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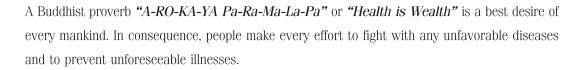
VVattanosoth
Cancer Registry
2012

# Table of Contents

Message from CEO	01 01
Message from Director	02 02
Wattanosoth Doctor Team	03 03
Cancer Registry 2012 : Abstract	04 04
Annual Cancer Registry 2012	05 05
Distribution by Age and Gender, The 10 Leading Site of Cand Patient Category, Method of Diagnosis, Staging, Type of Treat Patient Follow up, Patient Nationality	
Review of Breast Cancer	14 14
Review of Colorectal Cancer	19 19
Review of Lung Cancer	24 24
Review of Liver and Hepatobiliary Cancer	29 29
Review of Head and Neck Cancer	36 36
Hematologic Malignancies 2012	41 41
Age Distribution in All Male Cancer Number of Case	56 56
Age Distribution in All Female Cancer Number of Case	58 58
Breast Cancer Survival	61 61
Colorectal Cancer Survival	63 63
Lung Cancer Survival	66 66
Wattanosoth Hospital Conference	69 69
Cancer Registry Team	71 71
Wattanosoth Doctor Team	72 72



# Message from CEO



To relieve from such unpleasantness, especially the cancer aliment, many medical researches & development are conducted. The statistical data of patient's demography, medical history, and treatment outcome are continuously gathered and considerately analyzed.

Wattanosoth Hospital, the "Home of Cancer Care", significantly realizes an importance of those data; therefore, the Wattanosoth Cancer Registry Committee had continued our comprehensive Cancer registry program as exhibited by the Wattanosoth Cancer Registry 2012. The information and statistics contained in this annual report are seemed like a mirror that shows overview picture and guides the direction to remedy cancer. In addition, the hospital could also magnify its knowledge for developing future research and development projects.

I am proud to welcome all of you to the "Wattanosoth Cancer Registry 2012". I am confident that all readers will find this report to be of great value because it delivers the variety sets of statistic and summary which can be applied in enhancing a better quality of patient care.

In this connection, I wish to extend my heartfelt gratitude and appreciation to the Cancer Registry Committee and to everyone who dedicated and sacrificed their time to deliver expertise, effort and contribution to this publication.

Chatree Duangnet, M.D. FAAP.

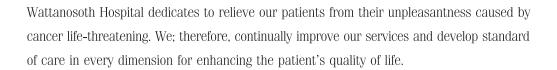
Chit Dugut.

Chief Operating Officer - Medical Affairs, Bangkok Dusit Medical Services PCL.

Vice President, Bangkok Dusit Medical Services PCL.

Chief Executive Officer, Bangkok Hospital Medical Center

# Message from Director



Wattanosoth Cancer Registry is one of various dimensions that Wattanosoth Hospital has continuously developed. It gathered a comprehensive view of our cancer patients, related demographics, methods of care, and treatment outcomes over the past year. These statistics and information play an important role for our future Research & Development program. I would like to encourage you to review the useful content in this "Wattanosoth Cancer Registry 2012".

Lastly, I take deep pride in the Cancer Registry Committee, including our physicians, nurses, medical personnel, and related team members perform, on behalf of Bangkok Hospital Medical Center, for their hard-working contribution to this publication.

"My warmest thanks and appreciation are specially extended to all of you".

MG. Nivet Boonynen

Major Genernal Niwat Boonyuen M.D. FRCST., FICS. Director, Wattanosoth Hospital Bangkok Hospital Medical Center

Bangkok Hospitals Group





# Wattanosoth Doctor Team



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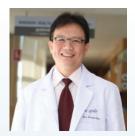
Sumitra Thongprasert M.D.



Supakorn Rojananin M.D.



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# Cancer Registry 2012 : Abstract









The total of new cases diagnosed as a malignancy at Bangkok Hospital Medical Center is 1,854 cases (excluding the hematologic malignancy). There was a 10 percent decrease in the total number as compared to 2,066 cases in 2011. The increased number in 2011 was attributed to referrals from the National Cancer Institute (NCI) for investigations utilizing PET/CT, SPECT scan, bone scan and MUGA scan, only.

The sex ratio is 1:1. This age distribution has not changed since the year 2011. Patients who are between 50-69 y/o are the majority accounting for more than half of the total. The average age in male patients is 65-69 y/o which is slightly older than the female age of 50-54 y/o.

Top 5 malignancies are:

- 1) Breast 21.36 percent
  - breast 21.50 percent
- 3) Lung -11.43 percent

- 2) Colorectal 11.92 percent
- 4) Liver and Hepatobiliary 8.14 percent
- 5) Head and Neck 7.39 percent

The trend for the top 5 malignancies has changed over the past 6 years (2006-2011). Head and Neck cancer is 5 in 2012. For the past 6 years the top 5 have been: Breast, Colorectal, Lung and Liver and Prostate cancer. However, when compared to last year, the overall number of cases in Breast cancer decreased significantly by 41 percent, Colorectal cancer increased by 15 percent, Lung cancer decreased by 13 percent, Liver and Hepatobiliary increased by 10 percent and Head and Neck cancer increased by 10 percent.

The results of overall staging of patients who received treatment at Bangkok Hospital Medical Center (BMC) are: Stage I is 22 percent, Stage II is 23 percent, Stage III is 19 percent, and Stage IV is 23 percent. Unspecified stage (due to lack of pertinent information) is 8 percent. All results are similar to 2011 staging results.

Analysis of the primary treatments modalities indicates that surgery continues to be the majority (24 percent), followed by Radiation therapy (16 percent), Chemotherapy and Concurrent chemoradiation (4 percent). Intervention treatment remained at 3 percent.

Patients with a cancer diagnosis decide to receive treatment at Wattanosoth Cancer Hospital at 18 percent (14 percent in 2011) and 10 percent (7 percent in 2011) of cancer patients decide to have primary treatment in other hospitals. Patients who came from other hospitals for a second opinion at BMC significantly decreased to 35 percent (51 percent in 2011), however, those who decided to receive treatment at BMC increased to 55 percent (43 percent in 2011)

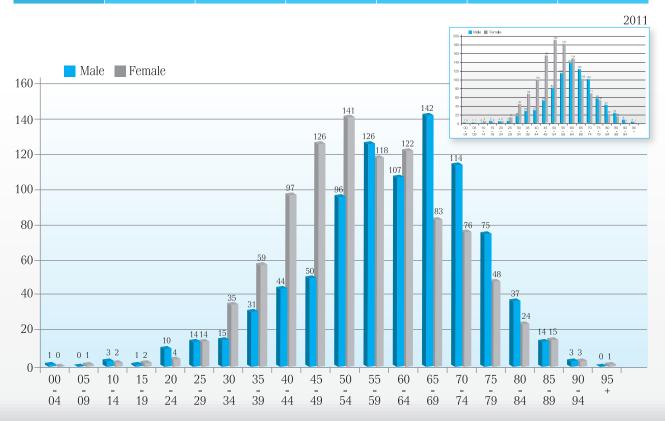
Patients who are still living after diagnosis or treatment in 2012 is 37 percent, patients alive without disease are 21 percent, and patients who have died with cancer as the cause are 2 percent. At this time no patients receiving treatment have been lost to follow-up.

Ratio of Thai to non-Thai patients is 3:2 in year 2012 equal to the year 2011. The top 5 rankings of non-Thai patients are: Myanmar, Bangladesh, United Arab Emirates, Oman and Qatar, respectively.

It is the third time BMC can follow the patients for 4 years and report the 4 years survival. We have shown and discussed the data of those survivors of top 3 cancers which are Breast, Colorectal And Lung in separated chapters.

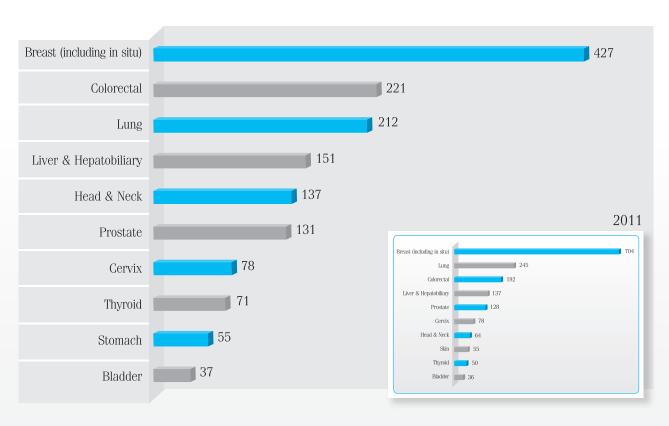
# WSH. ANNUAL CANCER REGISTRY 2012 DISTRIBUTION OF ALL CANCER BY AGE AND GENDER

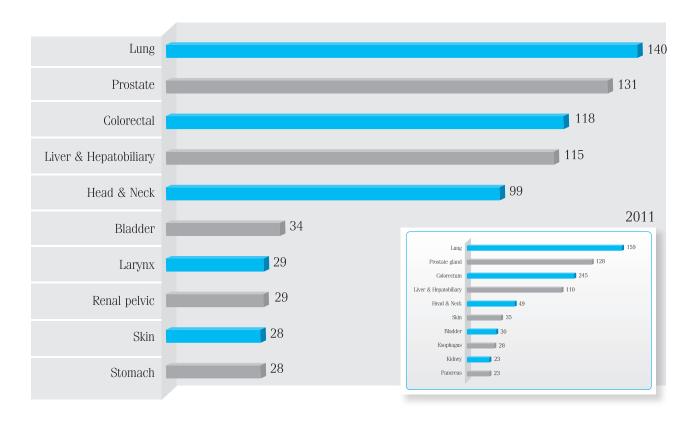
Ago	Ma	ale	Female		То	tal
Age	Number	Percent	Number	Percent	Number	Percent
00 - 04	1	0.11	0	0.00	1	0.05
05 - 09	0	0.00	1	0.10	1	0.05
10 - 14	3	0.34	2	0.21	5	0.27
15 - 19	1	0.11	2	0.21	3	0.16
20 - 24	10	1.13	4	0.41	14	0.76
25 - 29	14	1.59	14	1.44	28	1.51
30 - 34	15	1.70	35	3.60	50	2.70
35 - 39	31	3.51	59	6.08	90	4.85
40 - 44	44	4.98	97	9.99	141	7.61
45 - 49	50	5.66	126	12.98	176	9.49
50 - 54	96	10.87	141	14.52	237	12.78
55 - 59	126	14.27	118	12.15	244	13.16
60 - 64	107	12.12	122	12.56	229	12.35
65 - 69	142	16.08	83	8.55	225	12.14
70 - 74	114	12.91	76	7.83	190	10.25
75 - 79	75	8.49	48	4.94	123	6.63
80 - 84	37	4.19	24	2.47	61	3.29
85 - 89	14	1.59	15	1.54	29	1.56
90 - 94	3	0.34	3	0.31	6	0.32
95 +	0	0.00	1	0.10	1	0.05
Total	883	100.00	971	100.00	1,854	100.00



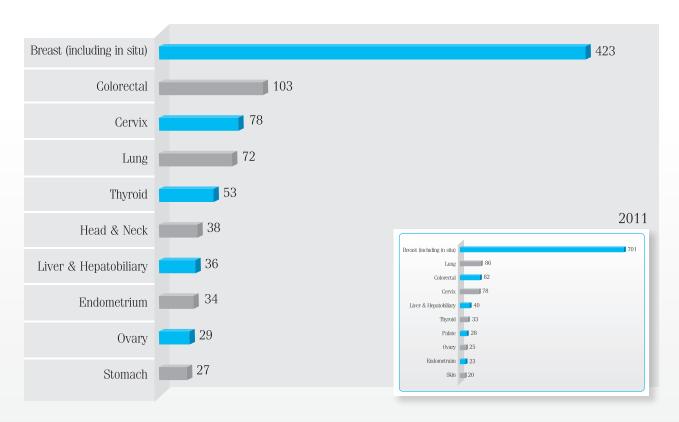
Code	Primary site	Male	Female	Total
C50	Breast (including in situ)	4	423	427
C18-C20	Colorectal	118	103	221
C33-C34	Lung	140	72	212
C22-C24	Liver & Hepatobiliary	115	36	151
C00-C14	Head & Neck	99	38	137
C61	Prostate	131	0	131
C53	Cervix	0	78	78
C73	Thyroid	18	53	71
C16	Stomach	28	27	55
C67	Bladder	34	3	37

TOP 10 CANCER FOR BOTH GENDER

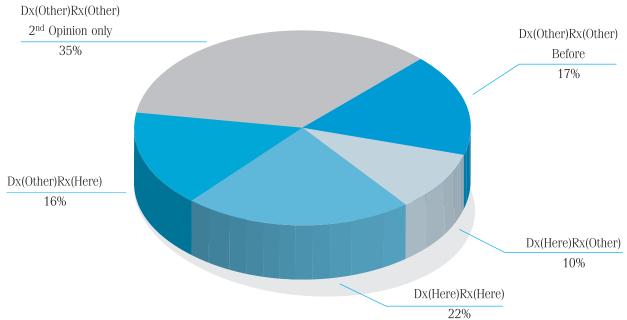




#### TOP 10 CANCER IN FEMALE



# PATIENT CATEGORY OF ALL CANCER IN BMC



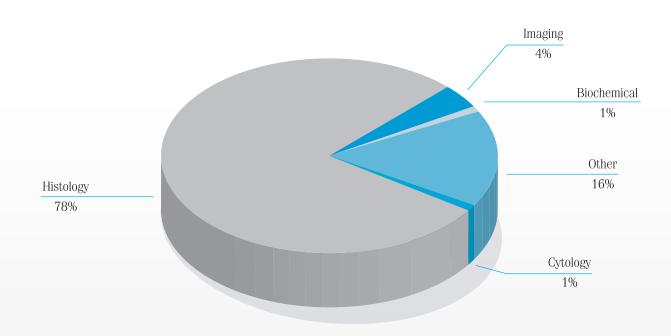
Dx = Diagnosis for Cancer (Dx by Pathology, Cytology or Imaging)

Rx = Treatment

Here = Within Bangkok Hospital Medical Center

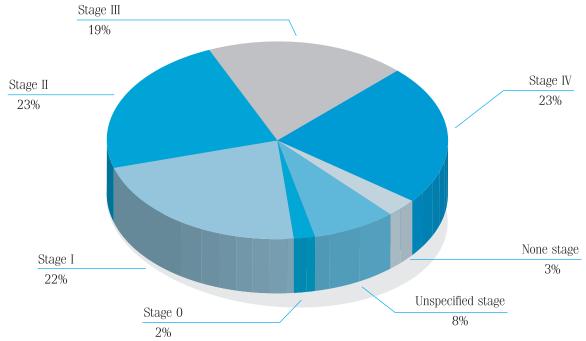
Other = Outside Bangkok Hospital Medical Center

#### METHOD OF DIAGNOSIS (TREATMENT IN BMC)



Other = Previously diagnosed as Cancer from other Hospital but no documentation of diagnosis

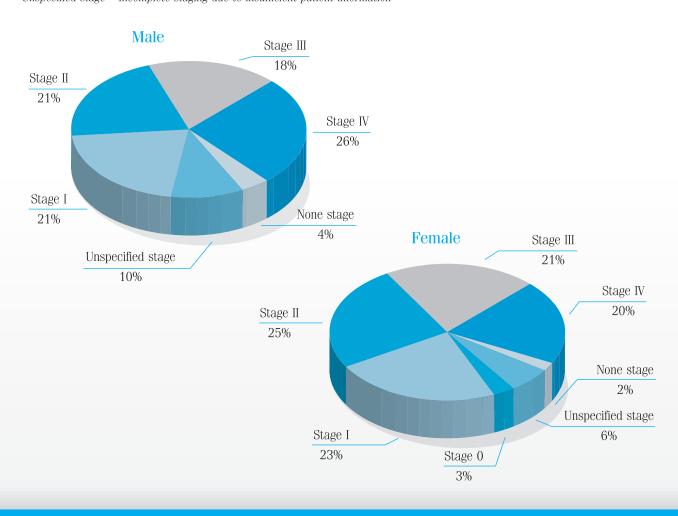
## STAGING (TREATMENT IN BMC)



Stage 0 = Carcinoma in situ

Non stage = In case of CA Brain

Unspecified stage = Incomplete staging due to insufficient patient information



Managament of treatment	Ma	ale	Female		Total		
Management of treatment	Number	Percent	Number	Percent	Number	Percent	
SUR.only	110	12.46	105	10.81	215	11.60	
RT only	137	15.52	125	12.87	262	14.13	
Brachytherapy	3	0.34	21	2.16	24	1.29	
CT only	18	2.04	38	3.91	56	3.02	
Targeted therapy	8	0.91	5	0.51	13	0.70	
Immunotherapy	0	0.00	1	0.10	1	0.05	
Hormonal therapy	6	0.68	6	0.62	12	0.65	
Intervention	37	4.19	10	1.03	47	2.54	
Nuclear mecidine	4	0.45	13	1.34	17	0.92	
Concurrent chemoradiation	30	3.40	26	2.68	56	3.02	
Palliative care only	2	0.23	0	0.00	2	0.11	
SUR.+RT	25	2.83	8	0.82	33	1.78	
SUR.+CT	25	2.83	45	4.63	70	3.78	
SUR.+T	1	0.11	0	0.00	1	0.05	
SUR.+Im	6	0.68	1	0.10	7	0.38	
SUR.+H	3	0.34	28	2.88	31	1.67	
SUR.+I	0	0.00	1	0.10	1	0.05	
SUR.+N	2	0.23	8	0.82	10	0.54	
SUR.+Concurrent CT-RT	7	0.79	5	0.51	12	0.65	
SUR.+Concurrent CT-RT+CT	2	0.23	1	0.10	3	0.16	
RT+Brachytherapy	0	0.00	10	1.03	10	0.54	
RT+Concurrent CT-RT	1	0.11	2	0.21	3	0.16	
RT+T	5	0.57	2	0.21	7	0.38	
RT+CT	8	0.91	12	1.24	20	1.08	
RT+H	8	0.91	6	0.62	14	0.76	
RT+I	1	0.11	0	0.00	1	0.05	
CT+T	1	0.11	3	0.31	4	0.22	
СТ+Н	0	0.00	1	0.10	1	0.05	
I+T	3	0.34	1	0.10	4	0.22	

Management of treatment	Ma	ale	Female		Total	
Management of treatment	Number	Percent	Number	Percent	Number	Percent
Concurrent CT-RT+Brachytherapy	0	0.00	8	0.82	8	0.43
Concurrent CT-RT+CT	2	0.23	1	0.10	3	0.16
SUR.+RT+CT	3	0.34	12	1.24	15	0.81
SUR.+RT+Brachytherapy	0	0.00	1	0.10	1	0.05
SUR.+RT+N	0	0.00	1	0.10	1	0.05
SUR.+RT+H	1	0.11	17	1.75	18	0.97
SUR.+RT+T	0	0.00	1	0.10	1	0.05
SUR.+CT+T	1	0.11	4	0.41	5	0.27
SUR.+CT+H	0	0.00	8	0.82	8	0.43
I+CT+T	1	0.11	0	0.00	1	0.05
SUR.+RT+CT+T	0	0.00	2	0.21	2	0.11
SUR.+RT+CT+H	0	0.00	11	1.13	11	0.59
SUR.+CT+T+H	0	0.00	1	0.10	1	0.05
SUR.+RT+CT+H+T	0	0.00	2	0.21	2	0.11
Investigation	107	12.12	96	9.89	203	10.95
Supportive	9	1.02	7	0.72	16	0.86
PET/CT	69	7.81	78	8.03	147	7.93
Bone scan	55	6.23	54	5.56	109	5.88
Follow up	0	0.00	3	0.31	3	0.16
2 <sup>nd</sup> Opinion	182	20.61	177	18.23	359	19.36
TBS scan	0	0.00	3	0.31	3	0.16
Total	883	100.00	971	100.00	1,854	100.00

SUR. = Surgery

RT = External radiation therapy

CT = Chemotherapy

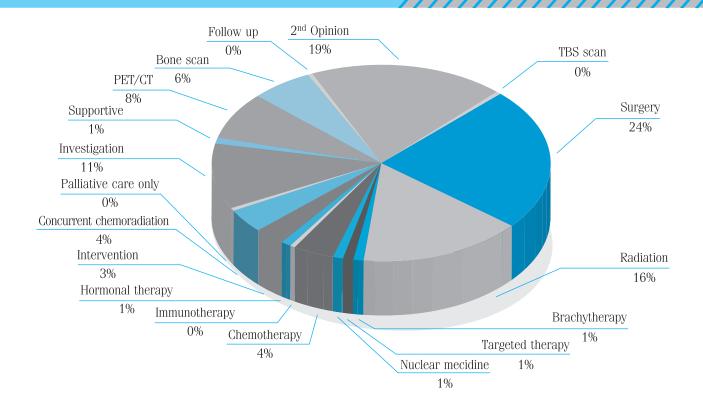
H (Hormone) = Hormonal therapy

T = Targeted therapy

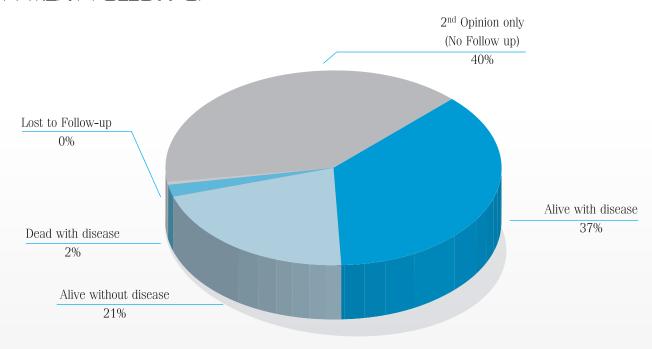
I = Intervention

Im = Immunotherapy

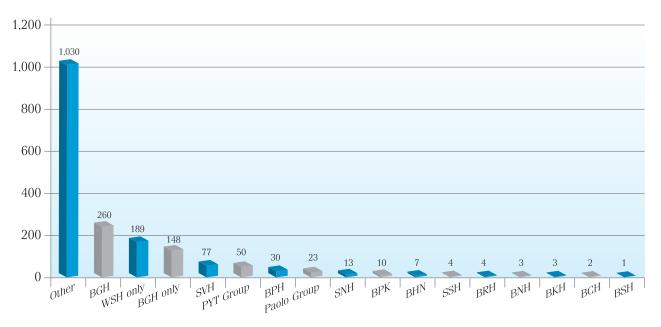
#### TYPE OF PRIMARY TREATMENT (ALL PATIENT)



#### PATIENT FOLLOW UP



2<sup>nd</sup> Opinion only = Intend not to continue diagnosis or treatment at BMC



BGH = Consult from Bangkok general hospital

WSH only = WATTANOSOTH HOSPITAL

BPH = BANGKOK PATTAYA HOSPITAL

BNH = BNH HOSPITAL

BKH = BANGKOK RATCHASIMA HOSPITAL

BRH = BANGKOK RAYONG HOSPITAL

 $BSH = BANGKOK\ SAMUI\ HOSPITAL$ 

BHN = BANGKOK HUAHIN HOSPITAL

Paolo Group = Paolo memorial hospital Group

BGH only = Not consult from Bangkok general hospital

SVH = SAMITIVEJ SUKHUMVIT HOSPITAL

BPK = BANGKOK PHUKET HOSPITAL

SSH = SAMITIVEJ SRIRACHA HOSPITAL

SNH = SAMITIVEJ SRINAKARIN HOSPITAL

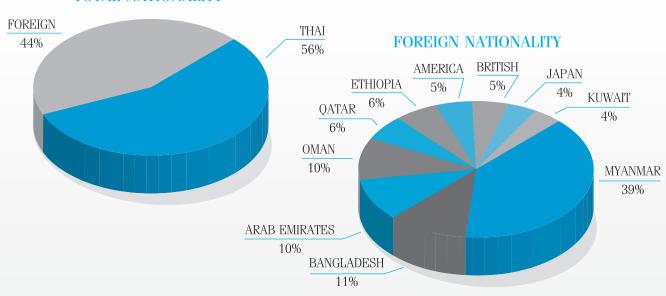
BHH = BANGKOK HATYAI HOSPITAL

BCH = BANGKOK CHANTHABURI HOSPITAL

PYT Group = Payathai hospital Group

#### PATIENT NATIONALITY

#### TOTAL NATIONALITY

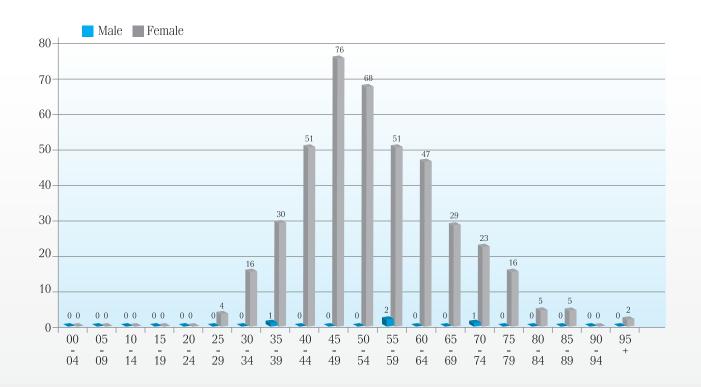


# BREAST CANCER: PATHOLOGY

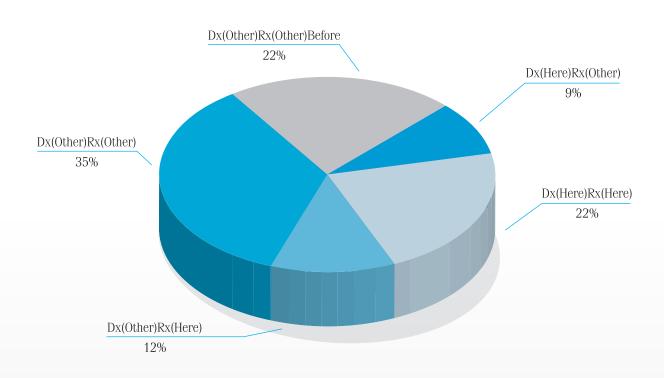
Tumor site		Number
C50.0	Nipple	5
C50.1	Central portion of breast	1
C50.2	Upper-inner quadrant of breast	27
C50.3	Lower-inner quadrant of breast	14
C50.4	Upper-outer quadrant of breast	97
C50.5	Lower-outer quadrant of breast	27
C50.8	Overlapping lesion of breast	2
C50.9	Breast, NOS	254
Total		427

Pathology Report		Number
M8000/3	Malignant neoplasm	108
M8010/3	Carcinoma, NOS	1
M8140/3	Adenocarcinoma, NOS	3
M8480/3	Mucinous carcinoma	10
M8500/2	Ductal carcinoma in situ	31
M8500/3	Invasive ductal carcinoma	257
M8520/3	Lobular carcinoma	12
M8522/3	Invasive ductal and lobular carcinoma	2
M8523/3	Invasive duct mixed with other type of carcinoma	2
M9020/3	Malignant phyllodes tumor	1
Total		427

Ago	M	ale	Female		То	tal
Age	Number	Percent	Number	Percent	Number	Percent
00 - 04	0	0.00	0	0.00	0	0.00
05 - 09	0	0.00	0	0.00	0	0.00
10 - 14	0	0.00	0	0.00	0	0.00
15 - 19	0	0.00	0	0.00	0	0.00
20 - 24	0	0.00	0	0.00	0	0.00
25 - 29	0	0.00	4	0.95	4	0.94
30 - 34	0	0.00	16	3.78	16	3.75
35 - 39	1	25.00	30	7.09	31	7.26
40 - 44	0	0.00	51	12.06	51	11.94
45 - 49	0	0.00	76	17.97	76	17.80
50 - 54	0	0.00	68	16.08	68	15.93
55 - 59	2	50.00	51	12.06	53	12.41
60 - 64	0	0.00	47	11.11	47	11.01
65 - 69	0	0.00	29	6.86	29	6.79
70 - 74	1	25.00	23	5.44	24	5.62
75 - 79	0	0.00	16	3.78	16	3.75
80 - 84	0	0.00	5	1.18	5	1.17
85 - 89	0	0.00	5	1.18	5	1.17
90 - 94	0	0.00	0	0.00	0	0.00
95 +	0	0.00	2	0.47	2	0.47
Total	4	100.00	423	100.00	427	100.00



Patient category	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Dx(Here)Rx(Other)	1	25.00	39	9.22	40	9.37
Dx(Here)Rx(Here)	0	0.00	96	22.70	96	22.48
Dx(Other)Rx(Here)	1	25.00	49	11.58	50	11.71
Dx(Other)Rx(Other)	2	50.00	146	34.52	148	34.66
Dx(Other)Rx(Other)Before	0	0.00	93	21.99	93	21.78
Total	4	100.00	423	100.00	427	100.00



 $Dx = Diagnosis \ for \ Cancer \ (Dx \ by \ Pathology, \ Cytology \ or \ Imaging)$ 

Rx = Treatment

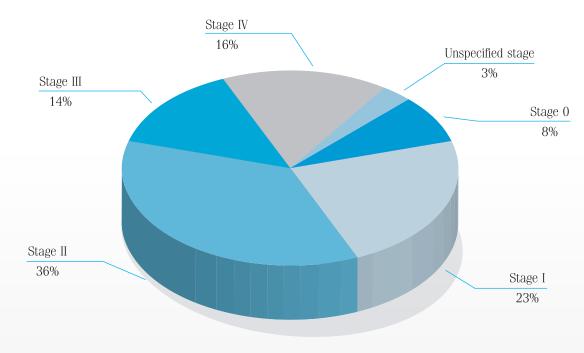
Here = Within Bangkok Hospital Medical Center

Other = Outside Bangkok Hospital Medical Center

Method of diagnosis	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Biochemical	0	0.00	0	0.00	0	0.00
Other	0	0.00	26	10.92	26	10.88
Cytology	0	0.00	0	0.00	0	0.00
Histology	1	100.00	212	89.08	213	89.12
Imaging	0	0.00	0	0.00	0	0.00
Total	1	100.00	238	100.00	239	100.00

Other = Previously diagnosed as Breast cancer from other Hospital but no documentation of diagnosis

### STAGING (TREATMENT IN BMC)

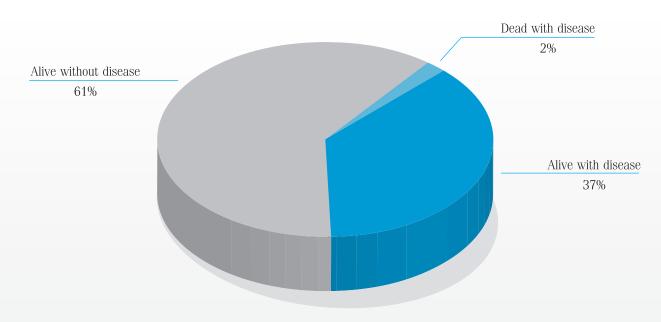


 ${\it Unspecified stage = Incomplete staging \ due \ to \ insufficient \ patient \ information}$ 

Management of treatment	M	ale	Female		Total	
Management of treatment	Number	Percent	Number	Percent	Number	Percent
SUR.only	0	0.00	40	16.81	40	16.74
RT only	0	0.00	61	25.63	61	25.52
CT only	0	0.00	16	6.72	16	6.69
Hormonal therapy	0	0.00	6	2.52	6	2.51
SUR.+RT	0	0.00	3	1.26	3	1.26
SUR.+CT	0	0.00	21	8.82	21	8.79
SUR.+H	0	0.00	27	11.34	27	11.30
RT+CT	1	100.00	5	2.11	6	2.51
RT+H	0	0.00	6	2.52	6	2.51
CT+T	0	0.00	1	0.42	1	0.42
SUR.+RT+CT	0	0.00	8	3.36	8	3.35
SUR.+RT+H	0	0.00	17	7.14	17	7.11
SUR.+CT+T	0	0.00	4	1.68	4	1.67
SUR.+CT+H	0	0.00	7	2.94	7	2.93
SUR.+RT+CT+T	0	0.00	2	0.84	2	0.84
SUR.+RT+CT+H	0	0.00	11	4.62	11	4.60
SUR.+CT+T+H	0	0.00	1	0.42	1	0.42
SUR.+RT+CT+H+T	0	0.00	2	0.84	2	0.84
Total	1	100.00	238	100.00	239	100.00

 $SUR. = Surgery, \ RT = External \ radiation \ therapy, \ CT = Chemotherapy, \ H \ (Hormone) = Hormonal \ therapy, \ T = Targeted \ therapy$ 

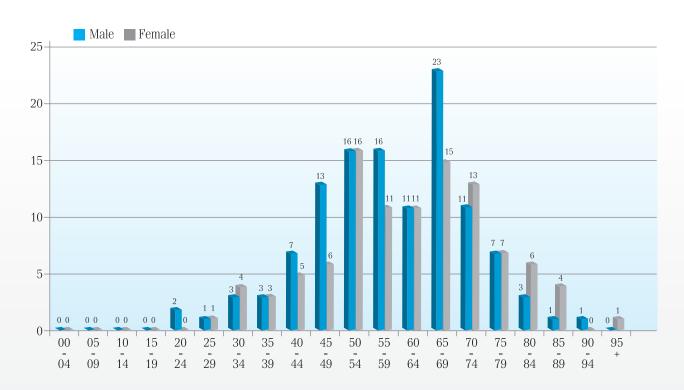
## FOLLOW UP STATUS (TREATMENT IN BMC)



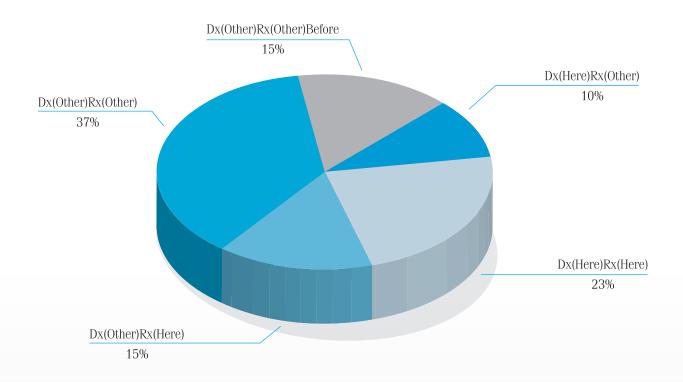
# COLORECTAL CANCER: PATHOLOGY

Tumor site		Number
C18.0	Cecum colon	9
C18.2	Ascending colon	10
C18.3	Hepatic flexure of colon	7
C18.4	Transverse colon	9
C18.5	Splenic flexure of colon	4
C18.6	Descending colon	11
C18.7	Sigmoid colon	44
C18.9	Colon, NOS	28
C19.9	Rectosigmoid colon	14
C20.9	Rectum	85
Total		221
Pathology Report		Number
M8000/3	Malignant neoplasm	36
M8010/3	Carcinoma, NOS	1
M8070/3	Squamous cell carcinoma, NOS	1
M8140/3	Adenocarcinoma	160
M8240/3	Carcinoid tumor, NOS	1
M8246/3	Neuroendocrine carcinoma, NOS	1
M8480/3	Mucinous adenocarcinoma	11
M8481/3	Mucin producing adenocarcinoma	3
M8490/3	Adenocarcinoma signet ring cell type	7
Total		221

Ago	Ma	ale	Fer	nale	То	tal
Age	Number	Percent	Number	Percent	Number	Percent
00 - 04	0	0.00	0	0.00	0	0.00
05 - 09	0	0.00	0	0.00	0	0.00
10 - 14	0	0.00	0	0.00	0	0.00
15 - 19	0	0.00	0	0.00	0	0.00
20 - 24	2	1.69	0	0.00	2	0.90
25 - 29	1	0.85	1	0.97	2	0.90
30 - 34	3	2.54	4	3.88	7	3.17
35 - 39	3	2.54	3	2.91	6	2.71
40 - 44	7	5.93	5	4.85	12	5.43
45 - 49	13	11.02	6	5.83	19	8.60
50 - 54	16	13.56	16	15.53	32	14.48
55 - 59	16	13.56	11	10.68	27	12.22
60 - 64	11	9.32	11	10.68	22	9.95
65 - 69	23	19.49	15	14.56	38	17.19
70 - 74	11	9.32	13	12.62	24	10.86
75 - 79	7	5.93	7	6.80	14	6.33
80 - 84	3	2.54	6	5.83	9	4.07
85 - 89	1	0.85	4	3.88	5	2.26
90 - 94	1	0.85	0	0.00	1	0.45
95 +	0	0.00	1	0.97	1	0.45
Total	118	100.00	103	100.00	221	100.00



Patient category	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Dx(Here)Rx(Other)	17	14.41	6	5.83	23	10.41
Dx(Here)Rx(Here)	26	22.03	25	24.27	51	23.08
Dx(Other)Rx(Here)	15	12.71	17	16.50	32	14.48
Dx(Other)Rx(Other)	39	33.05	42	40.78	81	36.65
Dx(Other)Rx(Other)Before	21	17.80	13	12.62	34	15.38
Total	118	100.00	103	100.00	221	100.00



 $Dx = Diagnosis \ for \ Cancer \ (Dx \ by \ Pathology, \ Cytology \ or \ Imaging)$ 

Rx = Treatment

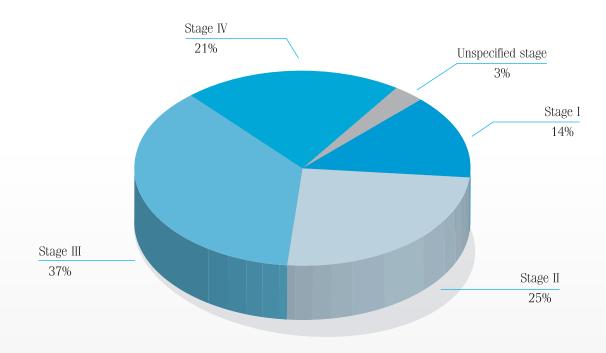
Here = Within Bangkok Hospital Medical Center

Other = Outside Bangkok Hospital Medical Center

Method of diagnosis	Male		Female		Total	
Method of diagnosis	Number	Percent	Number	Percent	Number	Percent
Biochemical	0	0.00	0	0.00	0	0.00
Other	3	4.84	3	5.45	6	5.13
Cytology	0	0.00	0	0.00	0	0.00
Histology	59	95.16	52	94.55	111	94.87
Imaging	0	0.00	0	0.00	0	0.00
Total	62	100.00	55	100.00	117	100.00

Other = Previously diagnosed as Colorectal cancer from other Hospital but no documentation of diagnosis

### STAGING (TREATMENT IN BMC)



 ${\it Unspecified stage = Incomplete staging \ due \ to \ insufficient \ patient \ information}$ 

## TYPE OF TREATMENT (IN BMC ONLY)

Management of treatment	Ma	ale	Fen	Female		Total	
Management of treatment	Number	Percent	Number	Percent	Number	Percent	
SUR.only	22	35.48	21	38.18	43	36.75	
RT only	12	19.35	6	10.91	18	15.38	
CT only	7	11.29	6	10.91	13	11.11	
Intervention	0	0.00	1	1.82	1	0.85	
Concurrent CT-RT	1	1.61	4	7.27	5	4.27	
SUR.+RT	2	3.23	0	0.00	2	1.71	
SUR.+CT	15	24.19	9	16.36	24	20.51	
SUR.+I	0	0.00	1	1.82	1	0.85	
SUR.+RT+CT	0	0.00	1	1.82	1	0.85	
SUR.+CT+Concurrent CT-RT	1	1.61	0	0.00	1	0.85	
SUR.+Concurrent CT-RT	1	1.61	3	5.45	4	3.42	
RT+CT	0	0.00	2	3.64	2	1.71	
CT+Concurrent CT-RT	1	1.61	1	1.82	2	1.71	
Total	62	100.00	55	100.00	117	100.00	

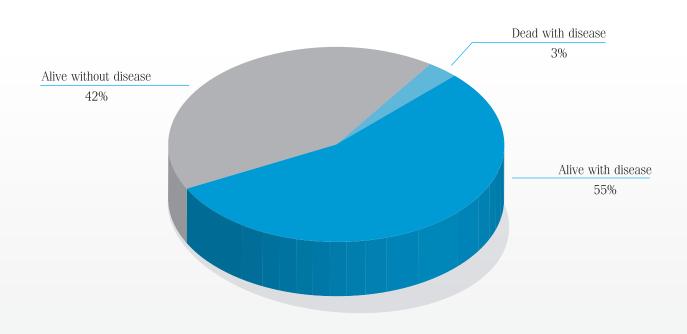
SUR. = Surgery

RT =  $External\ radiation\ therapy$ 

CT = Chemotherapy

T = Targeted therapy

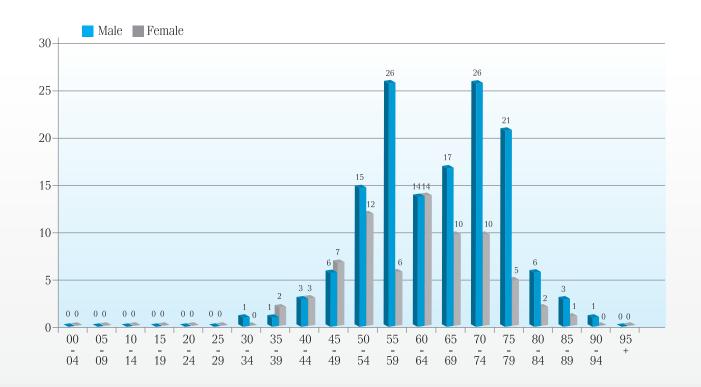
## FOLLOW UP STATUS (PATIENT TREATMENT IN BMC)



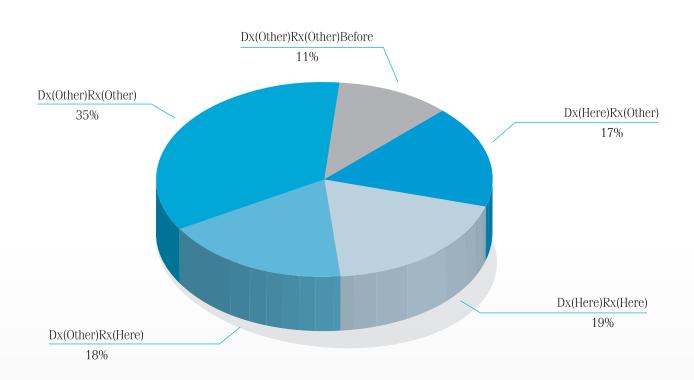
# LUNG CANCER: PATHOLOGY

Tumor site		Number
C33.9	Trachea	1
C34.1	Upper lobe, lung	38
C34.2	Middle lobe, lung	8
C34.3	Lower lobe, lung	33
C34.9	Lung, NOS	132
Total		212
Pathology Report		Number
M8000/3	Malignant neoplasm	36
M8010/3	Carcinoma, NOS	7
M8012/3	Large cell carcinoma, NOS	1
M8020/3	Carcinoma undifferentiated, NOS	1
M8032/3	Spindle cell carcinoma	1
M8041/3	Small cell carcinoma, NOS	9
M8045/3	Small cell large cell carcinoma	3
M8046/3	Non small cell carcinoma	15
M8070/3	Squamous cell carcinoma, NOS	26
M8140/3	Adenocarcinoma, NOS	96
M8200/3	Adenoid cystic carcinoma	1
M8246/3	Neuroendocrine carcinoma, NOS	3
M8250/3	Bronchiolo-aveolar adenocarcinoma, NOS	6
M8251/3	Alveolar carcinoma	1
M8480/3	Mucinous adenocarcinoma	4
M8560/3	Adenosquamous carcinoma	2
Total		212

Ago	M	ale	Fen	nale	То	tal
Age	Number	Percent	Number	Percent	Number	Percent
00 - 04	0	0.00	0	0.00	0	0.00
05 - 09	0	0.00	0	0.00	0	0.00
10 - 14	0	0.00	0	0.00	0	0.00
15 - 19	0	0.00	0	0.00	0	0.00
20 - 24	0	0.00	0	0.00	0	0.00
25 - 29	0	0.00	0	0.00	0	0.00
30 - 34	1	0.71	0	0.00	1	0.47
35 - 39	1	0.71	2	2.78	3	1.42
40 - 44	3	2.14	3	4.17	6	2.83
45 - 49	6	4.29	7	9.72	13	6.13
50 - 54	15	10.71	12	16.67	27	12.74
55 - 59	26	18.57	6	8.33	32	15.09
60 - 64	14	10.00	14	19.44	28	13.21
65 - 69	17	12.14	10	13.89	27	12.74
70 - 74	26	18.57	10	13.89	36	16.98
75 - 79	21	15.00	5	6.94	26	12.26
80 - 84	6	4.29	2	2.78	8	3.77
85 - 89	3	2.14	1	1.39	4	1.89
90 - 94	1	0.71	0	0.00	1	0.47
95 +	0	0.00	0	0.00	0	0.00
Total	140	100.00	72	100.00	212	100.00



Patient category	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Dx(Here)Rx(Other)	24	17.14	12	16.67	36	16.98
Dx(Here)Rx(Here)	28	20.00	11	15.28	39	18.40
Dx(Other)Rx(Here)	25	17.86	14	19.44	39	18.40
Dx(Other)Rx(Other)	49	35.00	26	36.11	75	35.38
Dx(Other)Rx(Other)Before	14	10.00	9	12.50	23	10.85
Total	140	100.00	72	100.00	212	100.00



 $Dx = Diagnosis \ for \ Cancer \ (Dx \ by \ Pathology, \ Cytology \ or \ Imaging)$ 

Rx = Treatment

Here = Within Bangkok Hospital Medical Center

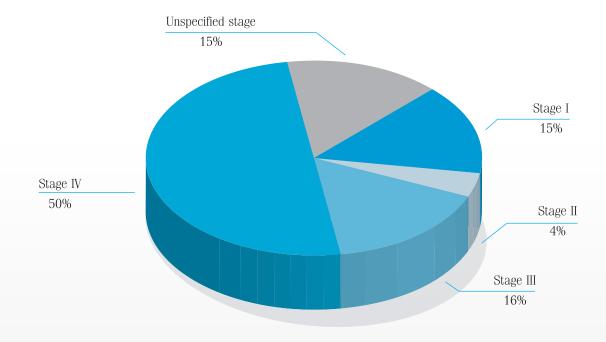
Other = Outside Bangkok Hospital Medical Center

## METHOD OF DIAGNOSIS (TREATMENT IN BMC)

Method of diagnosis	Male		Female		Total	
	Number	Percent	Number	Percent	Number	Percent
Biochemical	0	0.00	0	0.00	0	0.00
Other	4	5.97	3	8.82	7	6.93
Cytology	2	2.99	1	2.94	3	2.97
Histology	60	89.55	30	88.24	90	89.11
Imaging	1	1.49	0	0.00	1	0.99
Total	67	100.00	34	100.00	101	100.00

Other = Previously diagnosed as Lung cancer from other Hospital but no documentation of diagnosis

### STAGING (TREATMENT IN BMC)



 ${\it Unspecified stage = Incomplete staging \ due \ to \ insufficient \ patient \ information}$ 

## TYPE OF TREATMENT (IN BMC ONLY)

Management of treatment	Ma	ale	Fen	nale	Total	
management of treatment	Number	Percent	Number	Percent	Number	Percent
SUR.only	10	14.93	2	5.88	12	11.88
RT only	34	50.75	17	50.00	51	50.50
CT only	3	4.48	3	8.82	6	5.94
Targeted therapy	3	4.48	4	11.76	7	6.93
Palliative care only	1	1.49	0	0.00	1	0.99
Concurrent CT-RT	3	4.48	1	2.94	4	3.96
SUR.+RT	1	1.49	0	0.00	1	0.99
SUR.+CT	1	1.49	0	0.00	1	0.99
SUR.+RT+CT	0	0.00	1	2.94	1	0.99
SUR.+RT+T	0	0.00	1	2.94	1	0.99
SUR.+Concurrent CT-RT	1	1.49	0	0.00	1	0.99
RT+CT	5	7.46	1	2.94	6	5.94
CT+T	1	1.49	2	5.88	3	2.97
RT+T	4	5.97	2	5.88	6	5.94
Total	67	100.00	34	100.00	101	100.00

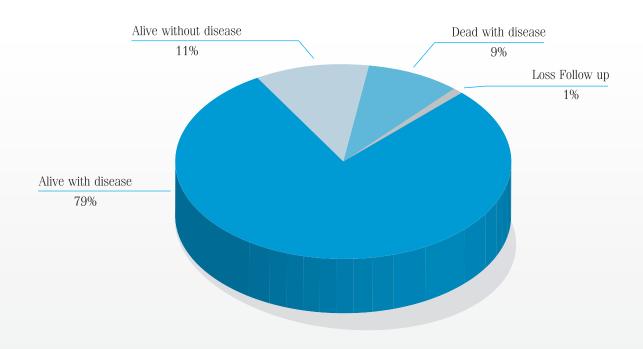
SUR. = Surgery

 $RT = External \ radiation \ the rapy$ 

CT = Chemotherapy

T = Targeted therapy

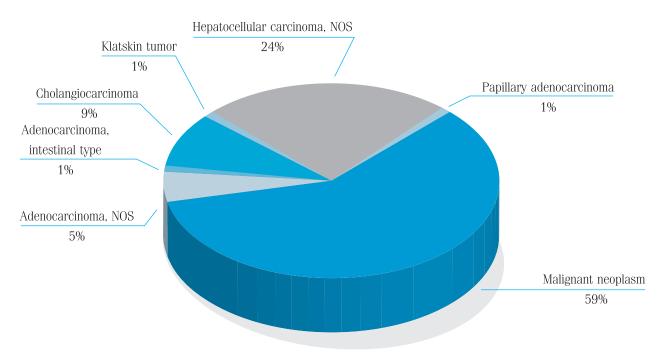
# FOLLOW UP STATUS (TREATMENT IN BMC)



# LIVER AND HEPATOBILIARY CANCER: PATHOLOGY

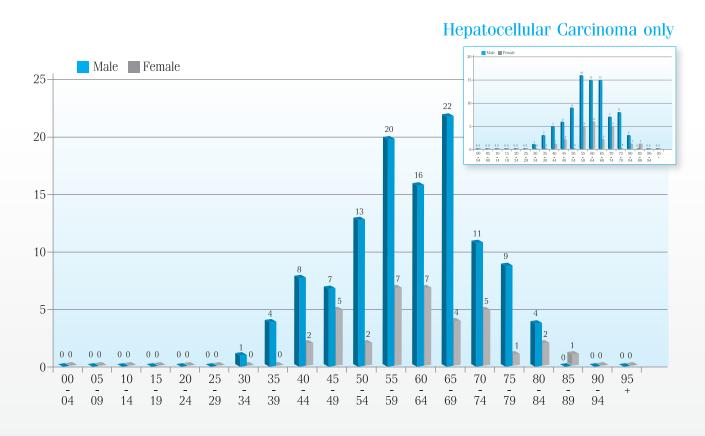
Tumor site		Number
C22.0	Liver	111
C22.1	Intrahepatic bile duct	30
C23.9	Gall bladder	4
C24.0	Extrahepatic bile duct	2
C24.1	Ampullar of vater	4
Total		151
Pathology Report		Number
M8000/3	Malignant neoplasm	90
M8140/3	Adenocarcinoma, NOS	7
M8144/3	Adenocarcinoma, intestinal type	1
M8160/3	Cholangiocarcinoma	14
M8162/3	Klatskin tumor	1
M8170/3	Hepatocellular carcinoma, NOS	36
M8174/3	Hepatocellular CA, clear cell type	1
M8260/3	Papillary adenocarcinoma	1
Total		151

#### PATHOLOGY REPORT OF LIVER AND HEPATOBILIARY CANCER

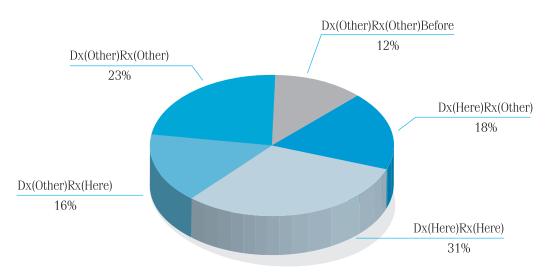


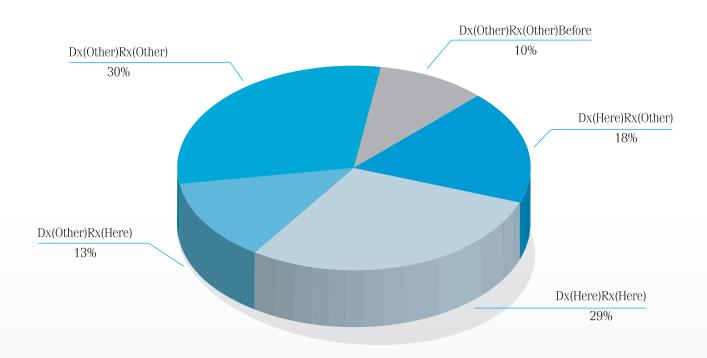
Malignant neoplasm = Dx For Cancer but unknow special type

#### AGE AND GENDER



## Hepatocellular Carcinoma only





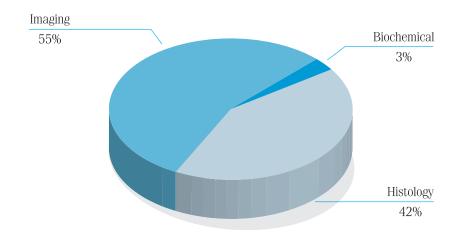
Dx = Diagnosis for Cancer (Dx by Pathology, Cytology or Imaging)

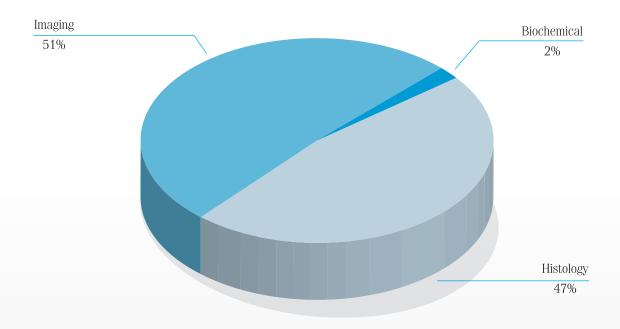
Rx = Treatment

Here = Within Bangkok Hospital Medical Center

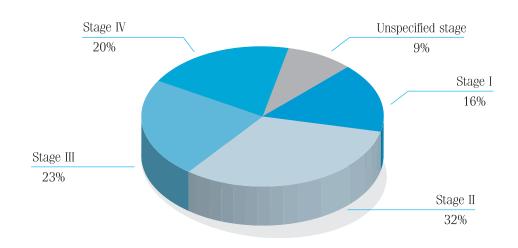
Other = Outside Bangkok Hospital Medical Center

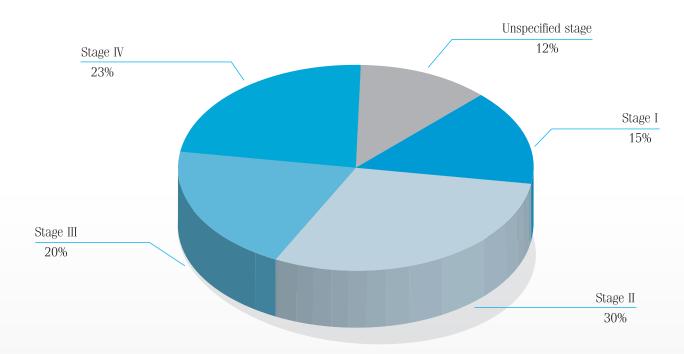
## Hepatocellular Carcinoma only





## Hepatocellular Carcinoma only





Unspecified stage = Incomplete staging due to insufficient patient information

### TYPE OF TREATMENT (IN BMC ONLY)

Management of treatment	M	ale	Female		Total	
management of treatment	Number	Percent	Number	Percent	Number	Percent
SUR.only	7	11.48	2	11.11	9	11.39
RT only	5	8.20	2	11.11	7	8.86
CT only	2	3.28	2	11.11	4	5.06
Targeted therapy	2	3.28	1	5.56	3	3.80
Intervention	37	60.66	9	50.00	46	58.23
Palliative care only	1	1.64	0	0.00	1	1.27
SUR.+CT	1	1.64	0	0.00	1	1.27
SUR.+T	1	1.64	0	0.00	1	1.27
T+I	3	4.92	1	5.56	4	5.06
RT+CT	0	0.00	1	5.56	1	1.27
RT+I	1	1.64	0	0.00	1	1.27
CT+T+I	1	1.64	0	0.00	1	1.27
Total	61	100.00	18	100.00	79	100.00

SUR. = Surgery

 $RT = External \ radiation \ the rapy$ 

CT = Chemotherapy

T = Targeted therapy

I = Intervention

# TYPE OF TREATMENT IN HEPATOCELLULAR CARCINOMA (IN BMC ONLY)

Management of treatment	Ma	ale	Female		Total	
Management of treatment	Number	Percent	Number	Percent	Number	Percent
SUR.only	4	7.84	2	14.29	6	9.23
RT only	2	3.92	2	14.29	4	6.15
Targeted therapy	2	3.92	1	7.14	3	4.62
Intervention	37	72.55	8	57.14	45	69.23
SUR.+T	1	1.96	0	0.00	1	1.54
T+I	3	5.88	1	7.14	4	6.15
RT+I	1	1.96	0	0.00	1	1.54
CT+T+I	1	1.96	0	0.00	1	1.54
Total	51	100.00	14	100.00	65	100.00

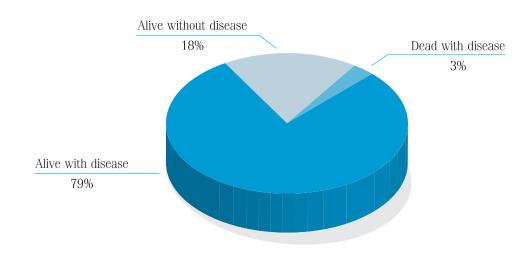
SUR. = Surgery

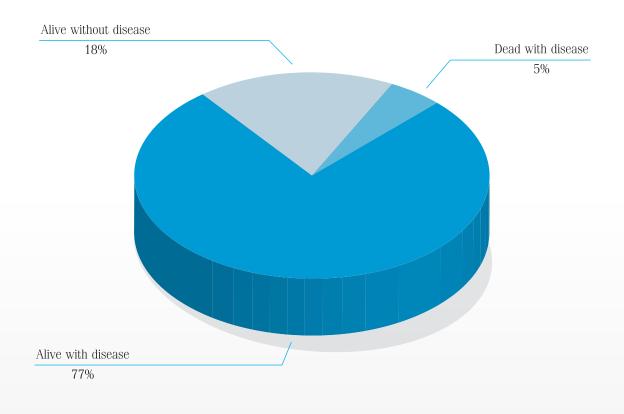
 $RT = External\ radiation\ the rapy$ 

I = Intervention

 $T = Targeted \ therapy$ 

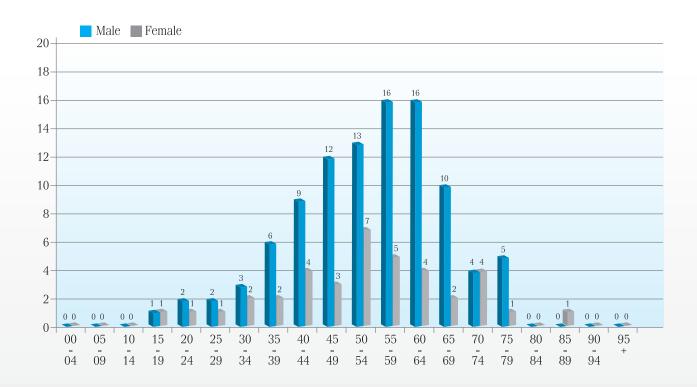
# Hepatocellular Carcinoma only





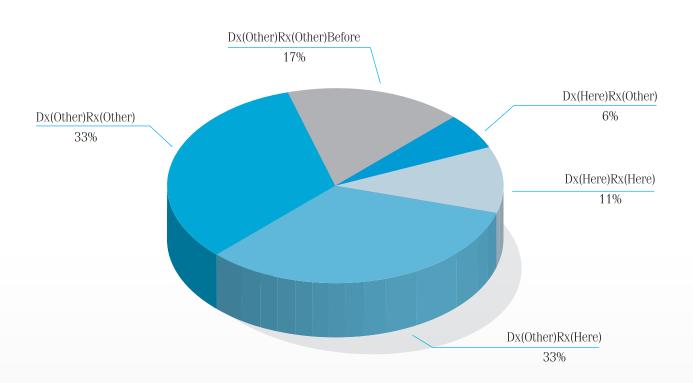
Tumor site		Number
C00.1	Lower lip	1
C01.9	Base of tongue	8
C02.9	Tongue	16
C03.1	Lower alveolus	1
C03.9	Gum	1
C04.9	Floor of mouth	4
C05.0	Hard palate	1
C05.1	Soft palate	1
C05.9	Palate	2
C06.0	Buccal mocusa	9
C07.9	Parotid gland	1
C08.0	Submandibular gland	2
C08.1	Sublingual gland	1
C09.1	Tonsillar pillar	1
C09.9	Tonsil	9
C10.9	Oropharynx	1
C11.9	Nasopharynx	70
C12.9	Pyriform sinus	3
C13.0	Postcricoid region	1
C13.9	Hypopharynx	2
C14.0	Pharynx	2
Total		137
Pathology Report		Number
M8000/3	Malignant neoplasm	22
M8010/3	Carcinoma, NOS	2
M8020/3	Carcinoma undifferentiated, NOS	24
M8021/3	Carcinoma, anaplastic, NOS	1
M8051/3	Verrucous carcinoma, NOS	1
M8070/3	Squamous cell carcinoma, NOS	69
M8071/3	Squamous cell carcinoma, keratinizing, NOS	2
M8072/3	Squamous cell carcinoma, large cell, nonkeratinizing, NOS	14
M8200/3	Adenoid cystic carcinoma	2
Total		137

Ago	M	ale	Fen	nale	То	tal
Age	Number	Percent	Number	Percent	Number	Percent
00 - 04	0	0.00	0	0.00	0	0.00
05 - 09	0	0.00	0	0.00	0	0.00
10 - 14	0	0.00	0	0.00	0	0.00
15 - 19	1	1.01	1	2.63	2	1.46
20 - 24	2	2.02	1	2.63	3	2.19
25 - 29	2	2.02	1	2.63	3	2.19
30 - 34	3	3.03	2	5.26	5	3.65
35 - 39	6	6.06	2	5.26	8	5.84
40 - 44	9	9.09	4	10.53	13	9.49
45 - 49	12	12.12	3	7.89	15	10.95
50 - 54	13	13.13	7	18.42	20	14.60
55 - 59	16	16.16	5	13.16	21	15.33
60 - 64	16	16.16	4	10.53	20	14.60
65 - 69	10	10.10	2	5.26	12	8.76
70 - 74	4	4.04	4	10.53	8	5.84
75 - 79	5	5.05	1	2.63	6	4.38
80 - 84	0	0.00	0	0.00	0	0.00
85 - 89	0	0.00	1	2.63	1	0.73
90 - 94	0	0.00	0	0.00	0	0.00
95 +	0	0.00	0	0.00	0	0.00
Total	99	100.00	38	100.00	137	100.00



# PATIENT CATEGORY OF HEAD AND NECK CANCER

Dationt astagomy	Male		Fen	nale	Total	
Patient category	Number	Percent	Number	Percent	Number	Percent
Dx(Here)Rx(Other)	8	8.08	1	2.63	9	6.57
Dx(Here)Rx(Here)	10	10.10	5	13.16	15	10.95
Dx(Other)Rx(Here)	33	33.33	12	31.58	45	32.85
Dx(Other)Rx(Other)	37	37.37	8	21.05	45	32.85
Dx(Other)Rx(Other)Before	11	11.11	12	31.58	23	16.79
Total	99	100.00	38	100.00	137	100.00



Dx = Diagnosis for Cancer (Dx by Pathology, Cytology or Imaging)

Rx = Treatment

Here = Within Bangkok Hospital Medical Center

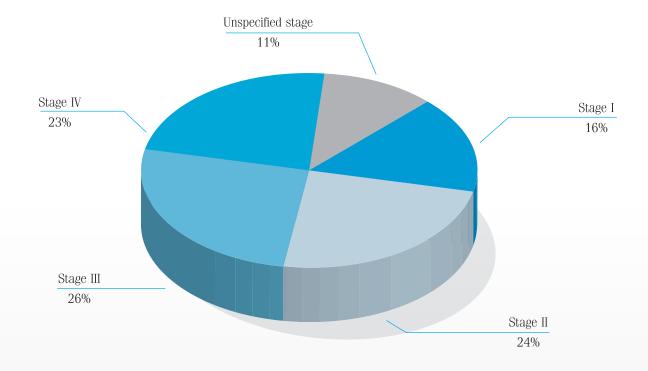
Other = Outside Bangkok Hospital Medical Center

## METHOD OF DIAGNOSIS (TREATMENT IN BMC)

Method of diagnosis	Male		Fen	nale	Total	
Method of diagnosis	Number	Percent	Number	Percent	Number	Percent
Biochemical	0	0.00	0	0.00	0	0.00
Other	2	3.70	1	3.45	3	3.61
Cytology	0	0.00	0	0.00	0	0.00
Histology	52	96.30	28	96.55	80	96.39
Imaging	0	0.00	0	0.00	0	0.00
Total	54	100.00	29	100.00	83	100.00

Other = Previously diagnosed as Head and Neck cancer from other Hospital but no document of Pathology

## STAGING (TREATMENT IN BMC)



Unspecified stage = Incomplete staging due to insufficient patient information

## TYPE OF TREATMENT (IN BMC ONLY)

Management of treatment	M	ale	Fen	nale	Total	
Management of treatment	Number	Percent	Number	Percent	Number	Percent
SUR.only	7	12.96	4	13.79	11	13.25
RT+Brachytherapy	23	42.59	13	44.83	36	43.37
CT only	0	0.00	1	3.45	1	1.20
Concurrent CT-RT	17	31.48	7	24.14	24	28.92
SUR.+RT	2	3.70	2	6.90	4	4.82
SUR.+RT+CT	1	1.85	0	0.00	1	1.20
SUR.+Concurrent CT-RT	1	1.85	1	3.45	2	2.41
RT+CT	0	0.00	1	3.45	1	1.20
RT+T	1	1.85	0	0.00	1	1.20
RT+Concurrent CT-RT	1	1.85	0	0.00	1	1.20
CT+Concurrent CT-RT	1	1.85	0	0.00	1	1.20
Total	54	100.00	29	100.00	83	100.00

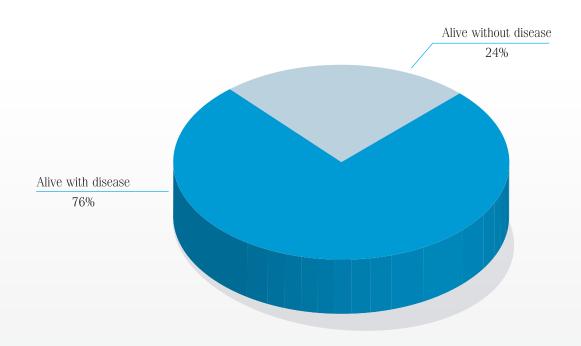
SUR. = Surgery

RT =  $External\ radiation\ the rapy$ 

CT = Chemotherapy

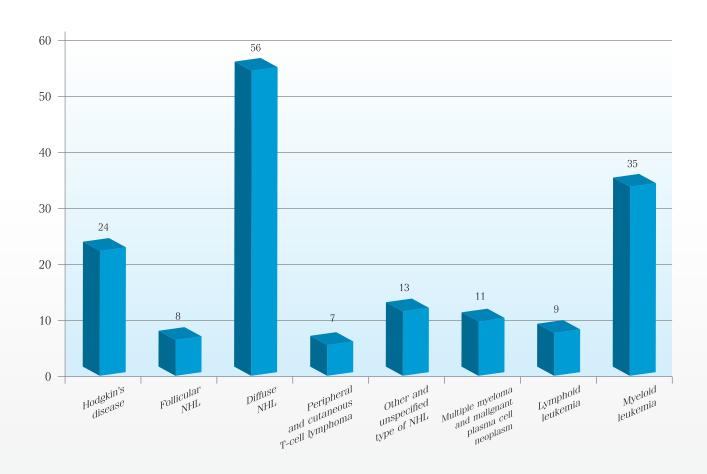
T = Targeted therapy

# FOLLOW UP STATUS (TREATMENT IN BMC)



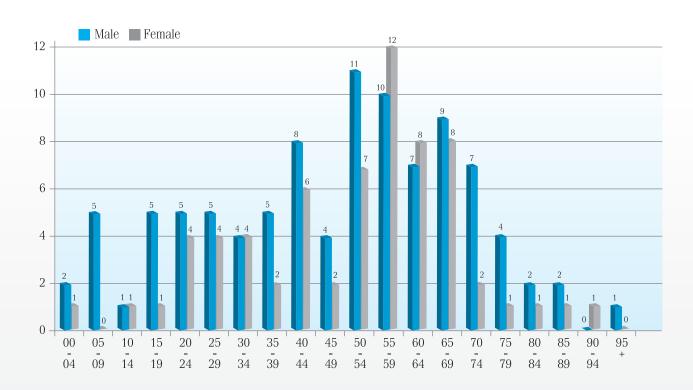
# HEMATOLOGIC MALIGNANCIES 2012 DISTRIBUTION OF HEMATOLOGIC MALIGNANCIES

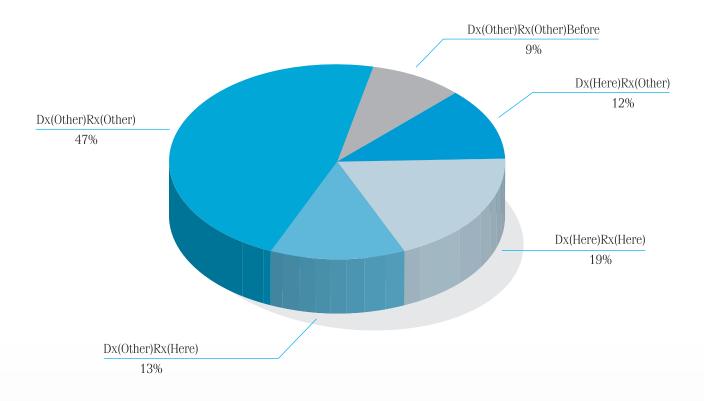
Disease	Ma	ale	Fen	nale	Tot	tal
Disease	Number	Percent	Number	Percent	Number	Percent
Hodgkin's disease	17	17.53	7	10.61	24	14.72
Follicular non-Hodgkin's lymphoma	5	5.15	3	4.55	8	4.91
Diffuse non-Hodgkin's lymphoma	30	30.93	26	39.39	56	34.36
Peripheral and cutaneous T-cell lymphoma	4	4.12	3	4.55	7	4.29
Other and unspecified type of non-Hodgkin's	9	9.28	4	6.06	13	7.98
lymphoma						
Multiple myeloma and malignant plasma cell	5	5.15	6	9.09	11	6.75
neoplasm						
Lymphoid leukemia	8	8.25	1	1.52	9	5.52
Myeloid leukemia	19	19.59	16	24.24	35	21.47
Total	97	100.00	66	100.00	163	100.00



# DISTRIBUTION OF HEMATOLOGIC MALIGNANCIES BY AGE AND GENDER

Ago	M	ale	Fen	nale	То	tal
Age	Number	Percent	Number	Percent	Number	Percent
00 - 04	2	2.06	1	1.52	3	1.84
05 - 09	5	5.15	0	0.00	5	3.07
10 - 14	1	1.03	1	1.52	2	1.23
15 - 19	5	5.15	1	1.52	6	3.68
20 - 24	5	5.15	4	6.06	9	5.52
25 - 29	5	5.15	4	6.06	9	5.52
30 - 34	4	4.12	4	6.06	8	4.91
35 - 39	5	5.15	2	3.03	7	4.29
40 - 44	8	8.25	6	9.09	14	8.59
45 - 49	4	4.12	2	3.03	6	3.68
50 - 54	11	11.34	7	10.61	18	11.04
55 - 59	10	10.31	12	18.18	22	13.50
60 - 64	7	7.22	8	12.12	15	9.20
65 - 69	9	9.28	8	12.12	17	10.43
70 - 74	7	7.22	2	3.03	9	5.52
75 - 79	4	4.12	1	1.52	5	3.07
80 - 84	2	2.06	1	1.52	3	1.84
85 - 89	2	2.06	1	1.52	3	1.84
90 - 94	0	0.00	1	1.52	1	0.61
95 +	1	1.03	0	0.00	1	0.61
Total	97	100.00	66	100.00	163	100.00





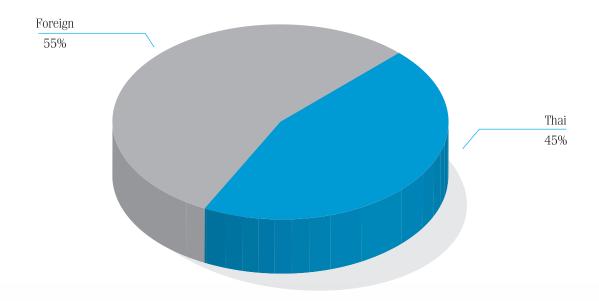
Dx = Diagnosis for cancer

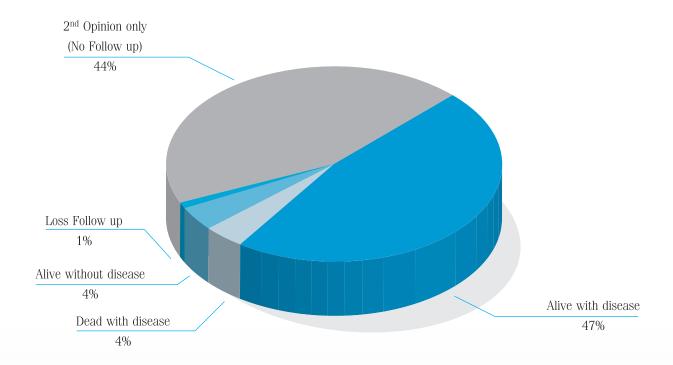
Rx = Treatment

Here = Within Bangkok Hospital Medical Center

Other = Outside Bangkok Hospital Medical Center

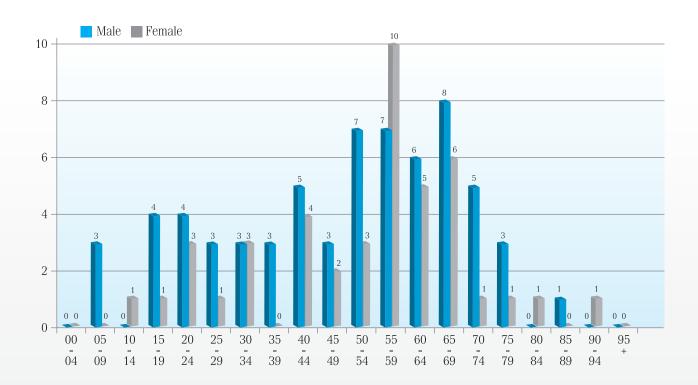
Patient nationality	Male		Fen	nale	Total		
ганені напонаніу	Number	Percent	Number	Percent	Number	Percent	
Thai	39	40.21	35	53.03	74	45.40	
Foreign	58	59.79	31	46.97	89	54.60	
Total	97	100.00	66	100.00	163	100.00	



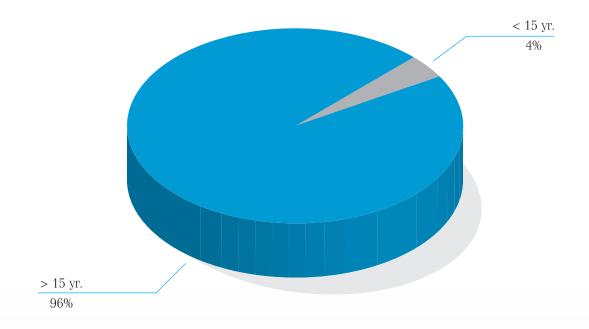


# LYMPHOMA AGE AND GENDER

Ago	Ma	ale	Fen	nale	То	tal
Age	Number	Percent	Number	Percent	Number	Percent
00 - 04	0	0.00	0	0.00	0	0.00
05 - 09	3	4.62	0	0.00	3	2.78
10 - 14	0	0.00	1	2.33	1	0.93
15 - 19	4	6.15	1	2.33	5	4.63
20 - 24	4	6.15	3	6.98	7	6.48
25 - 29	3	4.62	1	2.33	4	3.70
30 - 34	3	4.62	3	6.98	6	5.56
35 - 39	3	4.62	0	0.00	3	2.78
40 - 44	5	7.69	4	9.30	9	8.33
45 - 49	3	4.62	2	4.65	5	4.63
50 - 54	7	10.77	3	6.98	10	9.26
55 - 59	7	10.77	10	23.26	17	15.74
60 - 64	6	9.23	5	11.63	11	10.19
65 - 69	8	12.31	6	13.95	14	12.96
70 - 74	5	7.69	1	2.33	6	5.56
75 - 79	3	4.62	1	2.33	4	3.70
80 - 84	0	0.00	1	2.33	1	0.93
85 - 89	1	1.54	0	0.00	1	0.93
90 - 94	0	0.00	1	2.33	1	0.93
95 +	0	0.00	0	0.00	0	0.00
Total	65	100.00	43	100.00	108	100.00

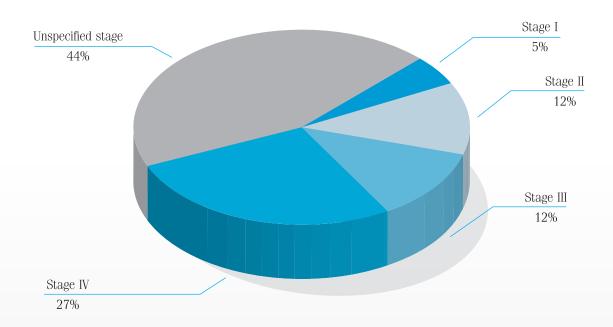


Age	Male		Fen	nale	Total	
	Number	Percent	Number	Percent	Number	Percent
< 15 yr.	3	4.62	1	2.33	4	3.70
≥ 15 yr.	62	95.38	42	97.67	104	96.30
Total	65	100.00	43	100.00	108	100.00



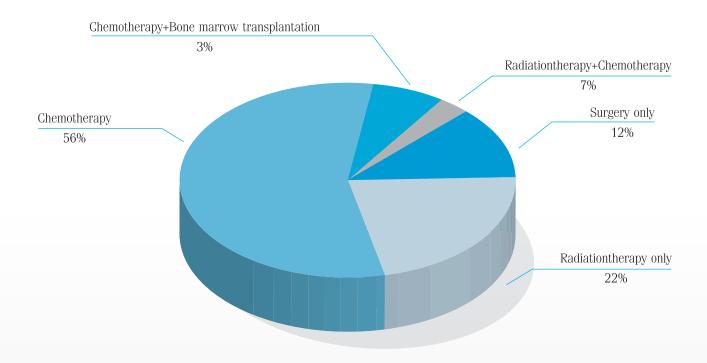
Conclude method of diagnosis	Ma	ale	Female		Total	
Conclude method of diagnosis	Number	Percent	Number	Percent	Number	Percent
Histopathology only	17	65.38	11	73.33	28	68.29
Histopathology+Flow cytometry+Chromosome	1	3.85	1	6.67	2	4.88
Histopathology+Flow cytometry	6	23.08	1	6.67	7	17.07
Histopathology+Immunohistochemistry	1	3.85	1	6.67	2	4.88
Histopathology+Flow cytometry+Immunohistochemistry	1	3.85	1	6.67	2	4.88
Total	26	100.00	15	100.00	41	100.00

#### STAGING (TREATMENT IN BMC)



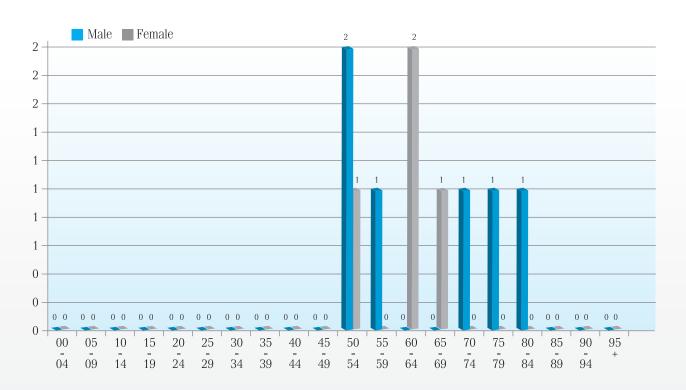
Unspecified stage = Incomplete staging due to insufficient patient information

Management of treatment	Ma	Male		Female		tal
Management of treatment	Number	Percent	Number	Percent	Number	Percent
Surgery only	2	7.69	3	20.00	5	12.20
Radiationtherapy only	7	26.92	2	13.33	9	21.95
Chemotherapy	14	53.85	9	60.00	23	56.10
Radiationtherapy+Chemotherapy	2	7.69	1	6.67	3	7.32
Chemotherapy+Bone marrow transplantatin	1	3.85	0	0.00	1	2.44
Total	26	100.00	15	100.00	41	100.00

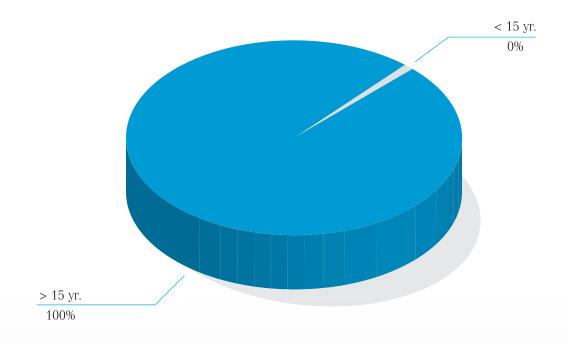


# MULTIPLE MYELOMA AGE AND GENDER

Ago	Ma	ale	Fen	nale	То	tal
Age	Number	Percent	Number	Percent	Number	Percent
00 - 04	0	0.00	0	0.00	0	0.00
05 - 09	0	0.00	0	0.00	0	0.00
10 - 14	0	0.00	0	0.00	0	0.00
15 - 19	0	0.00	0	0.00	0	0.00
20 - 24	0	0.00	0	0.00	0	0.00
25 - 29	0	0.00	0	0.00	0	0.00
30 - 34	0	0.00	0	0.00	0	0.00
35 - 39	0	0.00	0	0.00	0	0.00
40 - 44	0	0.00	0	0.00	0	0.00
45 - 49	0	0.00	0	0.00	0	0.00
50 - 54	2	33.33	1	25.00	3	30.00
55 - 59	1	16.67	0	0.00	1	10.00
60 - 64	0	0.00	2	50.00	2	20.00
65 - 69	0	0.00	1	25.00	1	10.00
70 - 74	1	16.67	0	0.00	1	10.00
75 - 79	1	16.67	0	0.00	1	10.00
80 - 84	1	16.67	0	0.00	1	10.00
85 - 89	0	0.00	0	0.00	0	0.00
90 - 94	0	0.00	0	0.00	0	0.00
95 +	0	0.00	0	0.00	0	0.00
Total	6	100.00	4	100.00	10	100.00



A go	Ma	ale	Fen	nale	Tot	tal
Age	Number	Percent	Number	Percent	Number	Percent
< 15 yr.	0	0.00	0	0.00	0	0.00
≥ 15 yr.	5	100.00	5	100.00	10	100.00
Total	5	100.00	5	100.00	10	100.00

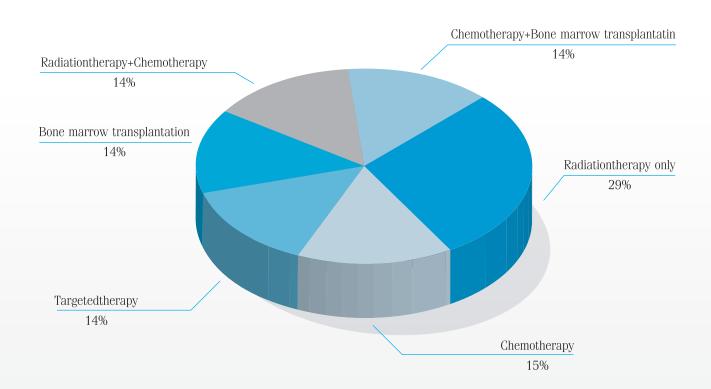


# METHOD OF DIAGNOSIS (TREATMENT IN BMC)

Canaluda mathad of diagnosia	Ma	ale	Fen	nale	Tot	tal
Conclude method of diagnosis	Number	Percent	Number	Percent	Number	Percent
Histopathology only	2	50.00	3	100.00	5	71.43
Histopathology+Flow cytometry	2	50.00	0	0.00	2	28.57
Total	4	100.00	3	100.00	7	100.00

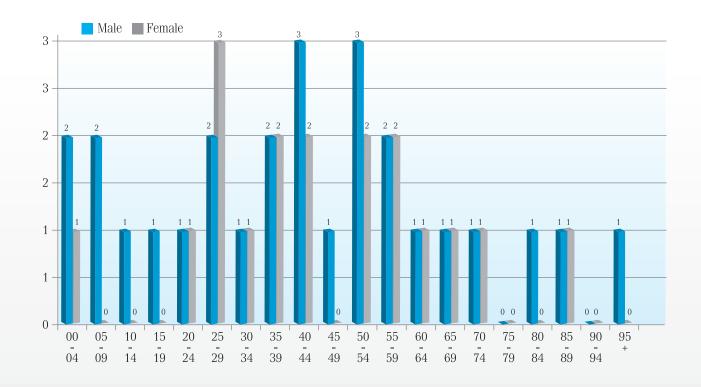
#### TYPE OF TREATMENT (TREATMENT IN BMC)

Management of treatment	Ma	ale	Fen	nale	To	tal
Management of treatment	Number	Percent	Number	Percent	Number	Percent
Radiationtherapy only	1	25.00	1	33.33	2	28.57
Chemotherapy	1	25.00	0	0.00	1	14.29
Targetedtherapy	0	0.00	1	33.33	1	14.29
Bone marrow transplantatin	0	0.00	1	33.33	1	14.29
Radiationtherapy+Chemotherapy	1	25.00	0	0.00	1	14.29
Chemotherapy+Bone marrow transplantatin	1	25.00	0	0.00	1	14.29
Total	4	100.00	3	100.00	7	100.00

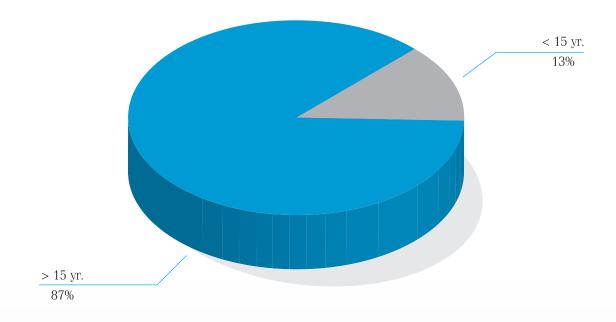


# LEUKEMIA AGE AND GENDER

Ago	M	ale	Fen	nale	То	tal
Age	Number	Percent	Number	Percent	Number	Percent
00 - 04	2	7.41	1	5.56	3	6.67
05 - 09	2	7.41	0	0.00	2	4.44
10 - 14	1	3.70	0	0.00	1	2.22
15 - 19	1	3.70	0	0.00	1	2.22
20 - 24	1	3.70	1	5.56	2	4.44
25 - 29	2	7.41	3	16.67	5	11.11
30 - 34	1	3.70	1	5.56	2	4.44
35 - 39	2	7.41	2	11.11	4	8.89
40 - 44	3	11.11	2	11.11	5	11.11
45 - 49	1	3.70	0	0.00	1	2.22
50 - 54	3	11.11	2	11.11	5	11.11
55 - 59	2	7.41	2	11.11	4	8.89
60 - 64	1	3.70	1	5.56	2	4.44
65 - 69	1	3.70	1	5.56	2	4.44
70 - 74	1	3.70	1	5.56	2	4.44
75 - 79	0	0.00	0	0.00	0	0.00
80 - 84	1	3.70	0	0.00	1	2.22
85 - 89	1	3.70	1	5.56	2	4.44
90 - 94	0	0.00	0	0.00	0	0.00
95 +	1	3.70	0	0.00	1	2.22
Total	27	100.00	18	100.00	45	100.00



Ago	Ma	ale	Fen	nale	To	tal
Age	Number	Percent	Number	Percent	Number	Percent
< 15 yr.	5	7.41	1	5.56	6	13.33
≥ 15 yr.	22	81.48	17	94.44	39	86.67
Total	27	88.89	18	100.00	45	100.00

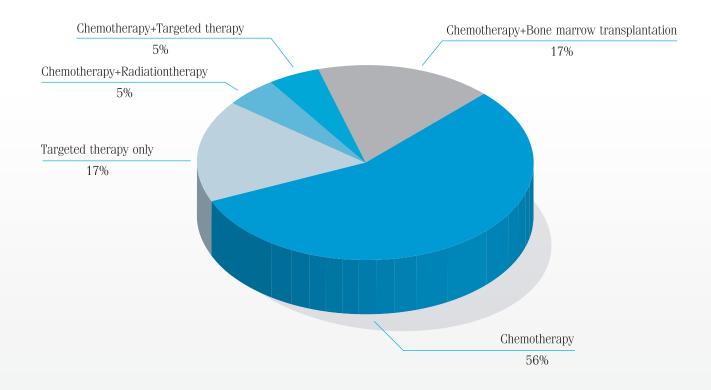


## METHOD OF DIAGNOSIS (TREATMENT IN BMC)

Conclude method of diagnosis	Ma	ale	Fen	nale	Tot	tal
Conclude method of diagnosis	Number	Percent	Number	Percent	Number	Percent
Histopathology only	3	33.33	1	11.11	4	22.22
Histopathology+Flow cytometry+Chromosome	2	22.22	2	22.22	4	22.22
Histopathology+Flow cytometry	4	44.44	6	66.67	10	55.56
Total	9	100.00	9	100.00	18	100.00

#### TYPE OF TREATMENT (TREATMENT IN BMC)

Management of treatment	Ma	ale	Fen	nale	Tot	tal
Management of treatment	Number	Percent	Number	Percent	Number	Percent
Chemotherapy	5	55.56	5	55.56	10	55.56
Targeted therapy only	1	11.11	2	22.22	3	16.67
Chemotherapy+Radiationtherapy	1	11.11	0	0.00	1	5.56
Chemotherapy+Targeted therapy	1	11.11	0	0.00	1	5.56
Chemotherapy+Bone marrow transplantation	1	11.11	2	22.22	3	16.67
Total	9	100.00	9	100.00	18	100.00



AGE DISTRIBUTION IN ALL MALE CANCER NUMBER OF CASE

Total %	1 0.11	17 1.93	2 0.23	4 0.45	2 0.23	9 0.68	00.00		1 0.11																			
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tal %	4 1.59	1 0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3 0.34	14.84	0.57	9 0.23	9 3.28	9 0.23	4 3.85	0.00	0.23	9 2.15	0.00	8 2.04	0.11	9 0.23	0.00	0.79	
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5 80	0 (	0	0	0	0	0	0	0	0 (	0	0 (	6 9	0	0	1	0	5	0	0	1	0	0	0	0	0 (	0	
0 75 4 79	0	0	0	0	0	0	0	0	0	0	0	0 16	0	0	4	0	2	0	0	0	0	0	0	0	0		
5 70 9 74	2	1	0	0	0	0	0	0	0	0	0	3 30	0	0	2	0	,	0	0		0		0	0	0	1	
0 65 4 69	3	0	0	0	0	0	0	0	0	0	0	3 33	0	0	2	0	7	0	0		0		0	0	0	2	
55 60 59 64	0 1	0 7	0 (	0 (	0 (	0 (	0 (	0 (	0 (	0 (	) 1	3 23	0 (	0 (	1 1	0 1	3 0	0 (	0 (	3 1	0 (	2	0 (	0 (	0 (	) 2	
50 5 54 5	1	0 2	0 0	0 0	0 0	0 0	0 0	0 (	0 0	0 (	1 0	10 8	0 0	1 0	4	1 1	5 3	0 0	0 0	0 3	0 0	2 2	0 0	0 0	0 0	1 0	
45 5 49 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1 1	0	0	0	0	0	0	0 0	0	0 0	0 1	0 1	0	0 1	3 4	0 1	0	0	0	1 (	0	0 2	1	0	0	0 1	
40 4 -44 4	0	0	0	0	0	0	0	0	0	0	0	0	2	0		0	0	0	1 (	_	0	3	0	0	0	0	
35 4 39 4	1	_	0	0	0	0	0	0	0	0	0	0		1	4	0	0	0	0	2	0	2	0	0	0	0	
30 3 34 3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	8	0	1	0	0	0	0	
25 3 29 3	2	0	0	0	0	0	0	0	0	0	1 (	0	2	0	_	0	0	0	0	2	0		0	1	0	0	
20 2 24 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	
15 2 19 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10 - 41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	_	0	0	
05 09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
00 - 40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_	0	0	0	0	0	0	0	0	0	
0 0																											
Primary site	Connective tissue	Breast	Vulva	Vagina	Cervix	Corpus uteri	Uterus	Ovary	Other female genital organs	Placenta	Penis	Prostate gland	Testis	Other and unspecified male genital organs	Urinary tract	Ureter	Bladder	Urinary organ unspecified	Eye & Adnexa	Brain	Spinal cord & CNS	Thyroid gland	Adrenal gland	Other & endocrine gland	Other & ill-defined	Unknown primary site	
Code	C49	C20	C51	C52	C53	C54	C22	C26	C57	C58	090	C61	C62	C63	C64-C65	990	C67	R9D	690	C70-C71	C72	C73	C74	C75	9LD	C79	שטען

AGE DISTRIBUTION IN ALL FEMALE CANCER NUMBER OF CASE

%	0.00	0.72	0.00	0.00	0.21	0.31	0.10	0.21	0.41	0.00	1.96	0.41	2.78	0.10	10.61	0.21	3.71	0.93	0.00	0.10	0.41	0.31	7.42	0.00	0.00	0.41	0.82	0.10
Total	0	7	0	0	2	3	_	2	4	0	19	4	27	_	103	2	36	6	0	_	4	3	72	0	0	4	8	$\leftarrow$
<del>6</del> +	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85 - 89	0	0	0	0	0	0	0	0	0	0	$\overline{}$	0	$\leftarrow$	0	4	0	$\overline{}$	0	0	0	0	0	$\leftarrow$	0	0	0	0	0
80 - 84	0	0	0	0	0	0	0	0	0	0	0	$\leftarrow$	$\leftarrow$	0	9	0	2	_	0	0	0	0	2	0	0	0	$\leftarrow$	0
75	0	0	0	0	0	0	0	0	0	0	$\overline{}$	0	$\overline{}$	0	7	0	_	2	0	0	0	0	5	0	0	0	_	0
70	0	1	0	0	~	$\overline{}$	0	0	0	0	$\leftarrow$	$\leftarrow$	33	0	13	0	വ	_	0	0	0	0	10	0	0	0	0	$\leftarrow$
65 69	0		0	0	0	0	0	0	0	0	$\leftarrow$	0	33	$\overline{}$	15	0	4	0	0	0	$\leftarrow$		10	0	0	0	2	0
60 - 64	0	0	0	0	$\leftarrow$	0	0	$\leftarrow$	0	0	2	0	33	0	11	0	7	33	0	0	0	0	14	0	0	$\leftarrow$	$\leftarrow$	0
55	0	0	0	0	0	$\overline{}$	0	0	$\leftarrow$	0	33	2	8	0	11	0	7	_	0	0	_	0	9	0	0	0	$\leftarrow$	0
50	0		0	0	0	0	0	0	$\overline{}$	0	5	0	4	0	16	_	2	0	0	0	$\overline{}$	$\leftarrow$	12	0	0	0	0	0
45 49	0	1	0	0	0	0	0	0	$\leftarrow$	0	$\overline{}$	0	2	0	9	0	5	0	0	0	$\leftarrow$	_	7	0	0	0	0	0
40 - 44	0	$\overline{}$	0	0	0	0	$\leftarrow$	$\leftarrow$	$\leftarrow$	0	0	0	$\leftarrow$	0	5	0	2	0	0	$\overline{}$	0	0	33	0	0	0	$\leftarrow$	0
35	0	0	0	0	0	$\overline{}$	0	0	0	0	$\leftarrow$	0	0	0	33	$\overline{}$	0		0	0	0	0	2	0	0	$\leftarrow$	0	0
30	0	1	0	0	0	0	0	0	0	0	_	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	$\leftarrow$	0
25 29	0		0	0	0	0	0	0	0	0	0	0	0	0	_	0	0	0	0	0	0	0	0	0	0	0	0	0
20 - 24	0	0	0	0	0	0	0	0	0	0	$\overline{}$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$\leftarrow$	0	0
15 1 19	0	0	0	0	0	0	0	0	0	0	_	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
5 10 -	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05 05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00 - 40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Primary site	Lip	Tongue	Gum	Floor of mouth	Palate	Other part of mouth	Parotid gland	Salivary gland	Tonsil	Oropharynx	Head & Neck	Esophagus	Stomach	Small intestine	Colon & Rectum	Anus	Liver & Hepatobiliary	Panceras	Other and ill-defined digestive organ	Nasal cavity	Accessory sinuses	Larynx	Lung	Thymus	Mediastinum	Bone	Skin	Retroperitonium
Code	000	C01-C02	C03	C04	C05	900	C07	800	600	C10	C11-C14	C15	C16	C17	C18-C20	C21	C22-C24	C25	C26	C30	C31	C32	C33-C34	C37	C38	C40-C41	C43-C44	C48

% I	0.62	40.37	0.31	0.21	8.03	3.50	0.00	2.99	0.00	0.00	0.00	0.00	0.00	0.00	0.62	0.10	0.31	0.10	0.10	1.13	0.00	5.46	0.10	0.00	0.00	0.62	3.19
Total	9	392	3	2	78	34	0	29	0	0	0	0	0	0	9	$\overline{}$	33	$\leftarrow$	$\overline{}$	11	0	53	$\overline{}$	0	0	9	31
+	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90 94	0	2	0	0	0	0	0	$\overline{}$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85 89	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80 - 84	$\vdash$	2	0	$\overline{}$	-	$\overline{}$	0	$\overline{}$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75 79	0	15	_	0	5	2	0	0	0	0	0	0	0	0	_	0	2	0	0	1	0	2	0	0	0	0	$\leftarrow$
70 - 74	_	22	_	0	4	3	0	2	0	0	0	0	0	0	$\overline{}$	0	0	0	0	0	0	3	0	0	0	0	$\leftarrow$
65 69	0	29	0	0	2	7	0	0	0	0	0	0	0	0	0	_	$\overline{}$	0	0	0	0	_	0	0	0	0	0
60 64	0	42		0	12	6	0	2	0	0	0	0	0	0	$\overline{}$	0	0	0	$\overline{}$	_	0	2	0	0	0	2	7
55 59	0	46	0	0	12	3	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0	2	0	0	0	0	2
50	_	63	0	0	11	9	0	9	0	0	0	0	0	0	0	0	0	_	0	0	0	4	0	0	0	0	2
45	0	70	0	0	8		0	9	0	0	0	0	0	0	$\overline{}$	0	0	0	0	2	0	9	0	0	0	$\overline{}$	9
4-4	0	47	0		13		0	4	0	0	0	0	0	0	0	0	0	0	0	_	0	8	0	0	0	_	4
35 39	0	27	0	0	4	$\overline{}$	0	0	0	0	0	0	0	0	0	0	0	0	0	$\overline{}$	0	10	$\leftarrow$	0	0	2	cc
30	0	15	0	0	33	0	0	_	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	_
25 29	_	4	0	0	0	0	0	0	0	0	0	0	0	0	_	0	0	0	0	1	0	2	0	0	0	0	С
20 24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	О
15	0	0	0	0	0	0	0	$\overline{}$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
05 09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_	0	0	0	0	0	0	0	0	0	0	0	0
00-40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	С
Primary site	Connective tissue	Breast	Vulva	Vagina	Cervix	Corpus uteri	Uterus	Ovary	Other female genital organs	Placenta	Penis	Prostate gland	Testis	Other and unspecified male genital organs	Urinary tract	Ureter	Bladder	Urinary organ unspecified	Eye & Adnexa	Brain	Spinal cord & CNS	Thyroid gland	Adrenal gland	Other & endocrine gland	Other & ill-defined	Unknown primary site	Ductal carcinoma in situ of breast
Code	C49	C20	C51	C52	C53	C54	C22	C26	C57	C58	090	C61	C62	C63	C64-C65	990	L9D	R9D	690	C70-C71	C72	C73	C74	C75	9LD	C79	D05

# A REPORT ON CANCER SURVIVAL IN WATTANOSOTH CANCER HOSPITAL

This report on cancer survival is based on an analysis of data of top 3 common cancers (i.e., breast, colorectal and lung cancer) in Wattanosoth Cancer Hospital (WSH). The data has been collected by the hospital cancer registry. The cancer patients were diagnosed during a 12 month period from January 1 to December 31, 2008. All of them received treatment at WSH and were prospectively followed-up up to December 31, 2012 (4 year follow-up period).

Survival rates were estimated by Kaplan-Meier method. The survival rates of subgroups of cancer patients categorized by age (aged  $\leq 50$  and > 50 years old), sex (male and female) and stage of cancer at diagnosis (stage 1-4) were analyzed for comparison.

As this report is hospital registry-based cancer survival analysis, the study may have limitations related to endpoint data and sample size. The observed survival rates are estimated by method which cumulative probability of survival is calculated at consecutive one-month intervals after diagnosis. The information used included death from the cancer and other causes; lost to follow-up before observation period ended; and follow-up ends due to observation period ended. Therefore survival estimated may be biased if the proportion of lost to follow-up or other causes of death is high. Survival rate estimated from small numbers of cases can provide misleading results and may have wide confidence intervals. In addition to compare survival rate between different groups, test for statistical significant may be misleading.

125 cases were diagnosed breast cancer during January 1 to December 31, 2008. At the time of diagnosis, 48 (38.4%) of them wereat stage 1, 39 (31.2%) at stage 2, 21 (16.8%) at stage 3, and 11 (8.8%) at stage 4. Their average age was 53.1 years old (SD  $\pm$  12.1). 54 (43.2%) of them aged  $\leq$  50 years old and 71 (56.8%) aged > 50 years old.

The median follow-up period of these breast cancer patients was 49 months (25<sup>th</sup> - 75<sup>th</sup> percentile: 20 - 54 months). During the 4 year follow-up period, 4 of them were dead and 1 were lost to follow-up.

The overall observed survival rate of the breast cancer patients at 4 year follow-up period was 95.5% (95% CI: 88.4 - 98.3) (Fig. 1). The survival seems to have no difference between the age group of > 50 and  $\leq$  50 years old, of which the survival rate was 95.9% (95% CI: 84.6 - 99.0), and 95.1% (95% CI: 81.6 - 98.7) respectively (Fig. 2).

The observed survival of the early stage breast cancers, i.e., stage 1 and 2 was 100.0% and 100.0% respectively, while the survival of the late stages, i.e., stage 3 and 4 was 83.9% (95% CI: 49.4 to 95.7) and 66.7% (95% CI: 5.4 to 94.5) respectively (Fig. 3). The survival rate tends to be lower in the late stage breast cancers.

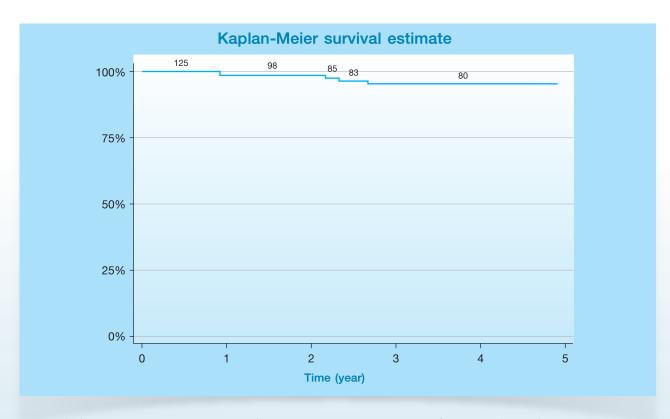


Figure 1. Overall observed survival rate of the breast cancer patients in WSH during 4 year follow-up period

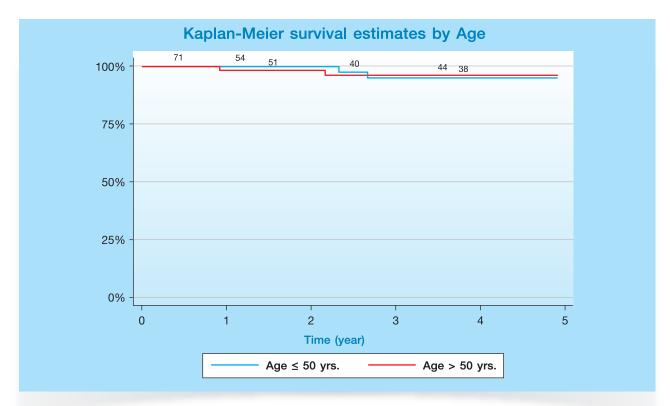


Figure 2. Observed survival rate of the breast cancer patients in WSH during 4 year follow-up period by age group of  $\leq 50$  and > 50 years old

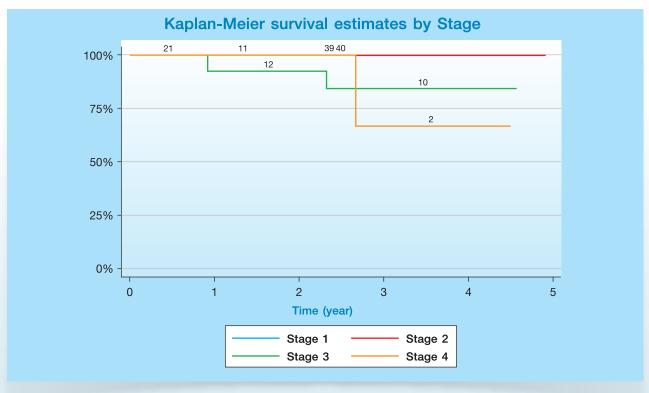


Figure 3. Observed survival rate of the breast cancer patients in WSH during 4 year follow-up period by stage of the cancer at diagnosis (stage 1 - 4)

58 cases were diagnosed colorectal cancer during January 1 to December 31, 2008. At the time of diagnosis, 6 (10.3%) of them were at stage 1, 10 (17.2%) at stage 2, 24 (41.4%) at stage 3, and 13 (22.4%) at stage 4. Their average age was 62.4 years old (SD  $\pm$  13.2). 11 (19.0%) of them aged  $\leq$  50 years old and 47 (81.0%) aged > 50 years old. Among of them, there were 41 (70.7%) males and 17 (29.3%) females.

The median follow-up period of these colorectal cancer patients was 20 months ( $25^{th}$  -  $75^{th}$  percentile: 5 - 45 months). During the 4 year follow-up period, 9 of them were dead and 4 were lost to follow-up.

The overall observed survival rate of the colorectal cancer patients at 4 year follow-up period was 85.2% (95% CI: 71.1 - 92.8) (Fig. 1). The survival among the male patients was 68.3% (95% CI: 27.9 - 89.2) and female was 84.6% (95% CI: 51.2 - 95.9) (Fig. 2). The male patients seem to have lower observed survival rate. The survival seems to have no difference between the age group of > 50 and  $\le 50$  years old, of which the survival rate was 70.1% (95% CI: 35.0 - 88.7) and 90.0% (95% CI: 47.3 - 98.5) respectively (Fig. 3).

The observed survival of early stage colorectal cancers, i.e., stage 1 and 2 was 100.0% and 83.3% (95% CI: 27.3 - 97.5) respectively, while the survival of the late stages, i.e., stage 3 and 4 was 87.1% (95% CI: 65.0 - 95.6) and 33.7% (95% CI: 1.6 - 75.3) respectively (Fig. 4). The observed survival tends to be decreased as the cancer stage advanced. Especially in the stage 4, the survival was substantially decreased.

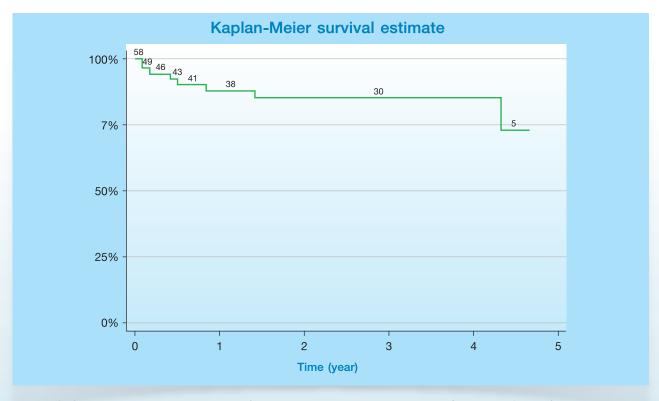


Figure 1. Overall observed survival rate of the colorectal cancer patients in WSH during 4 year follow-up period

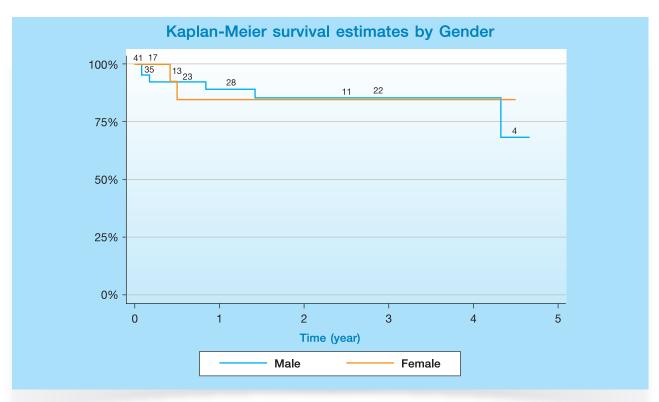


Figure 2. Observed survival rate of the colorectal cancer patients in WSH during 4 year follow-up period by gender (male and female)

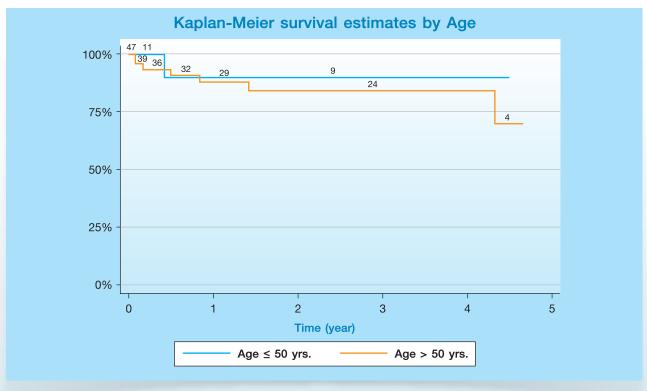
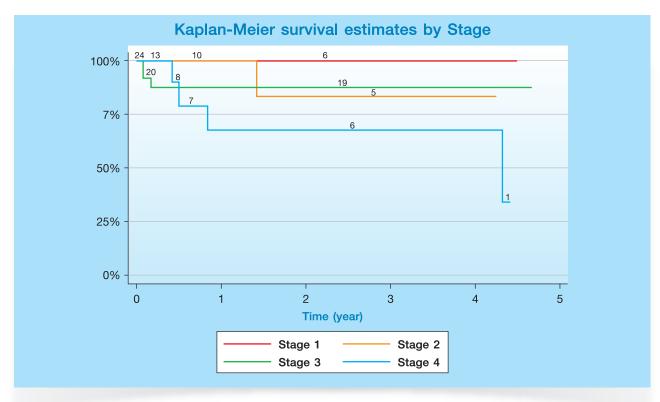


Figure 3. Observed survival rate of the colorectal cancer patients in WSH during 4 year follow-up period by age group of  $\leq 50$  and > 50 years old



**Figure 4.** Observed survival rate of the colorectal cancer patients in WSH during 4 year follow-up period by stage of the cancer at diagnosis (stage 1 - 4)

74 cases were diagnosed lung cancer during January 1 to December 31, 2008. At the time of diagnosis, 13 (17.6%) of them were at stage 1, 1 (1.3%) at stage 2, 9 (12.2%) at stage 3, and 47 (63.5%) at stage 4. Their average age was 61.6 years old (SD  $\pm$  12.1). 12 (16.2%) of them aged  $\leq$  50 years old and 62 (83.8%) aged > 50 years old. Among of them, there were 48 (64.9%) males and 26 (35.1%) females.

The median follow-up period of these lung cancer patients was 9 months (25<sup>th</sup> - 75<sup>th</sup> percentile: 3 - 27). During the 4 year follow-up period, 26 of them were dead and 1 were lost to follow-up.

The observed survival rate of the lung cancer patients at 4 year follow-up period was 45.7% (95% CI: 29.1 - 60.8) (Fig. 1). The survival seems to have no difference between male and female patients, of which the survival rate was 33.5% (95% CI: 13.4 - 55.1) and 60.3% (95% CI: 34.4 - 78.7) respectively (Fig. 2). The survival of patients aged > 50 and  $\leq 50$  years old was 46.9% (95% CI: 28.8 - 63.1) and 48.6% (95% CI: 16.0 - 75.3) respectively (Fig. 3). The patients aged > 50 years old seem to have lower observed survival rate.

The observed survival rate of early stage lung cancers, i.e., stage 1 and 2 was 100.0% and 100.0% respectively while the survival of late stages, i.e., stage 3 and 4 was 44.4% (95% CI: 10.4 - 74.8) and 16.5% (95% CI: 3.1 - 38.4) respectively (Fig. 4). The observed survival tends to be decreased as the cancer stage advanced.

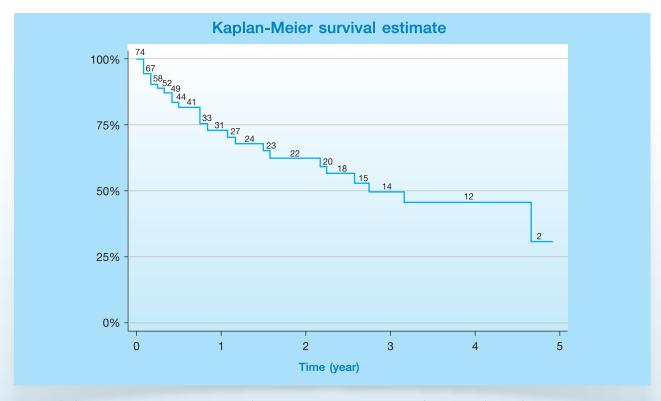
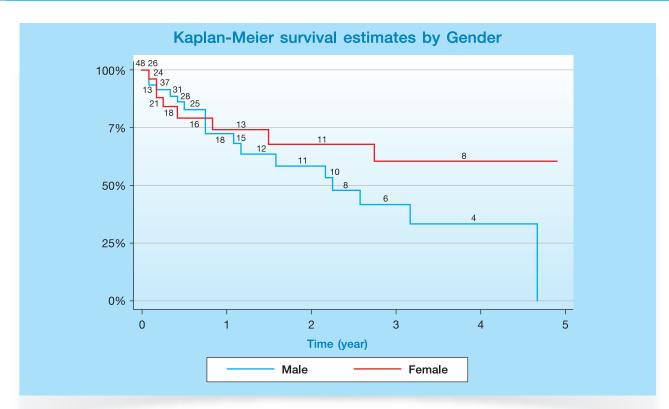


Figure 1. Overall observed survival rate of the lung cancer patients in WSH during 4 year follow-up period



**Figure 2.** Observed survival rate of the lung cancer patients in WSH during 4 year follow-up period by gender (male and female)

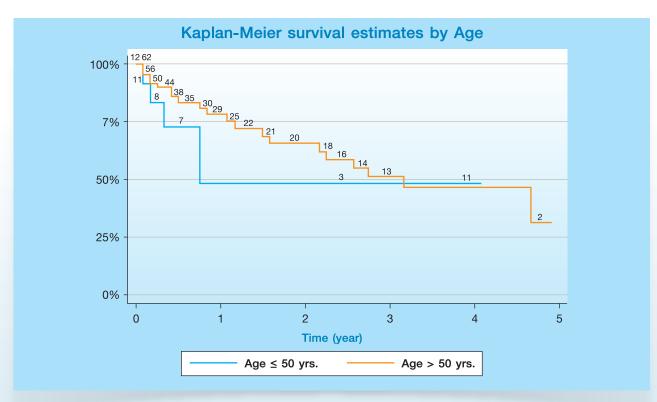
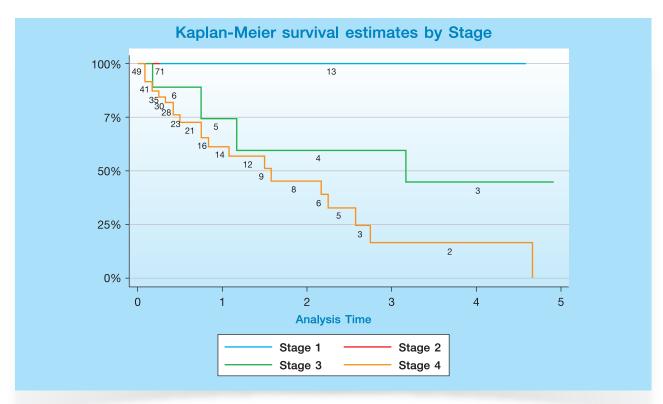


Figure 3. Observed survival rate of the lung cancer patients in WSH during 4 year follow-up period by age group of  $\leq 50$  and > 50 years old



**Figure 4.** Observed survival rate of the lung cancer patients in WSH during 4 year follow-up period by stage of the cancer at diagnosis (stage 1 - 4)

# Wattanosoth Hospital Conference

#### 3rd Best Practice for Cancer Care

#### Prof. Richard Champlin, M.D. MDAAC.

Chair, Department of Stem Cell Transplantation and Cellular Therapy,

The University of Texas MD Anderson Cancer Center, Houston USA. Joined with "3rd Best Practice for Cancer Care" gave speech on "Critical Role of Nursing Care in Improving Patient Outcomes" on 21-22 February 2013 at 7R conference Room, Bangkok Hospital.



## 3<sup>rd</sup> Bangkok Annual Colorectal Cancer Conference



#### Asso. Prof. Mehnaz A Shafi, M.D.

Associate Professor, Gastroenterology, Hepatology and Nutrition, Division of Internal Medicine, The University of Texas MD Anderson Cancer Center, Houston, TX. Joined with "3rd Bangkok Annual Colorectal Cancer Conference" gave speach on "Screening tools for Colorectal Cancer, Genetics and Family History in Colorectal Cancer" on 14 March 2013 at 7R Conference Room, Bangkok Hospital.

#### 3<sup>rd</sup> Bangkok Annual Colorectal Cancer Conference

#### Prof. Chusilp Charnsangavej, M.D. FSIR

Professor, Department of Diagnostic Radiology

The University of Texas MD Anderson Cancer Center, Houston, TX. Joined with "3rd Bangkok Annual Colorectal Cancer Conference" gave speech on "Advance in Colorectal cancer imaging" on 14 March 2013 at 7R Conference Room, Bangkok Hospital.



#### Practical Radiation Oncology in Head & Neck Cancer



#### Prof. David I Rosenthal, M.D. F.A.C.R.

Head and Neck Radiation Oncology, Section Chief. The University of Texas MD Anderson Cancer Center. Joined with "Practical Radiation Oncology in Head & Neck Cancer" gave speach on "Current Radiation Oncology in H&N" and "Treatment of Locally Advanced Oropharyngeal SCCA" on 28 March 2013 at 7R Conference Room, Bangkok Hospital.

# Cancer Registry Team



Komgrit Tanisaro M.D.



 $\begin{tabular}{ll} Natthaphum & Khanchanaporn \\ & M.D. \end{tabular}$ 



Surachai Sitawarin M.D.



Saengduan Chindavijak M.D.



Waraphorn Chomphu Tumor Registered-Officer (WSH)



Pichet Pariyarungsi Senior Business Intelligence Manager

# Wattanosoth Doctor Team

No.	NAME	SPECIALTY	REMARK
1.	Surapol Issaragraisil, M.D.	Hematologist	Part-time
2.	Supara Leechasan, M.D.	Hematologist	Full-time
3.	Sirimon Piyavunno, M.D.	Hematologist	Full-time
4.	Kannadit Proyongratana, M.D.	Hematologist	Part-time
5.	Nopadol Siritanarattanakul, M.D.	Hematologist	Part-time
6.	Bundarika Suwanawiboon, M.D.	Hematologist	Part-time
7.	Wirote Lausoontornsiri, M.D.	Hematologist	Part-time
8.	Theera Ruchutrakool, M.D.	Hematologist	Part-time
9.	Nuchanan Areethamsirikul, M.D.	Hematologist	Part-time
10.	Chajchawan Nakhakes, M.D.	Hematologist	Part-time
11.	Photsawee Khemaphiphat, M.D.	Hematologist	Full-time
12.	Manop Pithukpakorn, M.D.	Genetic	Part-time
13.	Chanin Limwongse, M.D.	Genetic	Part-time
14.	Surachat Chakrapee-Sirisuk, M.D.	Medical oncologist	Full-time
15.	Surachai Sitawarin, M.D.	Medical oncologist	Full-time
16.	Chatchai Koowattanapaisan, M.D.	Medical oncologist	Full-time
17.	Kanoknid Limvipaveanan, M.D.	Medical oncologist	Full-time
18.	Titima Purvaranukroh, M.D.	Medical oncologist	Full-time
19.	Natchadol Kittiwararat, M.D.	Medical oncologist	Full-time
20.	Kunlatida Maneenil, M.D.	Medical oncologist	Part-time
21.	Narin Vorawuth, M.D.	Medical oncologist	Part-time
22.	Vichien Srimuninnimit, M.D.	Medical oncologist	Part-time
23.	Sumitra Thongprasert, M.D.	Medical oncologist	Full-time
24.	Thiva Kiatpanabhikul, M.D.	Medical oncologist	Part-time
25.	Chanida Vinayanuwattikun, M.D.	Medical oncologist	Part-time
26.	Prasert Lertsanguansinchai, M.D.	Radiation oncologist	Full-time
27.	Sakpisid Nawasiri, M.D.	Radiation oncologist	Full-time
28.	Chanawat Tesavibul, M.D.	Radiation oncologist	Full-time
29.	Sirikanya Chongsatienttham, M.D.	Radiation oncologist	Full-time
30.	Chonlakiet Khorprasert, M.D.	Radiation oncologist	Part-time
31.	Napapat Amornwichet, M.D.	Radiation oncologist	Part-time
32.	Nantakan Ieumwananthachai, M.D.	Radiation oncologist	Part-time
33.	Saipin Tangkaratt, M.D.	Radiation oncologist	Part-time
34.	Parmon Puddhikarant, M.D.	Radiation oncologist	Part-time
35.	Nithinai Tangprasert, M.D.	Radiation oncologist	Part-time
36.	Danita Kannarumimit, M.D.	Radiation oncologist	Part-time
37.	Pathomphorn Siraprapasiri, M.D.	Radiation oncologist	Part-time
38.	Ladawan Narkwong, M.D.	Radiation oncologist	Part-time
39.	Yongyut Kongthanarat, M.D.	Radiation oncologist	Part-time
40.	Apiradee Kridakara, M.D.	Radiation oncologist	Part-time
41.	Attapol Pinitpatcharalert, M.D.	Radiation oncologist	Part-time
42.	Kanokpis Townamchai, M.D.	Radiation oncologist	Part-time
43.	Kitwadee S. Athigakunagorn, M.D.	Radiation oncologist	Part-time
44.	Pornsri Kidchob, M.D.	Radiation oncologist	Full-time

No.	NAME	SPECIALTY	REMARK
45.	Viruch Chareoniam, M.D.	Gynecologic oncologist	Full-time
46.	Sosakul Bunyaviroch, M.D.	Gynecologic oncologist	Part-time
47.	Phanont Kasemsan, M.D.	Gynecologic oncologist	Part-time
48.	Chantawat Sheanakul, M.D.	Gynecologic oncologist	Part-time
49.	Siriwan Tangjitgamol, M.D.	Gynecologic oncologist	Part-time
50.	Laksamee Chanvej, M.D.	Pain & Palliative	Full-time
51.	Boonthida Chaidaroon, M.D.	Pain & Palliative	Part-time
52.	Watanya Chaiwong, M.D.	Pain & Palliative	Part-time
53.	Samart Rajchadara, M.D.	Nuclear medincine	Full-time
54.	Tawatchai Chaiwatanarat, M.D.	Nuclear medincine	Part-time
55.	Apakorn Kositwattanalerk, M.D.	Nuclear medincine	Part-time
56.	Supatporn Tepmongkol, M.D.	Nuclear medincine	Part-time
57.	Chanisa Chotipanic, M.D.	Nuclear medincine	Part-time
58.	Nantiya Chantarapitak, M.D.	Nuclear medincine	Part-time
59.	Trirat Boonya-ussadorn, M.D.	Nuclear medincine	Part-time
60.	Usanee Vutrapongwatana, M.D.	Nuclear medincine	Part-time
61.	Komgrit Tanisaro, M.D.	Interventional Radiologist	Full-time
62.	Wachira Jarungkiattikhajorn, M.D.	Interventional Radiologist	Part-time
63.	Piyasak Thaharavanich, M.D.	Breast surgeon	Full-time
64.	Kris Bhothisuwan, M.D.	Breast surgeon	Part-time
65.	Supakorn Rojananin, M.D.	Breast surgeon	Part-time
66.	Poramaporn Prasarttong-Osoth, M.D.	Breast surgeon	Part-time
67.	Pongthep Pisarnturakit, M.D.	Breast surgeon	Part-time
68.	Suebwong Chuthapisith, M.D.	Breast surgeon	Part-time
69.	Satit Srimontayamas, M.D.	Breast surgeon	Part-time
70.	Poonpissamai Suwajo, M.D.	Breast surgeon	Part-time
71.	Dolrudee Songtish, M.D.	Breast surgeon	Part-time
72.	Sasithorn Sujarittanakarn, M.D.	Breast surgeon	Part-time
73.	Sirimana Ratanaprakarn, M.D.	Radiologist	Full-time
74.	Natthaphum Kanchanaporn, M.D.	Radiologist	Full-time
75.	Kewalee Sasiwimonphan, M.D.	Radiologist	Part-time
76.	Tanaphon Maipang, M.D.	Surgical oncologist	Full-time
77.	Art Hiranyakas, M.D.	Surgical oncologist	Full-time
78.	Duangdao Sahakitrungruang, M.D.	Breast Radiologist	Part-time
79.	Napapat Viravan, M.D.	Breast Radiologist	Part-time
80.	Naruporn Marukatat, M.D	Breast Radiologist	Part-time
81.	Pornpim Korpraphong, M.D.	Breast Radiologist	Part-time
82.	Wiluck Chu-Ongsakul, M.D.	Breast Radiologist	Part-time
83.	Wilaiporn Bhothisuwan, M.D.	Breast Radiologist	Part-time
84.	Sirirat Teavirat, M.D.	Breast Radiologist	Part-time
85.	Niramol Pantawanun, M.D.	Breast Radiologist	Part-time
86.	Kwansakul Boonsararuxapong, M.D.	Breast Radiologist	Part-time
87.	Lertlakana Bhoopat, M.D.	Internal medicine	Full-time