

Swedish National  
Breast Cancer Study

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**Karma**

## **Breast cancer variables from the RCC STHLM register (-2007) in Karma**

The RCC STHLM register holds the historic data of INCA (information network for cancer treatment) up to year 2007. Karma holds breast cancer records for all Karma study participants who have been diagnosed with breast cancer as a primary diagnosis. The register documents the chain of hospitalized treatments from first time cancer diagnosis to cases with cancer relapse or decease. The register is restricted to information on the first breast diagnosed with cancer, and is also restricted to invasive cancer and in situ cancer. Women with Phyllodes tumors, sarkom or lymphoma are not included in the register. And the register does not include information of deceased women where and an autopsy was performed and there was a tumor finding for the first.

The register includes information on pre-surgical diagnostics, as well as occurrences of tumors, kind of surgery performed, and treatment/diagnostic latencies. It also includes information on short/long term complication and relapses.

For more details, see

<http://www.cancercentrum.se/INCA/kvalitetsregister/Brostcancer/dokument/>

Karma holds the following RCC STHLM breast cancer variables:

## **Variables for first-time visit**

### **Dodat**

Death Date, YYYYMMDD

### **Dodors1**

Underlying cause, if it is cancer. Not recorded, transferred from the death registry

### **Vanlas**

Reporting hospital

### **Vankli**

Reporting clinic

### **Vdiadat**

Diagnosis Date, YYYYMMDD

### **Her**

Family history of breast cancer

1 = Yes

2 = No

9 = Unknown

### **Herant**

Relatives with breast cancer, nbr. Enter the number of 1-9. Blank = Missing.

## **Mens**

Menstrual status.

- 1 = premenopause
- 2 = 0-5 years postmenopause
- 3 => 5 years postmenopause
- 4 = Uncertain (e.g. hysterectomy)

## **vicdo**

ICDO progress code list.

## **Vsida**

Side of body.

- 1 = Right
- 2 = Left
- 9 = Unknown

## **vicd9**

ICD9 diagnosis at baseline and side indication. Automatically generated by VICDO + Vsida as ICD9 code list.

## **vicd7**

Diagnosis at baseline and side indication – ICD7. Automatically generated by VICDO + Vsida according ICD7 code list.

- 170 = Breast cancer, unknown side
- 1701 = Right Side
- 1702 = Left side
- 1707 = Multiple right-hand side
- 1708 = Multiple left side
- 1709 = Chest UNS

## **tumstat**

Tumor classification, clinical stage.

- 00 = Paget (goes before T0-T3)
- 09 = T0 (no tumor palp)

19 = T1 (tumor <20 mm)  
29 = T2 (tumors 20-50 mm)  
39 = T3 (→ > 51 mm)  
41 = T4A  
42 = T4b  
43 = Inflammatory cancer  
99 = Unknown

### **lgllstat**

Lymph node status, clinical stage

00 = N0 no palp / paget  
11 = N1A not susp  
12 = N1b susp  
20 = N2 fixed  
30 = N3  
99 = Unknown

### **fjarmmet**

Distant metastases

00 = No, no distant metastases proven or box is not checked and no other signs of distant metastases found on Form 1 (for example, that pat is primarily operated). 01 = Yes, there are distant metastases.

### **primop**

Primary operated.

1 = Yes  
2 = No (which includes all the reasons described below,  
Pinop = 1-3 and neoadjuvant treatment)

### **pinop**

Reason for not primarily operated

1 = Locally advanced disease  
2 = distant recurrence  
3 = Other reason

**annorsak**

Not a primary surgery because of other reasons, which free text

**neoadj**

Neoadjuvant treatment

1 = Yes

2 = No

Blank = Missing

**neoadjtyp**

Neoadjuvant treated (free text).

**opdat**

Operation date, YYYYMMDD.

**oplas**

Operating hospital

**brostop**

Breast surgery type

1 = Mastectomy

2 = Breast Conservation op

3 = Other operation

4 = subcutaneous mastectomy

**axillop**

Axill operation

1 = Axillutrymd

2 = Not axillutrymd

3 = not known

If only Sentinel node is made (up to 3 selected Igll) should be recorded as Non "axillutrymd"

**Annoptyp**

Other operation type (free text)

**sentnod**

Sentinel node biopsy performed

1 = Yes

2 = No

**primrek**

Primary breast reconstruction.

1 = Yes

2 = No

**vprepnr**

PAD code. Concerns breast tumor specimen

**vprepar**

Breast tumor preparation year.

**catyp**

Type of cancer

1 = invasive cancer

2 = Only non-infiltrative cancer

3 = Mixed invasive and non-infiltrative

**vpad**

PAD (Pathological anatomical diagnosis)

PAD code as listed, histopathological diagnosis according to WHO.

**Typinsitu**

Type of non-infiltrative cancer

1 = DCIS

2 = LCIS

3 = Other in situ cancers

### **patant**

Number of tumors started. Upgrading from PAD. Enter the number 0-9 or if accurate information is missing;

1 = 1 or infiltrative tumor about which number is missing and there are not multiple tumors.

2 = 2 tumors or written in the text, "multiple", "several", "multifocal" or "cures" .

9 => 9 tumors

Blank = Missing or non-infiltrative cancer of the number of missing

0 = If the tumor disappeared after neoadjuvant therapy

### **patstl**

Tumor size. Ofix Upgrading of PAD. Stated in mm and 0-filled in (eg 3mm = 003). In the presence of several tumors, record the largest diameter of the largest tumor.

999 = Invasive cancer where size is missing

Blank = Not infiltrative cancer where size is missing

000 = If the tumor disappeared after neoadjuvant therapy.

### **patlgll**

Lymph nodes in the preparation, nbr. Upgrading from PAD

Enter the number and 0-filled in (for example, 2x = 02)

or

98 = "A lot" or "multiple", "several"

99 = Upgrading missing

Blank = Not axillutrymd

00 = Not Found lgll in surgery preparation (such as may happen after neoadjuvant therapy)

### **patmet**

Lymph nodes with metastases in the preparation, nbr.

Enter the number and 0-Fill in

or

00 = no metastases

98 = "A lot" or "multiple" metastases

99 = Unknown

Blank = Not axillutrymd or Sentinel node op without meth

### **loklaber**

Estrogen-receptor measurement, immunohistochemistry according to local lab

1 = positive

2 = Negative

### **loklabpr**

Progesterone receptor-measurement, immunohistochemistry according to local lab

1 = positive

2 = Negative

### **Elston**

Elston-grading

1 = I

2 = II

3 = III

### **postopbeh**

Postoperative treatment

00 = No treatment

10 = Radiotherapy alone

20 = Chemotherapy only

30 = Endocrine therapy only

40 = Other treatment

12 = RT + Cyt

13 = RT + Endocrine beh

14 = RT + Other beh

15 = RT + Cyt + Endocrine beh

23 = Cyt + Endocrine beh

24 = Cyt + Other beh

25 = Cyt + ABMT  
34 = Endocrine + Other beh beh  
99 = Unknown

### **rtspec**

Radiotherapy specification

1 = Only the chest  
2 = Chest / thorax + regional lymph nodes

### **cytspec**

Chemotherapy specification

1 = CMF  
2 = anthracycline  
3 = Taxane-Based  
4 = Other

### **endospec**

Endocrine therapy (free text)

### **annbehspec**

Other treatment (free text)

### **erres**

Estrogen receptor determination. Listed in fmol /?g DNA with two decimal places. Recorded with four digits, two positions before and two positions after the comma (are filled with 0s). E.G. 1.2 = 1:20 are recorded as 0120.

1 = 1:00 is recorded as 0100  
0.05 = 00:05 is recorded as 0005  
Blank = Missing

As a "positive" value, we have here in Stockholm calculated values of > 0:05

**prres**

Progesterone receptor determination. Listed in fmol /?g DNA with two decimal places. Recorded with four digits, two positions before and two positions after the comma (are filled with 0s). Ex. 1.2 = 01,20 recorded as 0120.

1 = 1:00 is recorded as 0100

0.05 = 00:05 is recorded as 0005

Blank = Missing

As a "positive" value, we have here in Stockholm calculated values of>  
0:05

## **Variables for follow-up visit**

### **beslas**

Hospital for the follow-up visit.

### **beskli**

Clinic where follow-up visit was made.

### **besdat**

Patient visit date - date of last visit with variable "beslas" and "beskli", YYYYMMDD.

### **reclok1**

Location of 1st loco-regional relapse - ICD9.

1741 = Local recurrence right side

1742 = Local recurrence left side

1960 = Regional recurrence of IgII in the fossa supra clav

1963 = Regional recurrence of axillen

### **recdat1**

Date of diagnosis of 1st recurrence loco-regional, YYYYMMDD.

### **reclok2**

Location of 2nd loco-regional relapse – ICD9. See codes for reclok1.

### **recdat2**

Date of diagnosis of 2nd loco-regional relapse, YYYYMMDD.

### **reclok3**

Location for 3rd loco-regional relapse (according to ICD9 classification).

See codes for reclok1.

**recdat3**

Date of diagnosis of the 3rd loco-regional relapse, YYYYMMDD.

**reclok4**

Location for the 4th loco-regional relapse (according to ICD9 classification). See codes for reclok1.

**recdat4**

Date of diagnosis of the 4th loco-regional relapse, YYYYMMDD.

**metlok1**

Location of 1st distant recurrence – ICD9.

1960 = Lgll the contralateral fscl

1961 = Lgll intrathoracalt

1962 = Lgll abdominal

1963 = Lgll in contralateral axillen

1968 = Lgll multiple localization (contralateral)

1969 = Lgll unspecified localization

1970 = distant recurrence in lung

1971 = distant recurrence in the mediastinum

1972 = distant recurrence in the pleural

1974 = distant recurrence in small intestine

1976 = distant recurrence in the peritoneum and retroperitoneum

1977 = distant recurrence in liver

1979 = distant recurrence in other and unspecified digestive organs

1982 = distant recurrence in the skin

1983 = distant recurrence in the brain

1984 = distant recurrence in other and unspecified parts of nervous system

1985 = distant recurrence in the bone

1986 = distant recurrence in the ovary

1989 = distant recurrence in other specified premises

**metdat1**

Date of diagnosis of 1st distant metastase, YYYYMMDD.

**metlok2**

Location for 2nd distant recurrence – ICD9. See codes for metlok1.

**metdat2**

Date of diagnosis of 2nd distant metastase, YYYYMMDD.

**metlok3**

Location for 3rd distant recurrence (by ICD9 classification). See codes for metlok1.

**metdat3**

Date of diagnosis of the 3rd distant metastase, YYYYMMDD.

**metlok4**

Location for the 4th distant recurrence (by ICD9 classification). See codes for metlok1.

**metdat4**

Date of diagnosis of the 4th distant metastase, YYYYMMDD.

## System variables

### **round\_rccsthlm\_breastcancer**

Round of RCC STHLM breast cancer registration, i.e. the order number of times the study participant were registered in the register. Used for stratifying order of registration events.

### **year\_rccsthlm\_breastcancer**

Year of RCC cancer diagnose registration. Used for stratifying time series data.

### **month\_rccsthlm\_breastcancer**

Month of RCC cancer diagnose registration. Used for stratifying time series data.

### **source\_rccsthlm\_breastcancer**

Available RCC STHLM breast cancer register data.