Cancer Reporting Updated Standards

› **AJCC 8th edition** effective date Jan 1, 2018


› **CAP/ASCO 2018 Guidelines for Breast Tumor Markers**
  

› **HL7 Breast Cancer Model** (sponsored by CIMI & CIC)

› **Laboratories** implementing need LOINCs

› Common Problem: **Not all data elements have LOINCs.**
  End users need LOINCs to foster pathology data interoperability.
ASCO/CAP Guidelines require on the report **bolded elements**:

- **Time tissue is removed (OR staff to record)**
  - LOINC 49049-0 Collection time of Unspecified specimen
  - LOINC 68963-8 Collection date and time of Unspecified specimen
  - (depending on how data structured)

- **Time tissue is received in grossing room**
  - 56858-4 Time received by accepting facility or unit
  - 63572-2 Time received in laboratory in Semen
  - (2\textsuperscript{nd} limited to semen. Does not pertain to HER2 Breast cases)

- **Time tissue is placed in fixative**

Laboratories requesting LOINC maps.

Available LOINCs listed under elements. Requests needed for more specific LOINCs.
HL7 Breast Cancer Model Example

› Ki-67 Nuclear Antigen Model

› CIC discussed LOINCs for this item.
  - Some labs are reporting generic Ki-67 with [29593-1 Cells.Ki-67 nuclear Ag/100 cells in Tissue by Immune stain](https://www.labcorp.com/test-menu/33661/proliferation-marker-ki67-paraffin-block)
    - Test method may not be specific for Breast, but any tissue. Breast Specific LOINC below.
  - [85330-9 Cells.Ki-67 nuclear Ag/100 cells in Breast cancer specimen by Immune stain](https://www.labcorp.com/test-menu/33661/proliferation-marker-ki67-paraffin-block)
Other labs reporting manual and automated methods for Ki-67

- Ki67 Breast IHC Manual
  [https://www.mayocliniclaboratories.com/test-catalog/Overview/71668](https://www.mayocliniclaboratories.com/test-catalog/Overview/71668)
- Ki-67 (MIB-1), Breast, Quantitative Immunohistochemistry, Automated
  [https://www.mayocliniclaboratories.com/test-catalog/Overview/70588](https://www.mayocliniclaboratories.com/test-catalog/Overview/70588)

- Mayo has requested these LOINC codes
- When available, performing laboratories can update to the new specific LOINC codes depending on their test methodology
NAACCR Site Specific Data Items (SSDIs) HER2 Receptor

› Dual Probe ISH Copy Number
  - https://apps.naaccr.org/ssdi/input/breast/her2_ish_dp_copy_no/?breadcrumbs=(~schema_list~),(~view_schema~,~breast~)

› Single Probe ISH Copy Number
  - https://apps.naaccr.org/ssdi/input/breast/her2_ish_sp_copy_no/?breadcrumbs=(~schema_list~),(~view_schema~,~breast~)
Barriers to LOINC Implementation

› Gap Analysis needed of content
› Licensing and Copyright issues of elements need a path forward so Regenstrief can create LOINCs
› Many different end users/roles impacted
  – Requests from performing laboratories
  – Requests from HL7 CIC WG and downstream users
› EHRs, LISs, Cancer Registry Software, Public Health, and HIEs could benefit from the use of standards like LOINC. (One of the last lab areas not LOINCified yet.)
Benefits to LOINC Implementation

› Benefits: Interdependent and overlapping users in Cancer Reporting process from Surgeon to Pathologist, to Hospital Registrars to Central Cancer Registrars would have same LOINCs for same data elements to supplement other code systems

› Reduction of downstream mapping efforts, mapping errors, and loss of semantic meaning if lab results are mapped at their origin with LOINC

› Laboratory Data Interoperability fostered since information should flow from source to all downstream end users
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