

Category	DICOM Tag	Name	Definition	Explanatory Note	Requirement
<i>Patient Identification</i>					
	(0010,0020)	Patient ID	Unique identifier assigned to a patient.	Must be replaced with a study-specific ID before leaving the site, as part of the de-identification procedure.	Required
	(0010,0010)	Patient Name	Full name of the patient.	Replaced with 'ANONYMOUS'	Required
	(0012,0062)	Patient Identity Removed	Indicates if patient identity has been removed.	Marked as 'YES'	Required
<i>Institution and Administration</i>					
	(0008,0080)	Institution Name	The name of the institution where the equipment that created the image is located.	Modify as part of the de-identification procedure. Replace with 'ANONYMOUS' if indicated in the study procedure.	Required
<i>Study, Series, and Image Identification</i>					
	(0008,103E)	Series Description	Helps differentiate between different image series within a study.	Retained with modifications to remove PHI	Required
	(0008,1030)	Study Description	Provides a general description of the imaging study.	Retained with modifications to remove PHI	Required
	(0020,000D)	Study Instance UID	Unique identifier for the study.	Modified to prevent traceability. Links images to the correct study.	Required
	(0020,000E)	Series Instance UID	Unique identifier for the series.	Modified to prevent traceability	Required
	(0020,0010)	Study ID	short identifier for the study	Retained, but reviewed for any PHI	Required
	(0020,0011)	Series Number	indicates the series within a study		Required
	(0020,0013)	Instance Number	Indicates the order of images within a series.	Required for proper image sequence display.	Required
	(0008,0016)	SOP Class UID	Identifies the DICOM service class associated with the object (e.g., image, report).	Provides compatibility information for DICOM-compliant systems. Required for proper classification of the image type.	Required
<i>Acquisition Modality and Equipment</i>					
	(0008,0060)	Modality	Identifies the type of imaging modality used (e.g., CT, MR, US). Indicates the source of the image and its technical specifications.		Required
	(0008,0070)	Manufacturer	The manufacturer of the imaging equipment.	Retained	Required
	(0008,1090)	Manufacturer's Model Name	The model name of the imaging equipment.	Retained	Required

<i>Temporal and Acquisition Timing</i>					
	(0008,0020)	Study Date	Date the study started.	Offset while maintaining relative timing	Required
	(0008,0023)	Image Date	Date of image creation.	Useful for chronological ordering of images. Offset using a random number.	Required
	(0008,0032)	Acquisition Time	Time when the image was acquired.	Needed for tracking study history.	Required
	(0008,0033)	Image Time	Time of image creation.	Useful for chronological ordering of images.	Required
	0028,0303)	Longitudinal Temporal Information Modified	Indicates that longitudinal dates have been modified.	Set to "MODIFIED" to indicate date offsetting	Required
<i>Image Data, Dimensions, and Display Parameters</i>					
	(0028,0010)	Rows	Number of rows (height) in the image, in pixels. Defines the vertical resolution of the image.	Defines image dimensions for rendering.	Required
	(0028,0011)	Columns	Number of columns (width) in the image, in pixels. Defines the horizontal resolution of the image.	Defines image dimensions for rendering.	Required
	(0008,0018)	SOP Instance UID	Unique identifier for the DICOM instance.	Modified to prevent traceability. Ensures uniqueness for referencing and retrieval.	Required
	(0028,0100)	Bits Allocated	Number of bits allocated for each pixel sample, defining the pixel depth.	Higher values allow for greater image detail and precision. Defines image depth and grayscale rendering.	Required
	(0028,0101)	Bits Stored	actual number of bits used for pixel values		Required
	(0028,0102)	High Bit	position of the most significant bit		Required
	(0028,0103)	Pixel Representation	Specifies whether pixel data is signed (1) or unsigned (0). Determines how pixel values are stored and interpreted (e.g., grayscale range).		Required
	(0028,0004)	Photometric Interpretation	Specifies the intended color model of the image (e.g., MONOCHROME2, RGB). Determines how pixel values are interpreted for display (e.g., grayscale or color).		Required
	(0028,1050)	Window Center	Defines the center of the grayscale window.	Necessary for contrast adjustments in viewers.	Required
	(0028,1051)	Window Width	Defines the width of the grayscale window.	Necessary for contrast adjustments in viewers.	Required

	(0028,0030)	Pixel Spacing	Physical distance between the centers of adjacent pixels, measured in millimeters (mm). Essential for accurate spatial measurements and scaling.	Required for accurate measurements.	Required
	(0020,0032)	Image Position (Patient)	Defines the position of the image in the patient coordinate system.	Essential for 3D reconstructions and alignment.	Required
	(0020,0037)	Image Orientation (Patient)	specifies the direction cosines of the first row and first column of the image in relation to the patient's coordinate system. It defines the spatial orientation of the image plane in three-dimensional (3D) space.	From BRSI extension	Required
	(7FE0,0010)	Pixel Data	Contains the actual image pixel values.	Retained but must be checked for burned-in PHI	Required
<i>Image Type and Characteristics</i>					
	(0008,0008)	Image Type	Describes the characteristics and processing of the image using a multi-value string. The values typically indicate the image's purpose (e.g., "ORIGINAL" or "DERIVED"), modality-specific attributes, and image processing status.	From BRSI extension	Required
<i>Patient Demographics and Clinical Data</i>					
	(0010,1010)	Patient's Age	Indicates the age of the patient.	Retained but recorded as 90+ if over 89	Required
	(0010,0040)	Patient's Sex	Indicates the sex of the patient.	Retained by TCIA	Required
	(0010,1030)	Patient's Weight	Represents the patient's weight.	Retained by TCIA	Required
	(0010,21A0)	Patient's Smoking Status	Indicates whether the patient smokes.	Retained by TCIA	Required
	(0010,2160)	Ethnic Group	Captures the ethnic background of the patient.	Retained by TCIA	Required
	(0010,1020)	Patient's Size	Represents the patient's height.	Retained by TCIA	Required
	(0010,21C0)	Pregnancy Status	Indicates if the patient is pregnant.	Retained by TCIA	Required
<i>Free Text Field</i>					
	(0018,1030)	Protocol Name	Describes the protocol used for acquiring the images.	Retained but must be reviewed for PHI	Required
<i>Patient Positioning</i>					

	(0018,5100)	Patient Position	Describes the patient's physical orientation relative to the imaging device (e.g., "Head First Supine," "Feet First Prone"). This is crucial for interpretation and reproducibility of scans.		Required
<i>Lesion and Slice Details</i>					
	(0054,0081)	Number of Slices	Specifies the total number of slices in a tomographic imaging study (e.g., CT, MRI, PET). This is critical for reconstructing volumetric datasets and ensuring complete anatomical coverage.	From BRSI extension	Required
	(0020,1041)	Slice Location	Specifies the relative position of each slice.	Essential for 3D AI reconstructions.	Required