immunomodulatory substances	ICGC ARGO		immunotherapy_type	
Immunotherapy	**drug_name**	Required	Name of agent or drug administered to patient as part of the treatment regimen.	Text	This field uses standardized vocabulary from the RxNorm database (https://www.nlm.nih.gov/research/umls/rxnorm), provided by the NIH.	ICGC ARGO		drug_name	You can search for RX Norm values through the web interface (https://mor.nlm.nih.gov/RxNav/) or API (https://lhncbc.nlm.nih.gov/RxNav/APIs/RxNormAPIs.html). For example, to find the rxnormcui based on drug name, you can use: https://rxnav.nlm.nih.gov/REST/rxcui.json?name=leucovorin or https://mor.nlm.nih.gov/RxNav/search?searchBy=String&searchTerm=leucovorin
Immunotherapy	**drug_rxnormcui**	Required	The unique RxNormID assigned to the treatment regimen drug.	Text	RxNorm CUI	mCODE STU 1	Cancer Related Medication Statement	MedicationStatement.medication[x]:medicationCodeableConcept RxNorm CUIs from US Core Medication Codes Value Set	This field is required in order to validate required ARGO '**drug_name**' field
Surgery	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	
Surgery	***submitter_donor_id***	The Surgery file is only required if "treatment_type" = "Surgery"	Unique identifier for the donor, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient.Identifier	
Surgery	***submitter_specimen_id***	Required	Unique identifier of the specimen, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64}] Examples: LAML_PO_00445, THY_099-tumour	mCODE STU 1	Genetic Specimen	Specimen.Identifier	Please refer to documentation for instructions on how to submit a specimen that was resected during surgery: https://docs.icgc-argo.org/docs/submission/submitting-clinical-data#submitting-data-in-surgery-file
Surgery	***submitter_treatment_id***	Required	Unique identifier of the treatment, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Related Radiation Procedure	Procedure.identifier	
Surgery	**surgery_type**	Required	Indicate the type of surgical procedure that was performed. (References: SNOMED, NCIt, UMLS)	Text	Click for drop-down list of surgery types	ICGC ARGO		surgery_type	

Surgery	surgery_site	Conditional This field is not required if a specimen was resected during surgery (ie. if `submitter_specimen_id` is submitted) since type of specimen is collected in the Specimen table.	Indicate the ICD-O-3 topography code for the anatomic site where the surgical procedure was performed, according to the International Classification of Diseases for Oncology, 3rd Edition (WHO ICD-O-3).	Text		ICGC ARGO		surgery_site	
Surgery	surgery_location	Conditional This field is not required if a specimen was resected during surgery (ie. if `submitter_specimen_id` is submitted) since type of specimen is collected in the Specimen table.	Indicate whether the surgical procedure was done at the primary, local recurrence or metastatic location	Text	Local recurrence Metastatic Primary	ICGC ARGO		surgery_location	
Surgery	tumour_length	Optional	Indicate the length of the tumour, in millimetres (mm).	Number		ICGC ARGO		tumour_length	
Surgery	tumour_width	Optional	Indicate the length of the tumour, in millimetres (mm).	Number		ICGC ARGO		tumour_width	
Surgery	greatest_dimension_tumour	Optional	Indicate the greatest dimension or diameter of the tumour, in millimetres (mm). (Reference: NCIt C157135)	Number		ICGC ARGO		greatest_dimension_tumour	
Surgery	tumour_focality	Optional	Indicate the characterization of the location of the tumour. (Reference: NCIt: C157425)	Text	Cannot be assessed Multifocal Not applicable Unifocal Unknown	ICGC ARGO		tumour_focality	
Surgery	residual_tumour_classification	Optional	Indicate the absence or presence of residual tumour after treatment. In some cases treated with surgery and/or with neoadjuvant therapy there will be residual tumour at the primary site after treatment because of incomplete resection or local and regional disease that extends beyond the limit of ability of resection. (Reference: AJCC 8th ed.)	Text	Not applicable RX R0 R1 R2 Unknown	ICGC ARGO		residual_tumour_classification	RX (Presence of residual tumour cannot be assessed), R0 (no residual tumour), R1 (microscopic residual tumour), R2 (macroscopic residual tumour)
Surgery	margin_types_involved	Optional	Indicate the margin type(s) involved.	Text	Circumferential resection margin Common bile duct margin Distal margin Not applicable Proximal margin Unknown	ICGC ARGO		margin_types_involved	To include multiple values, separate values with a pipe delimiter '|' within your file.
Surgery	margin_types_not_involved	Optional	Indicate the margin type(s) not involved.	Text	Circumferential resection margin Common bile duct margin Distal margin Not applicable Proximal margin Unknown	ICGC ARGO		margin_types_not_involved	To include multiple values, separate values with a pipe delimiter '|' within your file.
Surgery	margin_types_not_assessed	Optional	Indicate the margin type(s) that cannot be assessed.	Text	Circumferential resection margin Common bile duct margin Distal margin Not applicable Proximal margin Unknown	ICGC ARGO		margin_types_not_assessed	To include multiple values, separate values with a pipe delimiter '|' within your file.
Surgery	lymphovascular_invasion	Optional	Indicate the absence or presence of lymphovascular invasion (LVI). LVI includes lymphatic invasion, vascular invasion and lymphovascular invasion. (Reference: AJCC 8th ed.)	Text	Absent Both lymphatic and small vessel and venous (large vessel) invasion Lymphatic and small vessel invasion only Not applicable Present Venous (large vessel) invasion only Unknown	ICGC ARGO		lymphovascular_invasion	
Surgery	perineural_invasion	Optional	A morphologic finding referring to a tumour that has spread along and infiltrated nerve fibers. Indicate the presence or absence of perineural invasion. (Reference: NCIt: C48260, ICCR)	Text	Absent Cannot be assessed Not applicable Present Unknown	ICGC ARGO		perineural_invasion	
Follow Up	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	
Follow Up	***submitter_donor_id***	Required	Unique identifier for the donor, assigned by the data provider.	Text	Values must meet the regular expression ^(A-Za-z0-9\-_){1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient.Identifier	
Follow Up	***submitter_follow_up_id***	Required	Unique identifier for a follow-up event in a donor's clinical record, assigned by the data provider.	Text	Values must meet the regular expression ^(A-Za-z0-9\-_){1,64} Examples: 90234, BLD_donor_89, AML-90	ICGC ARGO		submitter_follow_up_id	
Follow Up	*submitter_primary_diagnosis_id*	Optional	Indicate if the follow-up is related to a specific primary diagnosis event in the clinical timeline.	Text	Values must meet the regular expression ^(A-Za-z0-9\-_){1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Primary Cancer Condition or Secondary Cancer	Condition.identifier (Primary Cancer Condition) or Condition.identifier (Secondary Cancer Condition)	
Follow Up	*submitter_treatment_id*	Optional	Indicate if the follow-up is related to a specific treatment event in the clinical timeline.	Text	Values must meet the regular expression ^(A-Za-z0-9\-_){1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	CancerRelatedRadiationProcedure or CancerRelatedMedicationStatement or CancerRelatedS	Procedure.identifier	
Follow Up	**date_of_followup**	Required	Date of follow-up date.	Integer	Format YYYY-MM	ICGC ARGO		interval_of_followup	This field is required in order to calculate the ARGO required "**interval_of_followup**" field which is recorded in days (ie. [date_of_followup - date_of_diagnosis])
Follow Up	lost_to_followup	Optional	Indicate if donor was confirmed lost to follow-up at the end of this follow up clinical event.	Text	Yes No	caDSR CDE 7547299 NCIt C61410			
Follow Up	lost_to_followup_reason	Optional	Indicate reason the donor was lost to follow up.	Text	Completed study Discharged to palliative care Lost contact Not applicable Unknown Withdrew from study				
Follow Up	**disease_status_at_followup**	Required	Indicate the donor's disease status at time of follow-up.	Text	Complete remission Distant progression Loco-regional progression No evidence of disease Partial remission Progression NOS Relapse or recurrence Stable	ICGC ARGO		disease_status_at_followup	
Follow Up	relapse_type	This field is required to be submitted if disease_status_at_followup indicates a state of progression, relapse, or recurrence.	Indicate the donor's relapse type.	Text	Distant recurrence/metastasis Local recurrence Local recurrence and distant metastasis Progression (liquid tumours) Biochemical progression	ICGC ARGO		relapse_type	
Follow Up	**date_of_relapse**	This field is required to be submitted if disease_status_at_followup indicates a state of progression, relapse, or recurrence.	Indicate the date when relapse occurred following a period of time after primary treatment when the patient was clinically disease free.	Integer	Format YYYY-MM	ICGC ARGO		relapse_interval	This field is required in order to calculate the required ARGO "**relapse_interval**" field which is recorded in days (ie. [date_of_relapse] - [date_of_diagnosis])
Follow Up	method_of_progression_status	This field is required to be submitted if disease_status_at_followup indicates a state of progression, relapse, or recurrence. To include multiple values, separate values with a pipe delimiter '|' within your file.	Indicate the method(s) used to confirm the donor's progression or relapse or recurrence disease status. (Codelist reference: NCI CDE ID: 6161031)	Text	Imaging (procedure) Histopathology test (procedure) Assessment of symptom control (procedure) Physical examination procedure (procedure) Tumor marker measurement (procedure) Laboratory data interpretation (procedure)	mCODE STU 1	Cancer Disease Status	Observation.extension:evidenceType.valueCodeableConcept mCODE Value Set: Cancer Disease Status Evidence	
Follow Up	anatomic_site_progression_or_recurrence	This field is required to be submitted if disease_status_at_followup indicates a state of progression, relapse, or recurrence.	Indicate the ICD-O-3 topography code for the anatomic site where disease progression, relapse or recurrence occurred, according to the International Classification of Diseases for Oncology, 3rd Edition (WHO ICD-O-3). Refer to the ICD-O-3 manual for guidelines at https://apps.who.int/iris/handle/10665/42344	Text	ICD-O-3 topography code	mCODE STU 1	Primary Cancer Condition or Secondary Cancer Condition	Condition.bodySite (Primary Cancer Condition) or Condition.bodySite (Secondary Cancer Condition) ICD-O-3 topography codes as mentioned in description of Cancer Body Location Value Set	

Follow Up	recurrence_tumour_staging_system	Optional	Specify the tumour staging system used to stage the cancer at time of retreatment for recurrence or disease progression. This may be represented as rTNM in the medical report.	Text	AJCC 8th edition AJCC 7th edition AJCC 6th edition Ann Arbor staging system Binet staging system Durie-Salmon staging system FIGO staging system Lugano staging system Rai staging system Revised International staging system (RISS) SEER staging system St Jude staging system	ICGC ARGO		recurrence_tumour_staging_system	
Follow Up	recurrence_t_category	Optional	The code to represent the extent of the primary tumour (T) based on evidence obtained from clinical assessment parameters determined at the time of retreatment for a recurrence or disease progression, according to criteria based on multiple editions of the AJCC's Cancer Staging Manual.	Text	Click for drop-down list of AJCC T category values	mCODE STU 1	No mCODE Profile, only Value Set	Observation.value[x]:valueCodeableConcept AJCC values from TNM Primary Tumor Category Value Set	
Follow Up	recurrence_n_category	Optional	The code to represent the stage of cancer defined by the extent of the regional lymph node (N) involvement for the cancer based on evidence obtained from clinical assessment parameters determined at the time of retreatment for a recurrence or disease progression, according to criteria based on multiple editions of the AJCC's Cancer Staging Manual.	Text	Click for drop-down list of AJCC N category values	mCODE STU 1	No mCODE Profile, only Value Set	Observation.value[x]:valueCodeableConcept AJCC values from TNM Regional Nodes Category Value Set	
Follow Up	recurrence_m_category	Optional	The code to represent the stage of cancer defined by the extent of the distant metastasis (M) for the cancer based on evidence obtained from clinical assessment parameters determined at the time of retreatment for a recurrence or disease progression, according to criteria based on multiple editions of the AJCC's Cancer Staging Manual.	Text	Click for drop-down list of AJCC M category values	mCODE STU 1	No mCODE Profile, only Value Set	Observation.value[x]:valueCodeableConcept AJCC values from TNM Distant Metastases Category Value Set	
Follow Up	recurrence_stage_group	Optional	The code to represent the stage group of the tumour, as assigned by the reporting recurrence_tumour_staging_system, that indicates the overall prognostic tumour stage (ie. Stage I, Stage II, Stage III etc.) at the time of retreatment for a recurrence or disease progression.	Text	Click for drop-down list of recurrence stage groups	ICGC ARGO		recurrence_stage_group	mCODE's TNM Stage Group Value Set only contains TNM stage groups, so for this reason the ARGO controlled terminology is suggested since it contains stage groups from non-TNM staging systems as well. This field is dependent on the selected recurrence_tumour_staging_system. Please refer to the documentation for Tumour Staging Classifications: http://docs.icgc-argo.org/docs/submission/dictionary-overview#tumour-staging-classifications.
Biomarker	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	
Biomarker	***submitter_donor_id***	Required	Unique identifier for the donor, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-\._]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient.Identifier	Each row should include one or more biomarker test(s) associated with a particular clinical event (submitter_specimen_id, submitter_primary_diagnosis_id, submitter_treatment_id or submitter_follow_up_id field). If the biomarker test is not associated with a particular clinical event, then indicate the time interval at which the biomarker test was performed (test_interval
Biomarker	***submitter_specimen_id***	Each row should include one or more biomarker test(s) associated with a particular clinical event , so only one of ['submitter_specimen_id', 'submitter_primary_diagnosis_id', 'submitter_treatment_id' or 'submitter_follow_up_id'] fields is required. If the biomarker test is not associated with a particular clinical event, then indicate the time interval at which the biomarker test was performed (test_interval field).	Unique identifier of the specimen, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-\._]{1,64} Examples: LAML_PO, 00445, THY_099-tumour	mCODE STU 1	Genetic Specimen	Specimen.Identifier	
Biomarker	***submitter_primary_diagnosis_id***	Each row should include one or more biomarker test(s) associated with a particular clinical event , so only one of ['submitter_specimen_id', 'submitter_primary_diagnosis_id', 'submitter_treatment_id' or 'submitter_follow_up_id'] fields is required. If the biomarker test is not associated with a particular clinical event, then indicate the time interval at which the biomarker test was performed (test_interval field).	Indicate the primary diagnosis event in the clinical timeline that this specimen acquisition was related to	Text	Values must meet the regular expression ^[A-Za-z0-9\-\._]{1,64} Examples: LAML_PO, 00445, THY_099-tumour	mCODE STU 1	Primary Cancer Condition	Condition.identifier	
Biomarker	***submitter_treatment_id***	Each row should include one or more biomarker test(s) associated with a particular clinical event , so only one of ['submitter_specimen_id', 'submitter_primary_diagnosis_id', 'submitter_treatment_id' or 'submitter_follow_up_id'] fields is required. If the biomarker test is not associated with a particular clinical event, then indicate the time interval at which the biomarker test was performed (test_interval field).	Unique identifier of the treatment, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-\._]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	CancerRelatedRadiationProcedure or CancerRelatedMedicationStatement or CancerRelatedSurgicalStatement	Procedure.identifier	
Biomarker	***submitter_follow_up_id***	Each row should include one or more biomarker test(s) associated with a particular clinical event , so only one of ['submitter_specimen_id', 'submitter_primary_diagnosis_id', 'submitter_treatment_id' or 'submitter_follow_up_id'] fields is required. If the biomarker test is not associated with a particular clinical event, then indicate the time interval in the 'test_interval' field at which the biomarker test was performed.	Unique identifier for a follow-up event in a donor's clinical record, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-\._]{1,64} Examples: 90234, BLD_donor_89, AML-90	ICGC ARGO		submitter_follow_up_id	
Biomarker	**test_interval**	Each row should include one or more biomarker test(s) associated with a particular clinical event , so only one of ['submitter_specimen_id', 'submitter_primary_diagnosis_id', 'submitter_treatment_id' or 'submitter_follow_up_id'] fields is required. If the biomarker test is not associated with a particular clinical event, then indicate the time interval at which the biomarker test was performed (test_interval field).	If the biomarker test was not associated with a specific specimen or follow-up, primary diagnosis or treatment event, then indicate the interval of time since primary diagnosis that the biomarker test was performed at, in days.	Integer		ICGC ARGO			
Biomarker	psa_level	Optional	A laboratory test that measures the amount of prostate-specific antigen (PSA) found in the blood. PSA is a protein made by the prostate gland. The amount of PSA may be higher in men who have prostate cancer, benign prostatic hyperplasia (BPH), or infection or inflammation of the prostate (Reference NCIt C17634). Indicate	Integer					
Biomarker	ca125	Optional	Indicate the amount of cancer antigen 125 present in a blood serum sample in U/ml (References: NCIt C141277, LOINC: 10334-1)	Integer					
Biomarker	cea	Optional	Indicate the amount of carcinoembryonic antigen present in a serum sample in ng/ml (References NCIt C157252, LOINC 2039-6).	Integer					
Comorbidity	***program_id***	Required	Unique identifier of the program.	Text		ICGC ARGO		program_id	

Comorbidity	***submitter_donor_id***	Required	Unique identifier for the donor, assigned by the data provider.	Text	Values must meet the regular expression ^[A-Za-z0-9\-_]{1,64} Examples: 90234, BLD_donor_89, AML-90	mCODE STU 1	Cancer Patient	Patient Identifier	
Comorbidity	prior_malignancy	Optional	Prior malignancy affecting donor.	Text	Yes No Unknown	ICGC ARGO			
Comorbidity	laterality_of_prior_malignancy	Optional/Conditional This field should only be submitted if patient has been indicated to have a prior malignancy	If donor has history of prior malignancy, indicate laterality of previous diagnosis. (Reference: caDSR CDE ID 4122391)	Text	Bilateral Left Midline Not applicable Right Unilateral, Side not specified Unknown	ICGC ARGO			
Comorbidity	age_at_comorbidity_diagnosis	Optional/Conditional This field should only be submitted if patient has been indicated to have a comorbidity.	Indicate the age of comorbidity diagnosis, in years.	Integer		ICGC ARGO			
Comorbidity	comorbidity_type_code	Required/Conditional This field is required because it should have a cancer or non-cancer ICD-10 code. This field is marked 'Conditional' because it depends on the value of the `prior_malignancy` field. Both these fields will need to be consistent. If `prior_malignancy` is `Yes`, then an ICD-10 code related to cancer is expected in this field. If `prior_malignancy` is `No`, then an ICD-10 code related to a non-cancer condition is expected in this field.	Indicate the code for the comorbidity using the WHO ICD-10 code classification (https://icd.who.int/browse10/2019/en).	Text	Values must meet the regular expression ^[A-Z][0-9][2]{.[0-9]{1,3}[A-Z][0,1)}?$ Examples: E10, C50.1, I11, M06,	ICGC ARGO			
Comorbidity	comorbidity_treatment_status	Optional/Conditional This field should only be submitted if patient has been indicated to have a comorbidity.	Indicate if the patient is being treated for the comorbidity (this includes prior malignancies).	Text	Yes No Unknown	ICGC ARGO			
Comorbidity	comorbidity_treatment	Optional/Conditional This field should only be submitted if patient has been indicated to have a comorbidity.	Indicate treatment details for the comorbidity (this includes prior malignancies).	Text		ICGC ARGO			