

1	Status	Final Text
2	Date of Last Update	2023/01/19
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7	Submission Date	2022/06/02

8	Correction Number CP-2236	
9	Log Summary: Need to be able to select optical path in advanced blending presentation state	
10	Name of Standard	
11	PS3.3 2022e	
12	Rationale for Correction:	
13	It is currently not possible to reference a particular optical path in a VL Whole Slide Microscopy Image instance that contains more	
14	than one optical path.	
15	In order to specify the blending of different optical paths, the Referenced Optical Path Identifier is added.	
16	Only a single optical path may be specified, and it is required to be present if there is more than one optical path in the referenced	
17	image(s).	
18	The reference is inserted as a sibling of the Image SOP Instance Reference Macro, invocation, rather than within it, since the reference	
19	to the optical path would not be appropriate for many invocations of the macro, especially in the bulk microscopy annotations where	
20	the attribute already exists at a different place in the IOD.	
21	Correction Wording:	

Amend DICOM PS3.3 as follows (changes to existing text are bold and underlined for additions and ~~struckthrough~~ for removals):

C.11.33 Advanced Blending Presentation State Module

C.11.33.1 Advanced Blending Presentation State Module Attributes

Table C.11.33-1. Advanced Blending Presentation State Module Attributes

Attribute Name	Tag	Type	Attribute Description
Advanced Blending Sequence	(0070,1B01)	1	A Sequence of Items identifying the inputs and describing transformations of them. One or more Items shall be included in this Sequence. See ???.
>Blending Input Number	(0070,1B02)	1	Identification number of the input. Values shall be ordinal numbers starting from 1 and monotonically increasing by 1 within the Advanced Blending Presentation State Instance.
>Study Instance UID	(0020,000D)	1	Unique identifier for the Study.
>Series Instance UID	(0020,000E)	1	Unique identifier of a Series that is part of the Study defined by the Study Instance UID (0020,000D)
>Referenced Image Sequence	(0008,1140)	1C	The set of images comprising this input. One or more Items shall be included in this Sequence. Required if the input is not the entire set of Instances in the Series.
>>Include Table 10-3 "Image SOP Instance Reference Macro Attributes"			
>> <u>Referenced Optical Path Identifier</u>	<u>(006A,000E)</u>	<u>1C</u>	<u>A single value that identifies the optical path that is the input.</u> <u>Refers to the value in Optical Path Identifier (0048,0106) within the Optical Path Sequence (0048,0105) in the images to which this Presentation State applies.</u> <u>Required if more than one Optical Path is present in the images to which this Presentation State applies.</u>
>Referenced Spatial Registration Sequence	(0070,0404)	1C	A reference to a Spatial Registration Instance that is used to register the referenced inputs. Only one Item shall be included in this Sequence. Required if the Frame of Reference UID (0020,0052) value of the Images referenced by the Referenced Image Sequence (0008,1140) of this Item does not match the Frame of Reference UID (0020,0052) value of this Presentation State Instance. May be present otherwise.
...			

DICOM PS3.3 for reference unchanged:

C.37.1.2 Microscopy Bulk Simple Annotations Module

Table C.37.1-2. Microscopy Bulk Simple Annotations Module Attributes

Attribute Name	Tag	Type	Attribute Description
...			

Attribute Name	Tag	Type	Attribute Description
Referenced Image Sequence	(0008,1140)	1C	The image to which this Annotation object applies. Only a single Item shall be included in this Sequence. Required if Annotation Coordinate Type (006A,0001) is 2D. May be present otherwise.
<i>>Include Table 10-3 "Image SOP Instance Reference Macro Attributes"</i>			
Annotation Group Sequence	(006A,0002)	1	Groups of Annotations sharing common characteristics, such as graphic type, properties or measurements. One or more Items shall be included in this Sequence.
...			
>Referenced Optical Path Identifier	(006A,000E)	1C	Identifies one or more optical paths to which this Annotation applies. Refers to the same value in Optical Path Identifier (0048,0106) within the Optical Path Sequence (0048,0105) in the images to which this Annotation applies. More than one value may be present if the Annotations apply to more than one (but not all) Optical Paths. Required if Annotation Applies to All Optical Paths (006A,000D) is NO.
...			

10.3 Image SOP Instance Reference Macro

Table 10-3. Image SOP Instance Reference Macro Attributes

Attribute Name	Tag	Type	Attribute Description
<i>Include Table 10-11 "SOP Instance Reference Macro Attributes"</i>			
Referenced Frame Number	(0008,1160)	1C	Identifies the frame numbers within the Referenced SOP Instance to which the reference applies. The first frame shall be denoted as frame number 1. Note This Attribute may be multi-valued. Required if the Referenced SOP Instance is a multi-frame image and the reference does not apply to all frames, and Referenced Segment Number (0062,000B) is not present.
Referenced Segment Number	(0062,000B)	1C	Identifies the Segment Number to which the reference applies. Required if the Referenced SOP Instance is a Segmentation or Surface Segmentation and the reference does not apply to all segments and Referenced Frame Number (0008,1160) is not present.

10.8 SOP Instance Reference Macro

Table 10-11. SOP Instance Reference Macro Attributes

Attribute Name	Tag	Type	Attribute Description
Referenced SOP Class UID	(0008,1150)	1	Uniquely identifies the referenced SOP Class.

1

2

Attribute Name	Tag	Type	Attribute Description
Referenced SOP Instance UID	(0008,1155)	1	Uniquely identifies the referenced SOP Instance.