Table 2a: Codes for automated conversion from ICD-O-3 to ICD-10 (lymphoma, plasma cell neoplasm and immunoproliferative diseases)

*Topography codes C00-C41, C42.2, C43-C76, C80
** Topography codes C42.0, C42.1, C42.3, C42.4, C77
*** For international use, C90.3 (Solitary plasmacytoma) might be considered

ICD-O-3 to ICD-10 conversion for hemato-oncological diseases

1 German Centre for Cancer Registry Data, Robert Koch Institute, Berlin; 2 Cancer Registry of Schleswig-Holstein; 3 Cancer Registry of Hessen; 4 Cancer Registry of Hamburg; 5 Tumor Centre Regensburg; 6 University Clinic Erlangen, Dep. of Hematology and Oncology

METHODS. Main purpose was to ensure the best possible automated conversion of ICD-O-3 codes to the updated version for all hemato-oncological cases diagnosed until 2010, by making use of the typically more specific ICD-O-3 information. Therefore, we developed a new conversion table from ICD-O-3 to ICD-10 for ICD-O-3 morphology codes (1999 onwards). Additionally, we developed a new ICD-O-3 codes introduced in 2011 were provided. For the first draft of the conversion table, we used a systematic approach using a hierarchical structure of criteria, mainly based on synonym terms given in both classifications and additional information from the WHO Classification of tumours of Haematopoetic and Lymphoid Tissues.

RESULTS. All conversions are given in table 2. When applied to the pooled data of German cancer registries (2006-2010), 18% of hemato-oncological cases ICD-O-3 codes changed on the 4-digit, and 6% on the 3-digit level. Changes between major diagnostic groups (1:3%) or between C- and D-codes (0.2%) were nearly half of the 3-digit changes originated from the conversion of 9495/3 (marginal zone-B-cell-lymphoma n.o.s.) to C83.0 or C88.4 (depending on localization) instead of C82.7.

DISCUSSION. For a number of ICD-O-3 codes, no 1:1 conversion to ICD-10 was possible, and while we supply a reasonable solution for automated conversion, more accurate ICD-10 codes could be found when going back to diagnostic/pathologic reports. Some diagnostic terms are only used either in ICD-O-3 or ICD-10, which made conversion difficult and sometimes required arbitrary decisions. For Myeloma, the conversion was done with respect to common practice in Germany where ‘Plasmacytoma’ is often used as the more generic term (instead of Myeloma).

CONCLUSIONS. Despite limited impact on the data, we suggest the use of our conversion table (ICD-O-3 to ICD-10) for hemato-oncological diseases in population based cancer registries, especially for analyzing time trends according to ICD-10. The complete conversion table in electronic form can be ordered from our website (comments and suggestions welcome). For the future (ICD-11), an improved coordination between ICD and ICD-O working groups regarding hemato-oncological diseases is highly desirable.

Table 2b: Codes for automated conversion from ICD-O-3 to ICD-10 (hodgkin and non-hodgkin immunoproliferative disease)

**Topography codes C00-C41, C42.2, C43-C76, C80
** Topography codes C42.0, C42.1, C42.3, C42.4, C77
*** For international use, C90.3 (Solitary plasmacytoma) might be considered

ICD-O-3 to ICD-10 conversion for hemato-oncological diseases following recent updates in both classifications

Klaus Kräuwinkel 1, Nina Buttmann-Schweiger 2, Miriam Holzmann 3, Kirsten Schülke 4, Annie Funk 4, Doris Weinberger 4, Stefan W. Krause 6

1 German Centre for Cancer Registry Data, Robert Koch Institute, Berlin; 2 Cancer Registry of Schleswig-Holstein; 3 Cancer Registry of Hessen; 4 Cancer Registry of Hamburg; 5 Tumor Centre Regensburg; 6 University Clinic Erlangen, Dep. of Hematology and Oncology

BACKGROUND. The major update of WHO-ICD classification introduced in 2010 resulted in substantial changes for hemato-oncological diseases by introducing a new 3-digit (C86) and several new 4-digit codes and terms. For a substantial number of codes an unambiguous (1:1) conversion within ICD-10 seemed impossible. Furthermore the conversion programs provided by IARC (ICD-O-3 to ICD-10) could no longer be used for these diagnoses.