

PATIENT			
ObjectClass	ObjectProperty	Pivot file	Convention
Patient	Id	OSIRIS_pivot_Patient.csv	Patient_Id must be a pseudo-anonymized identifier for which a mapping table exist in the providing center.
Patient	Instance_Id		Instance_Id is an incremented number used as a patient index.
Patient	Gender		A value in the FHIR:AdministrativeGender code list. If unknown, use the code UMLS:C0439673.
Patient	Ethnicity		A value in the ConceptualDomain FHIR:Race code list. If unknown, use the code UMLS:C0439673.
Patient	BirthDate		Must be formatted as YYYY-MM-DD. Leave empty if not known. Optional rule : Possible date anonymisation by setting the 15th of every month i.e.: YYYY-MM-15. If the month is not known, we set it to June (06).
Patient	DeathDate		Must be formatted as YYYY-MM-DD. Leave empty if not known. Optional rule : Possible date anonymisation by setting the 15th of every month i.e.: YYYY-MM-15. If the month is not known, we set it to June (06).
Patient	ProviderCenterId		A FINESS code must be used for French institutions. If unknown, use the code UMLS:C0439673.
Patient	OriginCenterId		A FINESS code must be used for French institutions. If unknown, use the code UMLS:C0439673.
Patient	CauseOfDeath		A value in the UMLS:C0007465 code list. If unknown, use the code UMLS:C0439673.
Patient	LastNewsDate		Must be formatted as YYYY-MM-DD. Leave empty if not known. Optional rule : Possible date anonymisation by setting the 15th of every month i.e.: YYYY-MM-15. If the month is not known, we set it to June (06).
Patient	LastNewsStatus	A value in the OSIRIS:LastNewsStatus code list. If unknown, use the code UMLS:C0439673.	
TUMOR PATHOLOGY EVENT			
ObjectClass	ObjectProperty	Pivot file	Convention
TumorPathologyEvent	Type	OSIRIS_pivot_TumorPathologyEvent.csv	A value in the OSIRIS:TumorPathologyEvent_Type code list.
TumorPathologyEvent	StartDate		For Neoplasm/primary tumors, we consider the first exam date (imaging or anapathology analysis). For local or metastatic relapse, we consider the diagnosis date of the tumoral event.
TumorPathologyEvent	EndDate		For Neoplasm/primary tumors, local relapse : we consider the remission date.
TumorPathologyEvent	PerformanceStatus		Baseline PerformanceStatus.
TumorPathologyEvent	G8		First G8 score in the patient management.
TumorPathologyEvent	HistologicalGradeType		Code list not yet implemented. Only for primary tumor.
TumorPathologyEvent	HistologicalGradeValue		Code list not yet implemented. Only for primary tumor.
TumorPathologyEvent	StadeType		Code list not yet implemented. Only for primary tumor.
TumorPathologyEvent	StadeValue		Code list not yet implemented. Only for primary tumor.
TumorPathologyEvent	DiagnosisDate		First examination date that led to a diagnosis (imaging or anapathology analysis)
TumorPathologyEvent	TopographyCode		A value in the ICD-O-3 topography code list. Use the C80 code if unknown.
TumorPathologyEvent	MorphologyCode		A value in the ICD-O-3 morphology code list. Use the 8000/3 code for malignant neoplasm with No Other Specification (NOS), or 8000/6 code for malignant metastatic neoplasm with No Other Specification (NOS).
TumorPathologyEvent	Laterality		A value in the OSIRIS:Laterality. If unknown, use the code UMLS:C0439673. If not applicable, use the code UMLS:C1272460.
ANALYSIS			
ObjectClass	ObjectProperty	Pivot file	Convention
Analysis	Code	OSIRIS_pivot_Analysis.csv	Leave empty if not known.
Analysis	Type		A value in the OSIRIS:AnalysisType code list.
Analysis	Date		Must be formatted as YYYY-MM-DD. Leave empty if not known.
TREATMENT			
ObjectClass	ObjectProperty	Pivot file	Convention
Treatment	Type		A value in the OSIRIS:TreatmentType code list.
Treatment	LineNumber		If unknown, use the code UMLS:C0439673. If not applicable, use the code UMLS:C1272460.

Treatment	ActivityCode	OSIRIS_pivot_Treatment.csv	A compliant Classification of the French Social Security value. If unknown, use the code UMLS:C0439673
Treatment	StartDate		Must be formatted as YYYY-MM-DD. Leave empty if not known.
Treatment	EndDate		Must be formatted as YYYY-MM-DD. Leave empty if not known.
Treatment	ClinicalTrialContext		A value in the OSIRIS:Boolean code list.
Treatment	ClinicalTrialName		If unknown, use the code UMLS:C0439673. Leave it blank if the ClinicalTrialContext code is set to No.
Treatment	ClinicalTrialId		If unknown, use the code UMLS:C0439673. Leave it blank if the ClinicalTrialContext code is set to No.
Treatment	SurgeryResectionQuality		If unknown, use the code UMLS:C0439673. If not applicable, use the code UMLS:C1272460.
Treatment	SurgeryNature		Code list not yet implemented.
DRUG			
ObjectClass	ObjectProperty	Pivot file	Convention
Drug	Code	OSIRIS_pivot_Drug.csv	Compliant ATC code. Use the string "Molecule being tested" if no ATC code available.
Drug	Name		Corresponding label of the ATC code in lowercase. Please use the temporary label of a molecule being tested.
ADVERSE EVENT			
ObjectClass	ObjectProperty	Pivot file	Convention
AdverseEvent	Code	OSIRIS_pivot_AdverseEvent.csv	A compliant MedDRA value.
AdverseEvent	Date		The diagnosis date of the adverse event formatted as YYYY-MM-DD. If no such date is available, we use the date of the last treatment related to the event. This concept is not filled if we are unable to obtain one of those dates.
AdverseEvent	Grade		If several measures are available, we use the highest grade value.
RESPONSE EVALUATION			
ObjectClass	ObjectProperty	Pivot file	Convention
ResponseEvaluation	Date	OSIRIS_pivot_ResponseEvaluation.csv	The examination date which enabled the RECIST evaluation.
ResponseEvaluation	Status		A value in the RECIST v1.1 code list.
BIOLOGICAL SAMPLE			
ObjectClass	ObjectProperty	Pivot file	Convention
BiologicalSample	ExternalAccession	OSIRIS_pivot_BiologicalSample.csv	A string value that uniquely identifies the biological sample.
BiologicalSample	ParentExternalAccession		A string value that uniquely identifies the parent biological sample.
BiologicalSample	CollectDate		Must be formatted as YYYY-MM-DD. Leave empty if not known.
BiologicalSample	TopographyCode		A value in the ICD-O-3 topography code list. Use the C80 code if unknown.
BiologicalSample	Nature		A value in the OSIRIS:SampleNature code list. If unknown, use the code UMLS:C0439673.
BiologicalSample	Origin		A value in the OSIRIS:SampleOrigin code list. If unknown, use the code UMLS:C0439673.
BiologicalSample	StorageTemperature		A value in the OSIRIS:StorageTemperature code list. If unknown, use the code UMLS:C0439673.
BiologicalSample	TumorCellularity		An integer value between 0 to 100. We use the -1 value for unknown cellularity.
BIOMARKER			
ObjectClass	ObjectProperty	Pivot file	Convention
Biomarker	Code	OSIRIS_pivot_Biomarker.csv	A value in the OSIRIS:BiomarkerCode code list.
Biomarker	Value		A string value.
Biomarker	Unit		A value in the HL7:UCUM code list ( <a href="https://www.hl7.org/fhir/valueset-ucum-units.html">https://www.hl7.org/fhir/valueset-ucum-units.html</a> ).
TECHNOLOGY			
ObjectClass	ObjectProperty	Pivot file	Convention
Technology	TechnicalProtocol	OSIRIS_pivot_Technology.csv	A value in the OSIRIS:TechnicalProtocol code list.
Technology	PlatformName		A value in the OSIRIS:PlatformName code list.

Technology	PlatformAccession	OSIRIS_pivot_Technology.csv	A GEO identifier of the platform.
Technology	DateOfExperiment		A date value following the YYYY-MM-DD format. Leave blank if unknown.
PANEL			
ObjectClass	ObjectProperty	Pivot file	Convention
Panel	Name	OSIRIS_pivot_Panel.csv	A value in the OSIRIS:PanelName code list.
ANALYSIS PROCESS			
ObjectClass	ObjectProperty	Pivot file	Convention
AnalysisProcess	AnalyticPipelineCode	OSIRIS_pivot_AnalysisProcess.csv	The unique identifier of the bioinformatics analysis produced by the healthcare center.
OMIC ANALYSIS			
ObjectClass	ObjectProperty	Pivot file	Convention
OmicAnalysis	AlgorithmicCellularity	OSIRIS_pivot_OmicAnalysis.csv	An integer value between 0 and 100. We use the -1 value for unknown cellularity.
OmicAnalysis	AlgorithmicPloidy		A value in the OSIRIS:AlgorithmicPloidy code list.
OmicAnalysis	NumberOfBreakPoints		A numeric value. If unknown, use the value -1 or leave blank.
ALTERATION ON SAMPLE			
ObjectClass	ObjectProperty	Pivot file	Convention
AlterationOnSample	AlterationType	OSIRIS_pivot_AlterationOnSample.csv	A value in the OSIRIS:AlterationType code list.
AlterationOnSample	Pathogenicity		A value in the OSIRIS:AlterationOnSample_Pathogenicity code list. Leave blank if unknown.
AlterationOnSample	Actionability		A value in the OSIRIS:AlterationOnSample_Actionability code list. Leave blank if unknown.
AlterationOnSample	ProposedForOrientation		A value in the OSIRIS:Boolean code list.
VALIDATION			
ObjectClass	ObjectProperty	Pivot file	Convention
Validation	Type	OSIRIS_pivot_Validation.csv	A value in the OSIRIS:ValidationType code list.
Validation	Method		A String value. In the absence of information, use the code UMLS:C0439673 (unknown value)
Validation	Status		A value in the OSIRIS:ValidationStatus code list.
ALTERATION			
ObjectClass	ObjectProperty	Pivot file	Convention
Alteration	Chromosome	OSIRIS_pivot_Alteration.csv	A value in the OSIRIS:Chromosome code list.
Alteration	GenomicStart		An integer value (> 0).
Alteration	GenomicStop		An integer value (> 0).
Alteration	GenomeBuild		A value in the FHIR:Sequence code list.
Alteration	Cytoband		A string value.
GENOME ENTITY			
ObjectClass	ObjectProperty	Pivot file	Convention
GenomeEntity	Type	OSIRIS_pivot_GenomeEntity.csv	A value in the OSIRIS:GenomeEntityType code list.
GenomeEntity	Database		A value in the OSIRIS:GenomeEntityDatabase code list.
GenomeEntity	Id		Compliant HGNC nomenclature string value. Cannot be empty.
GenomeEntity	Symbol		Compliant HGNC string value. Can be empty if the GenomeEntityType value is different from "gene"
FUSION			
ObjectClass	ObjectProperty	Pivot file	Convention
Fusion	Type		A value in the OSIRIS:FusionType code list.
Fusion	Point5prime		An integer value (>= 0).

Fusion	Chromosome5prime	OSIRIS_pivot_Fusion.csv	A value in the OSIRIS:Chromosome code list.
Fusion	Point3prime		An integer value ( $\geq 0$ ).
Fusion	Chromosome3prime		A value in the OSIRIS:Chromosome code list.
Fusion	InFrame		A value in the OSIRIS:Boolean code list.
Fusion	NbSpanningPair		An integer value ( $\geq 0$ ).
Fusion	NbSplitReads		An integer value ( $\geq 0$ ).
CNV			
ObjectClass	ObjectProperty	Pivot file	Convention
CNV	SegmentIntensity	OSIRIS_pivot_CNV.csv	A float value (positive or negative).
CNV	SegmentGenomicStatus		A value in the OSIRIS:SegmentGenomicStatus code list.
CNV	CopyNumber		An integer value ( $\geq 0$ ).
CNV	LOH		A value in the OSIRIS:Boolean code list.
CNV	SegmentSize		An integer value ( $> 0$ ).
VARIANT			
ObjectClass	ObjectProperty	Pivot file	Convention
Variant	ReferenceAllele	OSIRIS_pivot_Variant.csv	String value following the regular expression [ACGT-BDHKMNRSVWY]+ ( <a href="https://www.hgvs.org/mutnomen/standards.html#nucDNA">https://www.hgvs.org/mutnomen/standards.html#nucDNA</a> )
Variant	AlternativeAllele		String value following the regular expression [ACGT-BDHKMNRSVWY]+ ( <a href="https://www.hgvs.org/mutnomen/standards.html#nucDNA">https://www.hgvs.org/mutnomen/standards.html#nucDNA</a> )
Variant	DNASequenceVariationType		A value in the LOINC:48019-4 code list.
ANNOTATION			
ObjectClass	ObjectProperty	Pivot file	Convention
Annotation	ReferenceType	OSIRIS_pivot_Annotation.csv	A value in the OSIRIS:Annotation_ReferenceType code list. If one of the Reference properties is set, the remaining properties of this class are mandatory.
Annotation	ReferenceDatabase		A value in the OSIRIS:Annotation_ReferenceDatabase code list. If one of the Reference properties is set, the remaining properties of this class are mandatory.
Annotation	ReferenceValue		Sting value. If one of the Reference properties is set, the remaining properties of this class are mandatory.
Annotation	MutationPredictionAlgorithm		A value in the OSIRIS:MutationPredictionAlgorithm code list. If one of the MutationPrediction properties is set, another property is expected.
Annotation	MutationPredictionValue		A string value. If set, the MutationPredictionalgorithm class is mandatory.
Annotation	MutationPredictionScore		Float value. If set, the MutationPredictionalgorithm class is mandatory.
Annotation	PfamDomain		A string value of the PFAM domain.
Annotation	PfamId		A string value of the PFAM family ID (Accession number following the regular expression PF[0-9]+).
Annotation	DNARegionName		Human readable string value of the transcript region (i.e.: exon1, intron1, UTR3 '). The value should be lowercase, without space, underscore nor dash.
Annotation	DNASequenceVariation		Compliant HGVS nomenclature string value related to the specified transcript.
Annotation	AminoAcidChange		Compliant HGVS nomenclature string value related to the specified transcript.
Annotation	GenomicSequenceVariation		Compliant HGVS nomenclature string value related to the specified transcript.
Annotation	RNASequenceVariation		Compliant HGVS nomenclature string value related to the specified transcript.
Annotation	AminoAcidChangeType		A value in the OSIRIS:AminoAcidChangeType code list.
Annotation	FusionPrimeEnd		A value in the OSIRIS:Annotation_FusionPrimeEnd code list.
Annotation	Strand		A value in the OSIRIS:Strand code list.
Annotation	OnSplicingSite		A value in the OSIRIS:Boolean code list.

VARIANT IN SAMPLE			
ObjectClass	ObjectProperty	Pivot file	Convention
VariantInSample	PositionReadDepth	OSIRIS_pivot_VariantInSample.csv	An integer value (>= 0).
VariantInSample	VariantReadDepth		An integer value (>= 0).
VariantInSample	StrandBias		A value in the OSIRIS:Boolean code list.
VariantInSample	GenomicSourceClass		A value in the LOINC:LL378-1 code list.
VariantInSample	AllelicState		A value in the LOINC:LL381-5 code list.
GENE EXPRESSION			
ObjectClass	ObjectProperty	Pivot file	Convention
GeneExpression	DataType		A value in the OSIRIS:ExpressionDataType code list.
GeneExpression	Value		A Float value (>= 0).