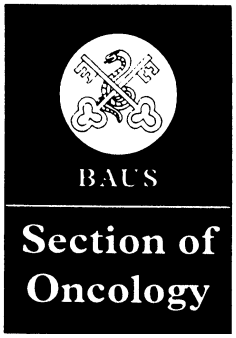


THE BRITISH ASSOCIATION OF UROLOGICAL SURGEONS

SECTION of ONCOLOGY

BAUS Cancer Registry
Analyses of Minimum data set for Urological cancers
January 1st – 31st December 2009

October 2010

MEMBERS OF THE EXECUTIVE COMMITTEE

M Aitchison	G Boustead	J Crew	D R Greene
R C Kocklebergh	R A Persad	S Prescott	
V Srinivasin	K S Swami		

PRODUCED FOR BAUS SECTION OF ONCOLOGY
by

Mrs Sarah Fowler
BAUS Cancer Registry Manager

CONTENTS

INTRODUCTION

The first data extraction from Nuvola during 2010 has taken place relatively smoothly, despite some expected gremlins which Sarah Fowler has sorted out. We remain hopeful that given time, the web based database will improve capture rates as well as simplify data returns demanded for revalidation. The Executive Committee is also exploring ways of helping and facilitating this process in the future.

Returns from 2009 are marginally down on last year and worryingly the quality and completeness of the submissions has declined still further. One of the core strengths of the BCR data in the past has been the TNM staging information, which set us apart from data held by other national cancer registries. Sadly this data quality is deteriorating (see section C). We believe that the increasing use of in-house systems to bulk-upload the data, as opposed to entering the data on an individual patient basis is the major reason. Please do impress upon those in your departments who do data entry the importance of accuracy and completeness and if possible run some checks on the quality and completeness of your data before it is uploaded if your submission is bulk-uploaded. In addition the reporting function within the web-based database allows you to extract and analyse all the data entered under your name and it is suggested that you do so on a regular basis to ensure its accuracy / completeness.

In line with the theme of this year's Section meeting, we have also included some analyses of the whole dataset on prostate cancer over the last decade.

Finally, the Executive committee would like to see regular publications and updates appearing in the peer reviewed literature, to raise the profile and awareness of the BCR, as well as utilize the valuable information it holds. Anyone is free to apply with a simple application form and instructions available on the website.

Greg Boustead
October 2010

AUDIT RESULTS SUMMARY January 1st – 31st December 2009

Who took part?

348 consultant urologists from 107 hospital centres in England, Wales, Scotland and Northern Ireland provided data for this study submitting data on 22,756 newly presenting urological tumours from 1st January to 31st December 2009. These figures represent approximately 40% of the total UK tumours registered in 2007/2008 (56,611) (the most recent years available). 0.3% (80/22,756) are the private patients of 32 consultants.

How were the data analysed?

All information presented here was extracted from the web-based database developed by Nuvola and launched in June 2009. All historical information was uploaded to the system at this time and participants were then encouraged to start entering their data directly, either in the form of bulk uploads or on an individual patient basis. As would be expected there have been a number of teething problems both with the bulk uploading and with individual data entry as users become used to the new system.

Until January 1st 2010 data could be returned either by completion of pro formas for each patient or in electronic format using either an Access (Microsoft) database or "in-house" database. The pro formas were entered directly into an Access database, at which time validation comprising mainly of checks for duplicate entries and dates could be carried out. All of this data was transferred to the web-based system and has been included in the analyses.

The data presented here are a summary of that received up to 10th September 2010 and relate to diagnoses made during the whole of 2009. The following data was included (this includes the total returns):

a. Patients for who the date of diagnosis fell within the time period. (01/01/2009 to 31/12/2009). 22,023 registrations (96.8%).
b. Patients for whom the date of diagnosis was either not included or the patient was a tertiary referral, but the referral date fell within the study period. (01/01/2009 to 31/12/2009) 733 registrations (3.2%).

For the ranked charts (1, 2 & 4) the individual consultant or centre identification numbers were removed and replaced with rank numbers starting at 1. A unique, confidential "Ranking Sheet" was prepared for each surgeon to enable them to identify their rank in every chart. For those charts where overall figures for the entire database are shown the ranking sheet displays the consultant's individual figures. No one else can identify the results of an individual consultant. The ranked comprise single bars, with in addition the 25, 50, and 75 percentiles and are ranked from left to right in the ascending order of the data item being measured. Where percentages are included figures have been rounded up to one decimal point. Unless otherwise stated all analyses represent the 2009 dataset.

A personal ranking sheet for each consultant registering three or more tumours was issued individually to go with this chartbook.

Sarah Fowler October 2010
BAUS Cancer Registry (BCR) Manager

A. Participants and Overall Figures

The proportion of data returned by bulk upload from in-house systems as oppose to being entered directly onto the web-based database has increased yet again but unfortunately the completeness of data returned by many of these systems remains less so than when individually entered or, prior to January 2010, returned using the specially designed Microsoft Access database, making validation and analyses more complicated.

As in previous years we have incorporated comparison with National Cancer Statistics from 2007/2008 – the latest years available. Comparison with the national data does suggest that our data are representative of the UK as a whole. However when comparing our data with that of the national data we should, as usual, bear in mind the following:

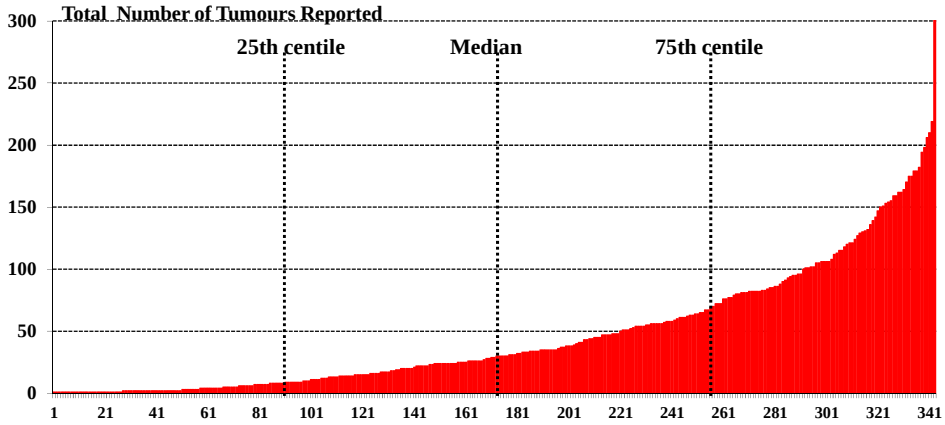
- Our data are only being collected by urologists. We have no way of estimating the number of urological cancers that are not being seen or diagnosed by urologists. In the case of kidney cancer, it seems that a substantial number are never seen by a urological surgeon.
- These data are being presented within ten months of the completion of the year of data collection, 2009, and being compared to national figures from 2007/2008, which are the latest to be published.
- For the majority of participants, there is no specific funding for data collection and the analysis and presentation is entirely funded by the Section of Oncology.

BAUS - Register of Newly Presenting Urological Tumours
January 1st - December 31st 2009
Who took part

- **348 Consultants from 107 Centres provided data on 22,756 newly presenting urological tumours.**
- **0.3% (80/22,756) were from the private patients of 32 Consultants**
- **Range of Consultants per Centre = 1 - 11, (Median 4)**
- **Median number of tumours per Consultant = 29, Range 1 - 303**
- **Median number of tumours per Centre = 147, Range 1 - 1650**

Chart 1

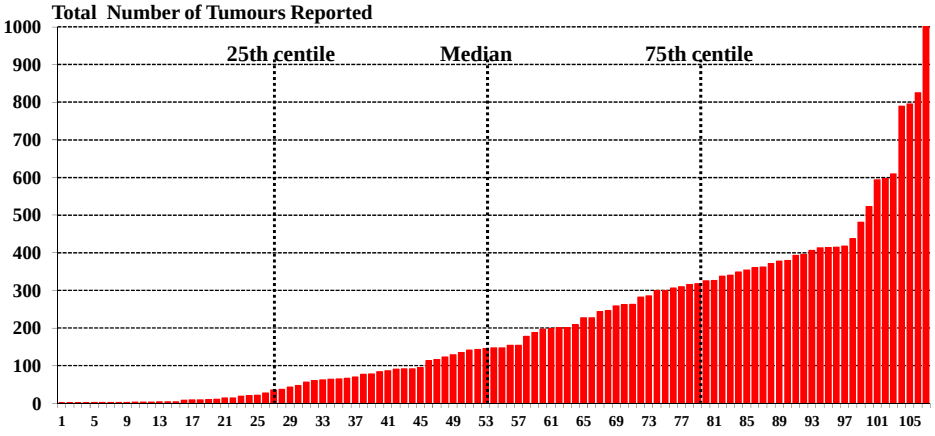
Total Number of Newly Presenting Tumours Reported per Consultant
Median: 29 (Interquartile Range 8 - 70)



N.B. Excludes data returned by centres as a whole

Chart 2

Total Number of Newly Presenting Tumours Reported per Centre
Median: 145 (Interquartile Range 35 - 325)



N.B. Excludes private patients

Chart 3

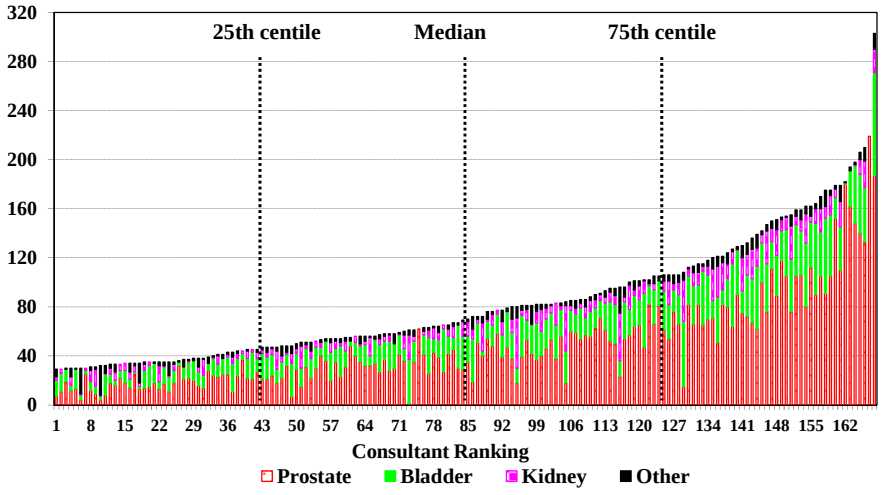
Number of Newly presenting Tumours by Organ per Consultant
348 Consultants reported 22,756 Tumours
Median Total per Consultant = 29

Organ	Total Number Reported	Median per Consultant	Range
Prostate *	13365	14	0 – 219
Bladder	5708	6	0 – 84
Kidney	2224	2	0 – 42
Testis	607	1	0 – 21
Pelvis/Ureter	387	0	0 – 13
Penis	225	0	0 – 21
Urethra	24	0	0 – 1
Prostatic Urethra	6	0	0 - 1

*** Includes 22 registrations with High Grade PIN only**

Chart 4

Total Number of Newly Presenting Tumours Reported per Consultant
by Organ where n >=29 (i.e. the median reported per consultant)



N.B. Excludes data returned by centres as a whole

Chart 5

Overall Data by Organ

Organ	Number Recorded	Percentage of Total (22756)	Median Age at Diagnosis	Age Range	Males	Females
Prostate *	13365	*58.7*	70	26-109	13364	
Bladder	5708	*25.1*	73	22-100	4298	1389
Kidney	2224	*9.8*	68	18-96	1380	836
Testis	607	*2.7*	36	15-100	607	
Pelvis/Ureter	387	*1.7*	74	35-98	252	134
Penis	225	*1.0*	65	20-98	225	
Urethra	24	*0.1*	76	45-89	10	14
Prostatic Urethra	6	*0.0*	72.5	58-87	6	
Other	75	*0.3*	70	27-98	60	15
Not recorded	135	*0.6*	69	9-89	110	24

*** Includes 22 registrations with High Grade PIN only**

Chart 6

Overall Data by Organ by Year

Organ	2009 Number Recorded	*% of Total (22,756)*	2004 Number Recorded	*% of Total (24,532)*	1999 Number Recorded	*% of Total (19,009)*
Prostate	13365	*58.7*	14858#	*60.6*	9277	*48.8*
Bladder	5708	*25.1*	6073	*24.8*	6584	*34.6*
Kidney	2224	*9.8*	2104	*8.6*	1661	*8.7*
Testis	607	*2.7*	750	*3.1*	838	*4.4*
Pelvis/Ureter	387	*1.7*	291	*1.2*	281	*1.5*
Penis	225	*1.0*	196	*0.8*	165	*0.9*
Urethra	24	*0.1*	29	*0.1*	-	
Prostatic Urethra	6	*0.0*	15	*0.1*	-	
Other	75	*0.3*	29	*0.1*	120	*0.6*
Not recorded	135	*0.6*	187	*0.8*	85	*0.4*

Including registrations with High Grade PIN only:
*** 22; # 84**

Chart 7

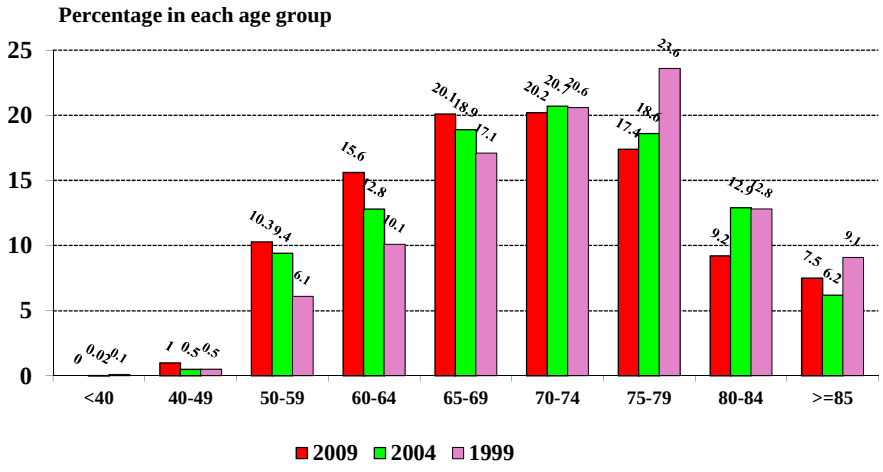
Total Registrations per Country
Prostate, Bladder, Kidney, Testis, Pelvis/Ureter & Penile Tumours*

Region	2009 Total Registrations* BAUS	National figures**	2009 BAUS % National	2004 BAUS % National	1999 BAUS % National
England	19231	47314	*40.6*	*50.8*	*44.0*
Scotland	962	4188	*23*	*18.8*	*17.4*
Wales	2251	3719	*60.5*	*53.3*	*35.5*
Northern Ireland	86	1390	*6.2*	*37.6*	*24.5*
Total UK	22530	56611	*39.8*	*48.1*	*40.7*

**England : cancer statistics - registrations of cancer diagnosed in 2007, England. Series MBI no. 38 – 2010
Wales: Welsh Cancer Intelligence & Surveillance Unit – 2008: www.wales.nhs.uk
Scotland:Scottish Cancer Registry,Scottish Cancer Intelligence Group, ISD Scotland – 2006: www.isdscotland.org
Northern Ireland:Northern Ireland Cancer Registry - 2007 _www.qub.ac.uk/nicr/research-centres

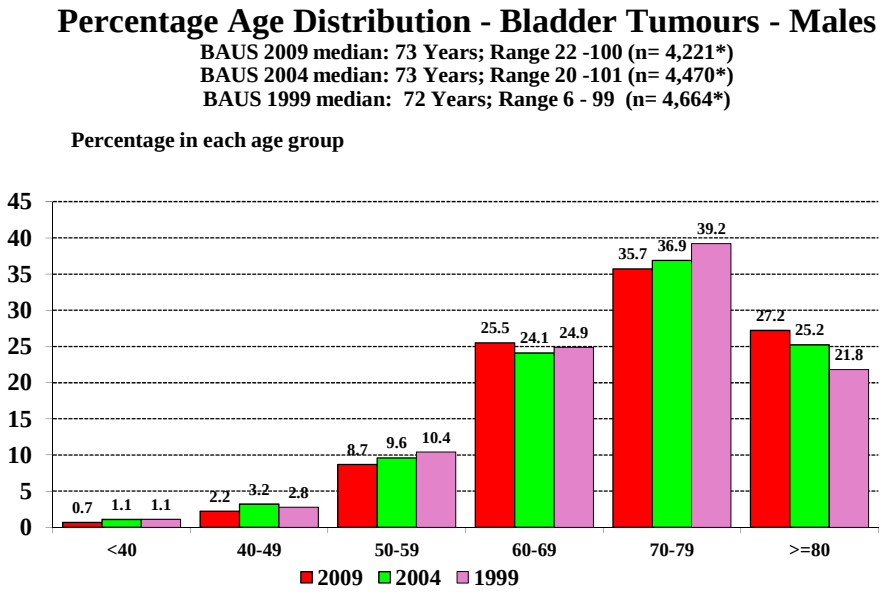
Chart 8

Percentage Age Distribution - Prostate Tumours
BAUS 2009 median: 70 Years; Range 26 -109 (n= 13,056*)
BAUS 2004 median: 72 Years; Range 21 -103 (n= 14,665*)
BAUS 1999 median: 73 Years; Range 21 -100 (n= 8,870*)



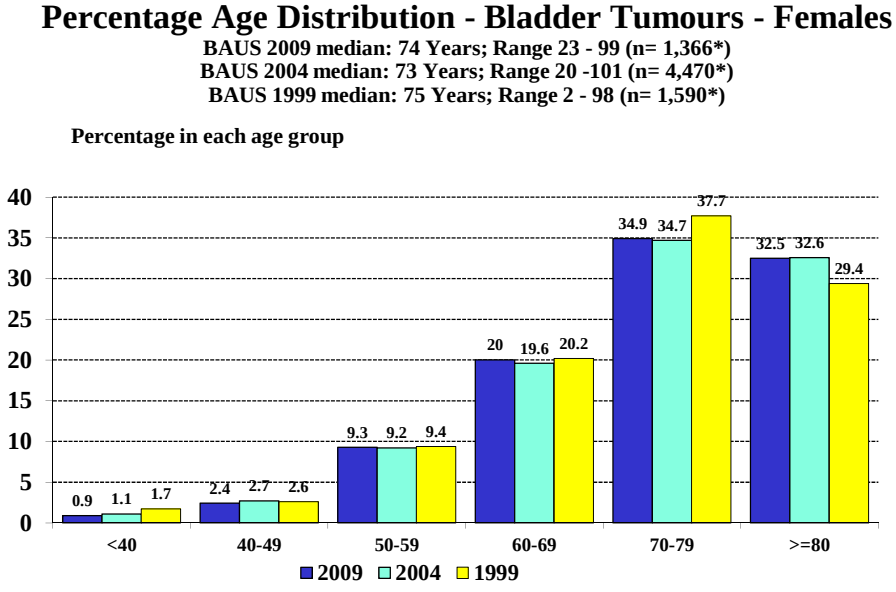
•Age could be calculated when both date of birth and diagnosis date were recorded
•The reductions in age at diagnosis over the years are significant at the 95% CI

Chart 9



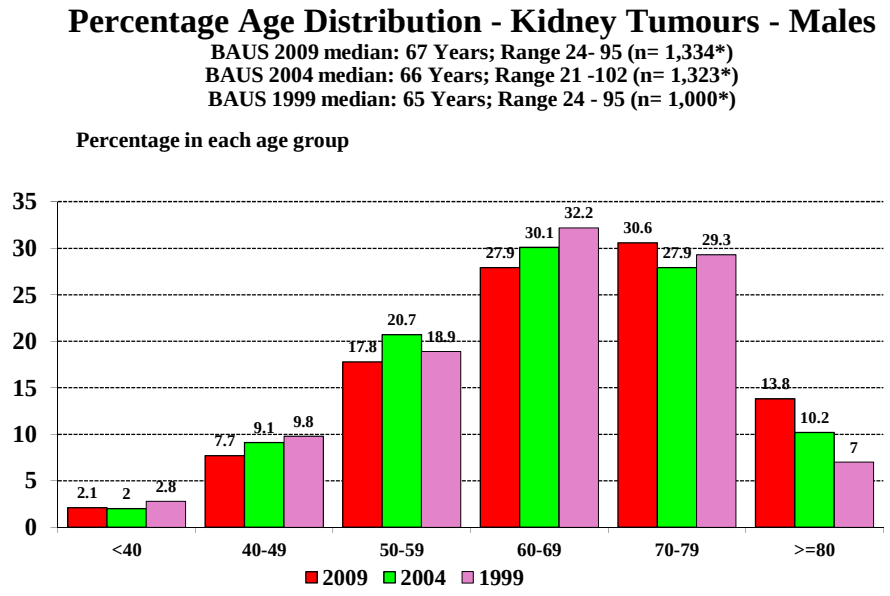
* Age could be calculated when both date of birth and diagnosis date were recorded

Chart 10



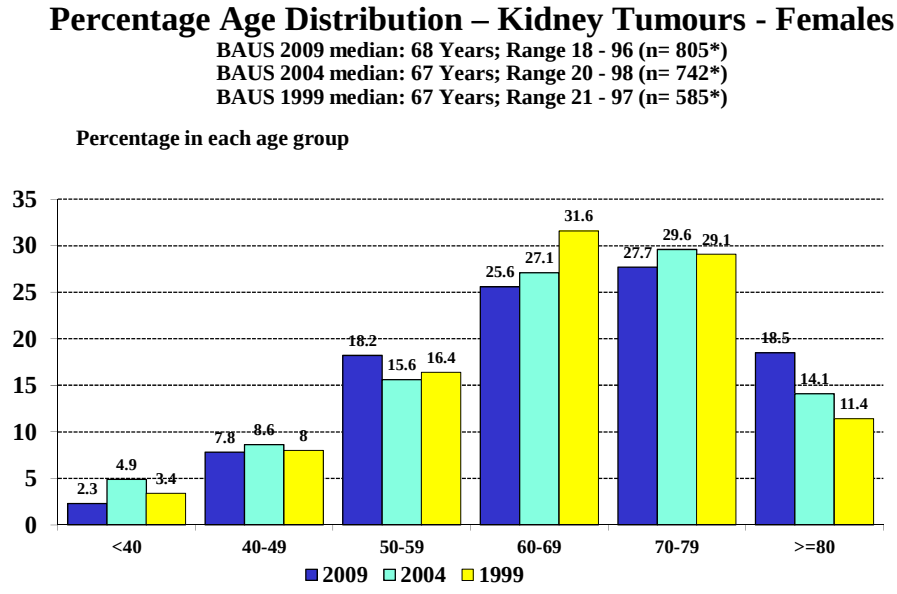
* Age could be calculated when both date of birth and diagnosis date were recorded

Chart 11



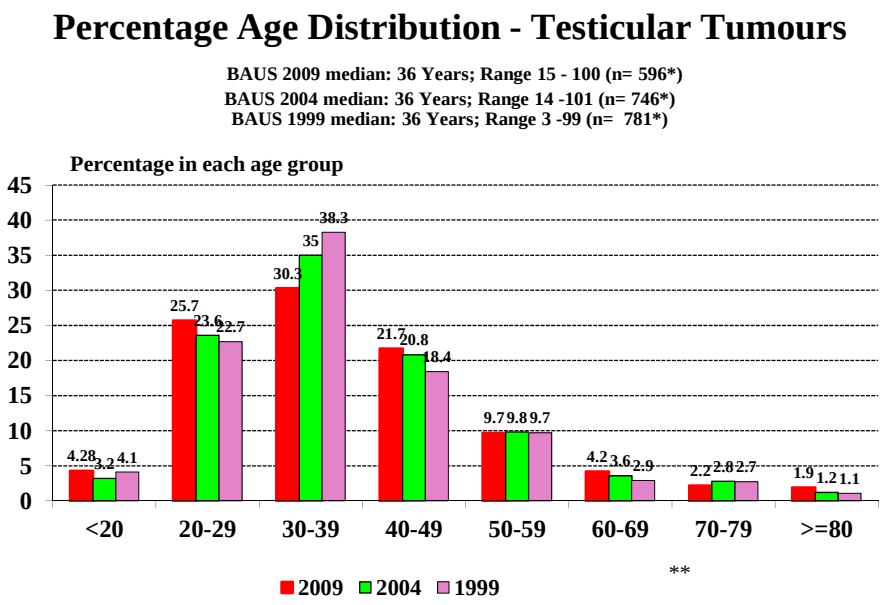
* Age could be calculated when both date of birth and diagnosis date were recorded

Chart 12



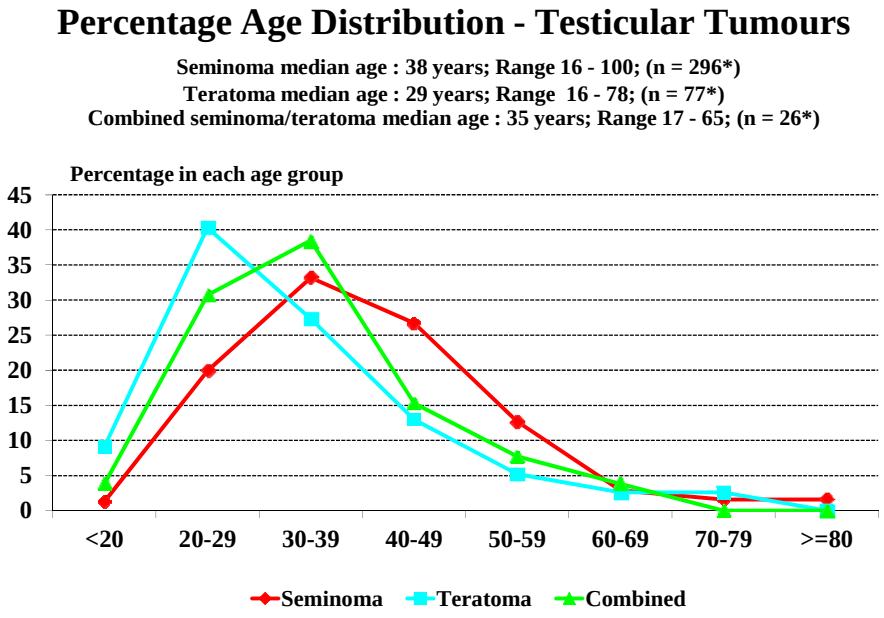
* Age could be calculated when both date of birth and diagnosis date were recorded

Chart 13



* Age could be calculated when both date of birth and diagnosis date were recorded

Chart 14

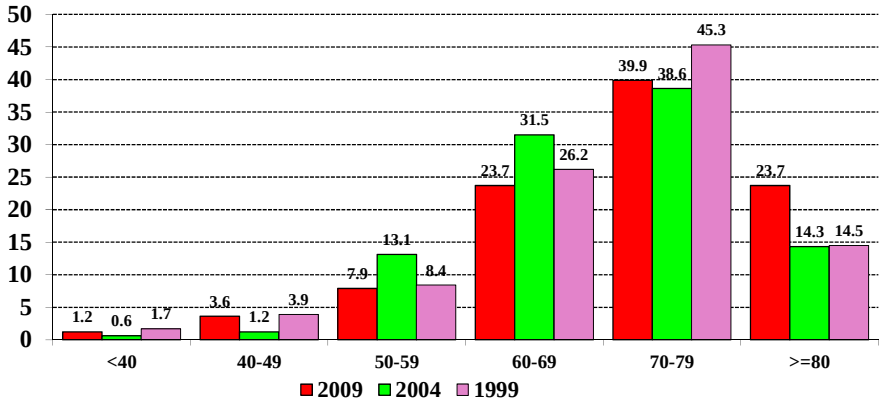


* Age could be calculated when both date of birth and diagnosis date were recorded = 596/607 (98%).
Histology was reported in 502 of these tumours. (502/596 = 84%), 103 of these were histologies other than the above groups

Chart 15

Percentage Age Distribution – Pelvic / UretericTumours – Males

BAUS 2009 median: 73 Years; Range 35 - 93 (n= 246*)
BAUS 2004 median: 70 Years; Range 19 - 91 (n= 168*)
BAUS 1999 median: 71 Years; Range 36 - 89 (n= 179*)

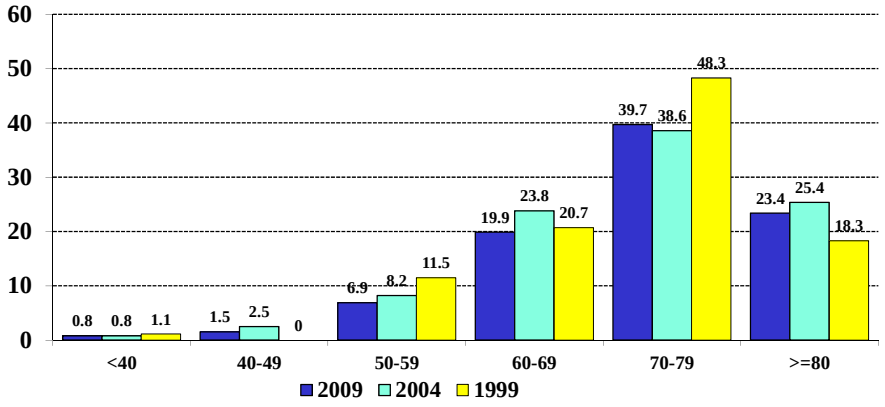


* Age could be calculated when both date of birth and diagnosis date were recorded

Chart 16

Percentage Age Distribution – Pelvic / UretericTumours – Females

BAUS 2009 median: 76 Years; Range 38 - 98 (n= 76*)
BAUS 2004 median: 73 Years; Range 19 - 94 (n= 122*)
BAUS 1999 median: 74 Years; Range 39 - 89 (n= 74*)

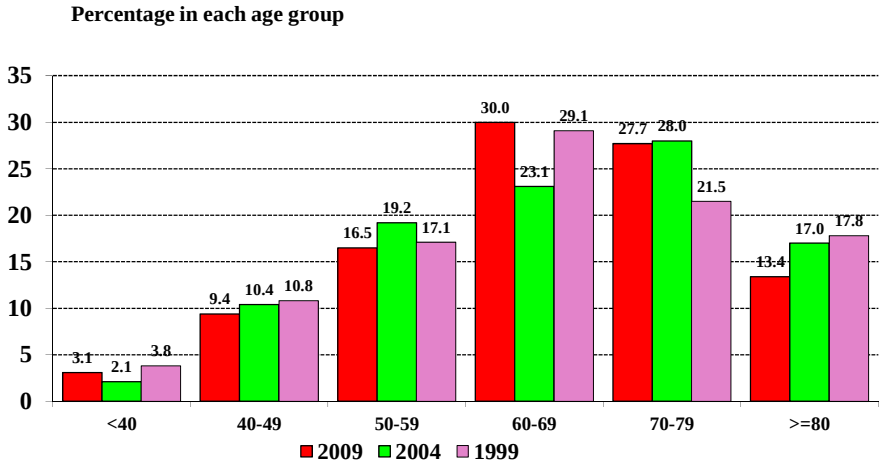


* Age could be calculated when both date of birth and diagnosis date were recorded

Chart 17

Percentage Age Distribution – Penile Tumours

BAUS 2009 median: 65 Years; Range 20- 98 (n= 220*)
BAUS 2004 median: 66 Years; Range 28 - 93 (n= 182*)
BAUS 1999 median: 66 Years; Range 31 - 95 (n= 158*)



* Age could be calculated when both date of birth and diagnosis date were recorded

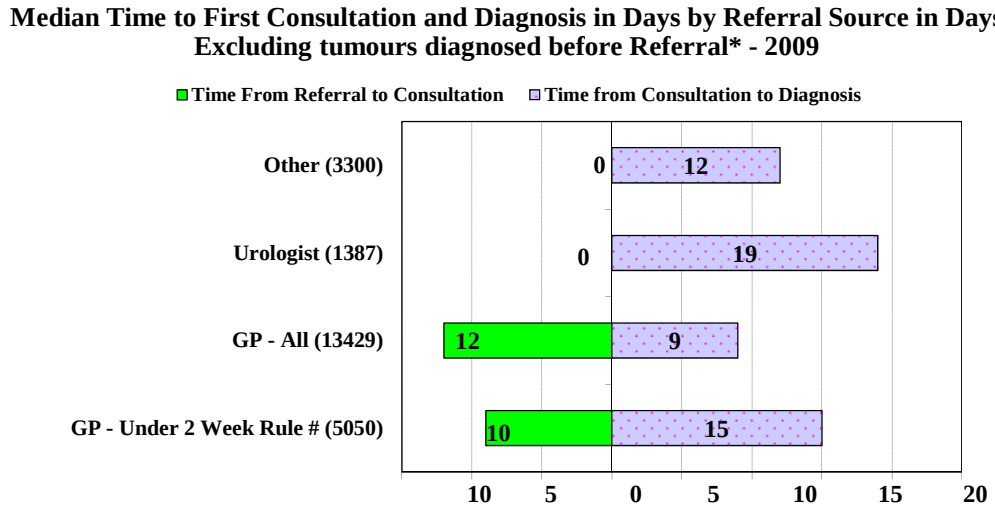
B. Times between referral, consultation, diagnosis and treatment

In this section we have included charts from the 2004 dataset to allow for comparisons.

The overall time from referral to diagnosis has fallen significantly from 2004 and is now the shortest since data collection started in 1999.

Recording of date of definitive treatment has improved this year by 10% with 81% of returns in 2009 including this item however interpretation must still be cautious. In some cases, the date of definitive treatment was recorded as being before the date of diagnosis! Any negative times between diagnosis and definitive treatment date were treated as 0 i.e. definitive treatment date = date of diagnosis.

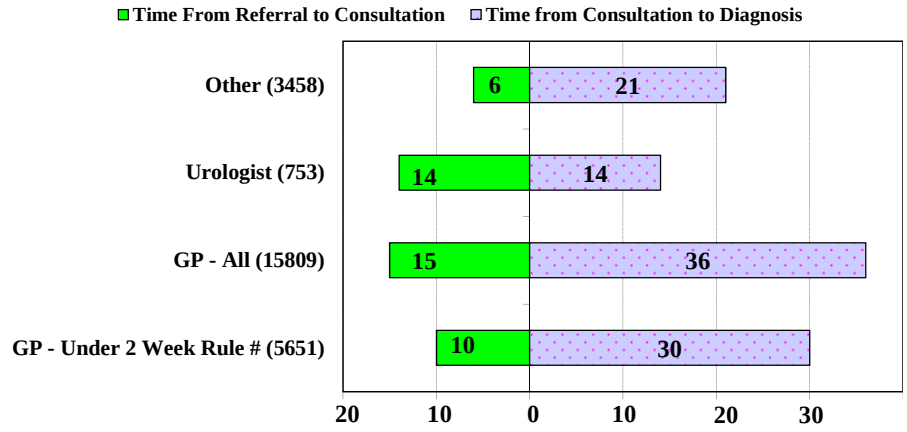
Chart 18



* Times were calculated when dates of referral, consultation and diagnosis were known and diagnosis date was not before referral date (N = 18,176/22,756 = 80% tumours)
Referral Source was recorded in 17,722/18,176 (98%) cases
Referral priority was recorded in 94% (10698/11326) GP referrals in England where 2 week rule operates

Chart 19

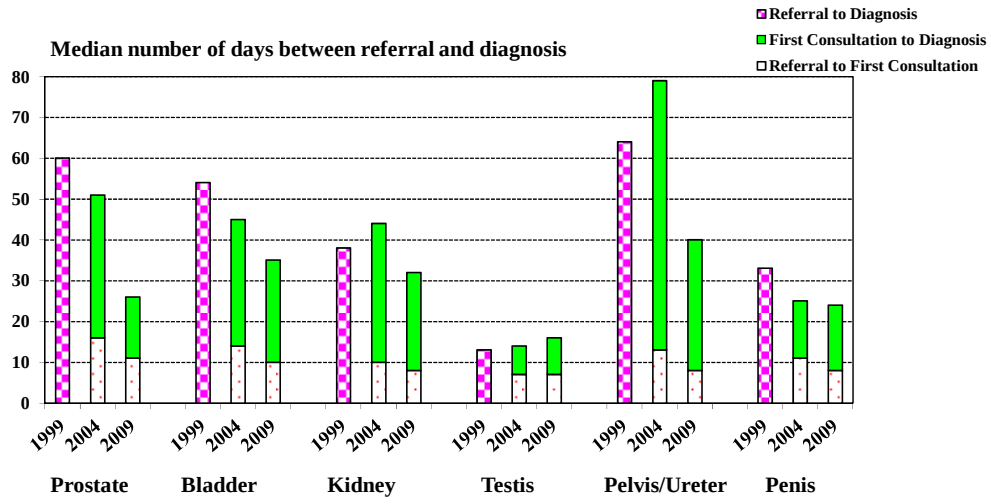
Median Time to First Consultation and Diagnosis in Days by Referral Source in Days
Excluding tumours diagnosed before Referral* - 2004



* Times were calculated when dates of referral, consultation and diagnosis were known
and diagnosis date was not before referral date (N = 20,189/24,532 = 82% tumours)
Referral Source was recorded in 20,020/20,189 (99%) cases
Referral priority was recorded in 96% (14601/15152) GP referrals in England where 2 week rule operates

Chart 20

Median Time to First Consultation and Diagnosis in Days by Organ
Excluding tumours diagnosed before Referral*



* Times were calculated when dates of referral, consultation and diagnosis were known
and diagnosis date was not before referral date . Date of first consultation not recorded in 1999

Chart 21

Median Total Times to Diagnosis in Days - All Referrals
Excluding Patients Diagnosed before Referral

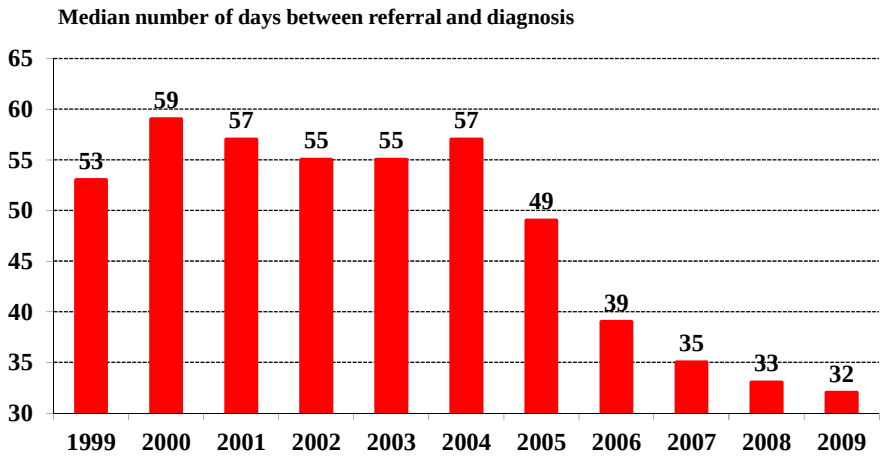


Chart 22

Times to Definitive Treatment in Days by Organ – 2009 and 2004
Excluding tumours diagnosed or treated before referral

Organ	Median Time between Referral and Definitive Treatment in days		Median Time between Diagnosis and Definitive Treatment in days	
	2004	2009	2004	2009
Prostate	112	62	31	28
Bladder	63	40	0	0
Kidney	65	58	0	12
Testis	16	16	0	0
Pelvis/Ureter	117	64	6	11
Penis	41	42	15	1

Definitive treatment date was recorded in 69% tumours (16923/24532) in 2004 and 81% in 2009 (18,442/22,756)

C. Histology and Staging

Histological confirmation was only available in 74% of all tumours. This has decreased steadily since 1999 and may be a reflection of the increasing number of returns using in-house data collection systems. Every effort should be made to record data on patients seen in clinics and on the wards, where there is no histological diagnosis.

Participants were asked to return both clinical and, where appropriate, pathological* TNM categories using the 2002 version of the TNM classification for Urological tumours which were included in the data dictionary sent to all participants.

In order to make interpretation of the resultant information easier each patient was staged, wherever possible, using the classifications as shown in the following charts. If the pathological TNM categories were given and appropriate then these were used for the staging, failing this clinical TNM categories were used.

The number of returns having either the full pathological TNM or clinical TNM categories has decreased significantly since last year and it is assumed that this is again a reflection of the proportion of data being uploaded in bulk from in-house systems. (A substantial proportion of returns do not include any N and M categories or these were recorded as "X" – Cannot be assessed.) A plea for more accurate data recording is given and the suggestion that the BCR data may be more fully recorded if completed during the relevant Multi Disciplinary Team meeting. The data on the following staging charts should therefore be regarded with caution.

*The pathological assessment of the primary tumour (pT) entails a "resection of the primary tumour or biopsy adequate to evaluate the highest pT category"

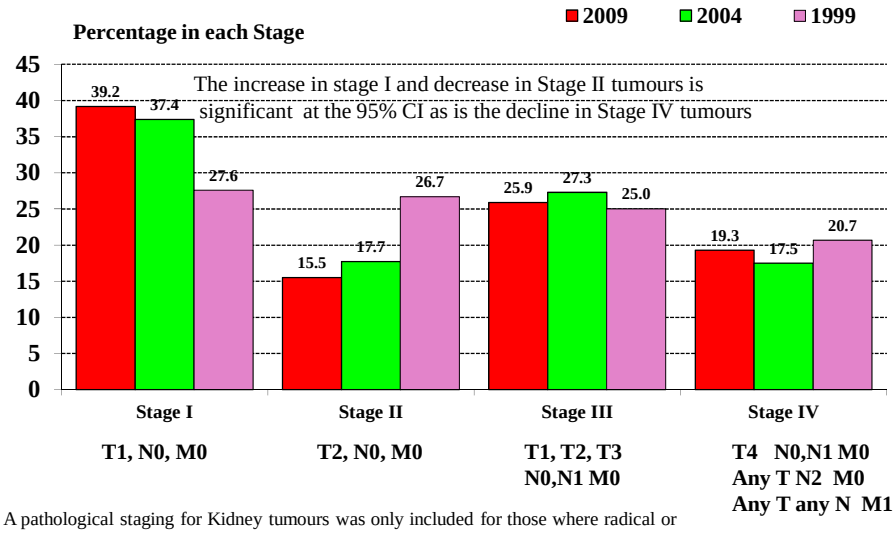
Chart 23

Known Histological Confirmation of Diagnosis by Organ

Organ	2009		2004		1999	
	N	%	N	%	N	%
Prostate	10367	77.6	13881	95.3	8605	94.4
Bladder	4568	80.0	5689	96.5	6344	97.8
Kidney	1071	48.2	1425	70.1	1436	88.0
Testis	463	76.3	685	93.6	815	99.4
Pelvis/Ureter	224	57.9	235	83.0	272	97.8
Penis	175	77.8	186	98.9	162	98.8
Urethra	19	79.2	28	100.0	-	
Prostatic Urethra	4	66.7	15	100.0	-	
Other or Not Recorded	59	28.1	80	30.4	185	94.9
Totals	16950	74.5	22224	92.6	17819	95.3

Chart 24

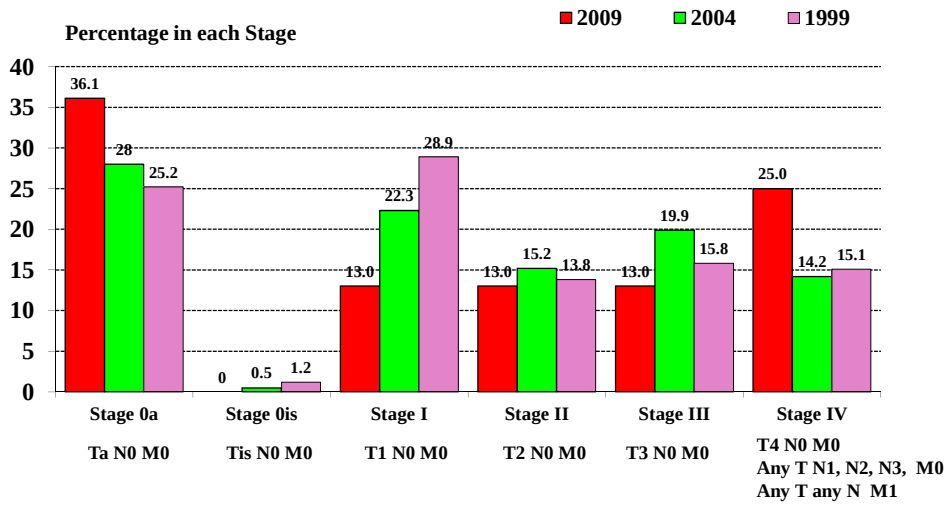
Staging of Kidney Tumours
Staging could be estimated in 40.9% in 2009, 75.4% in 2004 and 92% in 1999



N.B. A pathological staging for Kidney tumours was only included for those where radical or organ conserving surgery was performed

Chart 25

Staging of Pelvis / Ureteric Tumours
Staging could be estimated in 27.9% in 2009, 72.5% in 2004 and 87.5% in1999



N.B. A pathological staging for Pelvis / Ureteric tumours was only included for those where radical or organ conserving surgery was performed

Chart 26

Staging of Bladder Tumours
Staging could be estimated in 58.9% in 2009, 80.5% in 2004 and 94.2% in 1999

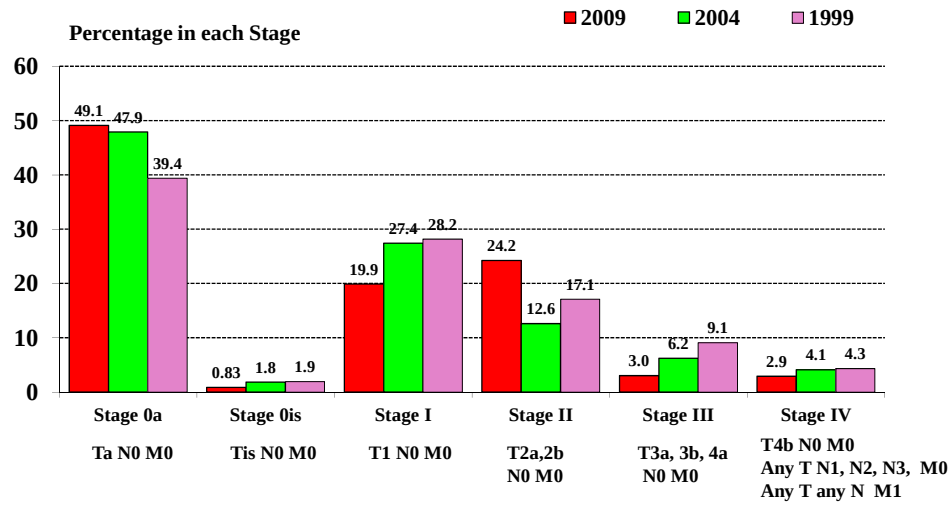
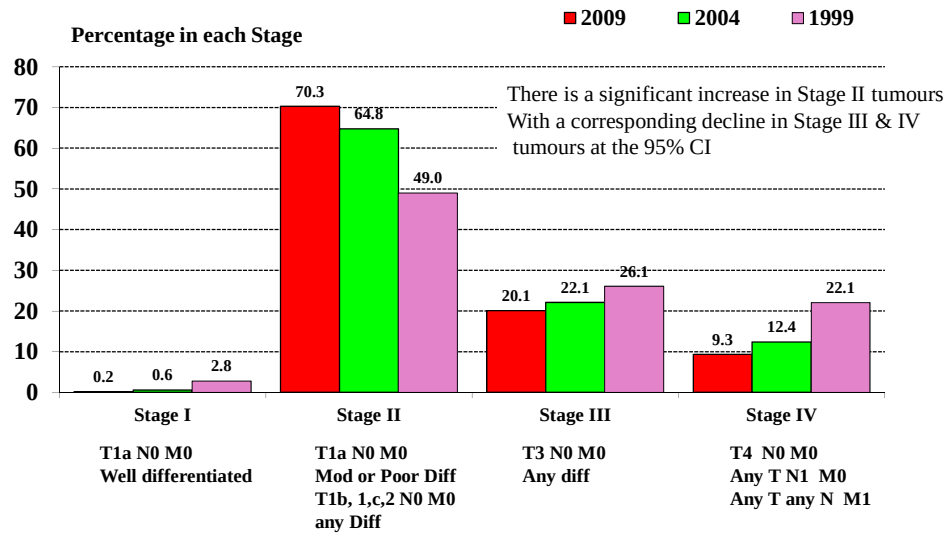


Chart 27

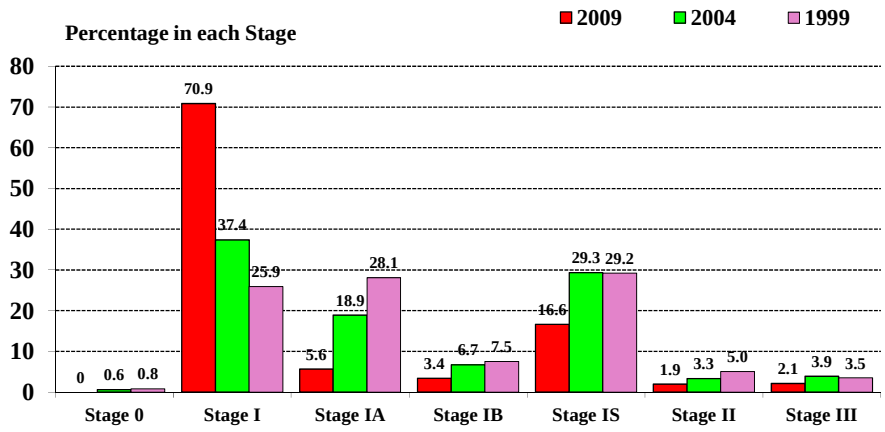
Staging of Prostate Tumours
Staging could be estimated in 49.5% in 2009, 67.6% in 2004 and 81.5% in 1999



N.B. A pathological staging for Prostate tumours was only included for those where radical surgery was performed

Chart 28

Staging of Testicular Tumours
Staging could be estimated in 50.9% in 2009, 69.2% in 2004 and 86.2% in1999

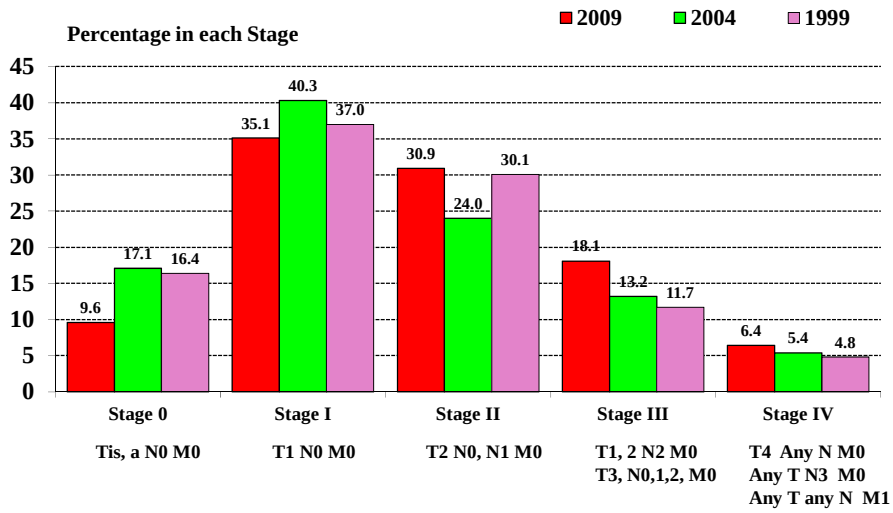


Stage 0 = Tis N0 M0 S0,SX
Stage I = T1,2,3,4 N0 M0 SX
Stage IA = T1, N0 M0 S0
Stage IB = T2, 3, 4, N0 M0 S0

Stage IS = Any T N0 M0 S1, 2, 3
Stage II = Any T, N1, 2, 3, M0, SX, 0, 1
Stage III =Any T, Any N, M1, 1a, SX, 0, 1,2, 3
Any T, N1, 2, 3, M0, S2, 3
Any T, Any N, M1b, Any S

Chart 29

Staging of Penile Tumours
Staging could be estimated in 41.8% in 2009, 65.8% in 2004 and 90.1% in1999



D. Treatment Intention & Laparoscopic procedures

Chart 30

Initial Treatment Intention by Organ
Percentage & Total of Known Intent - 2009

Organ (Number Known)	Curative N	%	Palliative N	%	No active anti-cancer treatment N	%	% of Total Tumours Reported
Prostate (7046)	3527	50.1	2227	31.6	1292	18.3	52.7
Bladder (3868)	3429	88.7	264	6.8	175	4.5	67.8
Kidney (1244)	850	68.3	222	17.8	172	13.8	55.9
Testis (296)	292	98.6	4	1.4		0.0	48.8
Pelvis/Ureter (184)	140	76.1	27	14.7	17	9.2	47.5
Penis (104)	94	90.4	5	4.8	5	4.8	46.2
Urethra (14)	12	85.7	1	7.1	1	7.1	58.3
Prostatic Urethra (2)	2	100.0	-		-		33.3

Chart 31

Initial Treatment Intention by Organ
Percentage & Total of Known Intent - 2004

Organ (Number Known)	Curative N	%	Palliative N	%	No active anti-cancer treatment N	%	% of Total Tumours Reported
Prostate (11615)	5131	44.2	4750	40.9	1734	14.9	78.2
Bladder (5132)	4574	89.1	450	8.8	108	2.1	84.5
Kidney (1765)	1273	72.1	332	18.8	160	9.1	83.9
Testis (620)	613	98.9	6	1.0	1	0.2	82.7
Pelvis/Ureter (234)	189	80.8	32	13.7	13	5.6	80.4
Penis (146)	132	90.4	9	6.2	5	3.4	74.5
Urethra (25)	15	60.0	7	28.0	3	12.0	86.2
Prostatic Urethra (11)	7	63.6	2	18.2	2	18.2	73.3

Chart 32

Initial Treatment Intention by Organ
Percentage & Total of Known Intent - 1999

Organ (Number Known)	Curative N	%	Palliative N	%	Surveillance N	%	% of Total Tumours Reported
Prostate (8291)	2465	*29.7*	4483	*54.1*	1343	*16.2*	*69.1*
Bladder (6105)	5096	*83.5*	820	*13.4*	189	*3.1*	*73.4*
Kidney (1579)	1191	*75.4*	307	*19.5*	81	*5.1*	*70.6*
Testis (789)	764	*96.8*	8	*1.0*	17	*2.2*	*70.9*
Pelvis/Ureter (268)	230	*85.8*	30	*11.2*	8	*3.0*	*75.8*
Penis (153)	136	*88.9*	15	*9.8*	2	*1.3*	*64.7*

Chart 33

Laparoscopic Procedures Performed as Percentage of Total Procedures reported*

Organ	2009			2004			2001		
	Open	Lap	Lap as % total	Open	Lap	Lap as % total	Open	Lap	Lap as % total
Prostate	1371	323	*23.6*	2709	290	*9.7*	3838	45	*1.2*
Kidney	753	288	*38.2*	1345	169	*11.2*	1632	31	*1.9*
Pelvis / Ureter	140	37	*26.4*	187	34	*15.4*	295	6	*2.0*
Bladder	4080	11	*0.3*	5232	4	*0.1*	6854	7	*0.1*

* Laparoscopic procedures not recorded until 2001

Chart 34

Laparoscopic Surgery by Organ and Stage
Total Numbers recorded

Staging	Prostate			Bladder			Kidney			Pelvis/Ureter		
	2009	2004	2001	2009	2004	2001	2009	2004	2001	2009	2004	2001
Stage 0a	N/A	N/A	N/A	2	1	1	N/A	N/A	N/A	3	9	2
Stage I		-	-	-	2	-	74	107	22	2	6	3
Stage II	92	247	40	1	1	3	10	14	3	3	5	
Stage III	5	21	3	-	-	2	11	12	1	1	2	1
Stage IV	2	-	2	-	-	-	6	4	-	-	-	
Not Recorded	224	22	-	8	-	1	187	32	6	28	12	-
Totals	323	290	45	11	4	7	288	169	32	37	34	6

E. Clinical Trial Status and discussion at MDT meeting

Chart 35

Clinical Trial Status

Trial Status	2009		2004		2002*	
	N	%	N	%	N	%
Patient eligible, consented to and entered trial	284	1.2	554	2.3	597	2.1
Patient eligible for trial but declined entry	121	0.5	148	0.6	144	0.5
Patient ineligible for trial	677	3.0	1231	5.0	1088	3.8
Patient not considered for trial	2844	12.5	7839	32.0	8746	30.8
Clinical trial status unknown	5737	25.2	4452	18.1	4879	17.2
Not Recorded	13093	57.5	10308	42.0	12897	45.5

*** First year recorded**

Chart 36

Was the Patient discussed at an MDT meeting with formation of a management plan?

Response	2009		2003*	
	N	%	N	%
Yes	18804	82.6	14967	55.0
No	1658	7.3	9414	34.6
Not Known or Not Recorded	2294	10.1	2844	10.4

*** First year recorded**

F. Completeness of Data

Chart 37

Completeness of Data -1
Percentage and numbers of Total Returns unknown

Data Item	2009 Number Unknown	*% of Total Returns 22756*	2004 Number Unknown	*% of Total Returns 24532*	1999 Number Unknown	*% of Total Returns 22309*
Centre no or Cons no	0	*0*	0	*0*	9	*0.04*
Hospital number	#3193	*14.0*	**760	*3.1*	***257	*1.4*
NHS number	#	-	2975	*12.1*	6946	*36.5*
Postcode	##	-	948	*3.9*	1319	*6.9*
Sex	32	*0.1*	113	*0.5*	118	*0.6*
Date of Birth	###543	*2.4*	244	*1.0*	217	*1.1*
Organ	126	*0.5*	181	*0.7*	83	*0.4*
Date of Diagnosis	199	*0.9*	84	*0.3*	604	*3.2*
Referral Source	1284	*5.6*	1592	*6.5*	1096	*5.8*
Priority of GP Referrals	1019/14251	*7.1*	776/17123	*4.5*	-	-
Date of Referral	1513	*6.6*	2419	*9.9*	1820	*9.6*
Date of First Consultation	2156	*9.5*	2101	*8.6*	-	-
Date of Definitive Treatment	4271	*18.8*	7707	*31.4*	-	-
Delay to Diagnosis	2330	*10.2*	2738	*11.2*	-	-
Histological confirmation	104	*0.5*	593	*2.4*	321	*1.7*
Basis of diagnosis if no Histology	2271/5706	*39.8*	175/1713	*10.2*	71/875	*8.1*

 # - NHS number main patient identifier -random one automatically created if missing; ## No longer extracted; ### Age at diagnosis;

**** includes 160 pp + 220 from 1 centre with data extraction problems ; *** includes 198 pp**

Chart 38

Completeness of Data -2
Percentage and numbers of Total Returns unknown

Data Item	2009 Number Unknown	*% of Total Returns 23174*	2004 Number Unknown	*% of Total Returns 24532*	1999 Number Unknown	*% of Total Returns 19009*
Histology	583/16946	*3.4*	787/22226	*3.5*	258/17813	*1.4*
Differentiation	7090/16946	*41.8*	5230/22226	*23.5*	2220/17813	*12.4*
Clinical T Category	13652	*60.0*	2669	*10.9*	3357	*17.7*
Clinical N Category	15610	*68.6*	4057	*16.5*	6555	*34.5*
Clinical M Category	15263	*67.1*	4453	*18.2*	6467	*34.0*
Pathological T Category	11098/16946	*65.5*	9158/22226	*41.2*	6223/17813	*34.9*
Pathological N Category	12883/16946	*76.0*	9920/22226	*44.6*	9061/17813	*50.9*
Pathological M Category	12396/16946	*73.1*	9930/22226	*44.7*	9055/17813	*50.8*
PSA at time of Diagnosis	306/13365	*2.3*	2276/14858	*15.3*	1071/9277	*11.5*
Gleason Scores	3145/13365	*23.5*	2102/14858	*14.1*	-	-
Testicular S Category	534/607	*88.0*	436/750	*58.1*	307/838	*36.6*
Treatment Intention	9960	*43.8*	4949	*20.2*	1646	*8.7*
Treatment Type	322/11134	*2.9*	703/17559	*4.0*	331/15714	*2.1*
Clinical Trial Status	13093	*57.5*	10705	*43.6*	-	-
Discussed at MDT	2294	*10.1*	1907	*7.8*	-	-
Pathological Ref. No.	8152	*35.8*	6322	*25.8*	-	-

G. Prostate Cancers – 1999 to 2009

The BAUS Cancer Registry (BCR) currently has data on over 300,000 new urological cancers diagnosed since 1998. We have undertaken an ad hoc analysis of all the prostate cancer entries (154,326) showing trends over the years 2000, 2003, 2006 and 2009. This is estimated to represent between 40 and 50% of all new prostate cancer registrations during this time period.

Chart 39

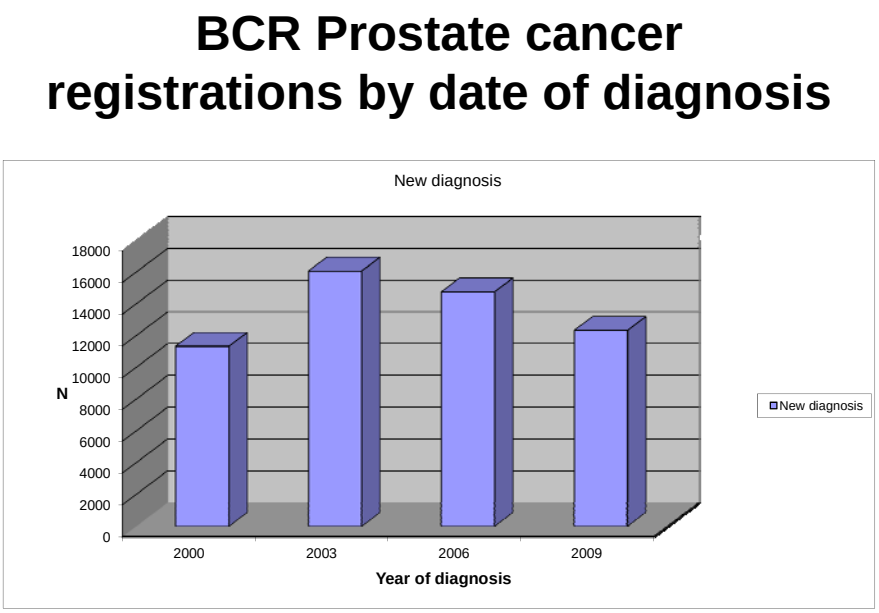


Chart 40

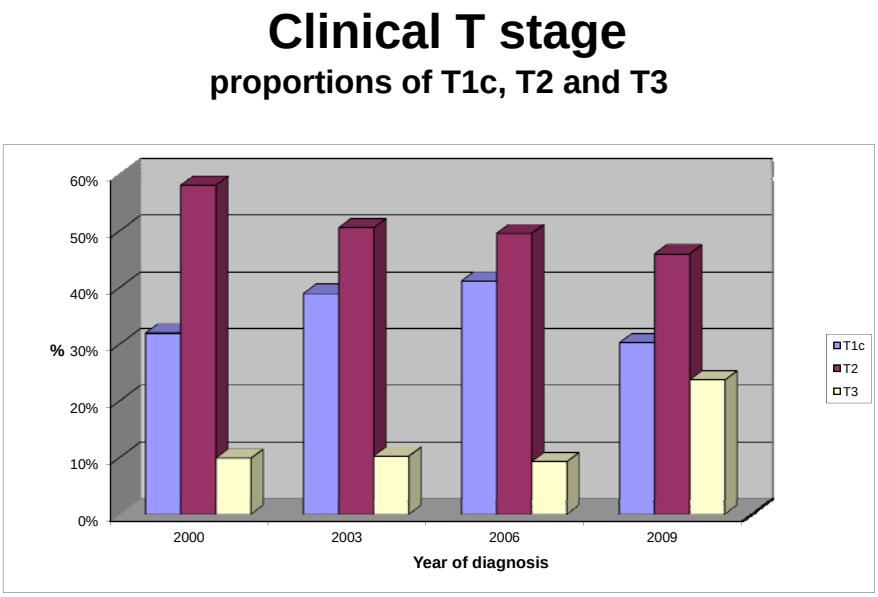


Chart 41

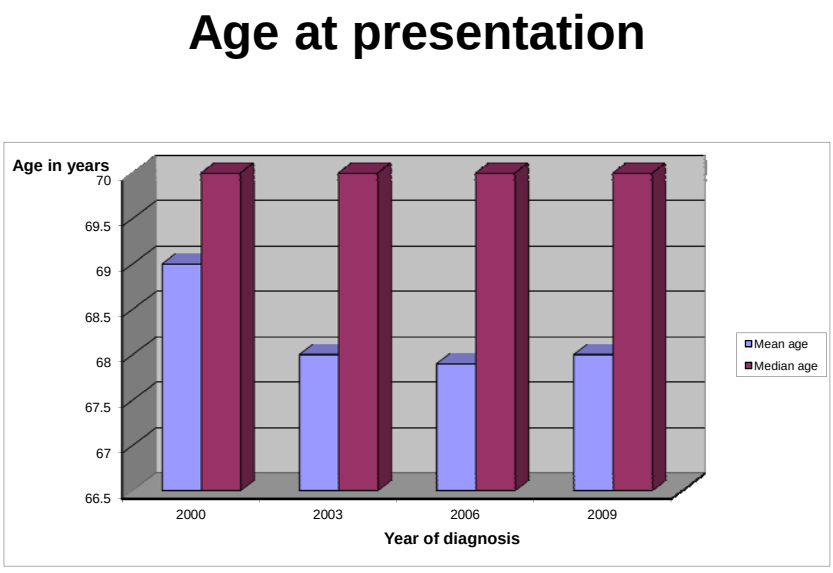


Chart 42

Trends in Gleason score at diagnosis

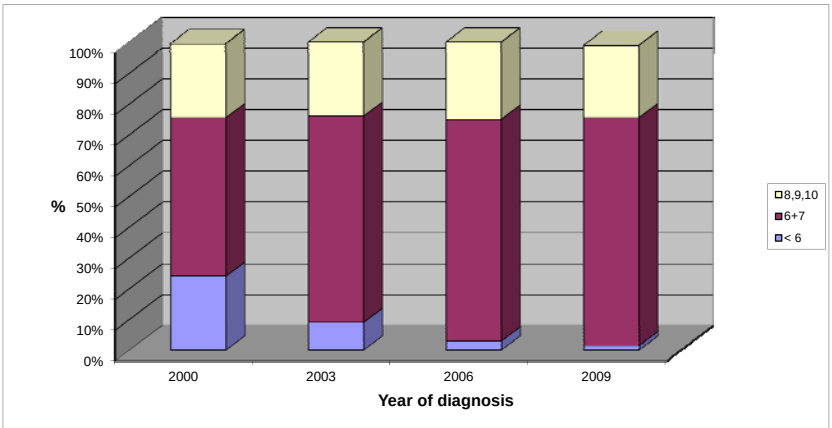


Chart 43

Trends in PSA at presentation -1

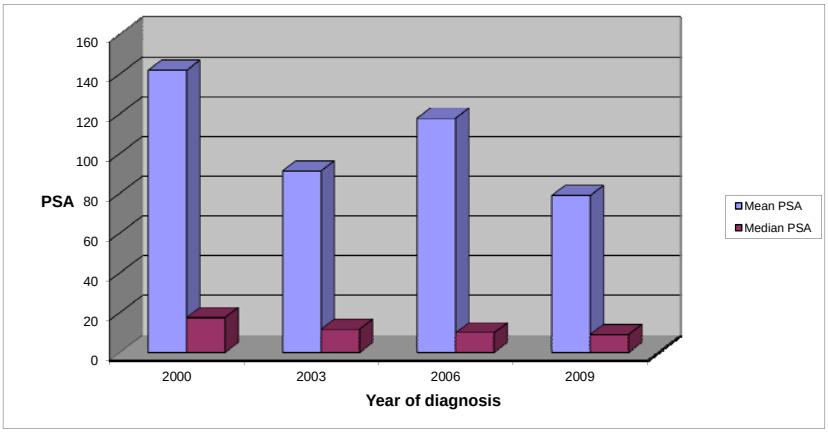


Chart 44

Trends in PSA at presentation - 2

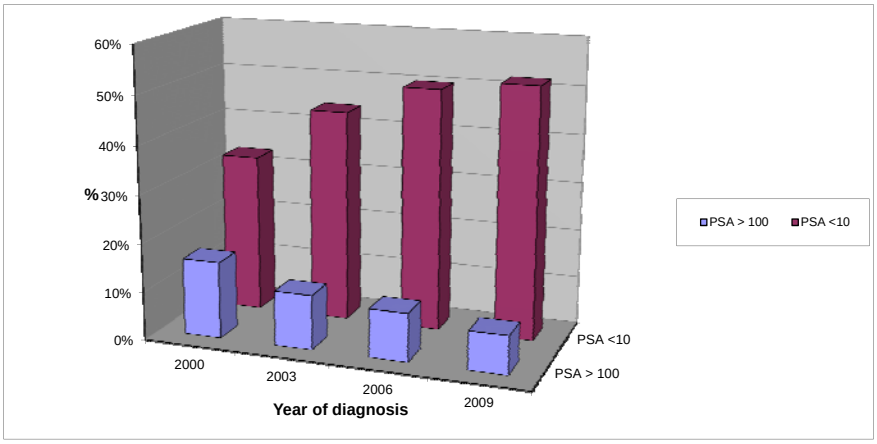


Chart 45

Time to First Consultation

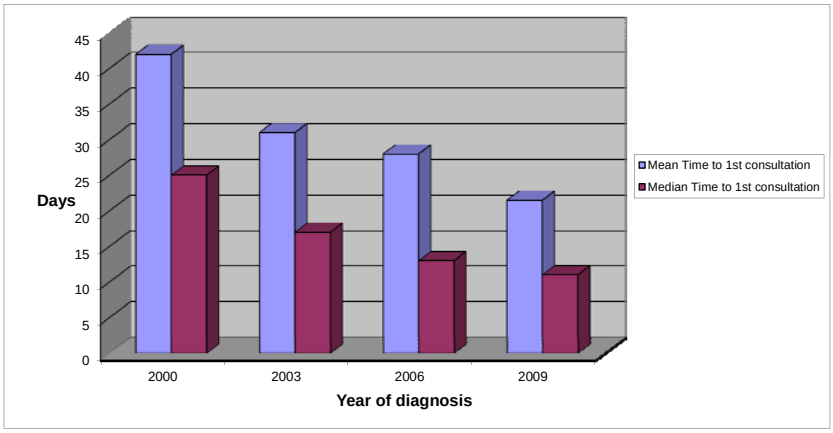


Chart 46

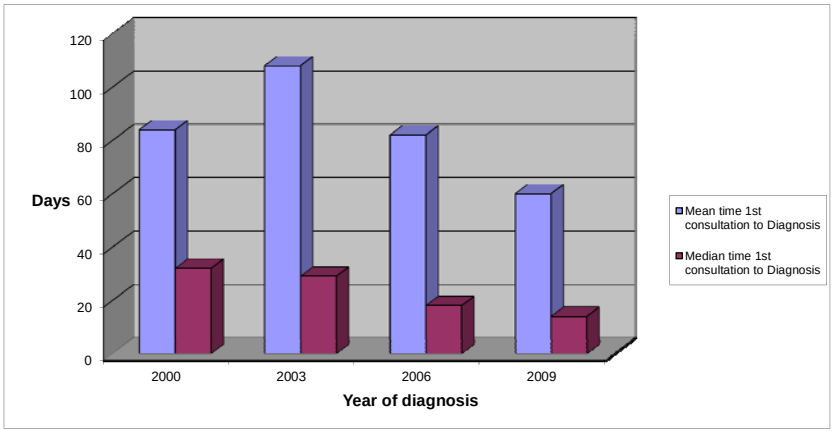


Chart 47

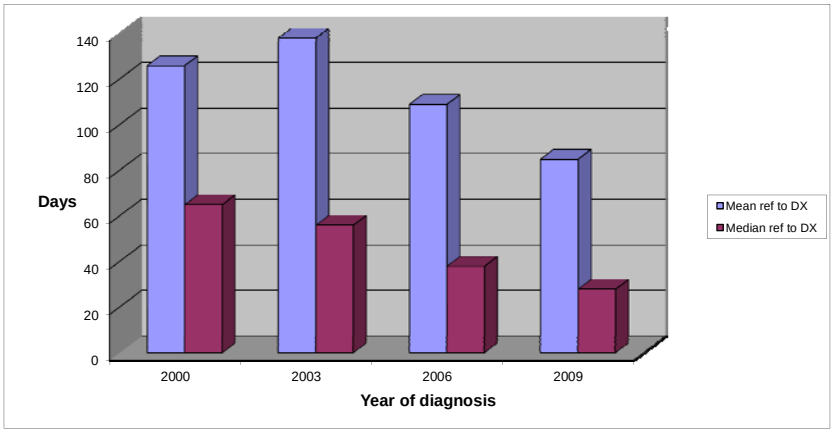
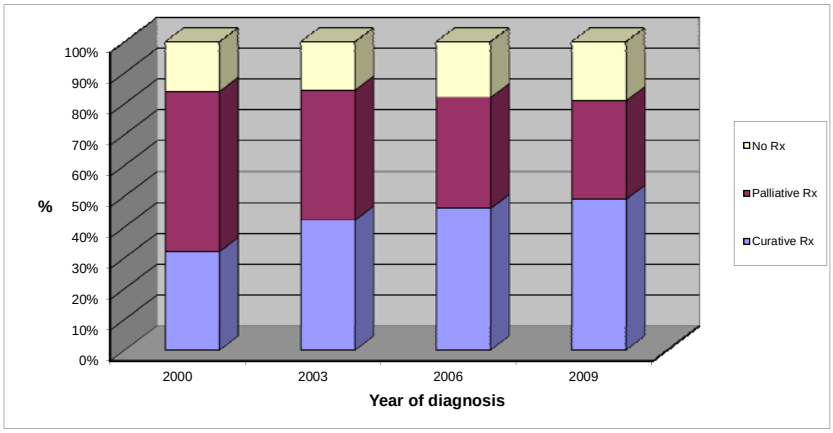


Chart 48

Treatment intention



Participating Hospital Centres 2009

We are grateful to Consultants from the following Centres / Trusts who provided data for the analyses of the 2009 newly diagnosed registry data:

Aberdeen Royal Infirmary
Airedale General Hospital
Alexandra Hospital; Kidderminster General Hospital; Worcester Royal Infirmary
Altnagelvin Area Hospital
Arrowe Park Hospital
Barnet & Chase Farm Hospital
Barnsley Hospital NHS Foundation Trust
Bedford Hospital
Bradford Royal Infirmary
Castle Hill Hospital
Chesterfield & North Derbyshire
Churchill Hospital
City Hospitals Sunderland NHS Foundation Trust
Colchester Hospital University NHS Foundation Trust
Cwm-Taf LHB (Royal Glamorgan/Prince Charles)
Derby Hospitals NHS Foundation Trust
Derriford Hospital
Diana, Princess of Wales Hospital; Goole & District Hospital; Scunthorpe General Hospital
Doncaster & Bassetlaw Hospitals NHS Trust
Dorset County Hospital
East Lancashire Hospitals NHS Trust
East Sussex Hospitals NHS Trust
Epsom and St Helier University Hospitals
Freeman Hospital
Frimley Park Hospital
Gartnavel General Hospital
George Eliot Hospital
Glan Clwyd Hospital
Glasgow Royal Infirmary
Gloucestershire Royal Hospital
Great Western Hospital, Swindon
Guy's & Thomas's Hospital
Hemel Hempstead General Hospital; Mount Vernon & Watford Hospitals
Hereford Hospitals NHS Trust
Hillingdon Hospital
Huddersfield Royal Infirmary
Kettering General Hospital
Leicester General Hospital
Leighton Hospital
Lincoln & Louth NHS Trust
Lister Hospital; Queen Elizabeth II Hospital, Welwyn
Manchester Royal Infirmary
Medway Maritime Hospital
Milton Keynes General Hospital
Nevill Hall Hospital
New Cross Hospital
Noble's Isle of Man Hospital
Norfolk & Norwich Hospital
North Bristol NHS Trust
North Devon District Hospital
North Hampshire Hospital
North Middlesex Hospital
Northampton General Hospital
Nottingham City Hospital
Pinderfields Hospital
Portsmouth Hospitals NHS Trust
Prince Philip Hospital
Princess Alexandra Hospital, Harlow
Private Patients General Centre
Queen Elizabeth Hospital, Birmingham
Queen Elizabeth Hospital, King's Lynn
Queen's Hospital Burton
Royal Alexandra Hospital (Paisley)
Royal Berkshire NHS Foundation Trust
Royal Bolton Hospital NHS Foundation Trust
Royal Bournemouth Hospital
Royal Cornwall Hospital
Royal Gwent Hospital
Royal Hallamshire Hospital
Royal Liverpool University Hospital
Royal Preston Hospital
Royal Surrey County Hospital
Royal Sussex County Hospital
Royal West Sussex NHS Trust
Salford Royal NHS Foundation Trust
Salisbury District Hospital
Sandwell District General Hospital
Scarborough Hospital
Southampton General Hospital

Southend University Hospital NHS Foundation Trust
Southern General Hospital
Southport & Ormskirk NHS Trust
St Bartholomew's Hospital
St George's Hospital
St James's University Hospital
St Mary's Hospital, IOW
Stobhill Hospital
Stracathro Hospital; Perth Royal Infirmary; Ninewells Hospital
Taunton and Somerset Hospital
The Countess of Chester Hospital
The Royal Oldham Hospital
Torbay Hospital
Trafford General Hospital
United Bristol Health Care Trust
University Hospital of North Durham
University Hospital of North Stafford
University Hospital of Wales
Walsgrave Hospital
Warwick Hospital
West Wales General Hospital
Wexham Park Hospital
Whipps Cross Hospital
Whiston Hospital
Withington Hospital
Worthing Hospital
Wrexham Maelor Hospital
Wrightington, Wigan and Leigh NHS Foundation Trust
York District Hospital
Ysbyty Gwynedd Hospital