

DICOM Correction Proposal

STATUS	Assigned
Date of Last Update	2025/03/20
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Correction Number	CP-2469
Log Summary:	Salvage Details in RT Treatment Record and RT Ion Treatment Record
Name of Standard	PS3.3
Rationale for Correction:	When the treatment record creation on the delivery device has failed, the treatment record is either created based on the user input in the treatment management system or simulated in the treatment delivery system. This CP enables the manual recording of the treatment with minimal set of required values and additionally enables labeling the record simulated.
Correction Wording:	

Update Annex A in PS 3 as follows:

A.29.3 RT Beams Treatment Record IOD Module Table

Table A.29.3-1 specifies the Modules of the RT Beams Treatment Record IOD.

Table A.29.3-1. RT Beams Treatment Record IOD Modules

IE	Module	Reference	Usage
Patient	Patient	C.7.1.1	M
	Clinical Trial Subject	C.7.1.3	U
Study	General Study	C.7.2.1	M
	Patient Study	C.7.2.2	U
	Clinical Trial Study	C.7.2.3	U
Series	RT Series	C.8.8.1	M
	Clinical Trial Series	C.7.3.2	U
Equipment	General Equipment	C.7.5.1	M
Treatment Record	RT General Treatment Record	C.8.8.17	M
	RT Patient Setup	C.8.8.12	U

IE	Module	Reference	Usage
	RT Treatment Machine Record	C.8.8.18	M
	Measured Dose Reference Record	C.8.8.19	U
	Calculated Dose Reference Record	C.8.8.20	U
	RT Beams Session Record	C.8.8.21	<u>MC - Required if Treatment Record Content Origin (300A,0709) is absent or has value DEVICE or SIMULATION</u>
	<u>RT Beams Salvage Record</u>	<u>C.8.8.X1</u>	<u>C – Required if Treatment Record Content Origin (300A,0709) is present and has value USER</u>
	RT Treatment Summary Record	C.8.8.23	U
	General Reference	C.12.4	U
	SOP Common	C.12.1	M
	Common Instance Reference	C.12.2	U

A.50.3 RT Ion Beams Treatment Record IOD Modules

Table A.50-1 identifies and defines the Modules that comprise this IOD. Modules listed are either mandatory or optional as specified in PS3.4. Mandatory Modules contain Attributes that are included in all SOP Instances employing this IOD.

Table A.50-1. RT Ion Beams Treatment Record IOD Modules

IE	Module	Reference	Usage
Patient	Patient	C.7.1.1	M
	Clinical Trial Subject	C.7.1.3	U
Study	General Study	C.7.2.1	M
	Clinical Trial Study	C.7.2.3	U
	Patient Study	C.7.2.2	U
Series	RT Series	C.8.8.1	M
	Clinical Trial Series	C.7.3.2	U
Equipment	General Equipment	C.7.5.1	M
Treatment Record	RT General Treatment Record	C.8.8.17	M

IE	Module	Reference	Usage
	RT Patient Setup	C.8.8.12	U
	RT Treatment Machine Record	C.8.8.18	M
	Measured Dose Reference Record	C.8.8.19	U
	Calculated Dose Reference Record	C.8.8.20	U
	RT Ion Beams Session Record	C.8.8.26	<u>MC - Required if Treatment Record Content Origin (300A,0709) is absent or has value DEVICE or SIMULATION</u>
	<u>RT Ion Beams Salvage Record</u>	<u>C.8.8.X2</u>	<u>C – Required if Treatment Record Content Origin (300A,0709) is present and has value USER</u>
	RT Treatment Summary Record	C.8.8.23	U
	General Reference	C.12.4	U
	SOP Common	C.12.1	M
	Common Instance Reference	C.12.2	U

Update Table C.8-53 in PS3

Table C.8-53. RT General Treatment Record Module Attributes

Attribute Name	Tag	Type	Attribute Description
Instance Number	(0020,0013)	1	Instance number identifying this particular Instance of the object.
Treatment Date	(3008,0250)	2	Date when current fraction was delivered, or Date last fraction was delivered in case of RT Treatment Summary Record IOD. See Note.
Treatment Time	(3008,0251)	2	Time when current fraction was delivered (begun), or Time last fraction was delivered (begun) in case of RT Treatment Summary Record IOD. See Note.
<u>Treatment Record Content Origin</u>	<u>(300A,0709)</u>	<u>3</u>	<u>The origin of the content of this SOP Instance.</u> <u>Enumerated Values:</u> <u>DEVICE</u> <u>The content has been recorded by the treatment device which performed the treatment delivery.</u> <u>USER</u> <u>The content has been constructed based on user inputs.</u> <u>SIMULATION</u> <u>The content has been constructed by a simulation of the treatment delivery</u>

Attribute Name	Tag	Type	Attribute Description
Referenced RT Plan Sequence	(300C,0002)	2	Reference to a RT Plan. Zero or one Item shall be included in this Sequence.
>Include Table 10-11 "SOP Instance Reference Macro Attributes"			
Referenced Treatment Record Sequence	(3008,0030)	3	Reference to RT Treatment Records to which the current RT Treatment Record is significantly related. One or more Items are permitted in this Sequence.
>Include Table 10-11 "SOP Instance Reference Macro Attributes"			

Add to PS3, C.36.2.2

C.36.2.2.XX RT Salvage Session Beam Macro

Table C.36.2.2.XX-1 RT Salvage Session Beam Macro Attributes

Attribute Name	Tag	Type	Attribute Description
Referenced Beam Number	(300C,0006)	3	References Beam specified by Beam Number (300A,00C0) in Beam Sequence (300A,00B0) in RT Beams Module within referenced RT Plan or in Ion Beam Sequence (300A,03A2) in RT Ion Beams Module within referenced RT Ion Plan.
Beam Name	(300A,00C2)	3	User-defined name for delivered Beam.
Entity Long Label	(3010,0038)	3	User-defined label for Beam.
Beam Description	(300A,00C3)	3	User-defined description for delivered Beam.
Current Fraction Number	(3008,0022)	2	Fraction number for this beam administration.
Treatment Delivery Type	(300A,00CE)	2	Delivery Type of treatment. Defined Terms: TREATMENT Normal patient treatment OPEN_PORTFILM Portal image acquisition with open field TRMT_PORTFILM Portal image acquisition with treatment port CONTINUATION Continuation of interrupted treatment SETUP No treatment beam is applied for this RT Beam. To be used for specifying the gantry, couch, and other machine positions where X-Ray set-up images or measurements are to be taken. VERIFICATION Treatment used for Quality Assurance rather than patient treatment
Treatment Termination Status	(3008,002A)	1	Conditions under which treatment was terminated. Enumerated Values: NORMAL treatment terminated normally OPERATOR operator terminated treatment MACHINE machine terminated treatment UNKNOWN status at termination unknown

Attribute Name	Tag	Type	Attribute Description
RT Treatment Termination Reason Code Sequence	(300A,0715)	3	Identifies the reason why the current treatment beam has terminated. Expected if the Treatment Termination Status (3008,002A) is not NORMAL. One or more items are permitted in this Sequence.
>Include Table 8.8-1, "Code Sequence Macro Attributes"			DCID 9561 "Treatment Termination Reason"
Treatment Termination Description	(300A,0730)	3	A user-readable description for an abnormal termination.
Delivered Primary Meterset	(3008,0036)	1	Machine setting as recorded by the user for the primary Meterset in units specified by Primary Dosimeter Unit (300A,00B3).

Add to PS3, C.8.8

C.8.8.X1 RT Beams Salvage Record Module

Table C.8.8.XY-1 RT Beams Salvage Record Module Attributes

Attribute Name	Tag	Type	Attribute Description
Referenced Fraction Group Number	(300C,0022)	3	Identifier of Fraction Group within referenced RT Plan.
Primary Dosimeter Unit	(300A,00B3)	1	Measurement unit of machine dosimeter. Enumerated Values: MU Monitor Unit MINUTE Minute
Treatment Session Beam Sequence	(3008,0020)	1	Sequence of Beams administered during treatment session. One or more Items shall be included in this Sequence.
>Include Table C.36.2.2.XX-1 "RT Salvage Session Beam Macro Attributes"			

C.8.8.X2 RT Ion Beams Salvage Record Module

Table C.8.8.XY-2 RT Ion Beams Salvage Record Module Attributes

Attribute Name	Tag	Type	Attribute Description
Referenced Fraction Group Number	(300C,0022)	3	Identifier of Fraction Group within referenced RT Ion Plan.
Primary Dosimeter Unit	(300A,00B3)	1	Measurement unit of machine dosimeter. Enumerated Values:

Attribute Name	Tag	Type	Attribute Description
			MU Monitor Unit NP Number of Particles
Treatment Session Ion Beam Sequence	(3008,0021)	1	Sequence of Beams administered during treatment session. One or more Items shall be included in this Sequence.
>Include Table C.36.2.2.XX-1 "RT Salvage Session Beam Macro Attributes"			