

Office of Compensation Analysis and Support Program Evaluation Report	Document Number: OCAS-PER-009 Effective Date: 03/8/2007 Revision No. 0
Target organs for lymphoma	Page 1 of 2
Author: _____ Signature on file _____ David Allen, Dose Reconstruction Team Leader	Date: <u>03/08/2007</u>
Approval: _____ Signature on file _____ J.W. Neton, Associate Director for Science	Date: <u>03/08/2007</u>
	Supersedes: None

ISSUE AUTHORIZATION DATE	EFFECTIVE DATE	REV. NO.	DESCRIPTION
3/8/2007	3/8/2007	0	New document to change target organs for lymphoma.

1.0 Description

In February, 2006, OCAS determined that the internal and external dosimetry target organs used for several forms of lymphoma should be changed. The detailed rationale for this decision is described in OCAS-TIB-012. The change resulted from a detailed investigation by OCAS of the etiology of lymphoma.

2.0 Evaluation

The issuance of OCAS-TIB-012 changed the internal target organ for most forms of non-Hodgkin's lymphoma and some other forms of lymphoma (primarily in the 200 – 202 ICD series) from the highest non-metabolic organ (HNMO) or remainder to the thoracic lymph nodes (LN(TH)). The calculated internal doses in these cases are almost invariably higher, resulting in a higher probability of causation.

In addition, the external target organ was changed from bone marrow to various other organs (stomach, spleen, thyroid, lung, bladder, etc.), for most forms of lymphoma, as described in OCAS-TIB-012. Because the organ-specific dose conversion factors (DCFs) are lower for red bone marrow than for most other organs, this change also results in an increase in organ dose, and the resulting probability of causation.

3.0 Resolution/Corrective Action

Guidance on target organ selection for lymphoma is given in two documents: (1) OCAS-TIB-012, and (2) ORAUT-OTIB-005. OCAS-TIB-012 Rev. 0 was issued on August 15, 2005. Subsequent to issuance of that revision, further changes were made to the lymphoma target organs, and these changes were reflected in Rev. 1, issued on February 10, 2006. At the same time, ORAUT-OTIB-005 Rev. 2 PC-1 was issued to reflect the target organ selection as directed by OCAS-TIB-012 Rev. 1. All lymphoma dose reconstructions completed after approximately February 10, 2006 use the current target organ selections.

A query of the NOCTS database was conducted to identify previously completed lymphoma claims with a probability of causation <50% which could be affected by this change. That query identified 528 such claims. Since the process was expected to take several months to complete, a Program Evaluation Plan was issued on 12/8/2006 to describe the issue and the plan to evaluate the individual claims. This plan required each of the 528 claims to be re-evaluated using the dose reconstruction methods current at the time of the re-evaluation.

4.0 Conclusion

This report is issued indicating a resolution to each of the 528 claims re-evaluated. Of the 528 claims, 23 had been returned to NIOSH for rework for various reasons. These claims were updated using the current dose reconstruction methods so no evaluation under this PER was necessary. Five claims have no current method of dose reconstruction. NIOSH will ask that these claims be returned for rework based on the revision to the lymphoma target organ. Of the remaining 500 claims, 152 claims were found to now result in a probability of causation of greater than 50% while the remaining 348 claims resulted in the probability of causation remaining below 50%.

5.0 References

- 1) National Institute for Occupational Safety and Health, Office of Compensation Analysis and Support, *External Dose Reconstruction Implementation Guideline*, OCAS-TIB-012, Rev 1, (February, 10, 2006).
- 2) ORAU Team, Technical Information Bulletin: IMBA Organ, External Dosimetry Organ, and IREP Model Selection by ICD-9 Code, ORAUT-OTIB-0005 Rev 02 PC-1 (02/10/2006).