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Message from

Director



Bangkok cancer hospital Wattanosoth is the only one private comprehensive cancer center hospital in Thailand. We are under the Bangkok Dusit Medical Services Public Company Limited (BDMS), which established a new subsidiary of the company under network healthcare group in Thailand. Recently, BDMS has put every effort to lever up our hospital to be center of excellence (CoE) in cancer. Cancer registry is one of our priorities for developing our network and improvement of our cancer services.

This Wattanosoth cancer registry report is aimed to be the source of cancer patient data in hospital based for building capacity of cancer care in our services. Demographic trends that favor our growth strategy with its focus on value and quality. Rising populations, ageing and expanding middle classes are fueling demand for more and better cancer care services and products.

Our report in international patients have shown similar growth levels to previous years. These results confirm the further strengthening of our position in the steadily growing and evolving cancer care to international standard. Wattanosoth Hospital and the Faculty of Medicine Siriraj Hospital became "Sister Institutes" of MD Anderson Cancer Center under Global Academic Program.

We put every effort to improve our cancer care program in both academic-based and value based aspects. Technical innovation, consolidation and de-regulation are transforming the patient journeys with the increasing need for large scale technology and innovation platforms. Then, our major service trends as greater health and lifestyle awareness, precision medicine, values based care and quality of life.



(Visiting Prof.Dr.Thiravud Khuhaprema)
Hospital Director of Wattanosoth Cancer Hospital

Cancer Registry 2018:

Abstract

The total of new cases diagnosed as a malignancy at Bangkok Hospital Headquarter (BHQ) is 2,088 cases (Tumor registry is 1,964 cases and Hematologic malignant is 124 cases). There was a little bit increased in the total number as compared to 2,056 cases in 2017.

The sex ratio is 1:1 This age distribution has not changed since the year 2017. Patients who are between 45-69 y/o are the majority accounting for more than half of the total. The average age in male patients is 55-74 y/o. which is slightly older than the female age of 45-64 y/o.

Top 5 malignancies are:

1) Breast (included DCIS) - 24.04 percent

2) Lung - 10.44 percent

3) Colorectal - 9.20 percent

4) Prostate - 7.81 percent

5) Thyroid - 6.51 percent

The trend for the top 5 malignancies has not changed over the past 10 years (2006-2017). For the past 10 years the top 5 have been: **Breast, Colorectal, Lung, Liver and Hepatobiliary and Head & Neck cancer.** However, when compared to last year, the overall number of cases in Breast cancer increased significantly by 1.41 percent, Lung cancer decreased by 9.16 percent, Colorectal cancer decreased by 6.34 percent, Prostate cancer increased by 46.84 percent and Thyroid cancer decreased by 0.72 percent.

The results of overall staging of patients who received treatment at Bangkok Hospital Headquarter (BHQ) are: Stage 0 3.49 percent, Stage I is 22.41 percent, Stage II is 22.86 percent, Stage III is 21.17 percent, and Stage IV is 20.61 percent. Unspecified stage (due to lack of pertinent information) is 8.56 percent. And in cases of Brain cancer has no stage grouping applies in AJCC Staging manual is 0.90 percent. All results are similar to 2017 staging results.

Analysis of the primary treatments modalities indicates that Surgery continues to be the majority (21 percent), followed by Radiation therapy (13 percent), Chemotherapy (5 percent), Radioactive Iodine Therapy (RAI) (2 percent) and Interventation treatment (2 percent)

Patients who are still living after diagnosis or treatment in 2018 is 97 percent and patients who have died with cancer as the cause are 3 percent. At this time no patients receiving treatment have been lost to follow-up.

Ratio of Thai to non-Thai patients is 1:1 in year 2018 equal to the year 2017. The top 5 rankings of non-Thai patients are: Myanmar, Cambodia, Bangladesh, Oman and Kuwait respectively.

The Top 5 malignancies of Thai patients are:

1) Breast (included DCIS) - 30.36 percent

2) Lung - 12.61 percent

3) Colorectal - 10.16 percent

4) Thyroid - 6.58 percent

5) Prostate - 6.36 percent

The Top 5 malignancies of non-Thai patients are:

1) Breast (included DCIS) - 19.30 percent

O) Proctate 9.90 percent

2) Prostate - 8.89 percent

3) Lung - 8.81 percent

- 4) Colorectal 8.47 percent
- 5) Liver and Hepatobiliary 7.72 percent

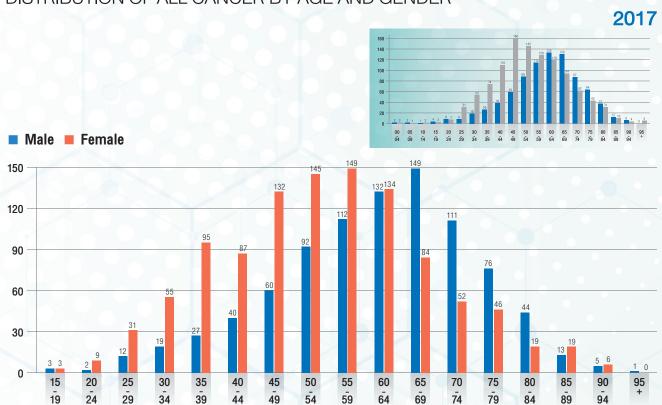
It is the fifth time BHQ can follow the patients for 5 years and report the 5-years survival. We have shown and discussed the data of those survivors of top 3 cancers which are Breast, Lung and Colorectal in separated chapters.

WATTANOSOTH ANNUAL CANCER REGISTRY 2018

DISTRIBUTION OF ALL CANCER BY AGE AND GENDER (EXCLUDED HEMATOLOGIC MALIGNANCIES)

A	M	ale	Fen	nale	То	tal
Age	Number	Percent	Number	Percent	Number	Percent
15 - 19	3	0.33	3	0.28	6	0.31
20 - 24	2	0.22	9	0.84	11	0.56
25 - 29	12	1.34	31	2.91	43	2.19
30 - 34	19	2.12	55	5.16	74	3.77
35 - 39	27	3.01	95	8.91	122	6.21
40 - 44	40	4.45	87	8.16	127	6.47
45 - 49	60	6.68	132	12.38	192	9.78
50 - 54	92	10.24	145	13.60	237	12.07
55 - 59	112	12.47	149	13.98	261	13.29
60 - 64	132	14.70	134	12.57	266	13.54
65 - 69	149	16.59	84	7.88	233	11.86
70 - 74	111	12.36	52	4.88	163	8.30
75 - 79	76	8.46	46	4.32	122	6.21
80 - 84	44	4.90	19	1.78	63	3.21
85 - 89	13	1.45	19	1.78	32	1.63
90 - 94	5	0.56	6	0.56	11	0.56
95 +	1	0.11	0	0.00	1	0.05
Total	898	100.00	1,066	100.00	1,964	100.00

DISTRIBUTION OF ALL CANCER BY AGE AND GENDER

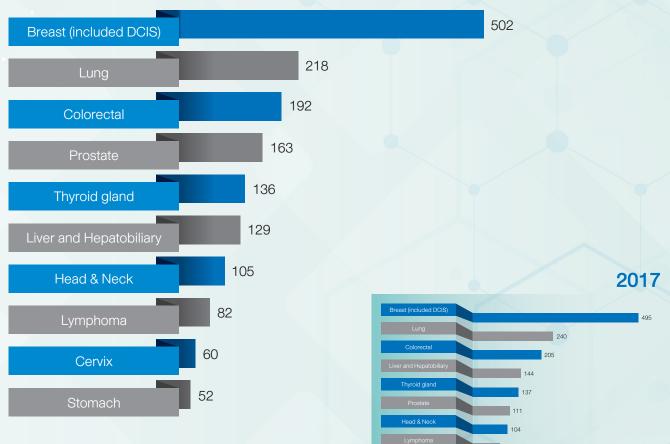


THE TOP 10 LEADING SITE OF CANCER IN BANGKOK HOSPITAL HEADQUARTER

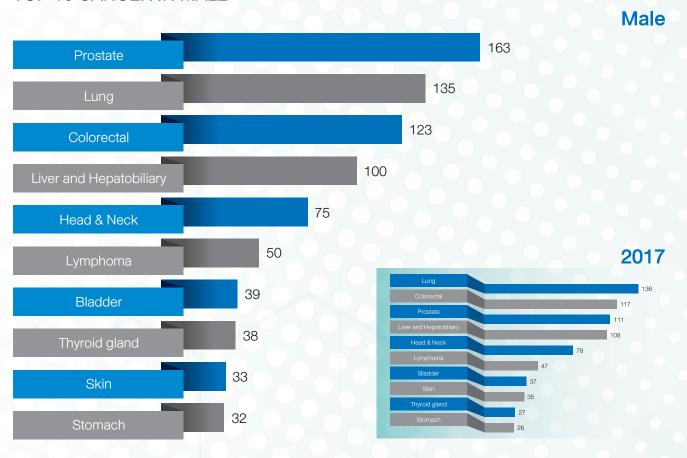
Code	Drimon, oito	Ma	Male		Female		Total	
Code	Primary site	Number	Percent	Number	Percent	Number	Percent	
C50, D05	Breast (included DCIS)	2	0.21	500	44.92	502	24.04	
C33-C34	Lung	135	13.85	83	7.46	218	10.44	
C18-C20	Colorectal	123	12.62	69	6.20	192	9.20	
C61	Prostate	163	16.72	0	0.00	163	7.81	
C73	Thyroid gland	38	3.90	98	8.81	136	6.51	
C22-C24	Liver and Hepatobiliary	100	10.26	29	2.61	129	6.18	
C00-C14	Head & Neck	75	7.69	30	2.70	105	5.03	
C81-C85	Lymphoma	50	5.13	32	2.88	82	3.93	
C53	Cervix	0	0.00	60	5.39	60	2.87	
C16	Stomach	32	3.28	20	1.80	52	2.49	

TOP 10 CANCER FOR ALL GENDER

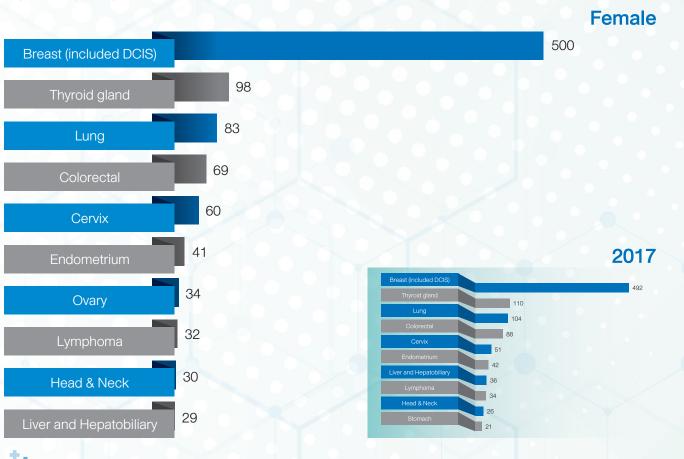
All Patient



TOP 10 CANCER IN MALE

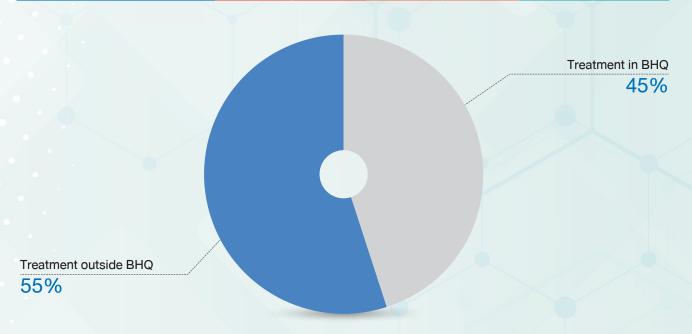


TOP 10 CANCER IN FEMALE

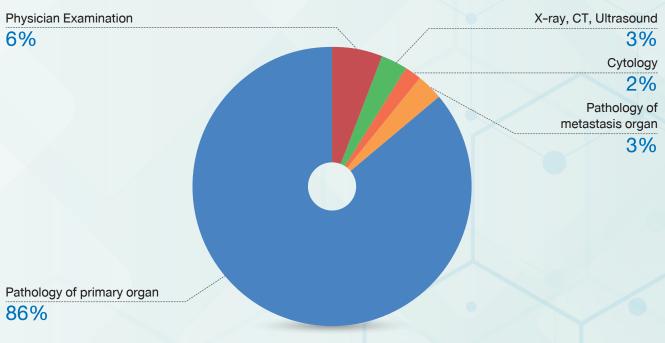


PATIENT CATEGORY OF ALL CANCER IN BANGKOK HOSPITAL HEADQUARTER

Dationt treatment	Male		Fen	nale	Total		
Patient treatment	Number	Percent	Number	Percent	Number	Percent	
Treatment in BHQ	384	42.76	504	47.28	888	45.21	
Treatment outside BHQ	514	57.24	562	52.72	1,076	54.79	
Total	898	100.00	1,066	100.00	1,964	100.00	



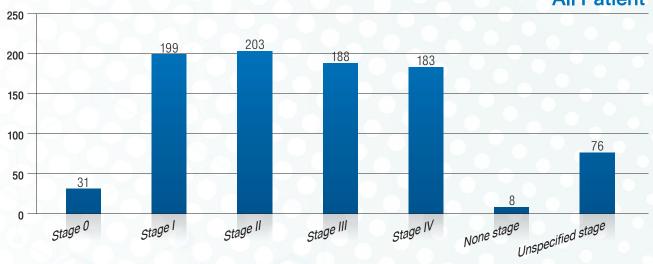
METHOD OF DIAGNOSIS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

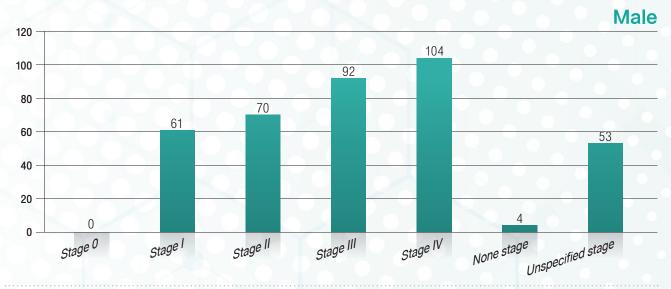


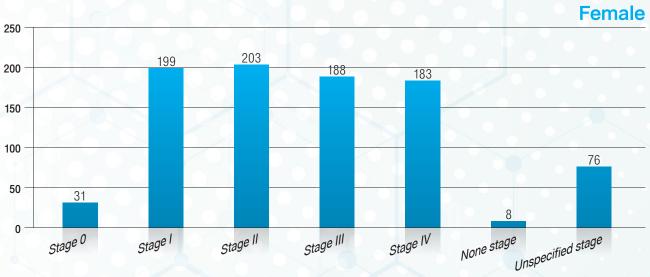
STAGING

(TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)









Stage 0 = Carcinoma in situ

None stage = In case of Brain tumor

Unspecified stage = Incomplete staging due to insufficient patient information



TYPE OF TREATMENT

	Ma	ale	Fen	nale	Total		
Type of treatment	Number	Percent	Number	Percent	Number	Percent	
SUR. only	120	13.36	137	12.85	257	13.09	
RT only	94	10.47	146	13.70	240	12.22	
CT only	30	3.34	23	2.16	53	2.70	
Targeted therapy	3	0.33	2	0.19	5	0.25	
Hormonal therapy	1	0.11	0	0.00	1	0.05	
Intervention	25	2.78	8	0.75	33	1.68	
Nuclear medicine	14	1.56	34	3.19	48	2.44	
Concurrent chemoradiation	15	1.67	9	0.84	24	1.22	
SUR.+RT	9	1.00	12	1.13	21	1.07	
SUR.+CT	23	2.56	44	4.13	67	3.41	
SUR.+Im	1	0.11	0	0.00	1	0.05	
SUR.+H	1	0.11	14	1.31	15	0.76	
SUR.+T	1	0.11	1	0.09	2	0.10	
SUR.+I	2	0.22	0	0.00	2	0.10	
SUR.+N	8	0.89	6	0.56	14	0.71	
SUR.+Concurrent CT-RT	9	1.00	4	0.38	13	0.66	
RT+Concurrent CT-RT	0	0.00	3	0.28	3	0.15	
CT+Concurrent CT-RT	2	0.22	1	0.09	3	0.15	
RT+T	0	0.00	1	0.09	1	0.05	
RT+CT	6	0.67	6	0.56	12	0.61	
RT+H	2	0.22	2	0.19	4	0.20	
RT+I	1	0.11	0	0.00	1	0.05	
CT+H	1	0.11	1	0.09	2	0.10	
CT+T	1	0.11	1	0.09	2	0.10	
CT+I	0	0.00	2	0.19	2	0.10	
Concurrent CT-RT+Im	1	0.11	0	0.00	1	0.05	
I+T	1	0.11	0	0.00	1	0.05	
SUR.+RT+CT	7	0.78	22	2.06	29	1.48	

Time of treatment	Ma	ale	Fen	nale	Total		
Type of treatment	Number	Percent	Number	Percent	Number	Percent	
SUR.+RT+H	0	0.00	7	0.66	7	0.36	
SUR.+CT+H	0	0.00	6	0.56	6	0.31	
SUR.+CT+I	2	0.22	0	0.00	2	0.10	
SUR.+CT+Concurrent CT-RT	1	0.11	1	0.09	2	0.10	
SUR.+RT+CT+H	0	0.00	9	0.84	9	0.46	
SUR.+RT+CT+T	0	0.00	1	0.09	1	0.05	
SUR.+CT+T+H	0	0.00	1	0.09	1	0.05	
SUR.+RT+Concurrent CT-RT	1	0.11	0	0.00	1	0.05	
RT+I+T	1	0.11	0	0.00	1	0.05	
CT+Concurrent CT-RT+Im	1	0.11	0	0.00	1	0.05	
Investigation	89	9.91	125	11.73	214	10.90	
Supportive	2	0.22	1	0.09	3	0.15	
PET/CT	144	16.04	137	12.85	281	14.31	
Bone scan	85	9.47	81	7.60	166	8.45	
2 nd Opinion	194	21.60	213	19.98	407	20.72	
TBS scan	0	0.00	5	0.47	5	0.25	
Total	898	100.00	1,066	100.00	1,964	100.00	

SUR. = Surgery

RT = External radiation therapy

CT = Chemotherapy

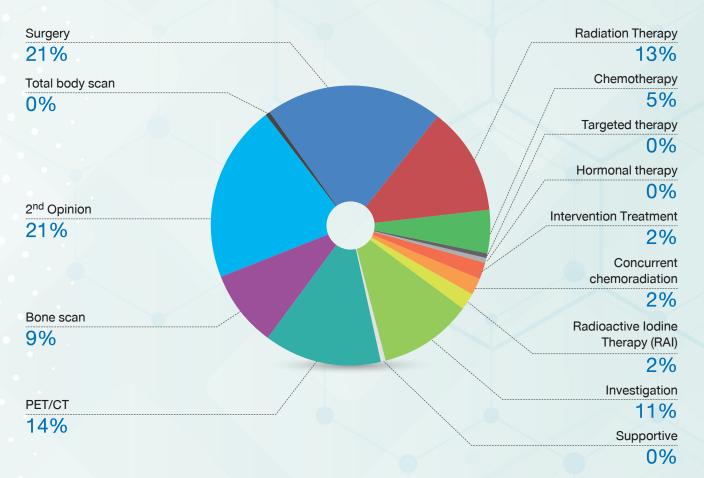
H (Hormone) = Hormonal therapy

T = Targeted therapy

I = Intervention

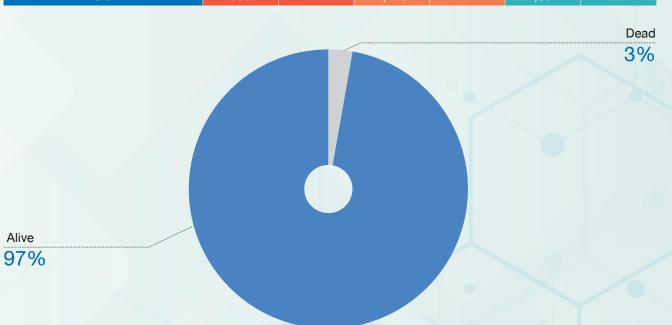
Im = Immunotherapy

TYPE OF PRIMARY MANAGEMENT (ALL PATIENT)

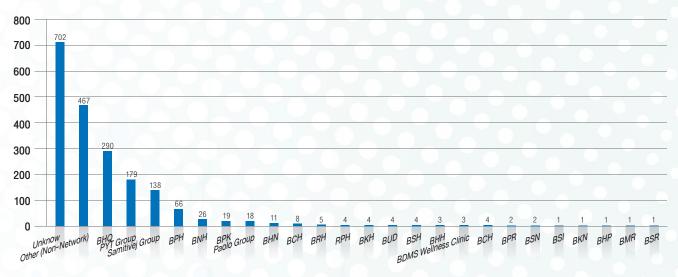


PATIENT FOLLOW UP

Follow up etatue	Male		Fen	nale	Total		
Follow up status	Number	Percent	Number	Percent	Number	Percent	
Alive	867	96.55	1,045	98.03	1,912	97.35	
Dead	31	3.45	21	1.97	52	2.65	
Total	898	100.00	1,066	100.00	1,964	100.00	



REFERING HOSPITAL



BHQ = Consult from Bangkok General Hospital

Samitivej Group = Samitivej Hospital Group

BNH = BNH Hospital

Paolo Group = Paolo Hospital Group

BCH = Bangkok Hospital Chanthaburi

RPH = Royal Phnom Penh Hospital

BUD = Bangkok Hospital Udon

BHH = Bangkok Hospital Hatyai

BPR = Bangkok Hospital Phetchaburi

BSI = Bangkok Siriroj Hospital

BHP = Bangkok Hospital Pakchong

BSR = Bangkok Hospital Surat

PYT Group = Payathai Hospital Group

BPH = Bangkok Hospital Pattaya

BPK = Bangkok Hospital Phuket

BHN = Bangkok Hospital Hua Hin

BRH = Bangkok Hospital Rayong

BKH = Bangkok Hospital Ratchasima

BSH = Bangkok Hospital Samui

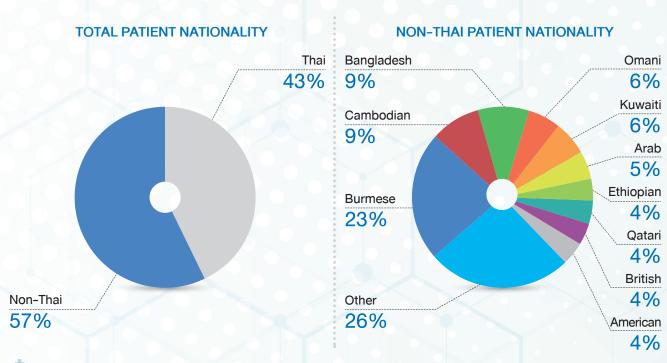
BCM = Bangkok Hospital Chiangmai

BSN = Bangkok Hospital Sanamchan

BKN = Bangkok Hospital Khonkhan

BMR = Bangkok Hospital Muangraj

PATIENT NATIONALITY

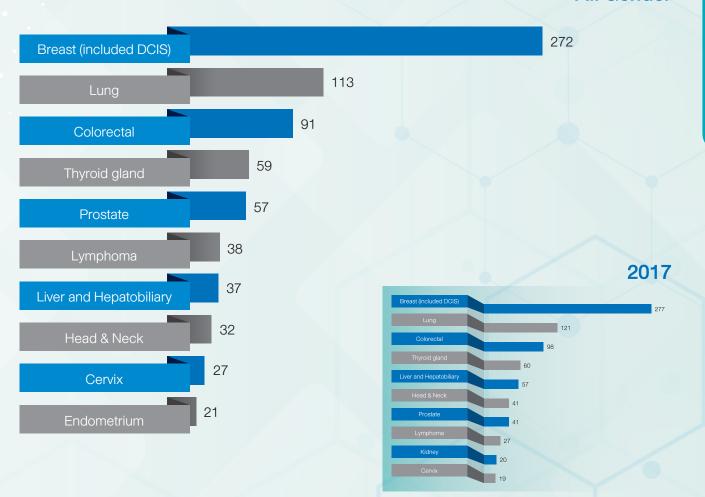


THE TOP 10 LEADING SITE OF THAI PATIENT CANCER IN BANGKOK HOSPITAL HEADQUARTER

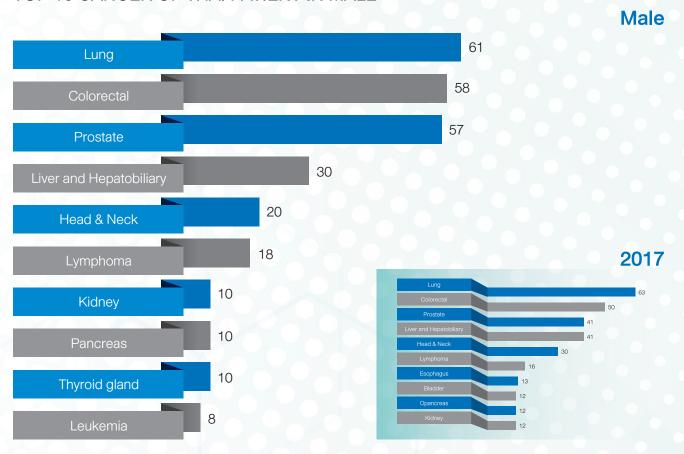
Code	Drimon, oito	Ma	ale	Female		Total	
Code	Primary site	Number	Percent	Number	Percent	Number	Percent
C50, D05	Breast (included DCIS)	0	0.00	272	48.40	272	30.36
C33-C34	Lung	61	18.26	52	9.25	113	12.61
C18-C20	Colorectal	58	17.37	33	5.87	91	10.16
C73	Thyroid gland	10	2.99	49	8.72	59	6.58
C61	Prostate	57	17.07	0	0.00	57	6.36
C81-C85	Lymphoma	18	5.39	20	3.56	38	4.24
C22-C24	Liver and Hepatobiliary	30	8.98	7	1.25	37	4.13
C00-C14	Head & Neck	20	5.99	12	2.14	32	3.57
C53	Cervix	0	0.00	27	4.80	27	3.01
C54	Endometrium	0	0.00	21	3.74	21	2.34

TOP 10 CANCER OF THAI PATIENT ALL GENDER

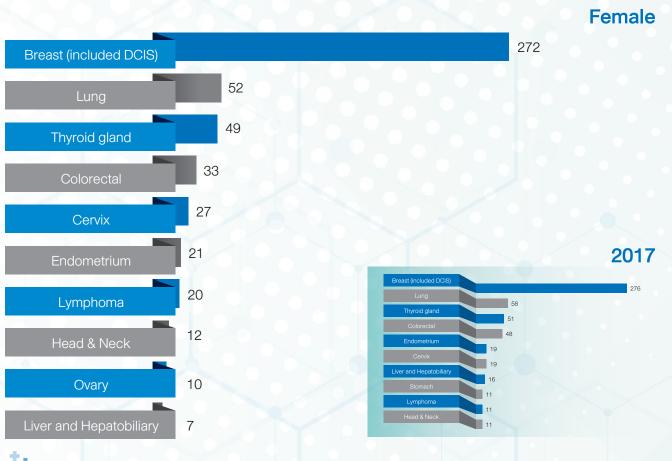
All Gender



TOP 10 CANCER OF THAI PATIENT IN MALE



TOP 10 CANCER OF THAI PATIENT IN FEMALE

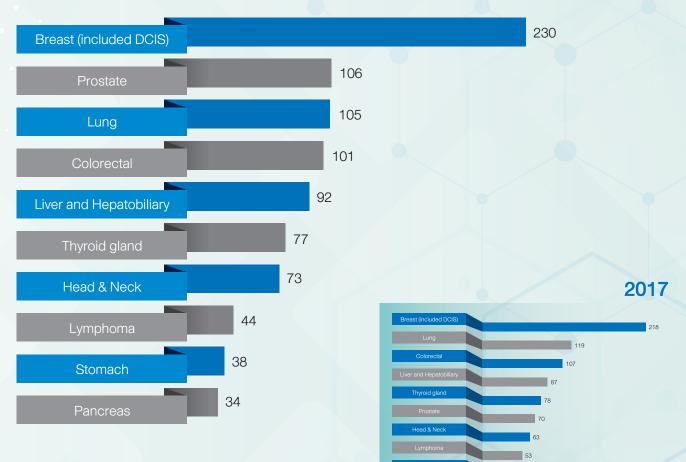


THE TOP 10 LEADING SITE OF NON-THAI PATIENT CANCER IN BANGKOK HOSPITAL HEADQUARTER

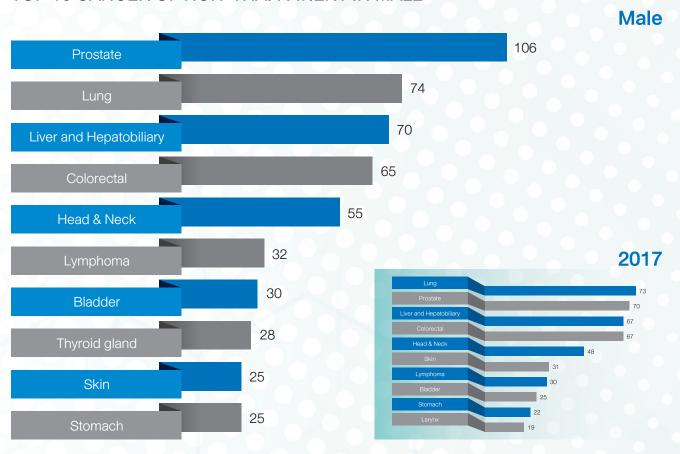
Code	Drimory cito	Ma	Male		Female		Total	
Code	Primary site	Number	Percent	Number	Percent	Number	Percent	
C50, D05	Breast (included DCIS)	2	0.31	228	41.38	230	19.30	
C61	Prostate	106	16.54	0	0.00	106	8.89	
C33-C34	Lung	74	11.54	31	5.63	105	8.81	
C18-C20	Colorectal	65	10.14	36	6.53	101	8.47	
C22-C24	Liver and Hepatobiliary	70	10.92	22	3.99	92	7.72	
C73	Thyroid gland	28	4.37	49	8.89	77	6.46	
C00-C14	Head & Neck	55	8.58	18	3.27	73	6.12	
C81-C85	Lymphoma	32	4.99	12	2.18	44	3.69	
C16	Stomach	25	3.90	13	2.36	38	3.19	
C25	Pancreas	21	3.28	13	2.36	34	2.85	

TOP 10 CANCER OF NON-THAI PATIENT ALL GENDER

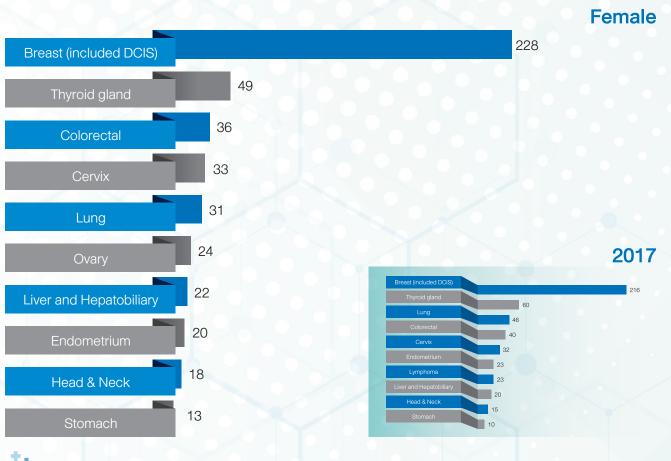
All Gender



TOP 10 CANCER OF NON-THAI PATIENT IN MALE



TOP 10 CANCER OF NON-THAI PATIENT IN FEMALE



BREAST CANCER: PATHOLOGY

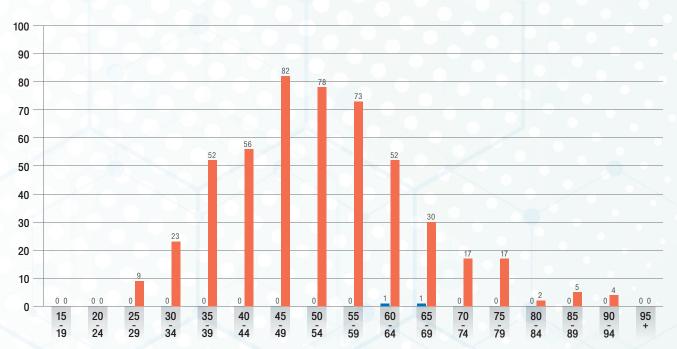
Tumor site		Number
50.0	Nipple	10
50.1	Central portion of breast	4
50.2	Upper-inner quadrant of breast	33
50.3	Lower-inner quadrant of breast	19
50.4	Upper-outer quadrant of breast	107
50.5	Lower-outer quadrant of breast	18
50.6	Axillary tail	1
50.8	Overlapping lesion of breast	25
50.9	Breast, NOS	285
	Total	502

Pathology R	eport	Number
8000/3	Malignant neoplasm	134
8010/3	Carcinoma, NOS	4
8140/3	Adenocarcinoma, NOS	2
8211/3	Tubular carcinoma	1
8480/3	Mucinous carcinoma	3
8480/3	Mucinous adenocarcinoma	1
8500/2	Ductal carcinoma in situ	49
8500/3	Infiltrating ductal carcinoma	287
8507/3	Invasive micropapillary carcinoma	2
8520/2	Lobular carcinoma in situ	3
8520/3	Invasive lobular carcinoma	11
8522/3	Infiltrating duct and lobular carcinoma	2
8523/3	Infiltrating duct and mucinous carcinoma	1
8720/3	Malignant melanoma	1
9020/3	Malignant phyllodes tumor	1
	Total	502

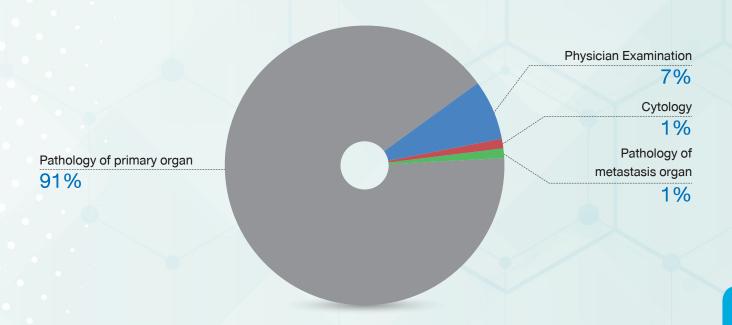
AGE AND GENDER

A 222	Ma	ale	Fen	nale	То	tal
Age	Number	Percent	Number	Percent	Number	Percent
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	9	1.80	9	1.79
30 - 34	0	0.00	23	4.60	23	4.58
35 - 39	0	0.00	52	10.40	52	10.36
40 - 44	0	0.00	56	11.20	56	11.16
45 - 49	0	0.00	82	16.40	82	16.33
50 - 54	0	0.00	78	15.60	78	15.54
55 - 59	0	0.00	73	14.60	73	14.54
60 - 64	1	50.00	52	10.40	53	10.56
65 - 69	1	50.00	30	6.00	31	6.18
70 - 74	0	0.00	17	3.40	17	3.39
75 - 79	0	0.00	17	3.40	17	3.39
80 - 84	0	0.00	2	0.40	2	0.40
85 - 89	0	0.00	5	1.00	5	1.00
90 - 94	0	0.00	4	0.80	4	0.80
95 +	0	0.00	0	0.00	0	0.00
Total	2	100.00	500	100.00	502	100.00



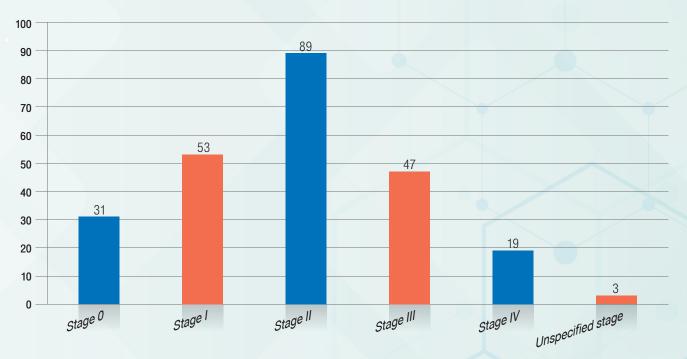


METHOD OF DIAGNOSIS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)



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

STAGING (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

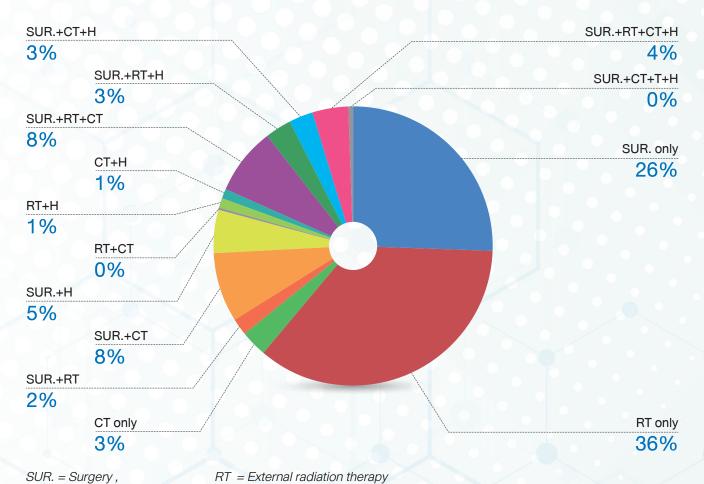


Stage 0 = Carcinoma in situ

Unspecified stage = Incomplete staging due to insufficient patient information

TYPE OF TREATMENT (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Turns of treatment	Ma	ale	Female		Total	
Type of treatment	Number	Percent	Number	Percent	Number	Percent
SUR. only	0	0.00	64	26.56	64	26.45
RT only	0	0.00	87	36.10	87	35.95
CT only	0	0.00	6	2.49	6	2.48
SUR.+RT	0	0.00	4	1.66	4	1.65
SUR.+CT	0	0.00	19	7.88	19	7.85
SUR.+H	0	0.00	13	5.39	13	5.37
RT+CT	0	0.00	1	0.41	1	0.41
RT+H	0	0.00	2	0.83	2	0.83
CT+H	1	100.00	1	0.41	2	0.83
SUR.+RT+CT	0	0.00	20	8.30	20	8.26
SUR.+RT+H	0	0.00	7	2.90	7	2.89
SUR.+CT+H	0	0.00	6	2.49	6	2.48
SUR.+RT+CT+H	0	0.00	10	4.15	10	4.13
SUR.+CT+T+H	0	0.00	1	0.41	1	0.41
Total	1	100.00	241	100.00	242	100.00



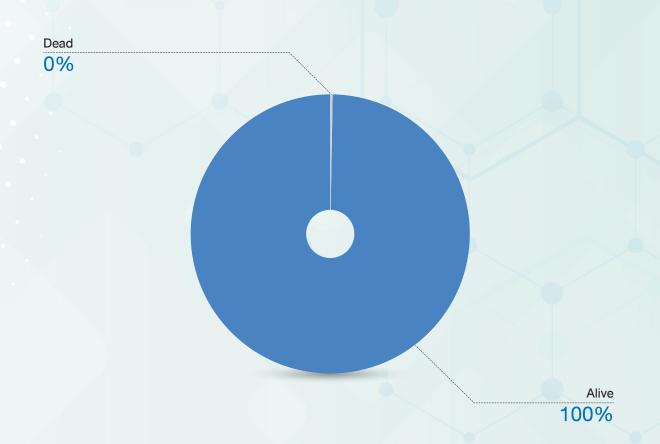
H (Hormone) = Hormonal therapy

CT = Chemotherapy,

T = Targeted therapy

FOLLOW UP STATUS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Follow up ototuo	Male		Fen	nale	Total	
Follow up status	Number	Percent	Number	Percent	Number	Percent
Alive	1	100.00	240	99.59	241	99.59
Dead	0	0.00	1	0.41	1	0.41
Total	1	100.00	241	100.00	242	100.00



LUNG CANCER: PATHOLOGY

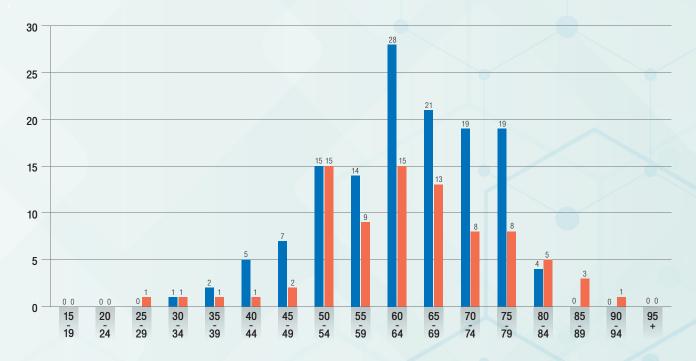
Tumor site		Number
34.0	Main bronchus	2
34.1	Upper lobe, lung	72
34.2	Middle lobe, lung	7
34.3	Lower lobe, lung	36
34.8	Overlapping lesion of lung	2
34.9	Lung, NOS	99
	Total	218

Pathology Re	port	Number
M8000/3	Malignant neoplasm	67
M8010/3	Carcinoma, NOS	5
M8012/3	Large cell carcinoma, NOS	2
M8013/3	Large cell neuroendocrine carcinoma	2
M8041/3	Small cell carcinoma, NOS	7
M8046/3	Non small cell carcinoma	16
M8070/3	Squamous cell carcinoma, NOS	9
M8082/3	Lymphoepithelioma-like carcinoma	1
M8140/3	Adenocarcinoma, NOS	94
M8144/3	Adenocarcinoma, intestinal type	1
M8246/3	Neuroendocrine carcinoma	3
M8260/3	Papillary adenocarcinoma	3
M8480/3	Mucinous adenocarcinoma	1
M8480/3	Colloid adenocarcinoma	1
M8550/3	Acinar cell carcinoma	4
M8801/3	Spindle cell sarcoma	1
M9050/3	Mesothelioma, malignant	1
	Total	218

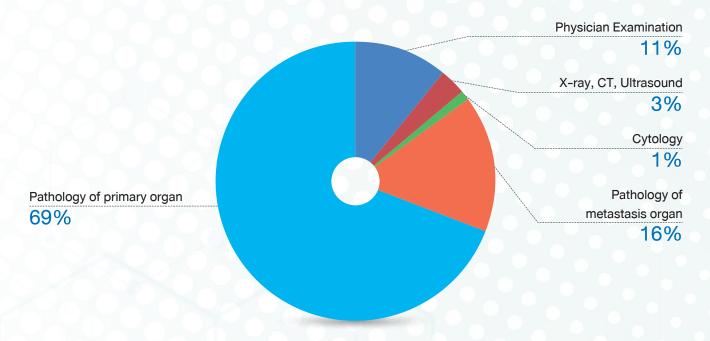
AGE AND GENDER

0.00	Ma	ale	Female		То	tal
Age	Number	Percent	Number	Percent	Number	Percent
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	1	1.20	1	0.46
30 - 34	1	0.74	1	1.20	2	0.92
35 - 39	2	1.48	1	1.20	3	1.38
40 - 44	5	3.70	1	1.20	6	2.75
45 - 49	7	5.19	2	2.41	9	4.13
50 - 54	15	11.11	15	18.07	30	13.76
55 - 59	14	10.37	9	10.84	23	10.55
60 - 64	28	20.74	15	18.07	43	19.72
65 - 69	21	15.56	13	15.66	34	15.60
70 - 74	19	14.07	8	9.64	27	12.39
75 - 79	19	14.07	8	9.64	27	12.39
80 - 84	4	2.96	5	6.02	9	4.13
85 - 89	0	0.00	3	3.61	3	1.38
90 - 94	0	0.00	1	1.20	1	0.46
95 +	0	0.00	0	0.00	0	0.00
Total	135	100.00	83	100.00	218	100.00

■ Male ■ Female



METHOD OF DIAGNOSIS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)



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

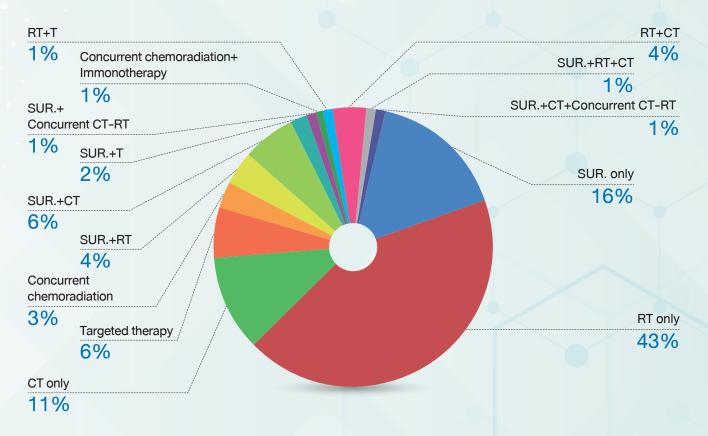
STAGING (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)



Unspecified stage = Incomplete staging due to insufficient patient information

TYPE OF TREATMENT (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Trung of hypothesis	Ma	ale	Female		Total	
Type of treatment	Number	Percent	Number	Percent	Number	Percent
SUR. only	6	13.64	6	20.00	12	16.22
RT only	18	40.91	14	46.67	32	43.24
CT only	8	18.18	0	0.00	8	10.81
Targeted therapy	3	6.82	1	3.33	4	5.41
Concurrent chemoradiation	2	4.55	0	0.00	2	2.70
SUR.+RT	1	2.27	2	6.67	3	4.05
SUR.+CT	1	2.27	3	10.00	4	5.41
SUR.+T	0	0.00	1	3.33	1	1.35
SUR.+Concurrent CT-RT	0	0.00	1	3.33	1	1.35
Concurrent chemoradiation+Immonotherapy	1	2.27	0	0.00	1	1.35
RT+T	0	0.00	1	3.33	1	1.35
RT+CT	2	4.55	1	3.33	3	4.05
SUR.+RT+CT	1	2.27	0	0.00	1	1.35
SUR.+CT+Concurrent CT-RT	1	2.27	0	0.00	1	1.35
Total	44	100.00	30	100.00	74	100.00



SUR. = Surgery

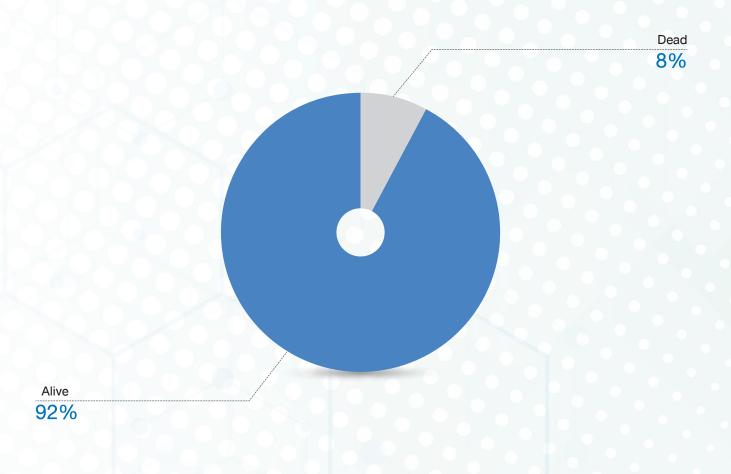
RT = External radiation therapy

CT = Chemotherapy

T = Targeted therapy

FOLLOW UP STATUS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Fallow up status	Male		Female		Total	
Follow up status	Number	Percent	Number	Percent	Number	Percent
Alive	39	88.64	29	96.67	68	91.89
Dead	5	11.36	1	3.33	6	8.11
Total	44	100.00	30	100.00	74	100.00



COLORECTAL CANCER: PATHOLOGY

Tumor site		Number
C18.0	Cecum colon	9
C18.2	Ascending colon	12
C18.3	Hepatic flexure of colon	1
C18.4	Transverse colon	10
C18.5	Splenic flexure of colon	3
C18.6	Descending colon	10
C18.7	Sigmoid colon	45
C18.9	Colon, NOS	35
C19.9	Rectosigmoid colon	14
C20.9	Rectum	53
	Total	192

Pathology R	eport	Number
M8000/3	Malignant neoplasm	57
M8140/3	Adenocarcinoma	120
M8144/3	Adenocarcinoma, intestinal type	3
M8480/3	Mucinous adenocarcinoma	8
M8480/3	Mucinous carcinoma	1
M8490/3	Signet ring cell adenocarcinoma	3
	Total	192

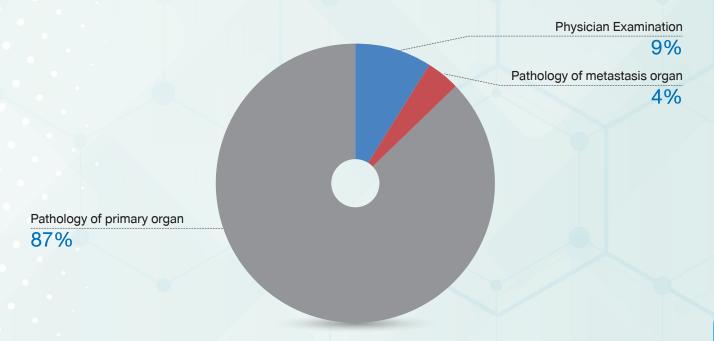
AGE ANG GENDER

A	Male		Fen	nale	Total		
Age	Number	Percent	Number	Percent	Number	Percent	
15 - 19	0	0.00	0	0.00	0	0.00	
20 - 24	0	0.00	1	1.45	1	0.52	
25 - 29	3	2.44	2	2.90	5	2.60	
30 - 34	6	4.88	3	4.35	9	4.69	
35 - 39	2	1.63	7	10.14	9	4.69	
40 - 44	3	2.44	2	2.90	5	2.60	
45 - 49	4	3.25	5	7.25	9	4.69	
50 - 54	12	9.76	5	7.25	17	8.85	
55 - 59	19	15.45	13	18.84	32	16.67	
60 - 64	18	14.63	11	15.94	29	15.10	
65 - 69	22	17.89	10	14.49	32	16.67	
70 - 74	14	11.38	4	5.80	18	9.38	
75 - 79	10	8.13	1	1.45	11	5.73	
80 - 84	6	4.88	5	7.25	11	5.73	
85 - 89	3	2.44	0	0.00	3	1.56	
90 - 94	1	0.81	0	0.00	1	0.52	
95 +	0	0.00	0	0.00	0	0.00	
Total	123	100.00	69	100.00	192	100.00	

■ Male ■ Female



METHOD OF DIAGNOSIS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)



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

STAGING (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

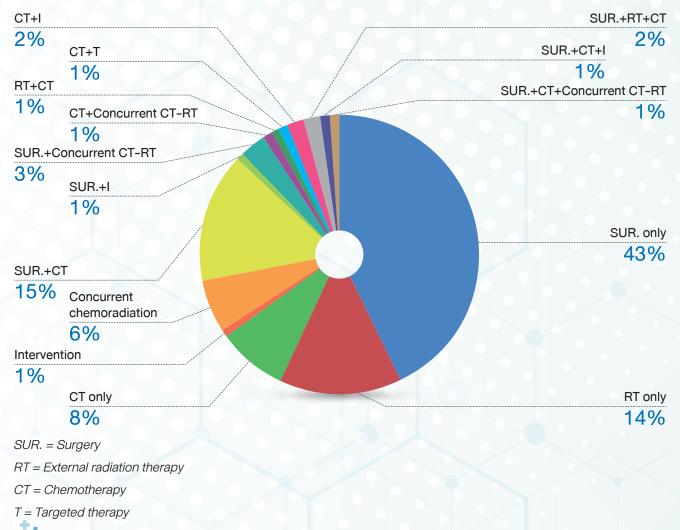


Unspecified stage = Incomplete staging due to insufficient patient information



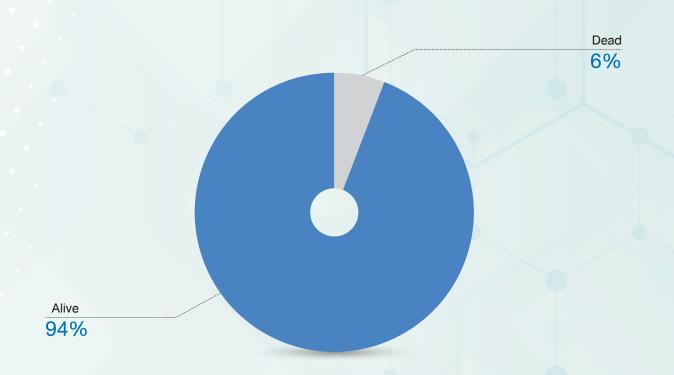
TYPE OF TREATMENT (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Towns of twenty-out	M	ale	Female		Total	
Type of treatment	Number	Percent	Number	Percent	Number	Percent
SUR. only	30	48.39	7	28.00	37	42.53
RT only	8	12.90	4	16.00	12	13.79
CT only	5	8.06	2	8.00	7	8.05
Intervention	1	1.61	0	0.00	1	1.15
Concurrent chemoradiation	3	4.84	2	8.00	5	5.75
SUR.+CT	7	11.29	6	24.00	13	14.94
SUR.+I	1	1.61	0	0.00	1	1.15
SUR.+Concurrent CT-RT	1	1.61	1	4.00	2	2.30
CT+Concurrent CT-RT	0	0.00	1	4.00	1	1.15
RT+CT	0	0.00	1	4.00	1	1.15
CT+T	1	1.61	0	0.00	1	1.15
CT+I	2	3.23	0	0.00	2	2.30
SUR.+RT+CT	2	3.23	0	0.00	2	2.30
SUR.+CT+I	1	1.61	0	0.00	1	1.15
SUR.+CT+Concurrent CT-RT	0	0.00	1	4.00	1	1.15
Total	62	100.00	25	100.00	87	100.00



FOLLOW UP STATUS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Follow up status	Male		Fen	nale	Total	
Follow up status	Number	Percent	Number	Percent	Number	Percent
Alive	57	95.00	25	92.59	82	94.25
Dead	3	5.00	2	7.41	5	5.75
Total	60	100.00	27	100.00	87	100.00



PROSTATE CANCER: PATHOLOGY

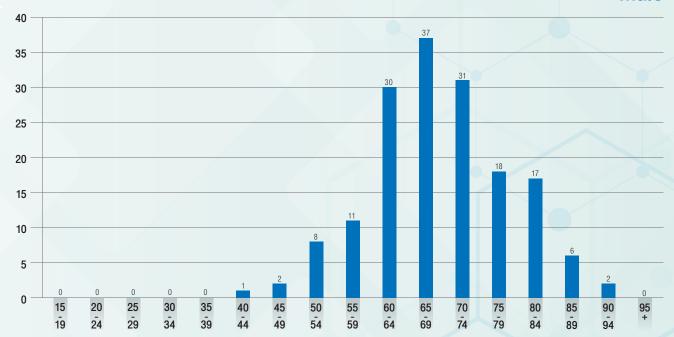
Tumor site		Number	
C61.9	Prostate	163	
	Total	163	

Pathology R	Report	Number
M8000/3	Malignant neoplasm	65
M8140/3	Adenocarcinoma, NOS	46
M8550/3	Acinar adenocarcinoma	48
M8550/3	Acinar carcinoma	4
	Total	163

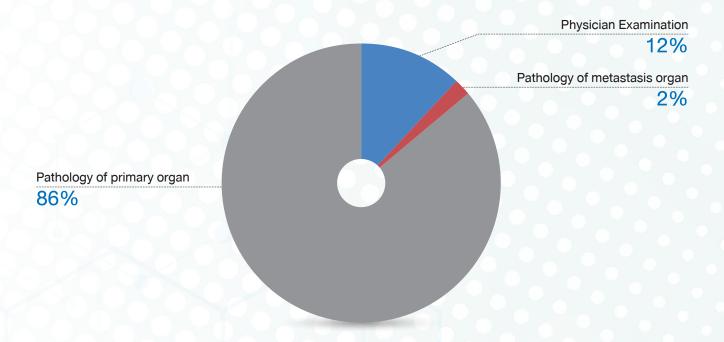
AGE AND GENDER

Ann	Male	
Age	Number	Percent
15 - 19	0	0.00
20 - 24	0	0.00
25 - 29	0	0.00
30 - 34	0	0.00
35 - 39	0	0.00
40 - 44	1	0.61
45 - 49	2	1.23
50 - 54	8	4.91
55 - 59	11	6.75
60 - 64	30	18.40
65 - 69	37	22.70
70 - 74	31	19.02
75 - 79	18	11.04
80 - 84	17	10.43
85 - 89	6	3.68
90 - 94	2	1.23
95 +	0	0.00
Total	163	100.00

Male

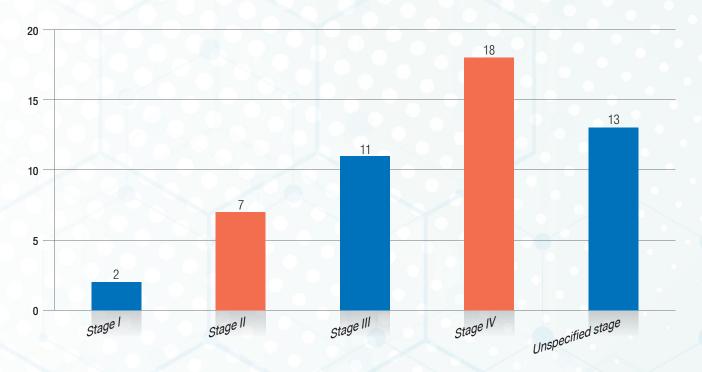


METHOD OF DIAGNOSIS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)



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

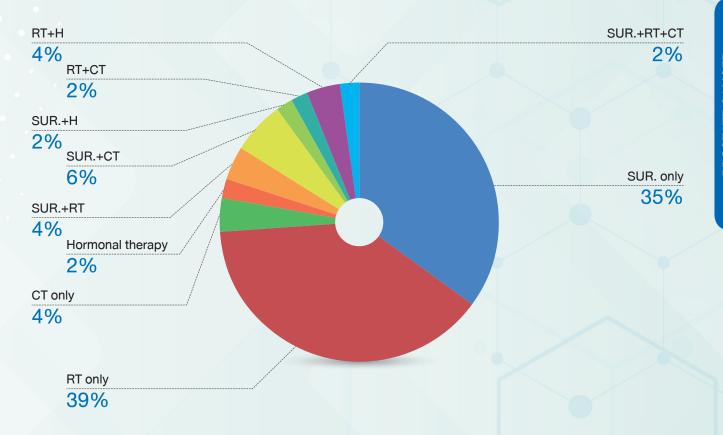
STAGING (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)



Unspecified stage = Incomplete staging due to insufficient patient information

TYPE OF TREATMENT (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Male				
Number	Percent			
18	35.29			
20	39.22			
2	3.92			
1	1.96			
2	3.92			
3	5.88			
1	1.96			
1	1.96			
2	3.92			
1	1.96			
51	100.00			
	Number 18 20 2 1 2 3 1 1 2 3 1			



SUR. = Surgery

RT = External radiation therapy

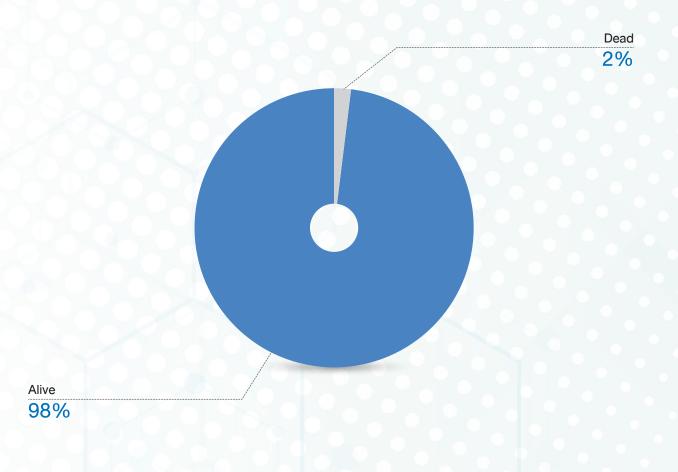
CT = Chemotherapy

T = Targeted therapy

I = Intervention

FOLLOW UP STATUS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Fallow up atatus	Male					
Follow up status	Number	Percent				
Alive	50	98.04				
Dead	1	1.96				
Total	51	100.00				



THYROID CANCER: PATHOLOGY

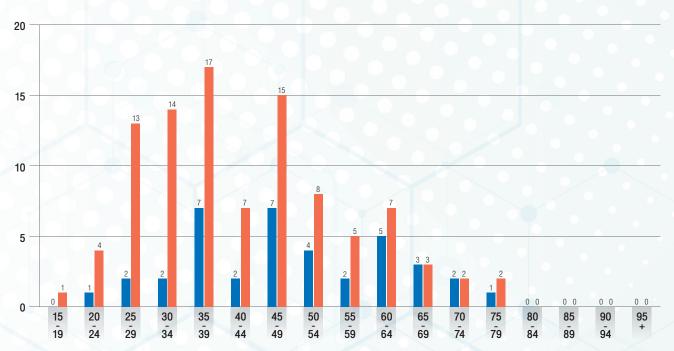
ा	umor site	Number	
C	273.9	Thyroid gland	136
		Total	136

Pathology R	eport	Number
M8000/3	Malignant neoplasm	19
M8260/3	Papillary carcinoma of thyroid	80
M8290/3	Hurthle cell carcinoma	2
M8330/3	Follicular carcinoma	2
M8340/3	Papillary carcinoma follicular variant	24
M8341/3	Papillary microcarcinoma	7
M8345/3	Medullary carcinoma of thyroid	2
	Total	136

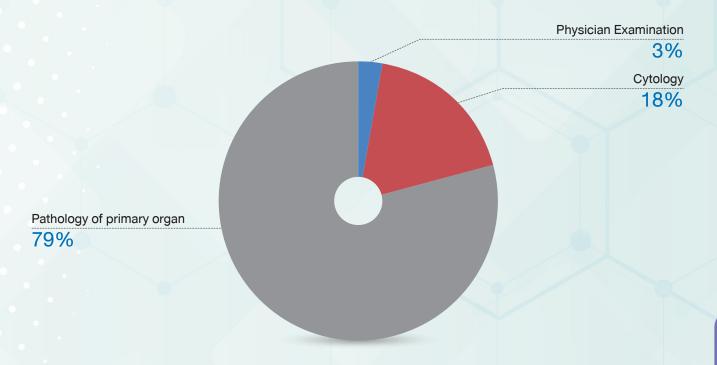
AGE AND GENDER

	М	ale	Fen	nale	Total		
Age	Number	Percent	Number	Percent	Number	Percent	
15 - 19	0	0.00	1	1.02	1	0.74	
20 - 24	1	2.63	4	4.08	5	3.68	
25 - 29	2	5.26	13	13.27	15	11.03	
30 - 34	2	5.26	14	14.29	16	11.76	
35 - 39	7	18.42	17	17.35	24	17.65	
40 - 44	2	5.26	7	7.14	9	6.62	
45 - 49	7	18.42	15	15.31	22	16.18	
50 - 54	4	10.53	8	8.16	12	8.82	
55 - 59	2	5.26	5	5.10	7	5.15	
60 - 64	5	13.16	7	7.14	12	8.82	
65 - 69	3	7.89	3	3.06	6	4.41	
70 - 74	2	5.26	2	2.04	4	2.94	
75 - 79	1	2.63	2	2.04	3	2.21	
80 - 84	0	0.00	0	0.00	0	0.00	
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	38	100.00	98	100.00	136	100.00	

■ Male ■ Female

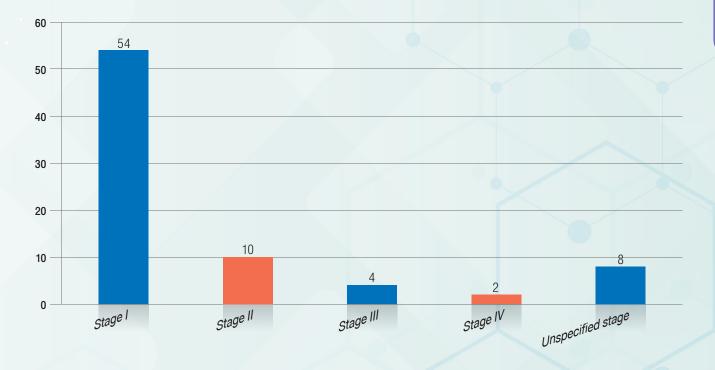


METHOD OF DIAGNOSIS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)



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

STAGING (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

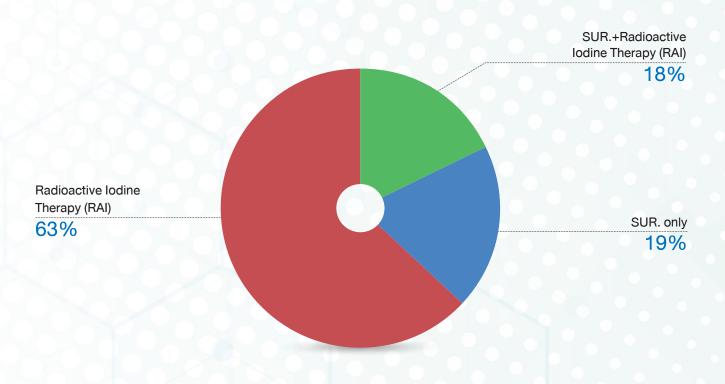


Unspecified stage = Incomplete staging due to insufficient patient information



TYPE OF TREATMENT (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Type of treetment	Male		Female		Total	
Type of treatment	Number	Percent	Number	Percent	Number	Percent
SUR. only	2	8.00	13	24.53	15	19.23
Radioactive Iodine Therapy (RAI)	15	60.00	34	64.15	49	62.82
SUR.+Radioactive lodine Therapy (RAI)	8	32.00	6	11.32	14	17.95
Total	25	100.00	53	100.00	78	100.00



SUR. = Surgery

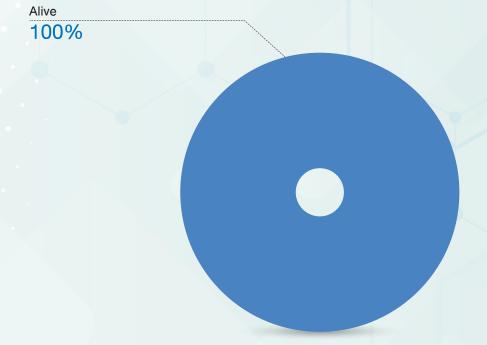
RT = External radiation therapy

CT = Chemotherapy

T = Targeted therapy

FOLLOW UP STATUS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Follow up status	Male		Fen	nale	Total	
Follow up status	Number	Percent	Number	Percent	Number	Percent
Alive	25	100.00	53	100.00	78	100.00
Total	25	100.00	53	100.00	78	100.00

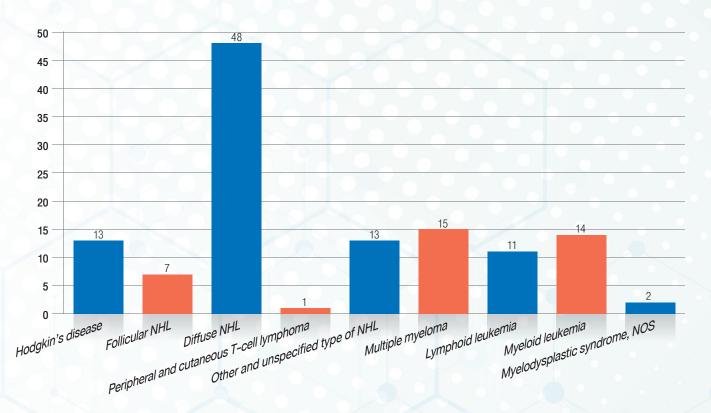


HEMATOLOGIC MALIGNANCIES 2018

DISTRIBUTION OF HEMATOLOGIC MALIGNANCIES

Code	Diagona	Ma	Male		Female		tal
Code	Disease	Number	Percent	Number	Percent	Number	Percent
C81	Hodgkin's disease	7	9.09	6	12.77	13	10.48
C82	Follicular NHL	5	6.49	2	4.26	7	5.65
C83	Diffuse NHL	28	36.36	20	42.55	48	38.71
C84	Peripheral and cutaneous T-cell lymphoma	1	1.30	0	0.00	1	0.81
C85	Other and unspecified type of NHL	9	11.69	4	8.51	13	10.48
C90	Multiple myeloma	10	12.99	5	10.64	15	12.10
C91	Lymphoid leukemia	7	9.09	4	8.51	11	8.87
C92	Myeloid leukemia	8	10.39	6	12.77	14	11.29
D46 Myelodysplastic syndrome, NOS		2	2.60	0	0.00	2	1.61
	Total	77	100.00	47	100.00	124	100.00

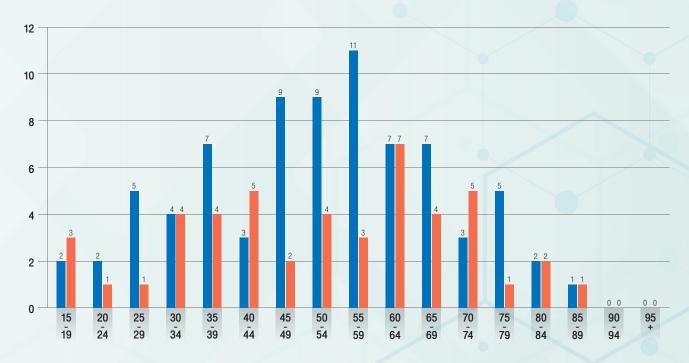
All Patient



DISTRIBUTION OF HEMATOLOGIC MALIGNANCIES BY AGE AND GENDER

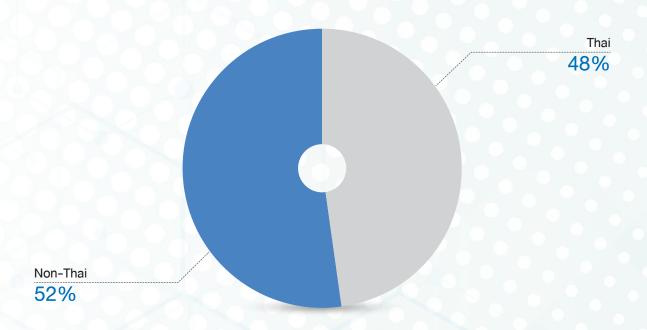
A 77.0	Ma	ale	Fen	nale	Total		
Age	Number	Percent	Number	Percent	Number	Percent	
15 - 19	2	2.60	3	6.38	5	4.03	
20 - 24	2	2.60	1	2.13	3	2.42	
25 - 29	5	6.49	1	2.13	6	4.84	
30 - 34	4	5.19	4	8.51	8	6.45	
35 - 39	7	9.09	4	8.51	11	8.87	
40 - 44	3	3.90	5	10.64	8	6.45	
45 - 49	9	11.69	2	4.26	11	8.87	
50 - 54	9	11.69	4	8.51	13	10.48	
55 - 59	11	14.29	3	6.38	14	11.29	
60 - 64	7	9.09	7	14.89	14	11.29	
65 - 69	7	9.09	4	8.51	11	8.87	
70 - 74	3	3.90	5	10.64	8	6.45	
75 - 79	5	6.49	1	2.13	6	4.84	
80 - 84	2	2.60	2	4.26	4	3.23	
85 - 89	1	1.30	1	2.13	2	1.61	
90 - 94	0	0.00	0	0.00	0	0.00	
95 +	0	0.00	0	0.00	0	0.00	
Total	77	100.00	47	100.00	124	100.00	





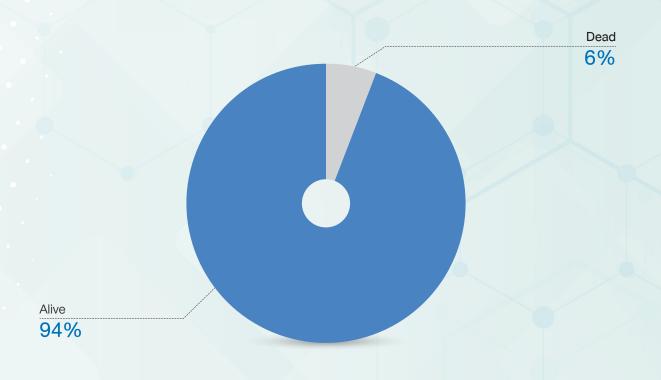
PATIENT NATIONALITY

Detient Netienelite	Male		Fen	nale	Total	
Patient Nationality	Number	Percent	Number	Percent	Number	Percent
Thai	30	38.96	29	61.70	59	47.58
Non-Thai	47	61.04	18	38.30	65	52.42
Total	77	100.00	47	100.00	124	100.00



PATIENT FOLLOW UP STATUS

Fallow up atatus	Male		Fer	nale	Total		
Follow up status	Number	Percent	Number	Percent	Number	Percent	
Alive	72	93.51	44	93.62	116	93.55	
Dead	5	6.49	3	6.38	8	6.45	
Total	77	100.00	47	100.00	124	100.00	

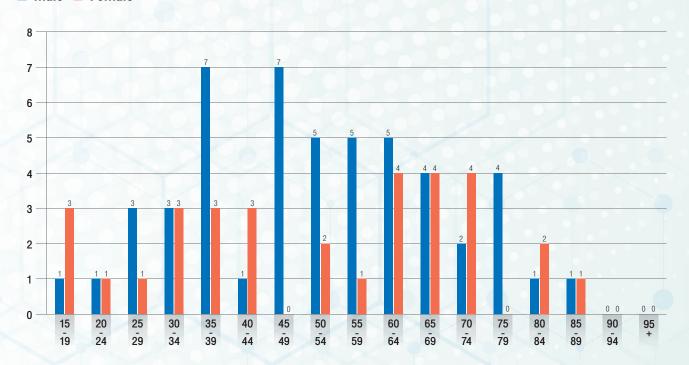


LYMPHOMA

AGE AND GENDER

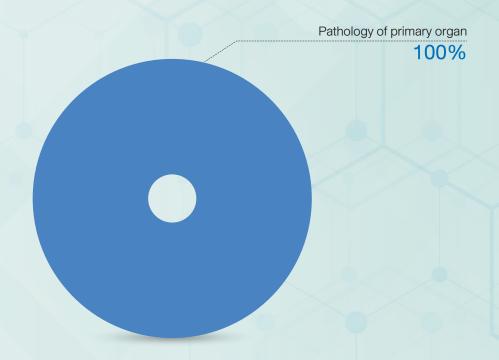
٨٠٠٠	М	ale	Fen	nale	Total	
Age	Number	Percent	Number	Percent	Number	Percent
15 - 19	1	2.00	3	9.38	4	4.88
20 - 24	1	2.00	1	3.13	2	2.44
25 - 29	3	6.00	1	3.13	4	4.88
30 - 34	3	6.00	3	9.38	6	7.32
35 - 39	7	14.00	3	9.38	10	12.20
40 - 44	1	2.00	3	9.38	4	4.88
45 - 49	7	14.00	0	0.00	7	8.54
50 - 54	5	10.00	2	6.25	7	8.54
55 - 59	5	10.00	0.1	3.13	6	7.32
60 - 64	5	10.00	4	12.50	9	10.98
65 - 69	4	8.00	4	12.50	8	9.76
70 - 74	2	4.00	4	12.50	6	7.32
75 - 79	4	8.00	0	0.00	4	4.88
80 - 84	1	2.00	2	6.25	3	3.66
85 - 89	1	2.00	1	3.13	2	2.44
90 - 94	0	0.00	0	0.00	0	0.00
95 +	0	0.00	0	0.00	0	0.00
Total	50	100.00	32	100.00	82	100.00

■ Male ■ Female

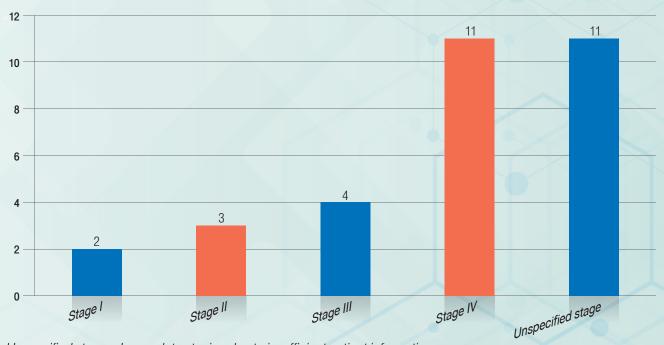


METHOD OF DIAGNOSIS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Mothed of diagnosis	Ma	ale	Fen	nale	Total		
Method of diagnosis	Number Percent		Number	Percent	Number	Percent	
Pathology of primary organ	16	100.00	15	100.00	31	100.00	
Total	16	100.00	15	100.00	31	100.00	



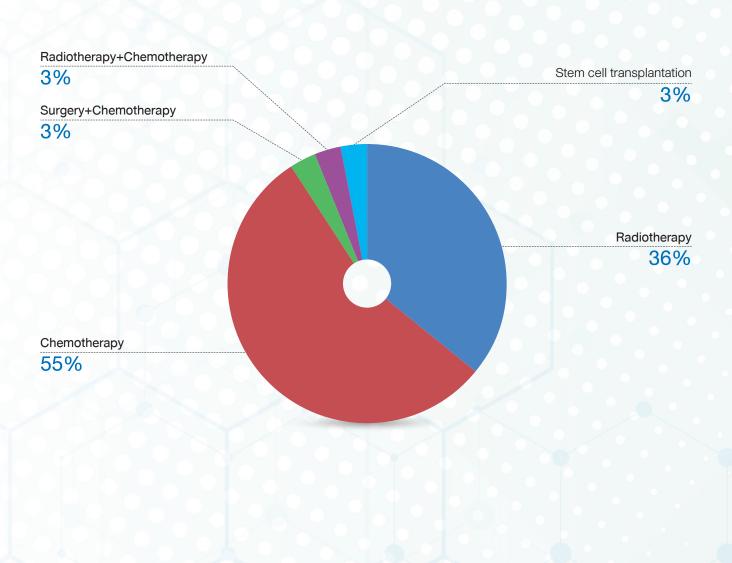
STAGING (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)



Unspecified stage = Incomplete staging due to insufficient patient information

TYPE OF TREATMENT (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Time of treatment	Ma	ale	Fen	nale	Total			
Type of treatment	Number Percent		Number	Percent	Number	Percent		
Radiotherapy	7	43.75	4	26.67	11	35.48		
Chemotherapy	9 56.25		8	53.33	17	54.84		
Surgery+Chemotherapy	0	0.00	1 6.67		1	3.23		
Radiotherapy+Chemotherapy	0	0.00	1	6.67	1	3.23		
Stem cell transplantation	0	0.00		6.67	1	3.23		
Total	Total 16 100.00		15	100.00	31	100.00		



PATIENT FOLLOW UP STATUS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

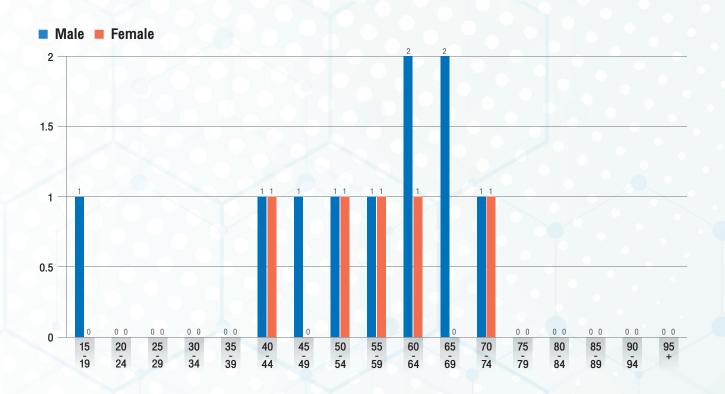
Follow up status	Ma	ale	Fen	nale	Total			
Follow up status	Number	Percent	Number	Percent	Number	Percent		
Alive	16	100.00	14	93.33	30	96.77		
Dead	0	0.00	1	6.67	1	3.23		
Total	16	100.00	15	15 100.00		100.00		



MULTIPLE MYELOMA

AGE AND GENDER

0.77	M	ale	Fen	nale	То	tal
Age	Number	Percent	Number	Percent	Number	Percent
15 - 19	1	10.00	0	0.00		6.67
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	1	10.00	1	20.00	2	13.33
45 - 49	1	10.00	0	0.00	1	6.67
50 - 54	1	10.00	1	20.00	2	13.33
55 - 59	1	10.00	1	20.00	2	13.33
60 - 64	2	20.00	1	20.00	3	20.00
65 - 69	2	20.00	0	0.00	2	13.33
70 - 74	1	10.00	1	20.00	2	13.33
75 - 79	0	0.00	0	0.00	0	0.00
80 - 84	0	0.00	0	0.00	0	0.00
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	10	100.00	5	100.00	15	100.00



METHOD OF DIAGNOSIS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

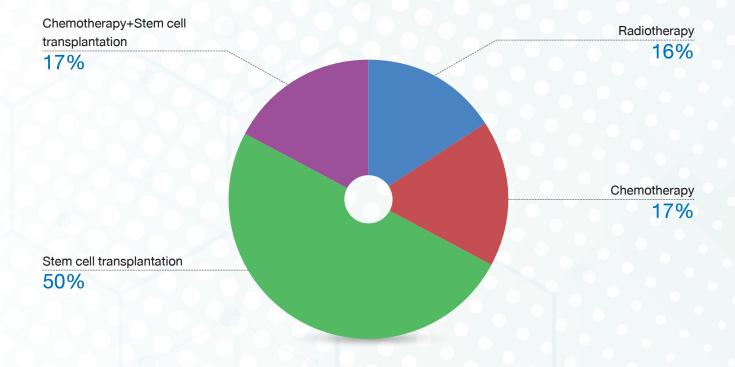
Mathad of diagnosis	Ma	ale	Fen	nale	Total		
Method of diagnosis	Number Percent	Percent	Number	Percent	Number	Percent	
Pathology of primary organ	4	100.00	2	100.00	6	100.00	
Total	4 100.00		2	100.00	6	100.00	

Pathology of primary organ 100%



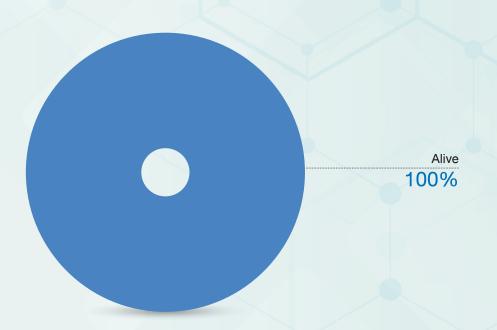
TYPE OF TREATMENT (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Town of two two out	Ma	ale	Fen	nale	Total			
Type of treatment	Number	Percent	Number	Percent	Number	Percent		
Radiotherapy	1	25.00	0	0.00	1	16.67		
Chemotherapy	1	25.00	0	0.00	1	16.67		
Stem cell transplantation	1	25.00	2	100.00	3	50.00		
Chemotherapy+Stem cell transplantation	1	25.00	0	0.00	1	16.67		
Total	4	100.00	2	100.00	6	100.00		



PATIENT FOLLOW UP STATUS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Follow up etatue	Ma	ale	Fen	nale	Total			
Follow up status	Number Perc	Percent	Number	Percent	Number	Percent		
Alive	4	100.00	2	100.00	6	100.00		
Dead	0	0.00	0	0.00	0	0.00		
Total	4 100.00		2	100.00	6	100.00		

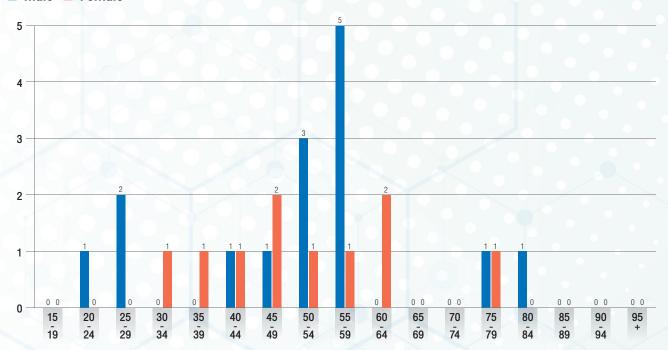


LEUKEMIA

AGE AND GENDER

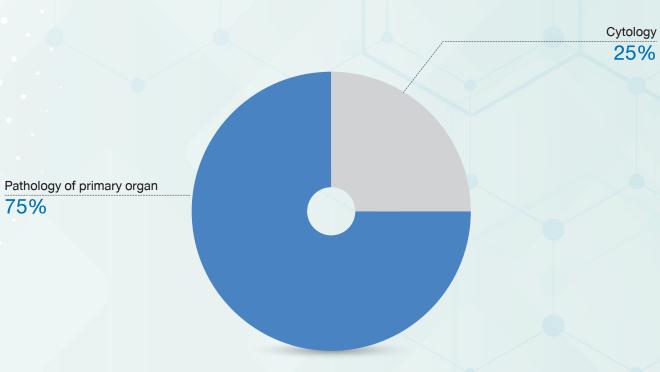
	M	ale	Fen	nale	To	Total			
Age	Number	Percent	Number	Percent	Number	Percent			
15 10									
15 - 19	0	0.00	0	0.00	0	0.00			
20 - 24	1	6.67	0	0.00	1	4.00			
25 - 29	2	13.33	0	0.00	2	8.00			
30 - 34	0	0.00	1	10.00	1	4.00			
35 - 39	0	0.00	1	10.00	1	4.00			
40 - 44	1	6.67	1	10.00	2	8.00			
45 - 49	1	6.67	2	20.00	3	12.00			
50 - 54	3	20.00	1	10.00	4	16.00			
55 - 59	5	33.33	1	10.00	6	24.00			
60 - 64	0	0.00	2	20.00	2	8.00			
65 - 69	0	0.00	0	0.00	0	0.00			
70 - 74	0	0.00	0	0.00	0	0.00			
75 - 79	1	6.67	1	10.00	2	8.00			
80 - 84	1	6.67	0	0.00	1	4.00			
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	15	100.00	10	100.00	25	100.00			

■ Male ■ Female



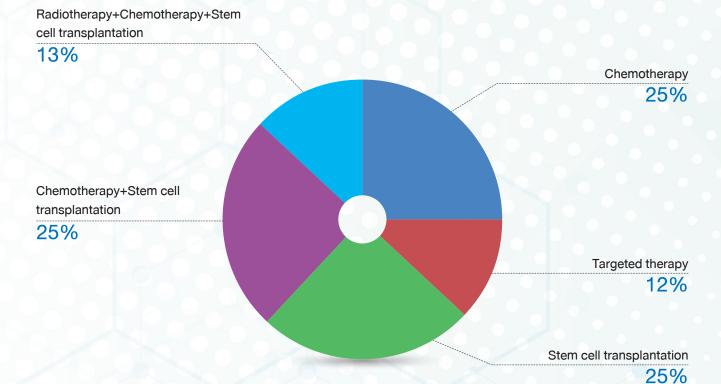
METHOD OF DIAGNOSIS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Method of diagnosis	Ma	ale	Fen	nale	Total			
Metriod of diagnosis	Number		Number	Percent	Number	Percent		
Cytology	2	33.33	0	0.00	2	25.00		
Pathology of primary organ	4	66.67	2	2 100.00		75.00		
Total	6 100.00		2	100.00	8	100.00		



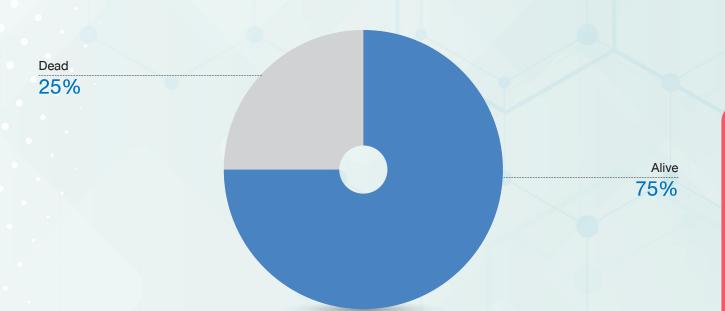
TYPE OF TREATMENT (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Type of treatment	Ma	ale	Fen	nale	Total			
Type of treatment	Number	Percent	Number	Percent	Number	Percent		
Chemotherapy	2	33.33	0	0.00	2	25.00		
Targeted therapy	0	0.00	1	50.00	1	12.50		
Stem cell transplantation	2	33.33	0	0.00	2	25.00		
Chemotherapy+Stem cell transplantation	1	16.67	1	50.00	2	25.00		
Radiotherapy+Chemotherapy+Stem cell transplantation	1	16.67	0	0.00	1	12.50		
Total	6	100.00	2	100.00	8	100.00		



PATIENT FOLLOW UP STATUS (TREATMENT IN BANGKOK HOSPITAL HEADQUARTER)

Follow up status	Ma	ale	Fen	nale	Total			
Follow up status	Number F	Percent	Number	Percent	Number	Percent		
Alive	4	4 66.67		100.00	6	75.00		
Dead	2	33.33	0	0.00	2	25.00		
Total	6 100.00		2 100.00		6 100.00 2 100.00 8		8	100.00



AGE DISTRIBUTION IN ALL MALE CANCER NUMBER OF CASE (INCLUDED HEMATOLOGIC MALIGNANCIES)

Code	Primary site	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 44	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 - 89	90 - 94	95+	Total	%
C00	Lip	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.10
C01-C02	Tongue	0	0	1	1	2	2	2	4	2	1	1	0	0	0	0	0	0	18	1.85
C03	Gum	0	0	0	0	0	0	1	0	0	0	3	0	0	0	0	0	0	4	0.41
C04	Floor of mouth	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3	0.31
C05	Palate	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0.21
C06	Other part of mouth	0	0	0	0	1	2	3	2	1	0	0	1	0	0	0	0	0	10	1.03
C07	Parotid gland	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	2	0.21
C08	Other and unspecified major salivary glands	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0.10
C09	Tonsil	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	4	0.41
C10	Oropharynx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
C11-C14	Head and Neck	1	0	2	2	4	5	2	1	5	2	3	2	0	0	0	0	0	30	3.08
C15	Esophagus	0	0	0	0	0	0	3	0	7	5	4	5	0	0	0	0	0	24	2.46
C16	Stomach	0	0	0	1	1	2	2	2	7	7	6	2	0	2	0	0	0	32	3.28
C17	Small intestine	0	0	0	0	0	0	0	1	0	2	1	0	0	0	0	0	0	4	0.41
C18-C20	Colon and Rectum	0	0	3	6	2	3	4	12	19	18	22	14	9	6	3	1	0	123	12.62
C21	Anus	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2	0.21
C22-C24	Liver and Hepatobiliary	0	0	0	1	2	10	12	12	15	13	11	10	10	5	0	1	0	100	10.26
C25	Pancreas	0	0	0	1	0	0	4	4	5	3	7	4	2	0	1	0	0	31	3.18
C26	Other and ill-defined digestive organ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
C30	Nasal cavity	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0.10
C31	Accessory sinuses	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.10
C32	Larynx	0	0	0	1	1	0	1	2	3	2	6	3	2	0	0	0	0	20	2.05
C33-C34	Lung	0	0	0	1	2	5	7	15	14	28	21	19	10	4	0	0	0	135	13.85
C37	Thymus	0	0	0	1	0	0	0	0	0	2	0	0	1	0	0	0	0	3	0.31
C38	Mediastinum	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0.21
C40-C41	Bone	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0.31
C43-C44	Skin	0	0	0	0	1	1	0	2	4	4	9	4	4	3	2	0	0	33	3.38
C48	Retroperitonium	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0.21
C49	Connective tissue	0	0	0	0	0	0	1	1	_ 1	0	1	0	0	0	0	0	0	4	0.41
C50	Breast	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	0.21
C51	Vulva	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
C52	Vagina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00



AGE DISTRIBUTION IN ALL FEMALE CANCER NUMBER OF CASE (INCLUDED HEMATOLOGIC MALIGNANCIES)

Code	Primary site	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 44	55 - 59	60 - 64	65 - 69	70 74	75 - 79	80 - 84	85 - 89	90 - 94	95+	Total	%
C00	Lip	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
C01-C02	Tongue	0	0	0	0	1	0	3	0	0	2	0	0	0	1	1	0	0	8	0.72
C03	Gum	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	3	0.27
C04	Floor of mouth	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0.09
C05	Palate	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.09
C06	Other part of mouth	0	0	0	0	0	0	1	0	0	2	0	0	0	0	1	0	0	4	0.36
C07	Parotid gland	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0.09
C08	Other and unspecified major salivary glands	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0.09
C09	Tonsil	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0.09
C10	Oropharynx	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0.09
C11-C14	Head and Neck	0	0	0	1	0	1	3	2	0	1	1	0	0	0	0	0	0	9	0.81
C15	Esophagus	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0.18
C16	Stomach	0	0	0	1	1	3	2	3	1	1	3	2	0	2	1	0	0	20	1.80
C17	Small Intestine	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	3	0.27
C18-C20	Colon and Rectum	0	1	2	3	7	2	5	5	13	11	10	4	1	5	0	0	0	69	6.20
C21	Anus	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0.09
C22-C24	Liver and Hepatobiliary	0	0	0	0	1	0	1	2	11	6	1	1	1	2	3	0	0	29	2.61
C25	Panceras	1	0	0	1	0	2	1	2	0	5	3	0	2	0	0	0	0	17	1.53
C26	Other and ill-defined digestive organ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
C30	Nasal cavity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
C31	Accessory sinuses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
C32	Larynx	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0.09
C33-C34	Lung	0	0	1	1	1	1	2	15	9	15	13	8	8	5	3	1	0	83	7.46
C37	Thymus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
C38	Mediastinum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00
C40-C41	Bone	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3	0.27
C43-C44	Skin	0	0	0	2	0	1	1	3	2	1	0	0	2	0	1	0	0	13	1.17
C48	Retroperitonium	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0.18
C49	Connective tissue	1	0	1	1	1	2	0	1	1	0	1	0	0	0	0	0	0	9	0.81
C50	Breast	0	0	8	23	51	44	69	73	66	46	28	15	16	1	4	4		448	40.25
C51	Vulva	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	3	0.27
C52	Vagina	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	3	0.27
	/																			



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 tumor registry. The cancer patients were diagnosed during a 12-month period from January 1st to December 31st, 2013. All of them received treatment at WSH and were prospectively followed-up up to December 31st, 2018 (5-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.

Noted that 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.

Breast cancer

Inte	Interval		Deaths	Lost	Survival	Error	[95% Conf. Int.]		
0	1	202	1	62	0.9942	0.0058	0.9592	0.9992	
1	2	139	1	21	0.9864	0.0096	0.9461	0.9966	
2	3	117	1	5	0.9778	0.0128	0.9318	0.9929	
3	4	111	0	9	0.9778	0.0128	0.9318	0.9929	
4	5	102	0	13	0.9778	0.0128	0.9318	0.9929	
5	6	89	1	88	0.9561	0.0249	0.8695	0.9857	

Breast Cancer Survival rate

202 cases were diagnosed breast cancer during January 1st to December 31st, 2013. At the time of diagnosis, 73 (36.1%) of them were at stage 1, 52 (25.7%) at stage 2, 37 (18.3%) at stage 3, 15 (7.4%) at stage 4 and 25 (12.3%) at unknown stage. Their average age was 54.6 years old (SD \pm 12.6). 85 (42.1%) of them aged \leq 50 years old and 117 (57.9%) aged > 50 years old.

The median follow-up period of these breast cancer patients was 48 months (25th - 75th percentile: 9 - 60 months). During the 5-year follow-up period, 4 of them were dead and 110 were lost to follow-up.

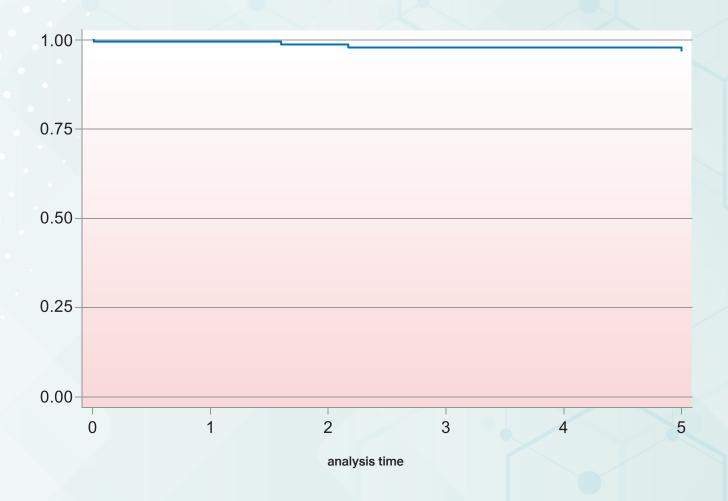


Figure 1. Overall observed survival rate of the breast cancer patients in WSH during 5-year follow-up period

The overall observed survival rate of the breast cancer patients at 5-year follow-up period was 95.5% (95%CI: 86.9 - 98.5) (Fig.1). The survival seems to have no difference between the age group of > 50 and ≤ 50 years old, of which the survival rate was 93.7% (95%CI: 79.4 - 98.2), and 98.5% (95%CI: 90.3 - 99.8) respectively (Fig. 2).

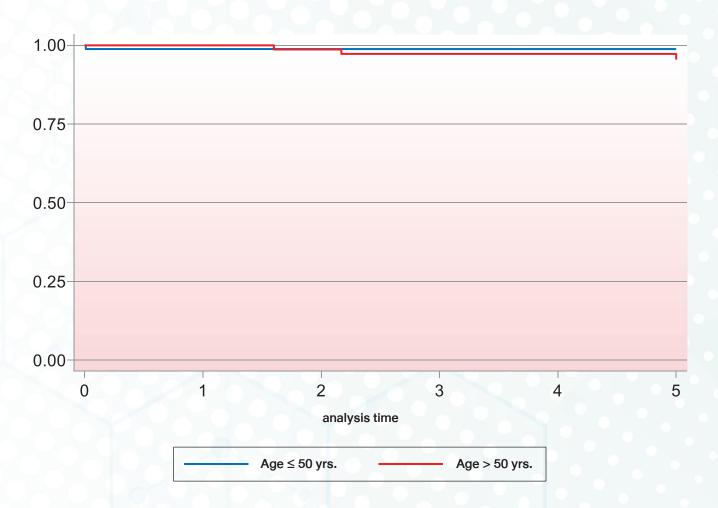


Figure 2. Observed survival rate of the breast cancer patients in WSH during 5-year follow-up period by age group of \leq 50 and > 50 years old

The observed survival of the early stage breast cancers, i.e., stage 1 and 2 was 100.0% and 97.0% respectively, while the survival of the late stages, i.e., stage 3 and 4 was 93.9% (95%CI: 64.1 to 99.1) and 90.9% (95%CI: 50.8 to 98.7) respectively (Fig. 3). The survival rate tends to be lower in the late stage breast cancers.

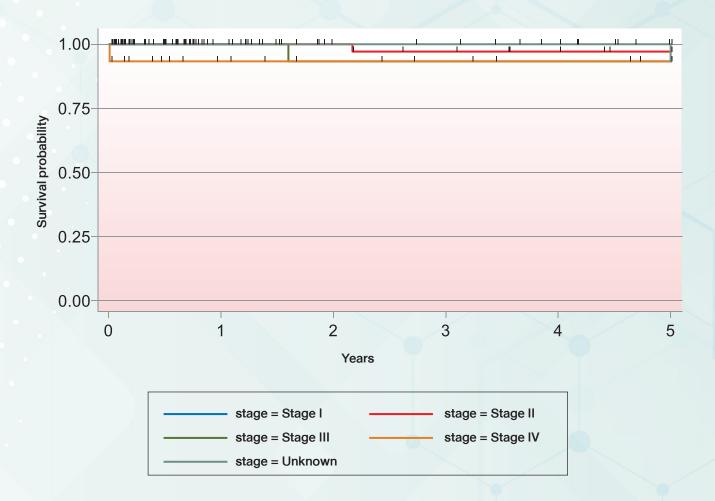


Figure 3. Observed survival rate of the breast cancer patients in WSH during 5-year follow-up period by stage of the cancer at diagnosis (stage 1-4)

Colorectal Cancer Survival rate

84 cases were diagnosed colorectal cancer during January 1st to December 31st, 2013. At the time of diagnosis, 4 (4.7%) of them were at stage 1, 23 (27.4%) at stage 2, 41 (48.8%) at stage 3, 14 (16.6%) at stage 4 and 2 (2.4%) at unknown stage. Their average age was 61.3 years old (SD \pm 14.5). 20 (23.8%) of them aged \leq 50 years old and 64 (76.2%) aged > 50 years old. Among of them, there were 46 (54.7%) males and 38 (45.2%) females.

The median follow-up period of these colorectal cancer patients was 11 months (25th - 75th percentile: 3 - 57 months). During the 5-year follow-up period, 5 of them were dead and 59 were lost to follow-up.

Colorectal cancer

Interval		Total	Deaths Lost		Survival	Error	[95% Conf. Int.]	
0	1	84	0	42	1.0000	0.0000		
1	2	42	1	8	0.9737	0.0260	0.8275	0.9963
2	3	33	2	3	0.9119	0.0488	0.7501	0.9708
3	4	28	2	3	0.8430	0.0650	0.6612	0.9320
4	5	23	0	3	0.8430	0.0650	0.6612	0.9320
5	6	20	0	20	0.8430	0.0650	0.6612	0.9320

The overall observed survival rate of the colorectal cancer patients at 5-year follow-up period was 84.3% (95%CI: 66.1 - 93.2) (Fig.1).

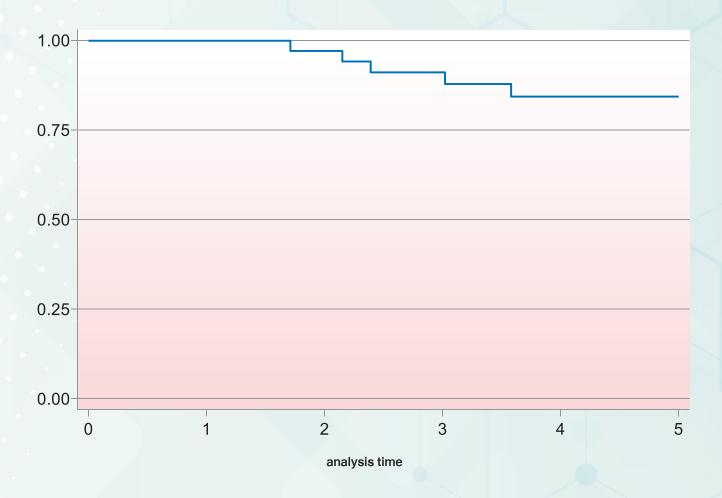


Figure 1. Overall observed survival rate of the colorectal cancer patients in WSH during 5-year follow-up period

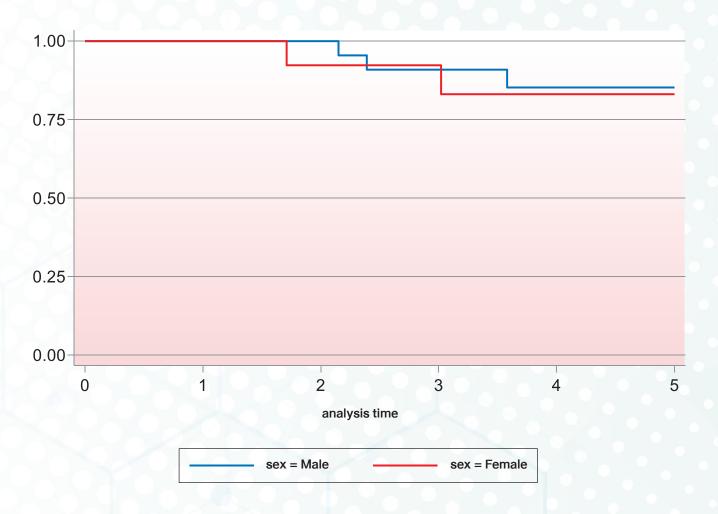


Figure 2. Observed survival rate of the colorectal cancer patients in WSH during 5-year follow-up period by gender (male and female)

The male patients seem to have lower observed survival rate. The survival seems to have no difference between the age group of > 50 and ≤ 50 years old, of which the survival rate was 83.9% (95%CI: 62.4 - 93.7) and 85.7% (95%CI: 33.4 - 97.8) respectively (Fig. 3).

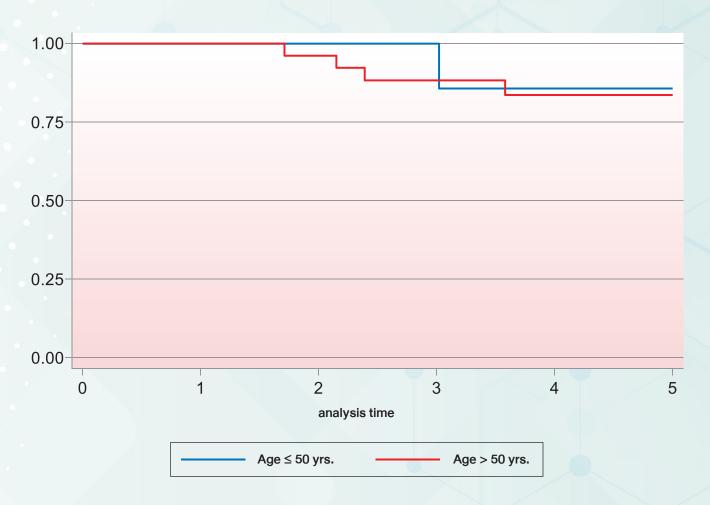


Figure 3. Observed survival rate of the colorectal cancer patients in WSH during 5-year follow-up period by age group of \leq 50 and > 50 years old

The observed survival of early stage colorectal cancers, i.e., stage 1 and 2 were 100.0%, while the survival of the late stages, i.e., stage 3 and 4 was 80.8% (95%CI: 51.3 - 93.4) and 50.0% (95%CI: 57.8 - 84.4) 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.

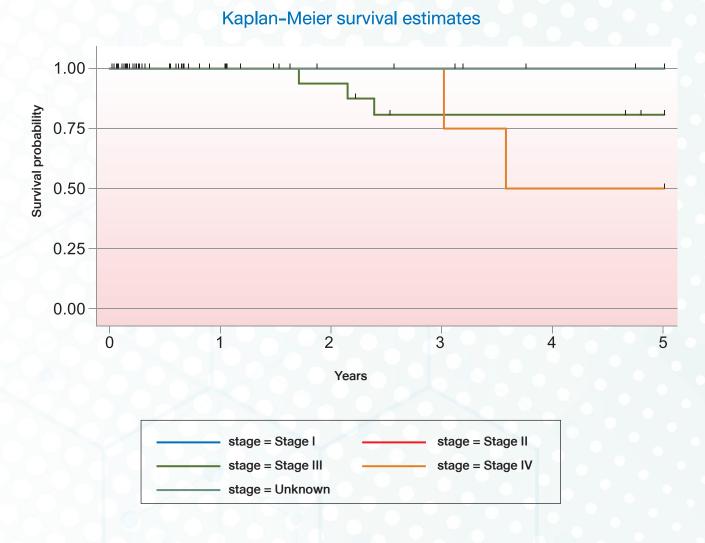


Figure 4. Observed survival rate of the colorectal cancer patients in WSH during 5-year follow-up period by stage of the cancer at diagnosis (stage 1 – 4)

Lung Cancer Survival rate

103 cases were diagnosed lung cancer during January 1st to December 31st, 2013. At the time of diagnosis, 12 (11.6%) of them were at stage 1, 3 (2.9%) at stage 2, 25 (24.2%) at stage 3, 58 (56.3%) at stage 4 and 5 (4.85%) at unknown stage. Their average age was 63.8 years old (SD \pm 11.1). 14 (13.5%) of them aged \leq 50 years old and 89 (86.4%) aged > 50 years old. Among of them, there were 68 (66.0%) males and 35 (34.0%) females.

The median follow-up period of these lung cancer patients was 7 months (25th - 75th percentile: 2 - 18). During the 5-year follow-up period, 13 of them were dead and 83 were lost to follow-up.

Lung cancer

Inte	Interval		Deaths	Lost	Survival	Error	[95% C	onf. Int.]
0	1	103	5	62	0.9306	0.0300	0.8412	0.9705
1	2	36	6	9	0.7533	0.0695	0.5850	0.8610
2	3	21	1	7	0.7103	0.0777	0.5271	0.8329
3	4	13	1	4	0.6457	0.0937	0.4325	0.7959
4	5	8	0	1	0.6457	0.0937	0.4325	0.7959
5	6	7	0	7	0.6457	0.0937	0.4325	0.7959

The observed survival rate of the lung cancer patients at 5-year follow-up period was 64.57% (95%CI: 43.3 - 79.6) (Fig.1).

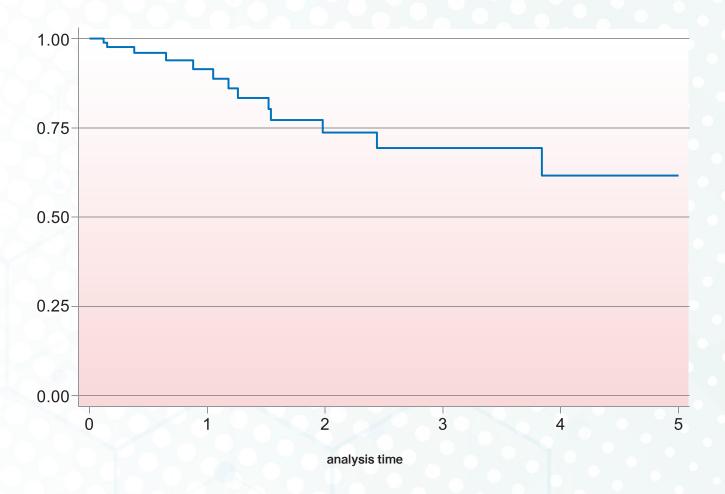


Figure 1. Overall observed survival rate of the lung cancer patients in WSH during 5-year follow-up period

The survival seems to have no difference between male and female patients, of which the survival rate was 58.4% (95% CI: 31.3 - 71.9) and 75.4% (95%CI: 39.9. - 91.7) respectively (Fig. 2).

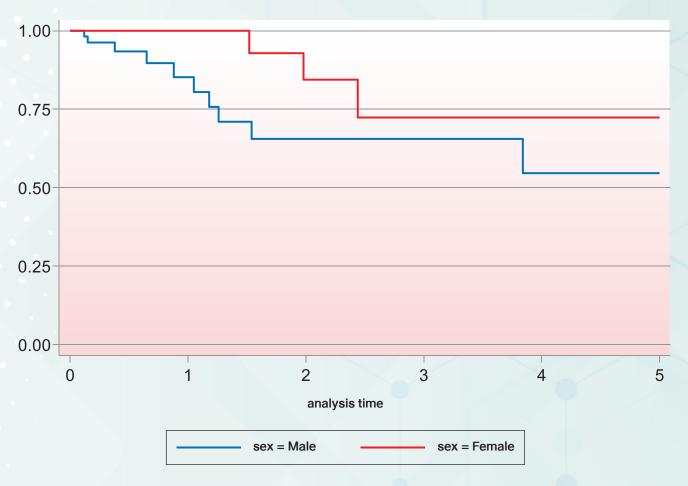


Figure 2. Observed survival rate of the lung cancer patients in WSH during 5-year follow-up period by gender (male and female)

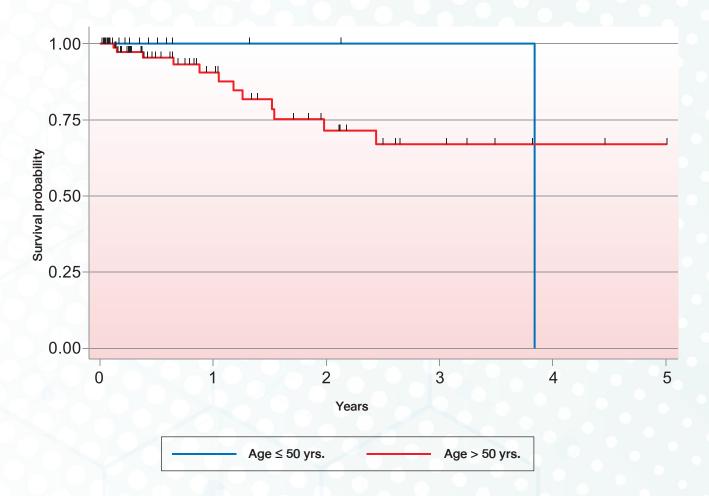


Figure 3. Observed survival rate of the lung cancer patients in WSH during 5-year follow-up period by age group of \leq 50 and > 50 years old

The observed survival rate of early stage lung cancers, i.e., stage 1 and 2 was 87.5% (95%CI: 38.7 - 98.1) and 0.0% respectively while the survival of late stages, i.e., stage 3 and 4 was 46.4% (95%CI: 0.9 - 88.3) and 17.7% (95%CI: 1.4 - 49.3) respectively (Fig. 4). The observed survival tends to be decreased as the cancer stage advanced.

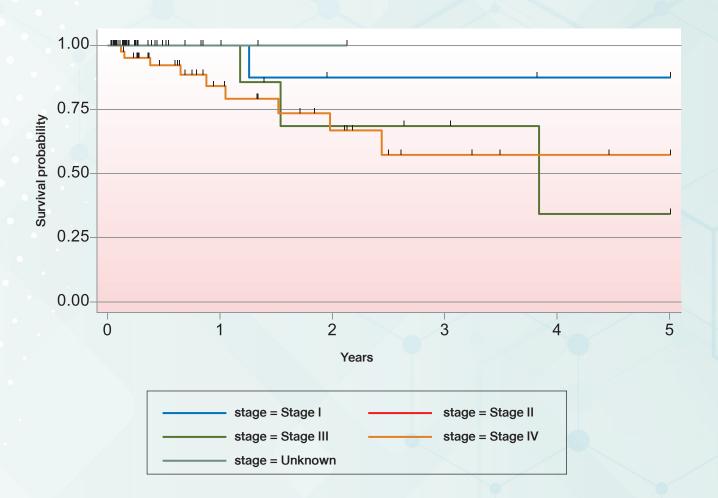


Figure 4. Observed survival rate of the lung cancer patients in WSH during 5-year follow-up period by stage of the cancer at diagnosis (stage 1-4)

