

**Skin Cancer Data Quality  
Report 2007-2009 NCDR Data – inc.  
data from the South West Skin  
Cancer Project 2009**

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Skin SSCRG



## Key Points

- Within the context of a steady increase in the incidence of malignant melanoma, cases reported across the English cancer registries are consistent over the last three years.
- Within the context of a steady increase in the incidence of non melanoma skin cancers, cases reported across the English cancer registries are consistent over the last three years for 6 of the cancer registries except for SWCIS which did not send a full registration of its NMSC in time for inclusion on the NCDR data but this will be addressed in the next off load of NCDR (20196 cases have been registered by SWCIS in 2009). ECRIC does not record all its cases of Basal Cell Carcinoma as it is done manually which explains variation in the overall number. The data for TCR although consistent over the last 3 years focus on Squamous Cell Carcinoma as this registry does not registry Basal Cell Carcinoma.

*(ECRIC, Eastern Cancer Registration & Information Centre; NWCIS, North West Cancer Intelligence Service; NYCRIS, Northern & Yorkshire Cancer Registry & Information Service; OCUI, Oxford Cancer Intelligence Unit; SWCIS, South West Cancer Intelligence Service; TCR, Thames Cancer Registry; TrCR, Trent Cancer Registry; WMCIU, West Midlands Cancer Intelligence Unit)*

- TNM staging data from the NCDR for malignant melanoma show that only 2 registries achieved an integrated TNM. In 2009, ECRIC and TrCR achieved the highest percentage of integrated TNM with 87.1% and 71.2% respectively. WMCIU and SWCIS achieved high percentage in 2009 of the T component of the valid pathology stage and WMCIU and ECRIC achieved high percentage of T component of the valid integrated stage, while TCR and OCUI achieved respectively 28.1% and 17.4%. However these four registries did not achieve high recording of valid pathological N, M. NWCIS and NYCRIS had very low or null recording in 2009.
- Staging data from the NCDR for non melanoma skin cancer were very poor overall and no cancer registries achieved full integrated TNM or high pathology T value.
- Data for malignant melanoma prognostic factors such as Breslow thickness and Clark's level in 2009 ranged from 71.9% to 91.7 % for Breslow thickness, TCR recorded 6.5% of Clark' level in 2009 and TrCR did not record any data.
- Data for non melanoma skin cancer prognostic factors such as Clark's level in 2009 were poor (below 10%) or absent.
- High percentages of valid specific histology code for malignant melanoma were recorded (90.9% to 99.5%) in 2009 by all registries.
- Medium to high percentages of valid specific histology code for non melanoma skin cancer were recorded (64.2% to 98.4%) in 2009 by all registries.
- The recording of valid ethnicity data for malignant melanoma was heterogeneously achieved amongst registries in 2009 (NWCIS 81.3% (highest) and NYCRIS 46.3% (lowest)) and had reduced over the three year period for a number of registries.
- The recording of valid ethnicity data for non melanoma skin cancer was achieved but heterogeneously amongst registries in 2009 (TrCR 61.4% (highest) and NYCRIS 11.9% (lowest)) had reduced over the three year period for a number of registries.
- Treatment flag was completed for 90% or more cases of malignant melanoma cases in 2009 for surgery, chemotherapy or radiotherapy treatment by 6 out of the 8 cancer registries (ECRIC, NWCIS, NYCRIS, OCUI, SWCIS, TCR). WMCIU had high treatment flag (93.5%) only for surgery. NWCIS achieved high completion 99.5%

of the treatment flag for surgery, chemotherapy, and radiotherapy, while TrCT was lower (43.8% in 2009 for surgery, 15.4% for chemotherapy and 15.3% for radiotherapy treatment).

- Treatment flag was completed for 90% more cases of non melanoma skin cancer cases in 2009 for Surgery, chemotherapy, radiotherapy by 5 out of the 8 cancer registries (ECRIC, NWCIS, NYCRIS, OCUI, SWCIS). NWCIS and SWCIS achieved high completion of the treatment flag for surgery 99.5% and 99.3% respectively chemotherapy, and radiotherapy, while TrCR was lower (45% in 2009 for surgery, 17.1% for chemotherapy and 17.2% for radiotherapy treatment).

## Introduction

This report has been produced as a collaboration between the South West Public Health Observatory (SWPHO) and the Skin Site Specific Cancer Reference Group (SSCRG) of the National Cancer Intelligence Network (NCIN). The skin SSCRG wished to ascertain the completeness of staging information held in the National Cancer Data Repository (NCDR) for skin malignancies (ICD10 C43, C44). Quality of data associated with factors such as Clarks Level and Breslow thickness along with other factors such as histology, ethnicity and treatment flags were also assessed where applicable.

As recommended by the UKACR, cancer registries based one of their performance indicators on the completeness of Clark's level as a stage data item and this year data quality report will remain based on the UKACR rules in place in 2007-2009.

However as a consequence of the forthcoming launch of the Cancer Outcomes Dataset Service and the staging initiative, emphasis has been put on the current staging system used in England with regard to skin.

It is now acknowledged that Clark's level cannot be considered as a staging indicator on its own right and it is now accepted that the American Joint Committee on Cancer (AJCC) staging system for skin cancer should be adopted by cancer registries. Thickness, ulceration, mitosis, microsatellite, Clark level IV, nodes and metastasis will all be factors used in the final AJCC staging of malignant melanoma and a restricted number of these for NMSC and Merkel.

Since the last skin cancer data quality report was published, the South West Public Health Observatory has completed a skin cancer registration project funded by the NCIN. The aim of the project was to undertake a full registration of skin cancers in 2009 in the registry catchment area. It was felt appropriate to include a short summary to give an assessment of the skin cancer cases presenting in the area and the completeness of AJCC data available from pathology reports. The data are included in the appendix.

## Method

Records of skin malignancies tumours (ICD10 C43, C44) in each Cancer Registry in England for the three most recent diagnosis years available, 2007-2009, were extracted from NCDR. Pathological, clinical and integrated\* staging fields (T, N and M separately and overall TNM stage grouping) were analysed.

*\* Integrated stage is a hybrid of pathological and clinical T, N and M values. Generally, the T and N values will come from the pathology and the M value will be attributed clinically.*

Additional fields were extracted relating to Clarks level, Breslow thickness, histology, ethnicity and treatment. The percentage valid in each field represents the number of tumours with a valid entry as a proportion of all tumours of that type in a given year at a given registry.

**Table 1: Valid entries for NCDR 2007-2009 fields analysed**

	Field	Valid Entries
<b>Pathological Stage</b>	<b>T</b>	0-4
	<b>N</b>	0-2 (C43), 0-1 (C44)
	<b>M</b>	0-1
	<b>TNM</b>	I-IV
<b>Clinical Stage</b>	<b>T</b>	0-4
	<b>N</b>	0-2 (C43), 0-1 (C44)
	<b>M</b>	0-1
	<b>TNM</b>	I-IV
<b>Other Non-Prognostic</b>	<b>Clark</b>	2-5
	<b>Breslow</b>	> 0
<b>Histology</b>	<b>All</b>	Valid five character codes
	<b>Specific</b>	As above excluding '8000' (neoplasm), '8010' (carcinoma)
<b>Ethnicity*</b>	<b>All</b>	A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S, X, Z
	<b>Specific</b>	A, B, C, D, E, F, G, H, J, K, L, M, N, P, R, S
<b>Treatment Flag</b>	<b>Surgery</b>	Y, N
	<b>Chemo</b>	Y, N
	<b>Radio</b>	Y, N
	<b>Hormone</b>	Y, N

Source: South West Public Health Observatory from NCDR

\*Data from Hospital Episode Statistics. <http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=571>

## Results

Table 2: Percentage of valid staging information based on TNM for melanoma skin cancer (C43) in English Registry Areas, 2007-2009

Cancer Registry	Year	Cases	Valid Pathological Stage				Valid Clinical Stage				Integrated Stage			
			T	N	M	TNM	T	N	M	TNM	T	N	M	TNM
EASTERN CANCER REGISTRATION & INFORMATION CENTRE	2007	1,166	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	79.1	0.0	1.1	82.6
	2008	1,433	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	82.6	0.0	0.8	85.9
	2009	1,374	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	84.2	0.0	0.0	87.1
NORTH WEST CANCER INTELLIGENCE SERVICE	2007	1,151	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	0.2	0.2
	2008	1,244	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.0	0.2	0.2
	2009	1,350	0.3	0.0	0.5	0.7	0.0	0.0	0.0	0.0	2.7	0.0	2.7	2.7
NORTHERN & YORKSHIRE CANCER REGISTRY & INFORMATION SERVICE	2007	1,164	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2008	1,167	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2009	1,244	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OXFORD CANCER INTELLIGENCE UNIT	2007	554	2.0	0.9	0.4	0.2	0.0	0.9	0.0	0.0	0.0	0.9	0.0	0.0
	2008	692	1.2	0.3	0.1	0.1	0.0	0.3	0.0	0.0	0.0	0.3	0.0	0.0
	2009	666	17.4	0.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
SOUTH WEST CANCER INTELLIGENCE SERVICE	2007	1,924	85.6	4.5	3.6	3.5	0.1	4.5	0.9	0.8	0.0	4.5	0.0	0.0
	2008	2,001	86.9	5.3	3.8	3.9	0.1	5.3	0.8	0.8	0.0	5.3	0.0	0.0
	2009	1,913	87.0	6.6	3.3	3.0	1.4	6.6	2.5	2.2	0.0	6.6	0.0	0.0
THAMES CANCER REGISTRY	2007	1,853	24.7	0.9	0.6	0.0	0.6	0.9	0.2	0.0	0.0	0.9	0.0	0.0
	2008	1,884	25.1	1.3	0.6	0.0	0.5	1.3	0.1	0.0	0.0	1.3	0.0	0.0
	2009	1,933	28.1	1.6	0.3	0.0	0.6	1.6	0.1	0.0	0.0	1.6	0.0	0.0
TRENT CANCER REGISTRY	2007	948	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	67.3
	2008	1,052	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	76.6
	2009	986	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.2
WEST MIDLANDS CANCER INTELLIGENCE UNIT	2007	810	92.5	2.1	1.4	1.6	0.1	2.1	1.5	0.1	92.5	2.1	2.7	3.0
	2008	937	92.6	1.3	1.3	1.2	0.2	1.3	2.5	0.1	92.6	1.3	3.7	3.0
	2009	977	91.8	1.8	0.6	0.6	0.3	1.8	1.4	0.0	91.9	1.8	1.8	1.7

Source: South West Public Health Observatory from NCDR

Table 3: Percentage of valid staging information based on TNM for non-melanoma skin cancer (C44) in English Registry Areas, 2007-2009

Cancer Registry	Year	Cases	Valid Pathological Stage				Valid Clinical Stage				Integrated Stage			
			T	N	M	TNM	T	N	M	TNM	T	N	M	TNM
EASTERN CANCER REGISTRATION & INFORMATION CENTRE	2007	3,881	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.1	0.0	0.1	0.1
	2008	14,500	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0
	2009	9,608	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0
NORTH WEST CANCER INTELLIGENCE SERVICE	2007	11,352	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2008	11,366	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2009	12,166	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1
NORTHERN & YORKSHIRE CANCER REGISTRY & INFORMATION SERVICE	2007	12,043	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2008	12,420	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2009	12,005	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OXFORD CANCER INTELLIGENCE UNIT	2007	5,121	0.2	0.0	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2008	5,401	0.6	0.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2009	5,513	10.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SOUTH WEST CANCER INTELLIGENCE SERVICE	2007	18,260	2.7	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2008	18,331	2.9	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2009	12,669	2.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
THAMES CANCER REGISTRY	2007	3,883	5.7	0.0	0.0	0.0	0.5	0.0	0.2	0.0	0.0	0.0	0.0	0.0
	2008	4,400	5.5	0.0	0.1	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	2009	4,185	9.1	0.0	0.1	0.0	0.6	0.0	0.1	0.0	0.0	0.0	0.0	0.0
TRENT CANCER REGISTRY	2007	9,115	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2008	10,070	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	2009	9,390	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WEST MIDLANDS CANCER INTELLIGENCE UNIT	2007	8,761	4.7	0.0	0.0	0.0	0.2	0.0	0.1	0.0	4.9	0.0	0.1	0.0
	2008	8,990	4.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	4.8	0.0	0.1	0.0
	2009	8,831	6.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	6.2	0.0	0.1	0.0

Source: South West Public Health Observatory from NCDR

Table 4: Percentage of valid histological, ethnicity and treatment information for melanoma skin cancer (C43) in English Registry Areas, 2007-2009

Cancer Registry	Year	Cases	Other Prognostic		Valid Histology		Valid Ethnicity		Valid Treatment Flag		
			Clark	Breslow	All	Specific	All	Specific	Surgery	Chemo	Radio
EASTERN CANCER REGISTRATION & INFORMATION CENTRE	2007	1,166	71.5	79.2	89.5	89.5	89.5	35.4	89.5	89.5	89.5
	2008	1,433	76.1	81.2	90.5	90.5	90.5	34.7	90.5	90.5	90.5
	2009	1,374	72.6	79.8	90.9	90.9	90.9	48.4	90.9	90.9	90.9
NORTH WEST CANCER INTELLIGENCE SERVICE	2007	1,151	65.4	80.9	99.2	99.2	99.2	80.5	99.2	99.2	99.2
	2008	1,244	72.6	79.8	98.7	98.7	98.7	77.5	98.7	98.7	98.7
	2009	1,350	71.9	70.8	99.6	99.6	99.6	81.3	99.6	99.6	99.6
NORTHERN & YORKSHIRE CANCER REGISTRY & INFORMATION SERVICE	2007	1,164	88.8	47.9	96.1	96.1	96.1	38.4	96.1	96.1	96.1
	2008	1,167	93.6	48.4	99.0	99.0	99.1	58.9	99.1	99.1	99.1
	2009	1,244	89.7	45.4	98.5	98.5	98.5	46.3	98.5	98.5	98.5
OXFORD CANCER INTELLIGENCE UNIT	2007	554	3.1	89.7	94.6	94.6	94.6	69.3	94.6	94.6	94.6
	2008	692	49.3	83.7	91.8	91.6	91.8	62.0	91.8	91.8	91.8
	2009	666	78.7	80.9	92.8	92.8	92.8	63.5	92.8	92.8	92.8
SOUTH WEST CANCER INTELLIGENCE SERVICE	2007	1,924	78.0	71.9	96.6	96.6	96.6	68.9	96.6	96.6	96.6
	2008	2,001	77.8	75.4	97.0	97.0	97.0	68.8	97.0	97.0	97.0
	2009	1,913	78.9	79.3	97.0	97.0	97.0	68.5	97.0	97.0	97.0
THAMES CANCER REGISTRY	2007	1,853	5.8	66.2	97.1	97.1	97.1	67.8	97.1	97.1	97.1
	2008	1,884	5.5	69.2	96.6	96.6	96.6	68.2	96.6	96.6	96.6
	2009	1,933	6.5	64.5	97.3	97.3	97.3	65.4	97.3	97.3	97.3
TRENT CANCER REGISTRY	2007	948	0.0	0.0	92.8	92.5	92.8	72.7	46.8	9.6	8.2
	2008	1,052	0.0	0.0	91.0	90.0	91.0	65.4	53.8	14.9	13.5
	2009	986	0.0	0.0	90.5	90.5	90.5	67.7	43.8	15.4	15.3
WEST MIDLANDS CANCER INTELLIGENCE UNIT	2007	810	89.5	92.2	96.1	96.1	96.1	69.6	94.7	0.7	2.8
	2008	937	90.2	92.2	96.4	96.4	96.4	68.9	94.7	0.6	1.1
	2009	977	88.7	91.7	95.6	95.6	95.6	69.5	93.5	0.8	1.4

Source: South West Public Health Observatory from NCDR

Table 5: Percentage of valid histological, ethnicity and treatment information for non-melanoma skin cancer (C44) in English Registry Areas, 2007-2009

Cancer Registry	Year	Cases	Other Prognostic	Valid Histology		Valid Ethnicity		Valid Treatment Flag		
			Clark	All	Specific	All	Specific	Surgery	Chemo	Radio
EASTERN CANCER REGISTRATION & INFORMATION CENTRE	2007	3,881	0.0	93.4	93.2	93.4	39.0	93.4	93.4	93.4
	2008	14,500	0.0	98.0	97.9	98.0	23.1	98.0	98.0	98.0
	2009	9,608	0.6	97.0	96.8	97.0	41.2	97.0	97.0	97.0
NORTH WEST CANCER INTELLIGENCE SERVICE	2007	11,352	0.5	99.2	97.9	99.2	60.2	99.2	99.2	99.2
	2008	11,366	0.2	99.3	97.5	99.3	59.1	99.3	99.3	99.3
	2009	12,166	1.6	99.5	95.6	99.5	59.3	99.5	99.5	99.5
NORTHERN & YORKSHIRE CANCER REGISTRY & INFORMATION SERVICE	2007	12,043	0.0	96.3	96.3	96.3	14.9	96.3	96.3	96.3
	2008	12,420	0.0	98.6	98.4	98.6	10.8	98.6	98.6	98.6
	2009	12,005	0.0	98.7	98.4	98.8	11.9	98.8	98.8	98.8
OXFORD CANCER INTELLIGENCE UNIT	2007	5,121	0.0	98.5	98.1	98.5	48.9	98.5	98.5	98.5
	2008	5,401	0.0	96.7	93.7	96.7	47.9	96.7	96.7	96.7
	2009	5,513	0.0	97.4	93.0	97.4	51.3	97.4	97.4	97.4
SOUTH WEST CANCER INTELLIGENCE SERVICE	2007	18,260	0.0	99.4	97.4	99.4	51.3	99.4	99.4	99.4
	2008	18,331	0.0	99.6	96.4	99.6	54.1	99.6	99.6	99.6
	2009	12,669	0.0	99.3	64.2	99.3	58.5	99.3	99.3	99.3
THAMES CANCER REGISTRY	2007	3,883	3.9	92.6	91.6	92.6	59.8	92.6	92.6	92.6
	2008	4,400	3.0	82.6	81.9	82.6	55.1	82.6	82.6	82.6
	2009	4,185	4.3	88.2	86.2	88.2	57.1	88.2	88.2	88.2
TRENT CANCER REGISTRY	2007	9,115	0.0	95.9	95.6	95.9	66.1	45.6	10.0	10.1
	2008	10,070	0.0	93.8	93.5	93.8	56.7	49.4	12.8	12.5
	2009	9,390	0.0	93.9	93.1	93.9	61.4	45.0	17.1	17.3
WEST MIDLANDS CANCER INTELLIGENCE UNIT	2007	8,761	7.7	97.2	97.1	97.2	50.0	77.2	0.3	7.1
	2008	8,990	8.5	97.4	97.3	97.4	48.9	79.2	0.2	6.9
	2009	8,831	9.5	97.9	97.8	97.9	48.8	73.8	0.2	4.9

Source: South West Public Health Observatory from NCDR

## Appendix

### Staging data captured as part of the Skin Cancer Registration project undertaken by SWCIS using 2009 data

Data items relevant to AJCC staging requirements were captured as part of a project undertaken by SWCIS using all skin cancer pathologically diagnosed and available for registration

#### Summary of Skin Cancer registration project

##### Overall aim of the project:

To pilot the registration of all skin cancers, and address the barriers to complete registration of skin cancer

##### Data sources

A number of sources and types of data were used for this project.

- Pathology system data from local trusts providing full pathological (data from 2 Trusts were not available and/or complete due to problems with their pathology system),
- Patient Administration System (PAS) data from local trusts,
- Radiology systems sourced from local trusts and from the Radiotherapy dataset RDTS national feed.
- Multi Disciplinary Team (MDT) data were only available for 13/22 Trusts in the region.

##### Overall data capture

The main aim of this project was to undertake a full registration of skin cancer in the SWCIS catchment area. Data were entered on a standalone database.

Number of malignant melanoma assessed as part of the standalone database was slightly lower than the overall number on the cancer registry because of the issue mentioned above of 2 Trusts having problem with their pathology IT extracts (1,852 v 1,913).

The standalone dataset allowed us to gather additional cases of non melanoma skin cancer.

Currently UKACR recommendation is to register the first case of squamous cell carcinoma and basal cell carcinoma. There was an increase in the number of cases registered but the data presented below were still underestimated due to incomplete pathology extracts from 2 local Trusts and also to the lack of pathology reports of basal cell carcinoma given non surgical treatments.

		Basal Cell Carcinoma	Squamous Cell Carcinoma
a.	Number of cases	25,981	5,385
b.	Number of patients with only one case in 2009	16,390	4,391
c.	Number of patients with two or more cases in 2009	3,733	434
d.	Number of patients recorded on standalone database <u>and</u> were also recorded on the Cancer Register from 1998 to 2008 <i>Data from: South West Cancer Registry</i>	6,102	962
e.	Expected no. of patients on the 2009 Cancer Register $\{(b \text{ plus } c) \text{ minus } d\}$	14,021	3,863
f.	Percentage of expected cases on the 2009 Cancer Register $\{(e/a)*100\}$	54.0%	71.7%
g.	Estimated no. of extra cases on the standalone database $(a \text{ minus } e)$	11,960	1,520
h.	Percentage of extra cases $\{(g/a)*100\}$	46.0%	28.3%

### Completeness of data items related to AJCC staging of malignant melanoma

	Number of cases	%
<b>Thickness</b>	1525/1852	82
<b>Ulceration present</b>	1572/1852	84
<b>Mitotic rate per Sq.mm <sup>(1)</sup></b>	528/1852	28.5
<b>T (0-4) pathology</b>	1749/1852	94
<b>N (0-3) pathology</b>	141/1852	8
<b>M(0-1) <sup>(2)</sup> pathology</b>	22/1852	1

Note:

(1) Other cases had mitotic rate given as X mitoses per X HPF or Low, Moderate and Brisk. Including these data a total of 53% (987/1852) of cases had a mitotic rate

(2) Data were extracted from pathology and therefore data on M will be limited at this stage.

A full TNM pathology was only available for 9 cases

### Completeness of data items related to AJCC staging of squamous cell carcinoma

	Number of cases	%
<b>Thickness</b>	2094/5385	39
<b>Clark level - including level IV <sup>(1)</sup></b>	0/5385	0
<b>Perineural invasion</b>	3237/5385	60
<b>Grade (differentiation)</b>	4846/5385	90
<b>T</b>	616/5385	11
<b>N</b>	13/5385	2
<b>M</b>	4/5385	0
<b>Anatomical site</b>	5231/5385	97

### Completeness of data items related to AJCC staging of basal cell carcinoma

	Number of cases	%
<b>Thickness</b>	975/25981	4
<b>Clark level - including level IV*<sup>(1)</sup></b>	0/25981	0
<b>Perineural invasion</b>	7616/25981	29
<b>Grade (differentiation)</b>	70/25981	0.3
<b>T</b>	762/25981	3
<b>N</b>	0	0
<b>M</b>	0	0
<b>Anatomical site</b>	24855/25981	96

Note:

(1) Clark level data including level IV are available on histology reports but were not included for Squamous Cell Carcinoma and Basal Cell Carcinoma

The NCIN is a UK-wide initiative, working to drive improvements in standards of cancer care and clinical outcomes by improving and using the information collected about cancer patients for analysis, publication and research.

Sitting within the National Cancer Research Institute (NCRI), the NCIN works closely with cancer services in England, Scotland, Wales and Northern Ireland. In England, the NCIN is part of the National Cancer Programme.

Our aims and objectives cover five core areas to improve the quality and availability of cancer data from its collection to use:

- Promoting efficient and effective data collection throughout the cancer journey
- Providing a common national repository for cancer datasets
- Producing expert analyses, to monitor patterns of cancer care
- Exploiting information to drive improvements in cancer care and clinical outcomes
- Enabling use of cancer information to support audit and research programmes