

### DICOM Correction Item

Correction Number CP-442	
Log Summary: RT Tissue Heterogeneity Correction	
Type of Modification Omission	Name of Standard PS 3 2003
<p>Rationale for Correction:</p> <p>Several clinical trials and research applications require the calculation and transmission of multiple dose distributions for the same treatment plan with differing dose calculation characteristics, e.g., dose calculation algorithm type and the use of tissue heterogeneity correction.</p> <p>To provide a means to record this parameter, the addition of a Tissue Heterogeneity Correction attribute in the RT Dose IOD is proposed.</p>	
<p>Sections of documents affected</p> <p>PS 3.3, C.8.8.3 (RT Dose module)</p> <p>PS 3.6, Section 6 (Registry of DICOM Data Elements)</p>	
Correction Wording:	

*In PS 3.3, C.8-35 (RT Dose Module Attributes), add the following attribute after Dose Grid Scaling (3004,000E):*

Attribute Name	Tag	Type	Attribute Description
<b><u>Tissue Heterogeneity Correction</u></b>	<b><u>(3004,0014)</u></b>	<b><u>3</u></b>	<b><u>Specifies list of patient heterogeneity characteristics used for calculating dose. This attribute shall be multi-valued if beams used to compute the dose have differing correction techniques. Enumerated Values:</u></b> <u>IMAGE = image data</u> <u>ROI_OVERRIDE= one or more ROI densities override image or water values where they exist</u> <u>WATER = entire volume treated as water equivalent</u>

*In PS 3.6, Section 6, add the following new attribute:*

Tag	Name	VR	VM
<b><u>(3004,0014)</u></b>	<b><u>Tissue Heterogeneity Correction</u></b>	<b><u>CS</u></b>	<b><u>1-3</u></b>