

# CANSTAGING - THE CANCER STAGING TOOL

Welcome to the Cancer Staging Tool, provided to you thanks to a collaboration between the Northern Ireland Cancer Registry (NICR), the International Agency for Research on Cancer (IARC) and the Union for International Cancer Control (UICC). The tool is designed to help maximise the availability, standardisation and comparability of cancer staging internationally.

*Used with the permission of UICC, Geneva, Switzerland. The original source for this material is: Leslie H. Sobin (Editor), Mary K. Gospodarowicz (Editor), Christian Wittekind (Editor), TNM Classification of Malignant Tumours, 7th Edition, published in November 2009 by Wiley-Blackwell.*

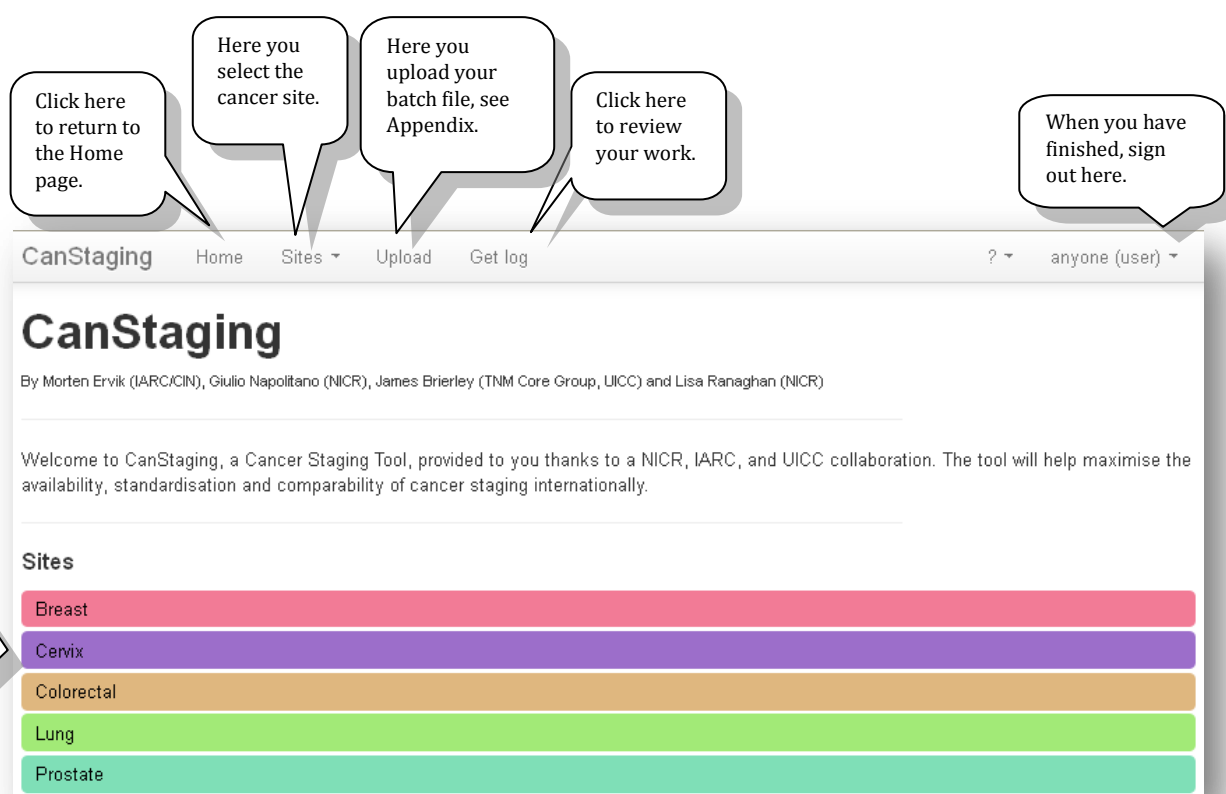
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## QUICK GUIDE

### CANCER STAGING TOOL OVERVIEW

The Cancer Staging Tool calculates TNM, Stage, Grade, and other site-specific stage scores from raw information entered by the user. It also calculates broader classification groups (Simplified Stage Group and Stage Group Range), when partial information is entered. Below is a view of the Tool's Home Page, with brief explanations:

### HOME PAGE



## CANCER SITE PAGES

The following screenshot shows the entry page of a sample cancer site (Breast).

**Breast**

Tumour ID: 5 ☒ Auto

**T** T1c

Enter size of invasive tumour (cm) 2

Inflammatory carcinoma ☐ Yes ☒ No

Extension to chest wall (not including only pectoralis muscle) ☐ Yes ☒ No

Ulceration/ipsilateral satellite nodules/oedema (incl. peau d'orange) of skin ☐ Yes ☒ No

**N** N1a

Micrometastases only: none >2.0mm (but: >0.2mm or more than 200 cells) ☐ Yes ☒ No

Metastases in internal mammary nodes with metastases in sentinel lymphnode (not clinically detected) ☐ Yes ☒ No

Metastases in clinically detected internal mammary nodes ☐ Yes ☒ No

Metastases in infraclavicular nodes ☐ Yes ☒ No

Number of positive axillary nodes (at least one deposit >2.0mm) 3

Metastases in supraclavicular nodes ☐ Yes ☒ No

**M** M0

Distant metastases No distant metastases

**SG** IIA

SimpG Regional

SG range IIA

**TNM** T1cN1aM0

**Callouts:**

- This ID may be used to link the log record to your archive. **NB: THIS ID SHOULD NOT BE A PERSONAL IDENTIFIER!**
- If you select this option, the record ID will automatically be generated for you.
- In these sections you enter or select the required information.
- You can click the section headings to collapse or expand whole sections.
- Click 'Reset' to clear your dropdown box selection.
- Calculated staging values will be shown here dynamically, i.e. they will change on your screen as more information is entered.
- If the TNM is not conclusive, hover here with the mouse pointer to see all possible values.
- Click here to show a list of your records (raw data with calculated staging values).
- Click here to remove all entered information from the form and restart.
- Click here to store in the log the data entered and the staging values calculated, after the form has been completed.

## LOGS

Finally, the following is a screenshot of the log page:

Each time "Submit" is clicked, the previous record is stored.

Tumour ID	Date created	Site	T	N	M	TNM - Result	TNM - Message	SG - Result	SG - Message	SimpG	SG range	Site Specific
0	2014-04-17 15:07:53 +0100	Breast	T3	N1mi	M0	T3N1miM0		IIIA		Regional	IIIA	
1	2014-04-17 15:09:23 +0100	Cervix	T1a1	NX	M1	T1a1NXM1		IVB		Distant	IVB	
2	2014-04-17 15:09:40 +0100	Colorectal	T1	N1a	M0	T1N1aM0		IIIA		Regional	IIIA	Dukes: C
3	2014-04-17 15:10:03 +0100	Lung	T3	N0	M0	T3N0M0		IIB		Localised	IIB	
4	2014-04-17 15:10:55 +0100	Prostate	T2a	N0	M0	T2aN0M0		IIB		Localised	IIB	
5	2014-04-17 16:10:13 +0100	Breast	T1c	NX	M0	T1cNXM0	One of many possible Ns...	IA		Localised - Regional	IA - IIIC	
6	2014-04-17 16:10:40 +0100	Colorectal	T4b	N1a	M0	T4bN1aM0		IIIC		Regional	IIIC	Dukes: C

Clear LogDownload Log

Click here to clear all entries from the log.

Click here to download a comma-separated, richer version of this log.

## ACCESS

The tool is only available to users with a valid key. This can either be entered on the login screen or provided in the URL, for example: <http://nicancerstaging.qub.ac.uk/tool?key=zzz>.

## SUPPORT

To request a new user account, please visit <http://www.qub.ac.uk/research-centres/nicr/ToolsResources/CancerStagingTool/>. Please use the Sourceforge page <http://sourceforge.net/p/thecancerstagingtool/tickets/> to raise general issues. Should you need individual help, please send a query to [gicr@iarc.fr](mailto:gicr@iarc.fr) kindly indicating the nature of the problem and provide your location (cancer registry, city, country) as well as telephone number. The Cancer Staging Tool team will help solve your problem!

Please follow our Twitter account @CanStaging for news and updates on the Cancer Staging Tool.

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THIS TOOL COULD INCLUDE TECHNICAL OR OTHER INACCURACIES. HOWEVER, WE MAKE NO COMMITMENT TO PROVIDE UPDATES.

## RELEASE NOTES

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VERSION 1.1 – 08/08/2014

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- New features:
  - Batch processing
- Known issues
  - When *Tumour Ids* are entered manually, records are overwritten when duplicate Ids are used without notification
  - Individual records cannot be deleted from log

## APPENDIX – BATCH PROCESSING

When you click the 'Upload' button, you can upload a comma-delimited file (.csv) using the following screen: browse to your file then click the green button.

You may upload one file at a time, containing one or more records for the same cancer site (you can't mix records for different cancer sites in the same file). An example of file content is illustrated in the following figure. The file specifications, for each site, are given in the next sections.

```
Site,T Invasion,N Positiven-number,N TumourDeposit,M M
Colorectal,3,0,F,1
```

In each of the remaining sections, the first table (*Header*) provides the list of field names for the first row of an upload file. The first column of this table is used to build the first row of the file (*Site* is omitted but must be present). The second column specifies what types of values are expected in the records:

- Boolean: *T* for *Yes* and *F* for *No*
- Number: A numerical value
- Dictionary: A number (*Key*) corresponding to a chosen option from a list, as specified in the Dictionary tables provided below. These correspond to the various options shown in the dropdown boxes of the tool. As an example, *T Invasion = 3* in the sample file above corresponds to "Tumour invades subserosa or into non-peritonealized pericorectal tissues".

Dictionary tables are specified in their own subsections.

## BREAST

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### Header

Field	DataType
T Size-number	Number
T Inflammation	Boolean
T ChestInvasion	Boolean
T Ulceration	Boolean
N Micrometastases	Boolean
N MammaryMicro	Boolean
N MammaryClinical	Boolean
N Infraclavicular	Boolean
N Supraclavicular	Boolean
N Axillary-number	Number
M M	Dictionary

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## BREAST DICTIONARY TABLE

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### M M

Key	DisplayText
1	No distant metastases
2	Distant metastases

## CERVIX

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### Header

Field	DataType
T Microscopic	Boolean
T Stromal	Dictionary
T ExtendedVisible	Dictionary
T BeyondUterus	Boolean
T Parametrium	Boolean
T Vagina	Boolean
T Pelvis	Boolean
T Hydronephrosis	Boolean
T Mucosa	Boolean
N PositiveN-number	Number
M M	Dictionary

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## CERVIX DICTIONARY TABLES

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### T Stromal

Key	DisplayText
1	<=3mm in depth AND <=7mm in horizontal spread
2	>3mm but <=5mm in depth AND <=7mm in horizontal spread
3	>5mm in depth OR >7mm in horizontal spread

### T ExtendedVisible

Key	DisplayText
1	No
2	Yes, <= 4.0cm
3	Yes, > 4cm

### M M

Key	DisplayText
1	No distant (or paraortic nodes) metastases
2	Distant (or paraortic nodes) metastases



## COLORECTAL

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### Header

Field	DataType
T Invasion	Dictionary
N PositiveN-number	Number
N TumourDeposit	Boolean
M M	Dictionary

---

## COLORECTAL DICTIONARY TABLES

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### T Invasion

Key	DisplayText
1	Tumour invades submucosa
2	Tumour invades muscularis propria
3	Tumour invades subserosa or into non-peritonealized pericorectal tissues
4	Tumour perforates visceral peritoneum
5	Tumour directly invades or is adherent to other organs or structures

### M M

Key	DisplayText
1	No distant metastases
2	Metastases confined to one organ or site (e.g. liver, lung, ovary, non-regional node)
3	Metastases in more than one organ/site or the peritoneum

## LUNG

### Header

Field	DataType
T Size-number	Number
T Bronchus	Dictionary
T Pleura	Boolean
T Atelectasis	Boolean
T T3invasion	Boolean
T AtelectasisAll	Boolean
T NodulesT3	Boolean
T Vocal	Boolean
T NodulesT4	Boolean
T T4invasion	Boolean
N Nregion	Dictionary
M M	Dictionary

### LUNG DICTIONARY TABLES

#### T Bronchus

Key	DisplayText
1	Tumour does NOT invade main bronchus
2	Tumour involves the main bronchus >= 2cm distal to the carina
3	Tumour involves the main brochus < 2cm distal to the carina
4	Tumour involves the carina or trachea

#### N Region

Key	DisplayText
1	No regional lymph node metastases
2	Metastases to ipsilateral peribronchial AND/OR ipsilateral hilar nodes AND intrapulmonary nodes
3	Metastases to ipsilateral mediastinal AND/OR subcarinal nodes
4	Metastases to contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene, or supraclavicular nodes

#### M M

Key	DisplayText
1	No distant metastases
2	Separate tumour nodule(s) in a contralateral lobe tumour with pleural nodes or malignant pleural (or pericardial) effusion
3	Distant metastases

## PROSTATE

### Header

Field	DataType
T Appearance	Dictionary
T Extension	Dictionary
T Capsule	Boolean
T Neck	Boolean
T Vescicles	Boolean
T Bladder	Boolean
T Sphincter	Boolean
T Rectum	Boolean
T Wall	Boolean
N PositiveN-number	Number
M M	Dictionary
M Nodes	Boolean
M Bone	Boolean
M Other	Boolean
SG Gleason-number	Number
SG PSA-number	Number

### PROSTATE DICTIONARY TABLES

#### T Appearance

Key	DisplayText
1	Tumour clinically inapparent (not palpable or visible by imaging)
2	Tumour clinically apparent

#### T Extension

Key	DisplayText
1	Tumour incidental histological finding in = 5% resected tissue
2	Tumour incidental histological finding >5% resected tissue
3	Tumour identified by needle biopsy
4	Tumour involves one 1/2 of one lobe or less
5	Tumour involves more than half of one lobe
6	Tumour involves both lobes

#### M M

Key	DisplayText
1	No distant metastases
2	Distant metastases