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# **Proceedings**

## SY10.06 | Standardization

TYPING, GRADING, STAGING - THE ULTIMATE GOALS OF PATHOLOGY REPORTS MODELLED IN HL7V3/CDA

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### Introduction/ Background

Clinicians want pathologists to provide their reports fast, understandable, and useable for clinical decision making. Reports without a concise diagnostic conclusion in terms of typing, grading and staging of a disease are of low value. Therefore Anatomic Pathology Structured Reports (APSR) should have those keystones also reflected.

#### Aims

Instead to define very long lists with specific TNM-formulas, grading values, and tumor classifications information models have been developed which allow a flexible use in the diagnostic reporting approach and a compact programming.

## Methods

Exemplarily for any diagnostic conclusion a model for TNM- as well as ICD-O-classification of malignant tumors for HL7 reporting to cancer registries in Germany was modified and completed with codes and value sets by means of Art-Decor. Additionally, an assessment score model was developed applicable for a wide variety of grading systems used in neoplastic as well as non-neoplastic diseases. ART-DECOR is a toolkit allowing for maintaining information models designated to data exchange facilitating communication standards.

## Results

An information model for TNM as well as ICD-O-classification of malignant tumors for reporting to cancer registries in Germany supporting the required data set was developed and filled with appropriate codes and value sets by means of ART-DECOR. The IHE APSR Trial implementation with its templates and value sets was mirrored in ART-DECOR and completed by templates for TNM-, ICD-O-3 and Assessment-Scores, based on the German HL7 Oncology Reporting requirements. A model based approach for structured reporting of complex problems is the preferred approach instead of exhaustive lists of permutated single values.

### **Conclusion:**

The developed templates are to be used as entries in the Diagnostic Conclusion section of IHE APSR allowing for a structured data exchange so that automatic clinical decision support is maximized.