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|---|---------------------|---|
| 1 | Status              | Final Text                                      |
| 2 | Date of Last Update | 2019/01/24                                      |
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| 6 | Submission Date     | 2018/05/26                                      |

|    |  |
|----|--|
| 7  | Correction Number CP-1829  |
| 8  | Log Summary: Clarify what slide label images contain and add overview image type   |
| 9  | Name of Standard   |
| 10 | PS3.3 2018e  |
| 11 | Rationale for Correction:  |
| 12 | The concept of a label image is used in WSI but what exactly it should or should not contain is not explicitly described.              |
| 13 | Clarification is important since viewers need to know whether the label image can be rendered as a label or whether the label is only  |
| 14 | a (small) part of what is encoded and hence does not produce the expected result for the user. The former was allegedly the intent     |
| 15 | of the original frames of Sup 145.   |
| 16 | Also, there is a need for an "overview" image of the entire slide, which contains both the tissue and the label, and is distinct from  |
| 17 | both the lowest resolution image of a pyramidal the specimen (only) and from a localizer image that is required to contain frame-level |
| 18 | navigational features. Such "overview" images are important for quality control, to help assure that all fragments of the specimen     |
| 19 | have been identified and scanned.  |
| 20 | See also Fraggetta F, Yagi Y, Garcia-Rojo M, Evans AJ, Tuthill JM, Baidoshvili A, et al. The importance of eSlide macro images for     |
| 21 | primary diagnosis with whole slide imaging. Journal of Pathology Informatics. 2018;9(1):46. doi:10.4103/jpi.jpi_70_18.                 |
| 22 | Correction Wording:  |

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

## C.8.12.4.1 Whole Slide Microscopy Image Attribute Descriptions

### C.8.12.4.1.1 Image Type

Image Type (0008,0008) is specified to be Type 1 with the following constraints:

Value 1 shall have a value of ORIGINAL or DERIVED

Value 2 shall have a value of PRIMARY

Value 3 (Image Flavor) shall have the Defined Terms in Table C.8.12.4-2.

**Table C.8.12.4-2. Whole Slide Microscopy Image Flavors**

|                        |   |
|------------------------|---|
| LOCALIZER              | Collected for the purpose of planning or navigating other images; <u>provides frame-level navigational features</u> .   |
| VOLUME                 | Set of frames that define a regularly sampled volume  |
| LABEL                  | Purpose of image is to capture the slide label <u>only</u> ; <del>any</del> -non-label area <del>captured is incidental to that purposes</del> <u>shall not be present; the label is shown in Figure C.8-16.</u>  |
| <b><u>OVERVIEW</u></b> | <b><u>Purpose of image is to provide an overview of the entire glass slide; shall include the label, the specimen and the empty space that are shown in Figure C.8-16.</u></b><br><br><b>Note</b><br><br><b><u>One purpose of the OVERVIEW image is to allow visual quality control to assure that tissue fragments have not been omitted when selecting areas (manually or automatically) to digitize at high resolution. The OVERVIEW image is distinct from the lowest resolution VOLUME image(s) of WSI pyramids.</u></b> |

Value 4 (Derived Pixel) shall have the Defined Terms specified in Table C.8.12.4-3.

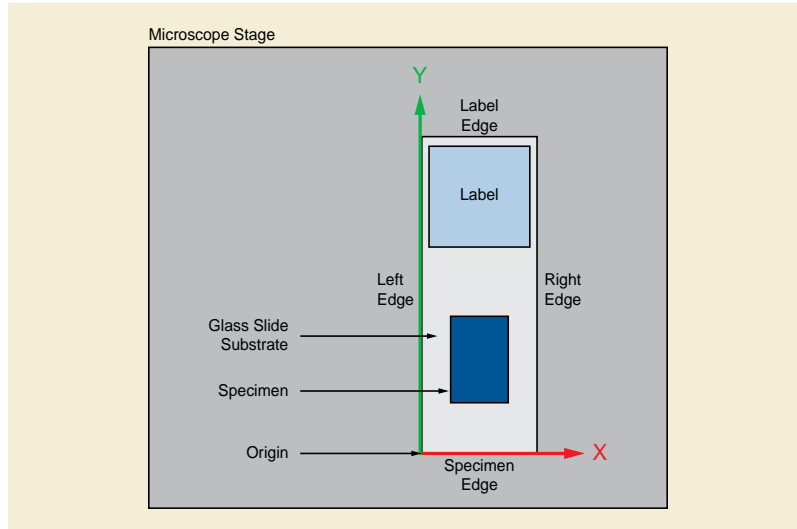
**Table C.8.12.4-3. Whole Slide Microscopy Image Derived Pixels**

|           |  |
|-----------|--|
| NONE      | No derivation of pixels (original)                             |
| RESAMPLED | Pixels were derived by down sampling a higher resolution image |

No additional values shall be present.

### C.8.12.2.1.1 Image Center Point Coordinates Sequence

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**Figure C.8-16. Reference Slide Orientation**