Hematopoietic and Lymphoid Neoplasm Database Comparisons (2010, 2012, 2014)

This document provides information on changes between the 2010, 2012 and 2014 editions of the Hematopoietic databases. Starting January 1, 2014, only one database for diagnosis years 2010 and forward will be available and will be referred to as the "Hematopoietic and Lymphoid Neoplasm Database," and be effective for cases diagnosed 2010 and forward. The information contained in this document will help to assure data is coded consistently and where and why changes were made.

Note: SEER is **not** requiring review of data already collected. This document was developed to assist in the location of the changes. . Applicable SINQ questions have been updated to reflect that the database applies to questions 2010 and forward.

SUMMARY OF CHANGES in 2012

A majority of the changes made in 2012 were typo corrections. There were also format changes in how information was displayed, but the information itself stayed the same. These changes will have no impact on incidence. In addition, many of the histologies had additional alternate names added and [OBS] added to existing alternate names.

All Hodgkin lymphomas (9650-9667) had primary site of C770-C779 added in the primary site field. Although rare, Hodgkin lymphomas can occur in extranodal sites. The primary site group of lymph nodes (C77) was added as a default.

Specific grades were added to many of the histologies in the database. These matched what was in the 2010 Hematopoietic Lymphoid Neoplasm Case Reportability and Coding Manual. The Grade rules in the Manual should be used to check to make sure that histologies that have an assigned grade are coded that way.

Additional codes were made obsolete in the 2012 manual. Most of these were made retroactive to 2010; however, some were made obsolete as of 1/1/2012. See the 2012 Hematopoietic Manual released in February 2013, Appendix E for a complete listing of the obsolete codes, their effective dates and the code the disease should now be assigned to. For the 2014 changes, all these codes are now [OBS] as of 2010. Appendix E had the column for "effective date" and a note added stating that all the codes listed were [OBS] as of 2010.

There were module rule changes for some codes, but this was mostly due to the rules in the Hematopoietic and Lymphoid Neoplasm manual being changed. An additional document is available for changes to the Hematopoietic and Lymphoid Neoplasm manual.

CHANGES THAT MAY AFFECT INCIDENCE

There are two sections within the database where changes may affect incidence. If there are changes, the effect is small and NCI SEER has decided that they are not significant enough to require a data review; however, if time permits NCI SEER recommends a review. Any questions on how cases affected should be coded should be referred to 'Ask a SEER Registrar'.

- SAME PRIMARIES-There were multiple changes to many same primaries. The table below documents all changes (additions/deletions).
 Four major changes (A-D) account for most of the same primary changes. The remaining three changes (E-G) affect a select group of histologies.
 - a. For all [OBS] codes, the 'referred to' code should always be a 'same' primary. There were several histologies where this was not the case in the 2010 and 2012 editions of the databases. This is a correction for the 2014 edition. A review of all [OBS] codes is suggested to see if a second primary is the 'referred to' code. If so, delete the second primary and keep the original case and histology. If the original diagnosis date was prior to 2010, retain the [OBS] code.
 - b. 9920/3 (Therapy-related myeloid leukemia, NOS) and 9987/3 Therapy-related myelodysplastic syndrome, NOS [OBS], see code 9920/3 (Therapy-related myelodysplastic syndrome, NOS):
 - i. Further review of these histologies showed that these two histologies should have no same primaries. All same primaries were removed. They should only be same primaries for each other. Code 9987/3 is OBSOLETE and referred to 9920/3.
 - ii. Finding cases that may have been affected would require a review of all histologies affected (see below in table). Each case would need to be reviewed to determine if a therapy-related neoplasm was diagnosed at a later date. If so, the therapy related disease (code 9920/3) would be a second primary.
 - c. 9960/3 [OBS] (Chronic myeloproliferative disease, NOS) was found to have errors in same primaries and transformations. Based on further review of the 2008 WHO Hematopoietic book, it was decided that 9960/3 [OBS] would have the same primaries and transformations as 9975/3 (Myelodysplastic/myeloproliferative neoplasm, unclassifiable).

- d. Myelodysplastic codes (9980/3, 9982/3, 9983/3, 9984/3 [OBS], 9985/3, 9986/3, 9991/3, 9992/3). Any combination of these codes should always be a same primary. Review data to see if there are multiple primaries with any combination of these codes. If so, delete multiple primaries and keep the original case (first diagnosis).
- e. Follicular lymphomas (9690/3, 9691/3, 9695/3, 9698/3). The 2010 edition of the database showed that any combination of these codes was a new primary. This was corrected in the 2012 edition of the database. Review data to make sure that there are no multiple primaries with these histologies. If so, delete the second primary and keep the original histology code.
- f. For some histologies, additional same primaries were added. These were initially left out in the 2010 edition of the database. For these histologies, a review is suggested to make sure that these multiple primaries are one primary and not two. When reviewing these cases, code to the more specific histology. If unable to determine the more specific histology, use the first histology.
- g. NOS codes were added to some histologies (mostly [OBS] histologies). The NOS codes include: Lymphoma, NOS (9590/3), Non-Hodgkin lymphoma, NOS (9591/3), Hodgkin lymphoma, NOS (9650/3), Leukemia, NOS (9800/3), Acute leukemia, NOS (9801/3) and Lymphoid leukemia, NOS (9820/3). Even those most of the histologies changed were [OBS] histologies, they are still a more specific histology.

Table 1: Same Primaries (Note: Only those histologies that had changes are in this table)

Histology(ies)	Addition	Deletion	Comments
9590/3	9661/3, 9662/3, 9675/3		See Same Primaries, 1.f and 1.g
9591/3	9675/3		See code 9675/3
9650/3	9661/3, 9662/3		See Same Primaries, 1.a
9653/3	9590/3, 9650/3, 9654/3, 9655/3		See Same Primaries, 1.f and 1.g Specific Hodgkin lymphocyte depletion codes added as same primaries (9654/3, 9655/3).

Histology(ies)	Addition	Deletion	Comments
9654/3	9653/3		See 9653/3
9655/3	9653/3		See 9653/3
9661/3 [OBS]	9590/3, 9650/3		See Same Primaries, 1.a and 1.g
9662/3 [OBS]	9590/3, 9650/3		See Same Primaries, 1.a and 1.g
9670/3 [OBS]	9820/3		See Same Primaries 1.g
9675/3 [OBS]	9590/3, 9591/3, 9690/3, 9691/3, 9695/3, 9698/3		See Same Primaries, 1.a and 1.g Referred to code 9690/3, Follicular lymphoma, NOS. The remaining follicular codes (9691, 9695, 9698) also added
9680/3	9684/3		See Same Primaries, 1.a
9684/3 [OBS]	9680/3		See Same Primaries, 1.a
9690/3, 9691/3, 9695/3, 9698/3	9675/3		See Same Primaries, 1.a and 1.e See 9675/3

Histology(ies)	Addition	Deletion	Comments
9702/3	9705/3, 9714/3, 9718/3, 9827/3		See Same Primaries, 1.f Mature T-cell lymphoma, NOS (9702/3) is a NOS code. The additional histologies are more specific T-cell lymphomas
9705/3	9702/3		See 9702/3
9714/3	9702/3		See 9702/3
9718/3	9702/3		See 9702/3
9728/3 [OBS]	9811/3		See Same Primaries, 1.a
9732/3	9733/3		See Same Primaries, 1.a
9733/3 [OBS]	9732/3		See Same Primaries, 1.a
9740/3		9920/3, 9987/3	See Same Primaries, 1.b
9741/3		9920/3, 9987/3	See Same Primaries, 1.b
9742/3		9920/3, 9987/3	See Same Primaries, 1.b
9750/3 [OBS]	9751/3, 9754/3		See Same Primaries, 1.a Langerhans cell histiocytosis, disseminated (9754/3) also added

Histology(ies)	Addition	Deletion	Comments
9751/3	9750/3, 9754/3		See Same Primaries, 1.a
9754/3	9750/3, 9751/3		See codes 9750/3 and 9751/3
9760/3 [OBS]	9761/3, 9762/3		See Same Primaries 1.a. Hematopoietic database refers to 9761/3 and 9762/3
9761/3	9760/3		See 9760/3
9762/3	9764/3		See 9760/3
9764/3 [OBS]	9762/3		See Same Primaries, 1.a
9805/3-9809/3		9920/3, 9960/3, 9987/3	See Same Primaries 1.b and 1.c
9811/3	9728/3, 9836/3		See Same Primaries, 1.a
9827/3	9702/3		See 9702/3
9836/3 [OBS]	9811/3		See Same Primaries, 1.a
9840/3, 9861/3, 9865/3-9867/3, 9869/3, 9871/3- 9876/3, 9891/3, 9895/3-9898/3, 9910/3, 9911/3		9920/3, 9960/3, 9987/3	See Same Primaries 1.b and 1.c

Histology(ies)	Addition	Deletion	Comments
9920/3		9590/3, 9740/3-9742/3,	See Same Primaries, 1.b
		9800/3, 9801/3, 9805/3-	
		9809/3, 9840/3, 9860/3,	See also 9987/3
		9861/3, 9865/3-9867/3,	
		9869/3-9876/3, 9891/3,	
		9895/3-9898/3, 9910/3,	
		9911/3, 9931/3, 9945/3,	
		9946/3, 9950/3, 9960/3,	
		9962/3-9967/3, 9975/3,	
		9980/3, 9982/3, 9983/3,	
		9985/3, 9986/3, 9989/3,	
		9991/3, 9992/3	
9930/3		9920/3, 9987/3	See Same Primaries 1.b and 1.c
9931/3		9920/3, 9987/3	See Same Primaries 1.b and 1.c
9945/3		9920/3, 9987/3	See Same Primaries 1.b and 1.c
9946/3		9920/3, 9987/3	See Same Primaries 1.b and 1.c
9960/3	9982/3	9805/3, 9840, 9863/3,	See Same Primaries, 1.c
		9866/3, 9870/3, 9871/3-	
		9876/3, 9891/3, 9895/3-	
		9897/3, 9910/3, 9920/3,	
		9930/3, 9931/3	

Histology(ies)	Addition	Deletion	Comments
9961/3-9967/3		9920/3, 9987/3	See Same Primaries, 1.b
9975/3	9960/3	9920/3, 9987/3	See Same Primaries, 1.b and 1.c
9980/3	9984/3, 9985/3, 9986/3	9920/3, 9987/3	See Same Primaries 1.b and 1.d
9982/3	9960/3, 9983/3, 9984/3, 9985/3, 9986/3, 9991/3, 9992/3	9920/3, 9987/3	See Same Primaries 1.b and 1.d
9983/3	9982/3, 9984/3, 9985/3, 9986/3, 9991/3, 9992/3	9920/3, 9987/3	See Same Primaries 1.b and 1.d
9984/3 [OBS]	9800/3, 9980/3, 9982/3, 9985/3, 9986/3, 9989/3, 9991/3		See Same Primaries 1.a and 1.d
9985/3	9980/3, 9982/3, 9983/3, 9984/3, 9986/3, 9991/3, 9992/3	9920/3, 9987/3	See Same Primaries 1.b and 1.d
9986/3	9980/3, 9982/3, 9983/3, 9984/3, 9985/3, 9991/3, 9992/3	9920/3, 9987/3	See Same Primaries 1.b and 1.d
9987/3 [OBS]		See list of histologies in 9920/3	See Same Primaries, 1.b

Histology(ies)	Addition	Deletion	Comments
9989/3	9984/3	9920/3, 9987/3	See Same Primaries 1.b and 1.d
9991/3	9800/3, 9982/3, 9983/3, 9984/3, 9992/3	9920/3, 9987/3	See Same Primaries 1.b and 1.d
9992/3	9800/3, 9982/3, 9983/3, 9984/3, 9985/3, 9991/3	9920/3, 9987/3	See Same Primaries 1.b and 1.d

2. MALIGNANT TRANSFORMATIONS

For some histologies, there was a change in transformations. Look for multiple primaries between the histologies and apply the Acute/Chronic rules: M8-M13 to determine if they need to be a single or multiple primaries. Also added for transformations is a "transformation from" field. This is for the acute neoplasms. The addition of this field did not change any rules but was added to assist registrars in determining acute and chronic neoplasms.

- a. Specific M rules referred in this document are from the 2014 edition of the Hematopoietic and Lymphoid Neoplasm Coding Manual.
- b. If time permits, review of the histologies listed below that have either additions or deletions should be performed to identify if there is mention of the other histology. If there is, then Rules M8-M13 (2014 manual edition) need to be reviewed to determine if it is a single vs. multiple primary. These changes were either based on additional review of the 2008 WHO Hematopoietic book or correspondence with subject matters experts (pathologists and hematologists).
- c. For the histologies that had 9861/3 (Acute Myeloid Leukemia, NOS) listed as a transformation, the additional AML histologies were also added as transformations: 9865/3, 9866/3, 9867/3, 9869/3, 9871/3, 9872/3, 9873/3, 9874/3, 9895/3, 9896/3, 9897/3, 9911/3.

Table 2: Transformations (Note: Only those histologies that had changes are in this table)

Histology(ies)	Addition	Deletion	Comments
9651/3, 9653/3	9680/3		See Malignant Transformations, 1.a
9671/3	9650/3, 9651/3, 9652/3, 9655/3, 9659/3, 9663/3		See Malignant Transformations, 1.a
9675/3 [OBS]	9680/3		Referred to code 9690/3 transforms to DLBCL (9680/3)
9700/3		9591/3, 9597/3, 9670/3, 9671/3, 9673/3, 9678/3, 9679/3, 9680/3, 9684/3, 9687/3-9689/3, 9690/3, 9691/3, 9695/3, 9698/3, 9699/3,	Further review of 2008 WHO Hematopoietic book confirmed that Mycosis Fungoides (9700/3) has no transformations. For the histologies listed in the deletion column, these may have been assigned using

Histology(ies)	Addition	Deletion	Comments
		9702/3, 9705/3, 9708/3, 9709/3, 9712/3, 9714/3, 9716/3-9719/3, 9725/3-9729/3, 9735/3, 9737/3, 9738/3, 9764/3, 9811/3-9818/3, 9823/3, 9827/3, 9835/3, 9837/3, 9967/3	Rules M8-M13 where a single primary was determined and overrode the Mycosis Fungoides. Review of these histologies to determine if Mycosis Fungoides was also present is suggested. If Mycosis is present, this would automatically be a second primary per Rule M15.
9731/3	9732/3	9831/3	9831/3 was added in error
9762/3	9680/3	9732/3	9732/3 was added in error. 9680/3 was added as a transformation, but only for the alpha heavy chain disease component of 9762/3. See abstractor notes
9823/3		9732/3	9732/3 was added in error
9840/3		Refractory anemia	The "refractory anemia" was added in error.
9867/3		Transformation from CMML	The "transformation from CMML" was added in error.
9875/3	AML Histologies	9930/3	See Malignant Transformations, 1.b; 9930/3 was added in error
9920/3	AML Histologies		See Malignant Transformations, 1.b
9940/3	9680/3		See Malignant Transformations, 1.a
9945/3	AML Histologies		See Malignant Transformations, 1.b
9946/3	AML Histologies	"AML"	See Malignant Transformations, 1.a

Histology(ies)	Addition	Deletion	Comments
9950/3	AML Histologies		See Malignant Transformations, 1.b
9960/3		9687/3, 9733/3, 9742/3, 9805/3- 9809/3, 9811/3-9818/3, 9827/3, 9834/3, 9835/3, 9840/3	See explanation in Same Primaries 1.c
9961/3	AML Histologies	9811/3-9818/3, 9962/3	See Malignant Transformations, 1.a
9962/3	AML Histologies	9930/3	See Malignant Transformations, 1.a and 1.b
9964/3	AML Histologies		See Malignant Transformations, 1.b
9965/3		9861/3	See Malignant Transformations, 1.a
9967/3		9806/3-9809/3, 9811/3-9818/3, 9861/3, 9930/3	See Malignant Transformations, 1.a
9971/3		9591/3, 9597/3, 9670/3, 9671/3, 9673/3, 9678/3, 9678-9680/3, 9684/3, 9687/3-9691/3, 9695/3, 9698/3, 9699/3, 9702/3, 9705/3, 9708/3, 9709/3, 9712/3, 9714/3, 9716/3-9719/3, 9725/3-9729/3, 9735/3, 9737/3, 9738/3, 9764/3, 9811/3-9818/3, 9823/3, 9827/3, 9835/3, 9837/3, 9967/3	See Malignant Transformations, 1.a
9975/3	9861/3, 9865/3-9867/3, 9869/3, 9871/3-9874/3,		See Malignant Transformations, 1.a

Histology(ies)	Addition	Deletion	Comments
	9895/3-9897/3		
9980/3, 9982/3, 9983/3-9987/3, 9989/3, 9992/3	AML Histologies		See Malignant Transformations, 1.b

3. CHANGES IN REPORTABILITY

- a. Plasma Cell Neoplasm: This was not listed in the 2010 edition of the manual but was added in the 2012 edition of the manual and database and was removed in the 2014 edition of the manual and the database. Plasma cell neoplasm is an umbrella term for various diseases, some reportable others not reportable. If collected, morpholology would have been assigned as 9731/4 or 9734/3. Suggest review of these records to see if these were collected based on "plasma cell neoplasm." If further studies or workup diagnosed a reportable diagnosis, then that case is maintained in the database.
- b. Plasma Cell Neoplasm has been added to the non-reportable list.

4. OTHER CHANGES TO DATABASE: Note these changes have been done since the January release. They do not affect the collection of data.

- a. Modifications to the database are now allowing date ranges to be added for the fields. For histologies that are effective 2001 and forward, the year 2010 was entered as the start year for the fields listed below. An additional message of "Not applicable for cases diagnosed prior to 2010," was added for years 2001-2009. (Note: For the histologies that are effective 2010 and forward, it was not necessary to put this information in since no data is available for the disease prior to 2010. For the histologies that are effective for only 2001-2009, the current information was not changed.)
 - i. Immunophenotyping
 - ii. Genetics
 - iii. Definitive diagnostic methods
 - iv. Module Rule
 - v. Missing primary site (Note: The message for 2001-2009 is "See Abstractor Notes.")
 - vi. Transformations to
 - vii. Transformations from
- b. The "Help me dx for year," field has been updated.
 - i. For those histologies that were obsolete as of 2010, only the years 2001-2009 will be available.
 - ii. For those histologies that were effective 2010, only the years 2010 and forward will be available.
 - iii. All other histologies will be available for 2001 and forward.