Coding Issues Arising Under The Cancer Registration Act

CoReDay 11, Zurich, the 5th of November

Coding Issues Arising Under The Cancer Registration Act

Refreshing

Swiss Coding HandBook SCHB

- **July 2019** — **SCHB general part (A, B, C)- prefinal**
  CHOP migration concept - prefinal

- **December 2019** — **SCHB general part (A, B, C) – FINAL**
  Site- chapters (B, P, C, L, H) - FINAL
  CHOP migration concept – FINAL
  all in FR, IT, DE

Refreshing
Notifiable Forms of Cancer

according to Annex 1 of the cancer registration ordinance – CRO

- **Malignant neoplasms**
  - **C00–C97, except basal cell carcinoma**
- **Carcinoma in situ**
  - **D00–D09**
- **Benign neoplasms**
  - **D32, D33, D35.2 (meninges, brain, pituitary gland)**
- **Neoplasms of uncertain or unknown behavior**
  - **D37–D48, except MGUS**

Notifiable Diagnoses from 1.1.2020
NEW entities ?

- **Malignant neoplasms**
  - **C00–C97, except basal cell carcinoma**

NO NEW entities

Notifiable Diagnoses from 1.1.2020
NEW entities (adults):

- **D00–D09: In situ neoplasms /2**

(exception: D01.0-2, D03, D05, D06, D01.0-2)

1. **D00 Oral cavity, oesophagus and stomach**
   a. **D00.0 Lip, oral cavity and pharynx**
   b. **D00.1 Oesophagus**
   c. **D00.2 Stomach**
2. **D01 Other and unspecified dig. Organs**
   a. **D01.3 Anus and anal canal**
   b. **D01.4 Other and unspecified parts of intestine**
   c. **D01.5-7 Liver, others**
3. **Etc...**

Notifiable Diagnoses from 1.1.2020
NEW entities ? (adults)

- **Benign neoplasms**
  - **D32, D33, D35.2 (meninges, brain, pituitary gland)**

NO NEW entities

Notifiable Diagnoses from 1.1.2020
NEW entities (adults):

- **Neoplasms of uncertain or unknown behaviour**

  D37–D48: (exception: D42-43 cerebr. meninges, brain, cns)

  1. **D37** oral cavity and digestive organs
  2. **D38** middle ear, respiratory and intrathoracic organs
  3. **D39** female genital organs
  4. **D40** male genital organs
  5. **D41** urinary organs (exception: D41.4 Bladder)
  6. **D44** endocrine glands
  7. **D45** polycythaemia vera
  8. **D46** myelodysplastic syndromes
  9. **D47** other HM (exception: MGUS)
  10. **D48** others

Notifiable Diagnoses
ISSUE 1

- **Malignant neoplasms C00–C97, except basal cell carcinoma**

- **Basal cell carcinoma (including Compound morphologies like Basosquamous carcinoma of the skin (ICD-O 3.1: 8094/3)) will be fully excluded: 809-811**

- **Premalignant neoplasms D00–D09: Actinic keratosis - ?**

Notifiable Diagnoses
ISSUE 2

- Actinic keratosis (AK) is precursor for SCC of skin
- AK behaviour:
  - benign acc. to ICD-O-3.2: 8070/0
  - can be changed to /1 or /2 (ICD-ORule F: pathologist has final say)
- AK grade I-II - ICD-10 category L57.0
- AK grade III - ICD-10 category D04.9
- AK - high incidence, but low rate of conversion to SCC:
  - AK annual incidence 4-5% (for comparison: Bowen 0.015% only)
  - AK to SCC annual conversion rate is 0.1 to 0.5%
- **Decision: Actinic keratosis will be excluded.**

Notifiable Diagnoses
ISSUE 3

- Premalignant neoplasms D00–D09: CIN2/3?
- Cervical intraepithelial neoplasia grade 3 (CIN3) – will be coded like CIS (carcinoma in situ)
- Info CIN3 vs CIS
  - CIN3 – D06, ICD-O-3.2: 8077/2 (High-grade squamous intraepithelial lesion)
  - CIN3 - precursor lesion for SCC (squamous cell carcinoma) of the uterine cervix
  - CIS - includes AIS (adenocarcinoma in situ)
- Cervical intraepithelial neoplasia CIN2 – ?

Notifiable Diagnoses
ISSUE 3

- Cervical intraepithelial neoplasia grade 2 (CIN2)
- Info CIN2:
  - CIN2 - N87.1, ICD-O-3.2: 8077/2 (squamous intraepithelial neoplasia grade II)
  - CIN2 - 20% progression rate to CIN3
  - CIN2 – suspected to be a mix of biological CIN1 and CIN3 (Blue Book last edition)
  - CIN2 – difficult to distinguish HSIL(CIN 2) from HSIL(CIN 3)
  - Decision: registration of CIN2 – not mandatory

Refreshing
Notifiable Data

- **Details of the diagnosis**
  - **Investigation method**
    - **Cytology, histology, imaging, autopsy, etc.**
  - **Reason for investigation**
    - **Clinical symptoms, org/opp. screening, incidental discovery, etc.**
  - **progression**
    transformation
    metastases
    relapses
    - **Date and localisation**

Refreshing
Notifiable Data

- **Details of initial treatment**
  - **Type of treatments**
    - **e.g. CHOP code for surgery, chemotherapy, radiotherapy, hormone therapy, etc. Treatment schedule (adjuvant, neoadjuvant)**
  - **Goal of treatment**
    - **Curative, palliative, etc.**
  - **Basis for treatment decision**
    - **tumour board yes/no (date), other decision process (details, date)**
  - **Start of treatment**
    - **Date**

Refreshing
Notifiable Data

- **Supplementary data**

For bowel (C18–C20)
breast (C50)
prostate (C61)

- **Predispositions**
- **Concomitant diseases**

Swiss Coding Handbook

General Coding Issues

General Coding Issues
Data consolidation - "Best-of" rules I

Problem:

- **different data on the same case**
- **contradictory data – a special challenge**
- **queries to info-provider may be unavoidable**
  - **weighting of the sources for resource reasons?**

Solution: select the best information as "best-of" summary

General rules:

- **experience with the reporting quality of certain notifiers?**
- **plausibility with other parts of information?**
- **pathologist`s statements have generally more weight**
- **the further the process of diagnostics/therapy, the more accurate data**

General Coding Issues
Data consolidation - "Best-of" rules II

Problem:

- different data on the same case
- contradictions are a special challengeng each other
- queries to info-provider may be unavoidable
  - weighting of the sources for resource reasons?

Solution: select the best information as "best-of" summary:

General rules:

- experience with the reporting quality of certain notifiers?
- plausibility with other parts of information?
- pathologist`s statements have generally more weight
- the further the process of diagnostics/therapy, the more accurate data

General Coding Issues
Data consolidation - "Best-of" rules III

Problem:

- different data on the same case
- contradictions are a special challengeng each other
- queries to info-provider may be unavoidable –
  - weighting of the sources for resource reasons?

Solution: select the best information as "best-of" summary:

Special rules:

- Incidence date – use ENCR ID rules
- Contradictory DS date: the later date may be revised DS
- For DS change in most cancers – use AJCC staging rules (4 mo)
- For DS change in HM - use ENCR Haema rules
- Contradictory DS findings – use ENCR BoD rules
- For histo-findings: code more specific histology
- Use ICD-O- coding rules A-B-C (ill-defined, overlapping) etc.
- OR: queries to reporters

Refreshing

Notifiable Data

- **Details of the diagnosis**

• Nature, type and properties of the tumour	➢ tumour morphology, topography, behavior, grade (ICD-O)
• tumour spread	➢ cTNM, pTNM, clinical/pathological tumour size, lymphatic, venous, perineural invasion, affected lymph nodes, distant metastases, stage
• Specific diagnostic information	➢ Molecular, cytogenetic information, hormone receptors, etc.

VARIABLES FOR BASIS DATA

Diagnostics

Method of First Detection

(Verfahren zum Erstnachweis / Méthode de Première Détection)

Code	Label	Description
1	Clinical symptoms	Clinical symptoms related to the tumour.
2	Incidental discovery	Diagnosis on the occasion of surveillance/treatment for another disease, incl. tumour aftercare for a previous primary tumour, routine medical consultation/routine check-up, surgery.
3	Organised screening program	Screening programmes organized at national or regional level, with an explicit policy, that includes several essential elements from target population to treatment. Screening refers to a targeted examination/search for an asymptomatic tumour.
4	Opportunistic screening	Screening outside an organized or population-based screening programme, as a result of, for example, a recommendation made during a routine medical consultation/check-up for the woman, on the basis of a possibly increased risk for developing cervical cancer or by self-referral. Screening refers to a targeted examination/search for an asymptomatic tumour.
5	Self-examination	Use this code if it is known that the chain of events leading to a diagnosis of cancer was a self-exam by the patient (e.g. a lump in the breasts, or a skin lesion).
6	Death with autopsy	Cancer diagnosed after death.
7	Death without autopsy	Cancer diagnosed after death.
8	Other	
9	Unknown	Not stated / Not assessed.

Most Valid Basis Of Diagnosis

(Valideste Diagnosegrundlage / Base du Diagnostic la plus fiable)

Code	Label	Description
0	Death Certificate Only	The only information to the registry is from a death certificate.
1	Clinical	Diagnosis made before death without diagnostic methods 2 to 7.
2	Clinical investigation	Clinical methods such as endoscopy, exploratory surgery and autopsy, without tissue diagnosis.
3	Imaging	Radiology and other imaging techniques without microscopic confirmation. Code 3 is not part of the ENCR recommendation or ICD-O. The quality of diagnostic imaging in some cases makes detailed differential diagnosis possible with a clinical impact equal to that of microscopic examination.
4	Specific tumour markers	Positive laboratory tests/marker studies.
5	Cytology	Positive cytology (fluid cells microscopically examined).
6	Histology of metastasis	Positive histology from a regional or distant metastasis (tissue microscopically examined).
7	Histology of primary tumour	Positive histology from the primary tumour (tissue microscopically examined).
9	Unknown	Basis of diagnosis not stated.

Most Valid Basis Of Diagnosis

(Valideste Diagnosegrundlage / Base du Diagnostic la plus fiable)

Comment to category 6 of the variable "Most Valid Basis Of Diagnosis":

- **«6 Histology of Metastasis» refers not only to distant, but also to regional metastasis**

- **"If, for example, a tumour is reported as being clinically a primary carcinoma of the lung and the diagnosis is supported by microscopic examination of mediastinal lymph nodes showing metastatic squamous-cell cancer, it should be coded as T-162.9 lung (*ICD-O-1*), M-8070/1/3 (squamous-cell carcinoma). The Basis of diagnosis code would in this instance be 6, i.e., histology of metastasis."(IARC Sci Publ. 1991;(95):108-25. *Cancer registration*: *principles* and methods. Reporting of results. Jensen OM et al.)**

Diagnostic Institutions
(Diagnoseinstitutionen/ Institution(s) communiquant le diagnostic)

- allows providing data quality feedback to those institutions requesting it
- allows regional and national statistical reports on the relative contribution of different types of institutions to diagnosing cancer
- cancer registries update official addresses of all responsible hospital units submitting cancer information
- multiple persons or institutions may optionally be registered per diagnosis
- source: national uniform lists of health service providers:

https://www.bag.admin.ch/bag/de/home/zahlen-und-statistiken/zahlen-fakten-zu-spitaelern/spital-suchen.exturl.html/aHR0cDovL3d3dy5iYWctYW53LmFkbWluLmNoLzIwMTZfdGFnbG/FiLzIwMTZfc3BpdGFsc3RhdGlzdGlrL3BvcnRhbF9kZS5waHA_/cD1tYXBrdCZsYW5nPWRl.html.

VARIABLES FOR BASIS DATA

Classification Systems (ICD, ICD-O)

Morphology

Associated in situ tumour
(Assoziiertes In-situ-Karzinom / Tumeur in situ associée)

- simultaneous occurrence of non-invasive (in situ) and invasive tumour components
- in situ and invasive components in the same morphology group - 1 case
  - incidence date of the invasive tumour
- in situ and invasive components in different morphology groups - separate cases
  - incidence dates individual for each case

GRADING FOR NON-INVASIVE NEOPLASMS

Nuclear grading for non-invasive carcinoma can be encoded, but is not mandatory.

- **Decision based on recommendations of Bluebook and ICD-O Editors Holger Moch and Brian Rous**
- **See also TUaREG discussion on case ID 35**

VARIABLES FOR BASIS DATA

Stage, Grading

y-Prefix of cTNM

Time of TNM assignment relative to therapy:

- **<u>following</u> initial (neoadjuvant) treatment as part of the first treatment (radio-, chemo-, hormonal therapy)**
- **can deviate from T, N, and M classifications at the time of diagnosis complex**

y-Prefix of pTNM

Pathological Tumour size based on post-surgical assessment:

- **neoadjuvant radio- and/or chemotherapy prior to surgery, no vital cells in resected specimen:**
  - **Staging after surgery ypT0N0M0**
- **neoadjuvant radio- and/or chemotherapy prior to surgery, in-situ tumour in resected specimen:**
  - **Staging after surgery ypT0N0M0, with in-situ component**

cM / pM –Category

- cMx and pMx no longer valid
- pM0 for autopsy only
- suspected lesion (e.g. CT, MRI) – code M0, not M1
- cM0 and pM1 - results in M1
- cM+ and pM0 - results in M0
- lymphangiosis carcinomatosa in distant site – pM1! (e.g. PC metastases in lung)
- positive cytology from the peritoneal cavity - M1! (except of primary ovarian tumours)
- Missing M – M0! (unless T4, N+)

TNM Stage Grouping

- For purposes of tabulation and analysis, it is useful to condense the anatomical extent of disease categories T, N, and M into groups.
- Non-invasive neoplasms are always stage 0
- Cases with distant metastasis - almost always stage IV
- The stage grouping can only be applied based on a cTNM or pTNM, or on a combination of clinical and pathological findings (e.g. pT, pN and cM or pT, cN and cM or cT, pN and pM).
- If available, pathological classifications have priority for stage grouping (except after neoadjuvant therapy).

synchronous/metachronous tumours

For tumours of same histology group – we follow AJCC 8 Cancer Staging Manual, Principles of Cancer Staging (p. 27), in deviation from TNM Supplement

Timing for synchronous cancers

Cancers in the same organ (including paired) that are

- **identified with a diagnosis date ≤4 months apart,**

or that are

- **identified at the time of surgery for the first cancer if that surgery is part of the planned first course of therapy (even if >4 months after primary diagnosis)**

synchronous/metachronous metastases

- **Metastases defined during the relevant time frame/staging window are classified as metastases (cM1/pM1) and are considered synchronous with diagnosis of the primary cancer.**

- **Metastases detected after the relevant time frame/staging window are not included in the initial staging and generally are considered recurrent cancer.**

Clinical tumour Size
(Klinische Tumorgrösse / Taille de la Tumeur à l'Examen Clinique)

- **Measures the largest preoperative dimension or the largest diameter of the tumour in mm.**

- **Note: pathological tumour size (tumour diameter in the surgical specimen) has priority over preoperative (clinical) dimensions, unless neoadjuvant therapy has been performed prior to surgical treatment (in such cases the clinically determined tumour diameter has priority).**

Pathological tumour Size
(Pathologische tumourgrösse / Taille de la Tumeur Pathologique)

- **The maximum measured, microscopically confirmed dimension or the largest diameter of the completely resected tumour in mm.**
- **Microscopically determined diameter of an R0 resected tumour takes precedence over macroscopic measurement of the lesion in the surgical specimen.**
- **See also decision on TuaREG Case ID 11 (C50 Morphology and tumour Size).**
- **It is sufficient to register the largest tumour diameter if multiple lesions**

VARIABLES FOR BASIS DATA

PROSTATE CANCER:

Tumour-Related Prognostic Factors

Gleason Biopsy Most Common Grade

(Gleason Biospie Häufigster Grad / Biopsie : Grade de Gleason le Plus Courant)

- **Gleason Score - worldwide established grading system for PC**
- **represents degree of de-differentiation of prostate tissue**
- **allowing histological evaluation (grading) of prostate neoplasias.**
- **Gleason grade of the most common pattern (primary pattern) in biopsy-diagnosed prostate cancer.**

Code	Label	Description
1	Gleason grade 1	Well differentiated tissue.
2	Gleason grade 2	Well / moderately differentiated tissue.
3	Gleason grade 3	Moderately differentiated tissue.
4	Gleason grade 4	Poorly differentiated tissue.
5	Gleason grade 5	Undifferentiated/Anaplastic tissue.

Gleason Biopsy Second Most Common or Highest Grade

(Gleason Biopsie Zweithäufigster oder Höchster Grad / Biopsie : Deuxième Grade de Gleason le Plus Courant ou le Plus Elevé)

Gleason grade of the second most common pattern (secondary pattern)

or

the pattern with the highest Gleason grade in biopsy-diagnosed prostate cancer, if the tumour has more than two histologic patterns

Code	Label	Description
1	Gleason grade 1	Well differentiated tissue.
2	Gleason grade 2	Well / moderately differentiated tissue.
3	Gleason grade 3	Moderately differentiated tissue.
4	Gleason grade 4	Poorly differentiated tissue.
5	Gleason grade 5	Undifferentiated/Anaplastic tissue.

Gleason Biopsy Second Most Common or Highest Grade
(Gleason Biopsie Zweithäufigster oder Höchster Grad / Biopsie : Deuxième Grade de Gleason le Plus Courant ou le Plus Elevé)

- The definition of the secondary pattern differs for punch biopsies and other preparations.
- In punch biopsy, the secondary pattern is the highest Gleason grade (but only if the worst Gleason pattern is "worse" than the primary pattern).
- For the resected prostate tissue - see next slides “Gleason excision second most common or highest grade”.

Gleason Excision Most Common Grade

(Gleason Exzision Häufigster Grad / Résection: Grade de Gleason le plus Courant)

- **Gleason grade of the most frequent histological pattern in resected prostate cancer.**

Code	Label	Description
1	Gleason grade 1	Well differentiated tissue.
2	Gleason grade 2	Well / moderately differentiated tissue.
3	Gleason grade 3	Moderately differentiated tissue.
4	Gleason grade 4	Poorly differentiated tissue.
5	Gleason grade 5	Undifferentiated/Anaplastic tissue.

Gleason Excision Second Most Common or Highest Grade
(Gleason Exzision Zweithäufigster oder höchster Grad / Résection: Deuxième Grade de Gleason le plus Courant ou le plus Elevé)

- **Gleason grade of the second most common pattern or the pattern with the highest Gleason grade in prostate cancer.**
- **In prostatectomy and transurethral resectates, the secondary pattern is the second most common pattern.**

Code	Label	Description
1	Gleason grade 1	Well differentiated tissue.
2	Gleason grade 2	Well / moderately differentiated tissue.
3	Gleason grade 3	Moderately differentiated tissue.
4	Gleason grade 4	Poorly differentiated tissue.
5	Gleason grade 5	Undifferentiated/Anaplastic tissue.

Gleason Score (1)
(Gleason-Score / Score de Gleason)

- **the Gleason degree with the most frequent pattern (primary pattern) plus the one with the second most frequent pattern (secondary pattern) if two available**

or

- **the pattern with the highest Gleason grade if the tumour has more than two histologic patterns.**

Gleason Score (2)
(Gleason-Score / Score de Gleason)

Code	Label	Description
2	1+1	1+1 (no longer assigned on biopsy, only rarely on other specimens).
3	2+1	2+1 (no longer assigned on biopsy, only rarely on other specimens).
4	2+2	2+2 (no longer assigned on biopsy, only rarely on other specimens).
5	3+2, 2+3	3+2, 2+3 (no longer assigned on biopsy, only rarely on other specimens).
6	3+3	3+3 (in practice the lowest score).
7	3+4, 4+3	3+4, 4+3
8	4+4, 3+5, 5+3	4+4, 3+5, 5+3
9	5+4, 4+5	5+4, 4+5
10	5+5	5+5
99	Unknown	

Gleason Grade Groups

Code	Label	Description
1	Grade group 1	Gleason score ≤ 6 (≤ 3+3). Only individual discrete well-formed glands.
2	Grade group 2	Gleason score 7 (3 + 4). Predominantly well-formed glands with lesser component of poorly formed/fused/cribriform glands.
3	Grade group 3	Gleason score 7 (4 + 3). Predominantly poorly formed/ fused/cribriform glands with lesser component of well-formed glands.
4	Grade group 4	Gleason score 8 (4 + 4 or 3 + 5 or 5 + 3). - Only poorly formed/fused/cribriform glands or - Predominantly well-formed glands and lesser component lacking glands - Predominantly lacking glands and lesser component of well-formed glands.
5	Grade group 5	Gleason score 9-10. Lack of gland formation (or with necrosis) with or without poorly formed/fused/cribriform glands.
9	Unknown	Not stated / Not assessed.

VARIABLES FOR BASIS DATA

TREATMENT: Treatment-Related Predictive Factors

In-situ Residual tumour Tissue

(Residuales In-situ Karzinom / Tumeur in situ résiduelle)

- Absence or presence of in situ tumour after treatment
- R-classification can be applied after surgery alone, radio – or chemotherapy alone, or after multimodal therapy.
- Regional /distant post-TX metastases to be considered.

- Example: Invasive breast carcinoma with associated in situ component; OP completed without a tumour visible at specimen edges. Histology shows:
  - a) Invasive carcinoma at the resection margin:
    - R1 for residual invasive tumour
  - b) Invasive carcinoma completely removed, but associated in situ component at the resection margin:
    - R1 for in-situ residual tumour.

VARIABLES FOR BASIS DATA

FIRST TREATMENT COMPLEX

Coding of Treatment Procedures According to CHOP Classification

- **CHOP (Swiss Operation and Treatment Procedures Systematics).**
- **Swiss hospitals - CHOP coding for all inpatient Tx mandatory.**
- **For cancer registration, additional CR-own codes are created for procedures that are not described in the CHOP system.**
- **CHOP concept with mapping tables for old Tx with user rules - in appendix to SCHB.**

Coding of Treatment Procedures

- **Basis for treatment decision – tumour board!**
  - **In most cases, the decision for the first treatment complex is discussed and coordinated in multidisciplinary tumor boards.**
  - **Date of first tumourboard is sufficient (unless TB for diagnostic and not for treatment).**

- **Other decision process (e.g. single expert decision in "mild" routine cases)**

Treatment Coding Issues(1)

- **Wait and See - Active Surveillance and Watchful Waiting**
- **Active Surveillance means "wait and see" with potentially curative intent**
  - **PSA ≤ 10 ng/ml**
  - **T ≤ 2a**
  - **Gleason ≤ 6**

- **should be coded by combining the CHOP Code Z89.0A.09 Spezielle Verlaufskontrolle (des Patienten), sonstige, with the Code category Curative of the Variable «First treatment complex goals"**

Treatment Coding Issues (2)

- **Watch & Wait or Watchful Waiting: this means "wait and see" with potentially palliative intent**
  - **> 75 years**
  - **slow growing PCA**

- **should be coded by combining the CHOP Code Z89.0A.09 Spezielle Verlaufskontrolle (des Patienten), sonstige, with the Code category Palliative of the Variable «First treatment complex goals“**

Treatment Coding Issues (3)

- For "No therapy“ - CHOP-like code
  - 998 Nicht geplante Therapie (nur für Krebsregistrierung)
- For "Unknown«
  - 999 Unbekannt (nur für Krebsregistrierung)

- If additional codes on a cantonal level needed - negotiate first with your canton(s) and then with BIT or Omnisoftory to create additional codes.
- The canton-based additional information remains in your registry and is not part of the regular data submission to NACR for national monitoring or health reporting.

VARIABLES FOR BASIS DATA

COURSE OF DISEASE:

Progression/Recurrences/Transformations

Type of Event (1)
(Art des Ereignisses / Type d'événement)

Code	Label	Description
1	Progression	Locoregional# new findings without disease free intermission.
2	Transformation	The development of one ICD-O M term into another (for example, the change of a haematopoetic or lymphoid neoplasm from chronic to acute phase). In order to decide on haematological transformation event, adherence to the ENCR recommendation and Haemacare guideline, cited below, is mandatory.
3	Metastasis	New finding at a site distant to the primary tumour, i.e. metachronous metastasis. Either with or without disease free intermission.
4	Relapse	Locoregional# new findings after a period of documented disease free intermission or remission without detectable tumour.
9	Unknown	Insufficient information to differentiate between Progression and Relapse.

Type of Event (2)
(Art des Ereignisses / Type d'événement)

- If data provider defines a second tumour of any date /any location as recurrence and/or metastasis – to be recorded as a progression of the known, pre-diagnosed primary tumour

- Locoregional progression of the primary tumor with detection of new findings without disease-free interval since the time of primary diagnosis

- Locoregional refers to the same or adjacent site of the original tumor or regional lymph nodes. A list of the lymph nodes that are defined as regional lymph nodes for each cancer can be found in the TNM

Type of Event(3)
(Art des Ereignisses / Type d'événement)

- **first recurrence of the disease: locoregional new findings after a period of documented disease free intermission or remission without detectable tumour.**

- **If the attending physician defines a second tumour of any date and any location as recurrence and/or metastasis, this should be processed by the coder as according event of the known, pre-diagnosed primary tumour**

CASE DEFINITION

Multiple Primary tumours

Multiple Primary tumours (According to ENCR "Recommendations for Multiple Primary tumours 2004")

For registration (recording, data collection in the cancer registry; see also ENCR Multiple Primary 2004 rules) applies:

- **record all newly occurring tumours separately (unless reported as course of disease).**
  - **For analysis (incidence calculations, reports), these tumours are then summarized according to reporting rules.**
- **tumours of different histology groups according to Berg are always registered and coded separately.**
- **tumours of different laterality, even from the same histology group, are registered and coded separately (exception: ovarian tumours, Wilms' tumour and retinoblastoma).**

Examples

- **Different laterality, different histology group**: A melanoma shoulder right (C44.6, morphology: 8720/3,) and a squamous cell carcinoma upper arm left (C44.6, morphology: 8070/3) are registered and coded as **2 cases**.
- **Different laterality, same histology group**: a right femur (C44.7, morphology: 8070/3) and a left hip (C44.7, morphology: 8071/3) are also registered and coded as **2 cases**.
- **Different laterality, same histology group, multiple tumour foci per side**: Three skin cancers, two forearms right (C44.6, 8070/3 smaller and 8071/3 larger lesion) and one forearm left (C44.6, 8070/3) are also registered and coded as **2 cases**, one case on the right C44.6, 8071/3 (larger lesion, i.e. highest T category, see also variable "(m)-suffix at pT" in part B), and the other case link (C44.6, 8070/3).
- **Bilateral** retinoblastoma is registered and coded as **one case**.

Multiple Primary tumours (According to ENCR "Recommendations for Multiple Primary tumours 2004")

For C18, colon and C44, skin special registration rules apply additionally:

- **C18, Colon: tumour foci of the same histology group (Berg) on colon sections, with different topographic end codes (C18.1, ..., C18.9), are coded separately (one case per each fourth digit).**

Examples

- Two tumours, one colon ascendens C18.2, one colon sigmoideum C18.7, are registered and coded as **2 cases**.
- Four tumours, two colon ascendens C18.2, two colon transversum C18.4, are also registered and coded as **2 cases**.
- Four tumours, two hepatic flexure C18.3 (both 8140/3), two transverse colon C18.4 (8220/3 and 8140/3), are registered and coded as **3 cases.**

- The **same** applies to **C44, skin**.

COMMENTS ON THE VARIABLES OF THE SUPPLEMENTARY DATA

Disease Assessment

Hereditary Cancer Predisposition(s)
(Hereditäre Prädisposition / Prédisposition héréditaire)

The following hereditary syndromes are

- **clinically/statistically significant because:**
- **better known - better integrated into the practice routine**
- **or the lifetime risk of a malignant disease is very high (60-100%):**
  - **Familial or hereditary nonpolyposis colorectal cancer (HNPCC/Lynch syndrome)**
  - **Hereditary breast and ovarian cancer syndrome (HBOC)**
  - **Familial ovarian cancer**
  - **Hereditary breast cancer**
  - **Familial prostate cancer**
  - **Familial adenomatous polyposis**

Hereditary Cancer Predisposition(s)
(Hereditäre Prädisposition / Prédisposition héréditaire)

- **high lifetime risk of developing malignant diseases (60-100%) in following cases:**
  - **Familial or hereditary nonpolyposis colorectal cancer (HNPCC/Lynch syndrome)**
  - **Hereditary breast and ovarian cancer syndrome (HBOC)**
  - **Familial ovarian cancer**
  - **Hereditary breast cancer**
  - **Familial prostate cancer**
  - **Familial adenomatous polyposis**

Hereditary Cancer Predisposition(s)
(Hereditäre Prädisposition / Prédisposition héréditaire)

- **The rest are**
  - **very rare (<1:10 000) to**
  - **extremely rare (<1:100 000) entities,**
  - **less researched.**
- **do not occur or occur very rarely in a small country like Switzerland, examples:**
  - **Nijmegen breakage syndrome**
  - **Peutz-Jeghers syndrome**
  - **Saethre Chotzen syndrome etc.**

Hereditary Cancer Predisposition(s)
(Hereditäre Prädisposition / Prédisposition héréditaire)

- coding tip: only code reported confirmed diagnoses
- if no information provided – absence assumed
- do not query, unless obvious cases reported (e.g. for Nijmegen-Breakage-Syndrom: microcephaly /short stature /immunodeficiency mentioned in patient findings)

COMMENTS ON THE VARIABLES OF THE SUPPLEMENTARY DATA

Concomitant Diseases (Comorbidities)

COMORBIDITIES

- **Charlson Comorbidity Index - a widely used measure of comorbidity**
- **used to adjust outcome statistics for survival and others**
- **if no information provided – absence assumed**

References

- >Charlson ME, Pompei P, Ales KL, MacKenzie CR. A new method of classifying prognostic comorbidity in longitudinal studies: development and validation. J Chronic Dis 1987; 40(5):373-383.
- >Website Charlson Comorbidity Index (CCI): https://www.mdcalc.com/charlson-comorbidity-index-cci#evidence

- For each co-morbidity listed in the General chapter of the SCHB, the score level indicates the estimated impact of the pre-existing condition on patient survival.

CHOP TREATMENT CODING

CHOP TREATMENT CODING

USER RULES

- original CHOP coding rules very helpful
- E.g.: rule “X” "Exklusivum“:
  - in upper categories - helps to avoid searching codes in lower categories, thus saving time
- what can I promise:
  - Chemotherapy regimens March 2020
  - synonym list for <u>CHOP procedure descriptions</u> will be available – summer 2020

CHOP TREATMENT CODING

Example: CIN3/CIS: therapy standards best updated in S3 Guidelines

- **therapy standards for CIN3 in different populations (see attached guidelines for Management of Cervical Cancer Precursors)**
- **in most cases of CIN3 and CIS conisation and not curettage is a standard**
    - **CHOP Codes for conisation: Z67.2 bis Z67.3 Konisation der Zervix, … Kauterisation etc.**
- **Under certain circumstances the preferred treatment can vary as follows:**
    - **Young women: wait and see, in most cases conisation**
    - **Pregnant: wait and see (unless invasive cancer is identified, treatment is inacceptable)**
    - **Completed family planning: Hysterectomy**

Colorectal Cancer

Colorectal Cancer
Multiple Primary tumours (1)

- tumour foci of the same histology group (Berg) on colon sections, with different topographic end codes (C18.1, ..., C18.9) are
  - separately coded (one case per fourth digit)
  - not categorized as multifocal T(m)
  - give only one incidence.

(acc. To ENCR MPM 2004 recording rules).

Colorectal Cancer
Multiple Primary tumours (2)

Examples:

- **Two tumours, one colon ascendens C18.2, one colon sigmoideum C18.7, are classified as 2 cases (not as multifocal T(m)).**
- **Four tumours, two colon ascendens C18.2, two colon transversum C18.4, are also classified as 2 cases.**
- **Four tumours, two hepatic flexure C18.3 (both 8140/3), two transverse colon C18.4 (8041/3 and 8140/3), are classified as 3 cases.**

Colorectal Cancer
Multiple Primary tumours (3)

- Tumour foci of different histology groups (Berg)
  - to be classified separately (one case per fourth digit)
  - to be also counted separately as incidence (ENCR reporting rule).
- If localized in different colon sections at different times - separate cases to register
  - this is independent of the morphology

Colorectal Cancer
Multiple Primary tumours (4)

Example:

- **Carcinoma C. ascendens (C18.2) in 2008**
- **Carcinoma in the C. sigmoideum (C18.7) in 2011**
- **The case of 2011 is not a recurrence!**
- **A new case to be created!**

COLORECTAL CANCER

HISTOLOGY

Morphology lists acc. to ICD-O-3.2 - Precancerous lesions (1)

- **8148/2 Glanduläre intraepitheliale Neoplasie, hochgradig**
  High-grade intraepitheliale Dysplasie
- **8201/2 Cribriform carcinoma in situ (nicht in WHO-Klassifikation)**
- **8210/2 Adenocarcinoma in situ in adenomatösem Polypen**
- **8261/2 Adenocarcinoma in situ in villösem Adenom**
- **8263/2 Adenocarcinoma in situ in tubulovillösem Adenom**
- **8480/1 Niedriggradige muzinöse Neoplasie der Appendix, LAMN (C18.1)**

Morphology lists acc. to ICD-O-3.2 - Precancerous lesions (2)

Low Grade Mucinous Neoplasia (LAMN) of the Appendix

- **LAMN belongs to the group of mucinous adenocarcinomas**
- **ICD-10: D37**
- **ICD-O: C18.1**
- **Morphology: 8480/1**
- **Grading: "9 Unknown, indefinite, not specified or not applicable".**
- **TNM analogous to carcinoma of the appendix**

Morphology lists acc. to ICD-O-3.2 - Precancerous lesions (3)

High-grade colorectal dysplasia

- **ICD-10: D01**
- **ICD-O: depending on intestinal segment**
- **Morphology: 8148/2**
- **TNM: pTis cN0 cM0**
- **Grading: "9 Unknown, indefinite, not specified or not applicable“**

Morphology lists acc. to ICD-O-3.2 - Precancerous lesions (4)

- **Codes used for high-grade intraepithelial dysplasia (HGD):**
  - **8210/2 Adenocarcinoma in situ in adenomatous polyp, when HGD results from a tubular adenoma**
  - **8261/2 Adenocarcinoma in situ in villous adenoma, if derived from a villous adenoma**
  - **8263/2 Adenocarcinoma in situ in tubulovillous adenoma, when derived from a villous adenoma.**
- **See also decision of the Swiss Cancer Registry on case ID 48 on TUaREG.**

Morphology lists acc. to ICD-O-3.2 - Neuroendocrine tumours (1)

Appendix

- **ICD-10:C18.1**
- **ICD-O: C18.1**
- **Morphology: 8240/3 - 8246/3, 8249/3**
- **TNM: see in chapter "TNM systematics".**
- **Grading: "9 Unknown, indefinite, not specified or not applicable"; see also below Histopathological Grading**

Morphology lists acc. to ICD-O-3.2 - Neuroendocrine tumours (2)

Colon, rectum

- **ICD-10: C18.0, C18.2-9**
- **ICD-O: depending on intestinal segment**
- **Morphology: 8240/3 - 8246/3, 8249/3**
- **TNM: see in chapter "TNM systematics".**
- **Grading: "9 Unknown, indefinite, not specified or not applicable"; see also Histopathological Grading**

BREAST CANCER CHAPTER

BREAST CANCER

Carcinoma of unknown primary (CUP)

- in ca. 1% of axillary metastases – primary not found
  - C80 is coded as topography
- 95% (from 1%) – later defined as occult MA-tumours
  - C50.9 is coded as topography
  - TNM-staging e.g. T0N2M0 for st III or T0N1M1 for st IV
  - Update ICD-10 DS as well
  - Same incidence date as for C80!
- For the remaining 5% (from 1%) – same topo (no metastases-topo!), same ICD-10 and same DS date

Haematological Neoplasms

ENCR: Recommendations for Registration of Haematological Malignancies

Nationale Krebsregistrierungsstelle
Organe national d'enregistrement du cancer
Servizio nazionale di registrazione dei tumori
National Agency for Cancer Registration

nicer 89 Foundation National Institute for Cancer Epidemiology and Registration

Multiple Primary tumours (According to ENCR "Recommendations for Multiple Primary tumours 2004")

- For incidence, survival (reporting) apply ENCR Multiple Primary 2004 rules and ICD-O-3.1 Chapter 4.4.

- Note:

  Compliance with the ENCR recommendation is mandatory for decisions on haemato-oncological transformation events (Gavin et al 2015). See rules for transformation in the organ chapter "Malignant neoplasms of haematopoietic and lymphatic tissues" section "Notes/Transformation".

ENCR Recommendations for HM (1)

- Multiple data sources should be used
- Additional information on the same HM patient - record as
  - Transformation
  - Same tumour
  - New tumour
- Allocate as Transformation if first HM transforms into a new morphological entity (different diagnostic group) after a 3 month window of first registration
- Only the first tumour's morphology and date of diagnosis counts for incidence
- the transformed tumour must not be counted as a new tumour.

ENCR Recommendations for HM (2)

b) **Allocate as same tumour with more specific /revised morphology,**

- **if within same diagnostic group, date of diagnosis remains unchanged.**
- **if a transformation occurs within three months after the incidence date, the morphology code of the transformed malignancy should replace that of the first tumour and be recorded as the first primary and not a transformation. Date of diagnosis remains unchanged as that of the first tumour**

ENCR Recommendations for HM (3)

c) **Allocate as a new tumour registration with new incident date when**

- **HM with malignant behavior (code /3) occurs after a previous haematological disease with uncertain behavior (code /1) or**
- **the change is not a transformation or a revised diagnosis of an existing tumour or**
- **clinical opinion regarding a new tumour is available and the detail of that decision is recorded.**

ENCR Recommendations for HM (5)

3. **Regular survival analysis methods do not necessarily apply in the case of patients with HM where transformations have occurred as the patient has to be alive until the diagnosis of multiple tumour or transformation occurs. The information of these changes may be used as time-dependent covariates. There are special methods for such multiple tumour analyses.**

ENCR Recommendations for HM (6)

4. **The ENCR recommendations for coding of incidence date should be followed.**
5. **Basis of diagnosis should follow the ENCR recommendations**
6. **Record all dates and diagnoses of transformations in the registry.**

Rules for Classification

- Classify to the most specific (WHO) diagnosis.
- Use all information from the different diagnostics.
- Take into account that indolent haematological malignancies can transform to aggressive haematological malignancies.
- For lymphoid malignancies the site of the tumour (lymph node, bone marrow) can also give an indication for the tumour type.

Site of Lymphoma

- Hodgkin lymphoma → lymph nodes
- Follicular lymphoma → mostly lymph nodes
- Lymphoplasmocytic lymphoma → bone marrow
- DLBCL → any site (including extranodal sites)
- T-ALL/LBL → bone marrow, thymus/mediastinal nodes

ADDITIONAL ORGAN CHAPTERS

Site-specific SCHB chapters will be created:

- **for Cervical cancer – by end 2019**
- **for Skin cancer – by Feb 2020**
- **for Head/Neck cancer – by Apr 2020**

ABBREVIATIONS

Tx – therapy

SCHB – Swiss Coding HandBook

THANK YOU FOR YOUR HELP!!!