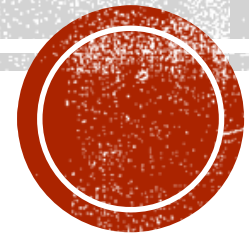


DATA MANAGEMENT

Introduction to Surgical Research

4 October 2022



***Yada Phengsalae, Research Assistant, Department of Surgery
Faculty of Medicine Ramathibodi Hospital, Mahidol University***

Data Management: การจัดการฐานข้อมูลเบื้องต้น



1. การเตรียมฐานข้อมูล

2. การตรวจสอบแก้ไขข้อมูล

3. การให้รหัสข้อมูล

3.1 ข้อมูลเชิงปริมาณ เช่น อายุ น้ำหนัก ส่วนสูง ฯ

3.2 ข้อมูลเชิงคุณภาพ เช่น เพศ ระยะโรค โรคประจำตัว ฯ

4. การวิเคราะห์ข้อมูล



ขั้นที่ 1: การเตรียมฐานข้อมูล

แถวแรก: ควรใช้คำสั้น, ง่าย ๆ และอ่านแล้วได้ใจความ

- ในแต่ละแถว: แสดงข้อมูลทั้งหมดของผู้ป่วยแต่ละราย
- ในแต่ละคอลัมน์: แสดงข้อมูลตัวแปรต่าง ๆ ของผู้ป่วยทุกราย

Study_ID	Age	Gender	Weight	Height
1	25	1	58	160
2	38	2	64	158
3	54	2	75	162
4	67	1	60	175
5	82	2	52	155



1. รูปแบบการลงข้อมูล



	1111111	2222222	3333333	4444444	5555555	1799970
HN	1111111	2222222	3333333	4444444	5555555	1799970
Sex	1	1	2	1	1	1
Age	86	94	84	84	61	85
Diagnosis	1	1	1	1	2	1
Comorbidity	DM, HT, stroke, DLP	HT, AF, Ca prostate	HT, AF, stroke	ESRD, DM, stroke, AF	AAA, DM, HT	HT, DLP, Stroke
ASA class	4	3	4	4	4	4
Charlson comorbidity index	10	11	12	16	6	6
bed ridden	2	1	2	2	1	2
Grading TG2013	3	2	3	3	3	3
imaging for Dx	1	1	2	2	1	1
WBC	17760	11800	5100	19600	25500	21170
Creatinine	1.22	0.9	1.21	5.9	4.05	1.14
AST	22	69	60	40	312	28
ALT	27	36	27	40	33	14
GGT	98	127	41	114	212	85
ALP	72	98	72	63	279	10
Alb	17	31	26.9	18	23	31
TB	1.8	0.6	0.7	1.1	21	2
DB	0.8	0.3	0.5	0.7	14	0.7
INR	1.26	1.16	2.61	2.1	1.49	1.2
platelet	188000	145000	188000	287000	167000	219000
Length of stay	18 days	39 days	23 day	69 days	59 days	20 days
total ATB iv day	17 days	32 days	15 days	69 days	50 days	20 days
PC; Date	11/6/2015	3/8/2015	26/10/2015	15/9/2015	31/10/2015	28/12/2015
complication	1	1	1	1	1	1
death?	1	1	1	1	1	1
time with PC(off date)	6/11/2015	paliative, NR	5/2/2015	paliative, NR	4/11/2015	11/4/2016
GB in situ/cholecystectomy	1		1		2	2
recurrent biliary event, time	1		1		1	1
day with PC	145		100		5	123



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1		Group	HN	AGE	SEX	Wt	HT	BMI	U/D	HT	DM	CVA	DLP	Cancer	heart dise	hematolog
2																
3		1= ATB			male = 1					0 =no dise	0 =no dise	0 =no dise	0 =no dise	0 =no disease		
4		2 = NSS			Female =2					1 = diseas	1 = diseas	1 = diseas	1 = diseas	1 = disease		
5																
6	31	1	5483206	63	female	54	154	22.76	no		0	0	0	0	0	0
7		1	5500284	77	male	55.7	170	19.27	Ht,Old CV		1	0	1	1	0	0
8	48	1	4571195	51	female	50	153	21.35	CA cervix		0	0	0	0	1	0
9	46	2	5551071	20	female	62	164	23.05	no		0	0	0	0	0	0
10	45	1	5014380	56	female	37	161	17.12	HT, DM		1	0	1	1	1	0
11	43	2	1771886	85	female	41	161	29.91	HT, DM		1	0	1	1	0	0
12	40	1	5550222	25	male	65	170				0	0	0	0	0	0
13	39	2	5550227	24	male	60	170				0	0	0	0	0	0
14	36	1	3513889	57	male	70	170				1	0	0	0	0	0
15	62	1	4818298	51	female	65					0	0	0	0	0	0
16	18	1	4834618	30	female	64		25.79	no		0	0	0	0	0	0
17	9	1	4078777	54	female	65	167	26.03	HT		1	0	0	0	0	0
18	55	1	5580262	36	male	67	167	24.02	HT		1	0	0	0	0	0
19	54	2	3665522	58	female	58	155	24.14	HT,DM,DL		1	1	1	0	0	0
20	53	2	3159298	55	female	45	155	18.73	no		0	0	0	0	0	0
21	52	1	3428033	88	male	55	155	22.89	DM,HT,DL		1	1	0	1	1	0
22	51	1	4528445	74	male	70	165	25.72	DM,HT,CA		1	1	0	0	1	0
23	50	2	1195552	69	female	73	153	31.18	DM,HT,DL		1	1	0	1	0	1
24	49	1	4376934	55	male	65	175	21.22	no		0	0	0	0	0	0
25	13	2	3533579	55	male	68	167	24.38	schizophre		0	0	0	0	0	0
26	35	2	3984908	71	female	38	148	17.34	lymphoma		0	0	0	0	0	1
27	20	2	3684992	74	female	64	165	23.5	no		0	0	0	0	0	0
28	41	2	4335799	69	female	42	145	19.97	DLP		0	0	0	1	0	0
29	-	1	5510039	20	male	50	160	19.53	no		0	0	0	0	0	0
30	-	1	2393051	51	male	67.5	166	24.49	no		0	0	0	0	0	0
31	-	2	4878371	67	male	50.6	158	20.26	ITP,MDS		0	0	0	0	0	1
32	6	1	2882794	53	male	99	180	30.55	no		0	0	0	0	0	0
33	47	2	894256	69	female	46	151	20.17	SVT		0	0	0	0	1	0
34	44	1	5560243	48	male	90	183	26.87	no		0	0	0	0	0	0
35	42	1	5570185	61	male	63	160	24.6	AF, hypert		0	0	0	0	0	1



G2

	A	B	C	D	E	F	G	H	I	J	K
2											
3											
4	HN	Op Date	ID	ยาริจัย	อายุ (yrs)	เพศ (M=1, F=2)	น้ำหนัก(kg)	ส่วนสูง(cm)	BMI(kg/m2)	BMI	สัญชาติ(Thai=1, Other=2)

5	2105567	7/2/62	3	A	64	2	86.4	154	36.4	36.43	1
6	4925613	9/7/62	4	A	43	1	54.1	172	18.3	18.29	1
7	5370328	9/7/62	9	B	56	2	58.7	158	23.5	23.51	1
8	3786935	12/7/62	6	B	64	2	54	143	26.4	26.41	1
9	5367426	26/7/62	8	B	34	2	47.6	155	19.8	19.81	1
10	4934262	30/7/62	14	A	42	1	80	163.4	30	29.96	1
11	4124919	13/8/62	16	B	67	2	52	148	23.7	23.74	1
12	4949184	27/8/62	18	B	55	2	44.1	144	21.3	21.27	1
13	1184773	10/9/62	20	B	59	1	84	160	32.8	32.81	1
14	3448448	17/9/62	21	A	46	2	44	149	19.8	19.82	1
15	4977010	17/9/62	5	A	46	1	59.4	184	17.5	17.54	1
16	4666179	4/10/62	24	B	58	2	52.9	150	23.5	23.51	1
17	4505923	8/10/62	34	A	31	2	51.1	163	19.2	19.23	1
18	4449827	11/10/62	1	B	44	1	66	174	21.8	21.80	1
19	3888397	15/10/62	36	B	72	2	53.6	148	24.5	24.47	1
20	2833914	18/10/62	10	A	63	2	80.5	156.9	21.7	32.70	1
21	5268946	25/10/62	30	A	32	2	54.5	156	22.4	22.39	1
22	5342646	12/11/62	35	A	42	2	56	153	23.9	23.92	1
23	3832890	12/11/62	37	B	43	1	56.6	157.1	23	22.93	1
24	4729898	26/11/62	38	B	42	2	54	150	24	24.00	1
25	4571846	20/12/62	42	B	37	1	48.2	164		17.92	1
26	3208158	27/12/62	41	B	71	2	60	155		24.97	1
27	2897970	3/1/63	2	B	70	2	51	147		23.60	1
28	5250578	17/1/63	50	A	51	2	72.8	148		33.24	1
29	3688905	11/2/63	44	A	44	1	59.3	173		19.81	1
30	5509457	11/2/63	47	A	44	1	52.3	158		20.95	1
31	5415232	29/5/63	19	A	63	2	54.7	155		22.77	1
32	5595013	4/8/63	53	A	45	1	99	160		38.67	1
33	4523433	9/6/63	51	B	36	2	47.43	156		19.49	1
34	2075174	16/6/63	17	A	64	2	51	155		21.22	1



ID	testosterone After TU3	SHBG After TU3	Albumin After TU3	Free-T After TU3	Bio-T After TU3		testosterone After TU4	SHBG After TU4	Albumin After TU4	Free-T After TU4	Bio-T After TU4	
1	13/7/2550 762	28.5	40.9	19.34	432.12		21/9/2550 507	25	39.6	13.04	282.52	

2	26/9/2550 377	20.9	45.5	9.3	230.06		30/11/2550 561	16.5	43.1	16.51	387.8	
3	2/11/2550 733	17.7	42.9	21.92	512.62		25/1/2551 657	15.2	45.3	19.49	480.25	
4	15/6/2550 369	32.3	43.1	7.51	176.49		7/9/2550 393	26.6	42.7	9.03	210.15	
5	27/8/2550 311	16.5					1/11/2550 463	17.8	40.3	13.57	298.81	
6	21/9/2550 333	13.7	42.3	10.02	231.15		15/12/2550 311	16.5	42.9	8.62	201.53	
7	25/9/2550 /	/	/	/	/		8/12/2550 428	27.3	41.5	9.97	225.8	
8	38.4	11.08	232.98		13/12/2550 684	36.8	39.5	14.92	322.31		5/3/2551 797	31.7
9	180.19		22/6/2550 306	18	8.06			14/9/2550 361	22.4	41	9.17	
10	15/6/2550 445	35.2	41.9	8.95				28.3	40.9	10.28	229.6	
11	21/9/2550 1321	42.8	41.5	30.38			2/2550 1321	44.4	38.8	22.44	476.79	
12	13/7/2550 463	27.5	41.1	10.02				25.5	42.2	12.95	298.13	
13	21/9/2550 545	42.5	43.2	9.87	232.44		14/12/2550 680	50	46	11.14	278.4	
14		19/10/2550 359	8.9	43.5	11.97	283.72		26/11/2550 752	9.8	44.3	25.67	618.95
15	28/9/2550 386	32.8	41.6	7.98	181.09		30/11/2550 672	29.1	39.5	16.8	363.11	

no	ครั้งที่	Date	PSA	Testosterone	SHBG	Albumin	Free-T	Bio-T	Hct	Total Chol
18	1	30/3/2007	0.396	265	31	42.1	5.4	125.01	41.4	197
	2	11/5/2007		427	34.4	41.8	8.67	197.74		
	3	3/8/2007	0.619	445	30.3	43.2	9.62	226.46	46.9	162
	4	26/10/2007	0.522	649	24.4	42.5	16.02	202.08	46.5	144

	5	7/12/2007	0.695	973	23.1	41.3	28.48	642.12	50.9	198
	6	15/2/2008	0.534	412	22.8	41.8	10.42	237.57	47.7	157
	7	2/5/2008	0.651	777	26.2	42.4	20.6	466.19	50.7	148
	8	25/7/2008	0.729	974	24.7	45.4	25.83	637.58	50	171
	9	24/10/2008		443	31.4	45.5	9.12	225.53		166
	10	9/1/2009	0.733	694	24.4	42.7	18.14	422.34	48.4	164
	11	27/3/2009								
	12	12/6/2009	0.824	825	26.2	41.9	21.07	481.74	52.5	166
	13	11/9/2009								
	14	4/12/2009								
	15	19/2/2010								
	16	14/5/2010								
	17	10/9/2010								
	18	17/12/2010								
	19	11/3/2011								4.61
	20	10/6/2011	0.667	763	27.2	40.2	50.08	115	48.9	168
	21	9/9/2011								
	22	9/12/2011	3.26	720	24	40.6		441	50	165
	23	9/3/2012								
	24	15/6/2012	0.736	482	27.5	39.6	17.7	254	50.2	
	25	21/9/2012	0.718	491	24.8	40.0	12.5	276	49	
	26	4/1/2013								
	27	17/5/2013	0.207	329	26.4		7.78	168	43.2	135
	28	22/11/2013								252
	29	14/3/2014	0.577	342			6.8	154	40.7	
	30	27/6/2014								
	31	17/10/2014		529						
	32	6/2/2015		139						
	33	5/6/2015								
	34	14/8/2015		298						247
	35	13/11/2015	0.598	405	28.5	44.1			47.2	225
	36	22/6/2016	0.393	320	36.2	43				173
	37	16/2/2017	0.277	213	33.7	41.8			36.7	196
	38	12/7/2017		145						159
	39	29/12/2017	0.946	204	24.5	39.1			38.5	



2. การตั้งชื่อตัวแปร

	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG
	Rt			A			B			C		
	กว้าง	ยาว	TouchRef	Touch	Pain	Cool	Touch	Pain	Cool	Touch	Pain	Cool
	22	32	4.31	4.31	3	4	4.31	3	4	4.31	3	3
	20	30	3.61	3.61	3	3	2.83	3	3	2.83	3	3
	19	24	2.83	2.83	3	3	2.83	3	3	2.83	3	3
	20	24	3.61	4.31	4	3	4.31	4	3	4.31	4	3
	19	31	3.61	3.61	2	3	3.61	2	3	3.61	3	3
	27	28	2.83	3.61	3	2	3.61	2	3	3.61	3	2
	19	25	2.83	3.61	3	2	3.61	3	3	3.61	4	3
	31	43	3.61	4.31	3	3	4.31	3	3	4.31	3	4
	19	23	3.61	3.61	4	3	3.61	3	3	3.61	3	3
	19	31	3.61	4.31	3	3	4.31	4	4	4.31	3	3
	24	35	3.61	4.31	3	3	4.31	4	4	4.31	3	3
	20	28	2.83	2.83	2	2	2.83	2	2	3.61	2	2
	15	18	4.31	4.31	4	3	4.31	4	3	4.31	4	4
	20	30	2.83	3.61	3	3	3.61	3	3	3.61	3	3
	24	26	2.83	3.61	3	3	3.61	3	3	3.61	3	2
	24	28	3.61	3.61	3	3	3.61	3	3	3.61	4	4
	23	27	3.61	4.31	3	2	3.61	4	2	3.61	2	2
	16	25	3.61	3.61	3	3	4.31	3	4	3.61	3	3
	15	22	3.61	4.31	4	4	3.61	4	3	2.83	4	4
	19	25	2.83	2.83	3	3	3.61	3	3	3.61	3	3
	21	33	2.83	3.61	3	3	3.61	3	3	3.61	2	2
	25	30	3.61	4.31	4	3	4.31	3	3	3.61	3	3
	20	23	2.83	3.61	3	3	3.61	3	3	3.61	3	3
	30	35	2.83	3.61	3	3	4.31	3	3	4.31	2	3
	35	45	3.61	3.61	4	3	3.61	3	4	3.61	3	3
	28	30	3.61	4.31	3	3	4.31	3	3	4.31	3	3
	18	25	2.83	3.61	4	4	3.61	4	4	3.61	3	3
	20	23	4.31	4.31	4	3	2.83	2	3	4.31	2	4
	30	40	3.61	4.31	3	2	4.31	4	2	4.31	4	2
	25	32	2.83	2.83	4	4	3.61	4	3	2.83	3	3
	30	40	3.61	3.61	4	4	3.61	4	3	3.61	4	3
	30	37	2.83	3.61	4	3	3.61	4	2	4.31	4	3
	30	35	2.83	3.61	4	3	3.61	4	3	3.61	3	3
	26	36	3.61	3.61	3	3	4.31	3	3	3.61	4	3
	30	42	2.83	3.61	3	3	3.61	3	3	3.61	3	3
	33	35	3.61	3.61	3	3	3.61	4	3	3.61	4	3

Touch_A
Pain_A
Cool_A



	A	F	G	H	I	J	K	
1	study ID		on anticoagulant drig	smoking		menopause osteoporesis		
2		1	1	2	4	3/1/1900		
3	2	2		2	0	1		3
4								
5	3	1		1	4	3		
6		1		1	4	3		
7								
8	คนบังคล6							
9	7			2				
10	8	1	2	2	4	1		
11	9	1	2	2	4	1		
12	10	1	2	2	4	2		
13	11	1	2	2	4	1		
14	12	2	2	1	0	3		
15	13	1	2	2	0	1		
16	14	4	2	2	0	3		
17	15	1	2	2	0	3		
18	16	1	2	2	0	3		
19	17	2	2	2	0	1		
20	18	2	2	2	4	1		
21	19	1	2	2	0	3		
22	20	1	2	2	0	3		
23	21	1	2	2	0	2		
24	22	2	2	2	0	3		
25	23	1	2	2	4	3		
26	24	2	2	2	4	3		
27	25	1	2	2	4	1		
28	26	1	2	2	4	1		
29	27	1	2	2	4	3		
30	28	1	2	2	0	3		
31	28.1	1	2	2	0	3		
32	28.2							
33								
34								
35								
36	29	1	2	2	1	3		

anticoag

Menopause_osteoporesis



3. การรวมข้อมูล: กรณีมีหลาย sheet

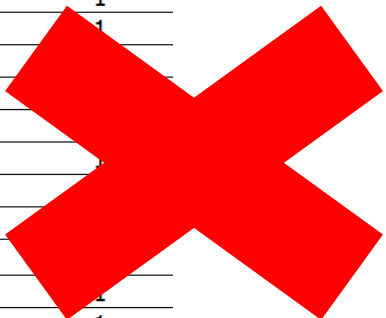


27	25		58	6	59.0	173	1	0
28	26		41	6	85.0	174	1	0
29	27		60	3	50.7	161	1	1
30	28		61	1	53.5	155	2	0
31	29			6	57.0	162	1	1
32	30		57	1		154	2	0
33	31		55	2	88.0	160	1	0
34	32		53	2	61.0	172	1	0
35	33		59	6	53.3	161	1	0
36	34		67	1	51.0	155.4	2	0
37	35		65	6	59.1	167.5	1	0
38	36		57	1	80.0	172	1	0
39	37		73	1		160	1	0

◀ ▶	General	Clinical	Treatment	Outcome
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G2											
	A	B	C	D	E	F	G	H	I	J	K
2											
3											
4	HN	Op Date	ID	ยาริจัย	อายุ (yrs)	เพศ (M=1, F=2)	น้ำหนัก(kg)	ส่วนสูง(cm)	BMI(kg/m2)	BMI	สัญชาติ(Thai=1, Other=2)
5	2105567	7/2/62	3	A	64	2	86.4	154	36.4	36.43	1
6	4925613	9/7/62	4	A	43	1	54.1	172	18.3	18.29	1
7	5370328	9/7/62	9	B	56	2	58.7	158	23.5	23.51	1
8	3786935	12/7/62	6	B	64	2	54	143	26.4	26.41	1
9	5367426	26/7/62	8	B	34	2	47.6	155	19.8	19.81	1
10	4934262	30/7/62	14	A	42	1	80	163.4	30	29.96	1
11	4124919	13/8/62	16	B	67	2	52	148	23.7	23.74	1
12	4949184	27/8/62	18	B	55	2	44.1	144	21.3	21.27	1
13	1184773	10/9/62	20	B	59	1	84	160	32.8	32.81	1
14	3448448	17/9/62	21	A	46	2	44	149	19.8	19.82	1
15	4977010	17/9/62	5	A	46	1	59.4	184	17.5	17.54	1
16	4666179	4/10/62	24	B	58	2	52.9	150	23.5	23.51	1
17	4505923	8/10/62	34	A	31	2	51.1	163	19.2	19.23	1
18	4449827	11/10/62	1	B	44	1	66	174	21.8	21.80	1
19	3888397	15/10/62	36	B	72	2	53.6	148	24.5	24.47	1
20	2833914	18/10/62	10	A	63	2	80.5	156.9	21.7	32.70	1
21	5268946	25/10/62	30	A	32	2	54.5	156	22.4	22.39	1
22	5342646	12/11/62	35	A	42	2	56	153	23.9	23.92	1
23	3832890	12/11/62	37	B	43	1	56.6	157.1	23	22.93	1
24	4729898	26/11/62	38	B	42	2	54	150	24	24.00	1
25	4571846	20/12/62	42	B	37	1	48.2	164		17.92	1
26	3208158	27/12/62	41	B	71	2	60	155		24.97	1
27	2897970	3/1/63	2	B	70	2	51	147		23.60	1
28	5250578	17/1/63	50	A	51	2	72.8	148		33.24	1
29	3688905	11/2/63	44	A	44	1	59.3	173		19.81	1
30	5509457	11/2/63	47	A	44	1	52.3	158		20.95	1
31	5415232	29/5/63	19	A	63	2	54.7	155		22.77	1
32	5595013	4/8/63	53	A	45	1	99	160		38.67	1
33	4523455	9/6/63	51	B	56	2	47.45	156		19.49	1
34	2075174	16/6/63	17	A	64	2	51	155		21.22	1



3. การรวมข้อมูล: กรณีมีหลายไฟล์

Microsoft Excel interface showing two overlapping spreadsheets. The background spreadsheet has columns C, D, E, F with headers Group, sex, Age, BMI. The foreground spreadsheet has columns A, B, C, D, E with headers number, diag, Group, sex, Age, BMI. A large red 'X' is overlaid on the right side of the image.

Group	sex	Age	BMI
IPC+GCS	1	67	20.
IPC+GCS	0	61	20.
IPC+GCS	0	63	23.
IPC+GCS	1	64	24.
IPC+GCS	0	49	21.
IPC+GCS	0	84	27.
IPC+GCS	0	70	24.
IPC+GCS	1	74	34.2
IPC+GCS	1	54	1
IPC+GCS	0	68	26.
IPC+GCS	1	80	34.9
IPC+GCS	1	87	21.

number	diag	Group	sex	Age	BMI
1	CA color	Enoxaparin	Male	57	23
2	CA rectum	Enoxaparin	Fem	79	21
3	CA rectum	Enoxaparin	Male	68	20
4	CA sigmoid	Enoxaparin	Male	52	22
5	CA rectum	Enoxaparin	Male	62	24
6	ca COLON	Enoxaparin	Fem	67	24
7	CA rectum	Enoxaparin	Fem	66	20
8	CA color	Enoxaparin	Fem	49	18
9	TB periton	Enoxaparin	Male	60	23



- > ★ Quick access
- > 📁 Creative Cloud Files
- > ☁ OneDrive
- ✓ 💻 This PC
 - > 🖥 Desktop
 - > 📄 Documents
 - > ⬇ Downloads
 - > 🎵 Music
 - > 🖼 Pictures
 - > 🎬 Videos
 - > 💾 Local Disk (C:)

Name	Date modified	Type	Size
📄 1. testos def + ไม่ Tx	1/12/2564 8:42	Microsoft Excel Work...	28 KB
📄 2. testos def	1/12/2564 8:42	Microsoft Excel Work...	257 KB
📄 3. testos normal	1/12/2564 8:42	Microsoft Excel Work...	153 KB
📄 Note จากคุณหมอวันที่_29-11-2021	1/12/2564 8:58	Microsoft Word Doc...	13 KB
📄 แบบฟอร์มเสนอโครงการ Testosterone and CV risk	1/12/2564 11:28	Microsoft Word Doc...	807 KB





ขั้นที่ 2: การตรวจสอบแก้ไขข้อมูล

1. ข้อมูล blank



	A	C	D	E	F
1	study ID	age	sex	diag	Sx level
2	1	67	1	2	1
3	2	62	2	2	2
4					
5	3	88	1	2	1
6	4	72	1	2	1
7	5	83	1	1	3
8	คนบังคล6	33	1	4	1
9	7	56	2	2	1
10	8	68	2	2	1
11	9	70	2	1	1
12	10	46	2	4	1
13	11	54	2	2	1
14	12	46	1	2	2
15	13	71	1	2	1
16	14	76	1	1	4
17	15	69	1	2	1
18	16	48	1	2	1
19	17	79	2	2	2
20	18	52	2	3	2
21	19	77	1	2	1
22	20	70	1	4	1
23	21	16	2	3	1
24	22	60	1	1	2
25	23	59	1	4	1
26	24	48	1	1	2
27	25	69	2	2	1
28	26	66	2	2	1
29	27	58	1	2	1
30	28	72	1	2	1
31	28.1	70	1	2	1
32	28.2				
33					
34					
35					
36	29	59	1	1	1
37	30	82	1	1	2



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	
		ID	CODE	Comment	hn	xname	DOB	DO Liver Dx	Age	GENDER	Height (cm)	BW (kg)	BMI	HT	DM	CVS	CKD	Cirrhosis	Fatty liver	ECOG PS
8			7		2442377	เบญจทรัพย์	25/11/1954	29/05/2008	54	1	159	66	26.11	1	0	1	0	0	0	
9			8		2485308	จิราภรณ์	15/12/1977	6/06/2018	40	1	165	68	24.98	0	0	0	0	0	0	1
10			9	2 resection 3	2498500	วราภรณ์	2/06/1960	24/04/2017	57	1	157	56	22.72	1	0	0	0	0	0	
11			10		2552888	พาดิ	27/04/1950	15/05/2012	62	1	158	53	21.23	0	0	0	0	0	0	0
12			11	RFA	2584222	บัญญัติ	13/09/1941	27/03/2016	75	0	168	67	23.74	1	0	1	1	0		
13			12		2667849	เพ็ญจันทร์	6/08/1943	11/02/2018	75	1	156	53	21.78	0	0	0	0	0	0	1
14			13		2723176	จิรภา	23/03/1953	8/04/2011	58	1	150	51	22.67	1	0	0	0	0	0	
15			14	RFA 1/4 lesion			16/04/1945	6/12/2016	72	1	155	47	19.56	0	0	0	0	0	0	1
16			15	2 resection	3018886	มรกต	2/09/1976	14/10/2017	41	0	157	61	24.75	1	0	0	0	0	0	0
17			16	2 resection	3317107	จรรยา	23/04/1951	5/06/2008	57	0	163	70	26.35	0	1	0	0	1	0	1
18			17	S/p wedge he			13/04/1953	14/06/2017	64	1	152	52	22.51	1	0	0	0	0	0	
19			18	CRLM or NET	3583691	วีรพล	19/12/1955	29/09/2018	63				20.31	0		0	0	0	0	1
20			19	RFA 15/3/255	3591081	สมชาย	1/01/1943	10/02/2008	65	0	167	51	18.29	0				0	0	0
21			20		3612380	อนันต์	17/10/1939	20/02/2016	76	0	160	56	21.88	1	1			0	0	0
22			21		3628795	วันทนาย	7/10/1957	29/07/2013	56	0	174	61	20.15	0	0			0	0	0
23			22		3718735	โสภาส	8/02/1955	13/12/2014	60	0	172.5	72.9	24.50	1				0	0	
24			23		3794371	กอบโชค	14/09/1945	18/03/2015	70	0	167	61	21.87	0				0	0	0
25			24	3 RFA	3874854	อรพรรณ	1/01/1941	17/09/2017	77	1	143	60	29.34	1	1	0	0	0	0	
26			25	Liver HCC	3876023	พรพนม	8/11/1943						#DN 0!					1	0	
27			26	Borderine res	3895608	สุมาลี	4/03/1967	16/08/2017	50	1	155	49	20.40	0	0	0	0	0	0	0
28			27	2 RFA	3920005	อนุดร	12/01/1943	21/01/2014	71	0	163	54	20.32	0	0	0	0	0	0	0
29			28		3939514	นงเยาว์	22/09/1963	30/09/2014	51	1	161	59	22.76	0	0	1	0	0	1	0
30			29		3948840	วิเชียร	1/01/1931	15/06/2009	78	0	170	59	20.42	1	0	0	1	0	0	0
31			30	2 stage hepat	3955527	ธรรมนุญ	1/07/1958	13/04/2017	59	0	167	69	24.74	0	0	0	0	0	0	1
32			31		4028268	สุนทร	1/01/1944	5/10/2009	66	0	162	67	25.53	0	0	0	0	0	0	0
33			32		4048860	สมจิต	16/10/1944	23/01/2017	72	1	150	36	16.00	0	0	0	0	0	0	1
34			33		4053723	ผกาวดี	1/01/1948	4/03/2017	69	1	155	60	24.97	0	1	0	0	0	0	1



2. ข้อมูลในรูปแบบตัวอักษร / ตัวย่อ

F22				25.5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													
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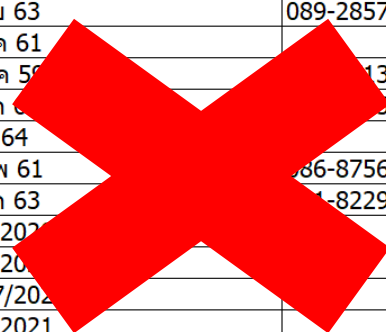


Time to OR(hrs)	Underlying/co morbid	Sepsis/ septic shock	Antiplt or Anticoa	Caprini (appคำนวณ)	Death	Cause of death	Cause of disease	Obstruction/ perforation/ ischemia	Sx Complication I/s	A
OR 11.00		5	2	2		2	1	1	3	
OR 18.45	1,2,4,ckd		2	1		2	1		3	
9.3		5	2	2		2	1	1	3	
6	2,4		2	2		2	2	1	3	
7.3	TAS c BSO		2	2		1 malignant	1	2	3	
2	2,ckd		1	2		2	2	2,abcess	3	
2.3		5	2	2		2	1	1	3	
	1,2,3,4					2	sigmoid volvulus	1		
5.15	DVD,1,2,ckd		1	1		2	1	1	แผลไม่ดีswab: multiple rare	
OR11.00		2	2	2		2	1	1	3	
OR 4.30	2,4,gout		1	2		1 septicaemia	1	2	cardiac arrest	
1.3	allergytic		1	2		2	1	1	8	
OR 14.30		5	2	2		2	1	1	3	
OR 05.00	2,3		2	2		2	2	1,2	3	
OR 18.15	1,2,3,4		2	1		2	1	1	3	



AM	AN	AO	AP	AR	AS	AT	AU	AV	AW	AX		
->Recurrence 0=no, 1=liver, 2=lung, 3=Local recurrence				Time recurrence	Alive/death	Last F/U	โทรศัพท์	CRM	timing adju	Regimen(1	Cycle	Turn
	M(0=M0,1=M1post	0=No preop CCRT indeterminate ,1 = ideterminate preopCCRT-->				post CCRT no change,2=ideterminate preopCCRT-->						
0	0	0		A	มค 64		0.3	41	1	6		
2	0	0	พค 60 (lung)	A (to last F/U)	6 สค 62	081-086205	0.7					
0	0	0		A	มค 64		0.1					
0	0	0		A	ค 64		3.2	29	2	6		
0	0	0		A	4 มค 64	087-810775	0.8	58	2	6		
0	0	0		A (24 มค 64)	6 มีย 59 นัดจะปิด ileostomy แต่	089-9870940 081-9303278						
0	0	0		A	7 สค 63	089-693914	2	13	3	6		
0	0	0		A	4 มค 64	081-661196	1	30	3	6		
4	0	0	สค 59 (liver,lung)	D (liver,lung) 12 มีย 6	2 มีย 61	086-753720	1.5	58	3	6		
0	0	0		นัด 16 มีย 64	0 กย 63	089-285791	0.5	139	1	6		
4	0	0	เมย 60 (LN,liver,lung)	D	6 สค 61		1.3					
0	0	0		D (Bleeding neurofibr	3 พค 59	13367 02-5267414						
0	0	0		A	9 สค 6	13367 02-5267414	2	42	3	6		
0	0	0		A	8 มค 64		3	44	2	6		
1	0	0	กย 59 (liver)	D (liver) 1 สค 61	5 กพ 61	086-875682	2	28	2	6		
0	0	0		A	6 สค 63	1-822963	2.5	22	2	6		
0	0	0		A	2/3/202		2.5	26	2	6		
0	0	0		A	1/11/20		2.5	33	1	6		
0	0	0		A	23/07/202							
0	0	0		A	8/3/2021		1	71	3	6		
0	0	0		A	9/4/2021		3.7	43	3	6		
0	0	0		A	7/5/2021		1	19	3	6		
0	0	0		A	6/2/2019		3.6					
5	0	0	30/8/2018 pleural,peri	A(to last follow up)	10/10/2561		0.2					
0	0	0		A	6110/2562		0.1					
0	0	0		A	7/8/2563		1.1					
0	0	0		A	8/3/2564		1.8	37	3	6		
0	0	0		A	13/12/2562							
0	0	0		A	6/11/2563		1.5	31	3	6		
0	0	0		A	22/2/2563							
4	0	0	29/11/61 lung liver,lc?	?	11/1/2562		0.3	45	3	6		
0	0	0		A	2/9/2564		0.1					
2	0	0	28/1/61F/U ต่อราขวิ	?	20/12/2561			45	3	6		

ita (Analyze)

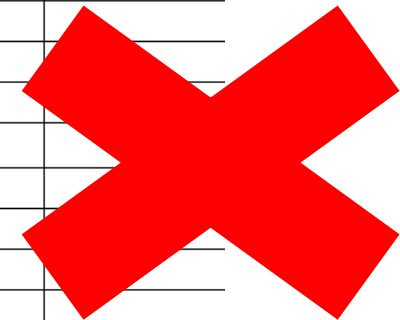


ita (Analyze) (+)

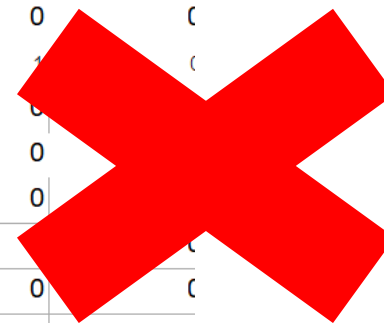
Average: 216384.3768 Count: 301 Sum: 14930522



Op Date	ID	ยาริัจัย	อายุ (yrs)	เพศ (M=1, F=2)	น้ำหนัก(kg)	ส่วนสูง(cm)	BMI(kg/m2)
12/7/62	6	B	64	2	54	143	26.4
26/7/62	8	B	34	2	47.6	155	19.8
30/7/62	14	A	42	1	80	163.4	30
13/8/62	16	B	67	2	52	148	23.7
27/8/62	18	B	55	2	44.1	144	21.3
10/9/62	20	B	59	1	84	160	32.8
17/9/62	21	A	46	2	44	149	19.8
17/9/62	5	A	46	1	59.4	184	17.5
4/10/62	24	B	58	2	52.9	150	23.5
8/10/62	34	A	31	2	51.1	163	19.2
11/10/62	1	B	44	1	66	174	21.8
15/10/62	36	B	72	2	53.6	148	24.5
18/10/62	10	A	63	2	80.5	156.9	21.7
25/10/62	30	A	32	2	54.5	156	22.4
12/11/62	35	A	42	2	56	153	23.9
12/11/62	37	B	43	1	56.6	157.1	23
26/11/62	38	B	42	2	54	150	24
20/12/62	42	B	37	1	48.2	164	
27/12/62	41	B	71	2	60	155	
3/1/63	2	B	70	2	51	147	
17/1/63	50	A	51	2	72.8	148	
11/2/63	44	A	44	1	59.3	173	
11/2/63	47	A	44	1	52.3	158	
29/5/63	19	A	63	2	54.7	155	
4/8/63	53	A	45	1	99	160	
9/6/63	51	B	36	2	47.43	156	
16/6/63	17	A	64	2	51	155	
30/6/63	56	A	42	1	83.1	173	
14/7/63	57	B	67	2	62.75	159	



H	I	J	K	L	M	N	O	P	Q	R
Age	GENDER	Height (cm)	BW (kg)	BMI	HT	DM	CVS	CKD	Cirrhosis	Fatty liver
57	0	163	70	26.35	0	1	0	0	1	0
64	1	152	52	22.51	1	0	0	0	0	0
63				20.31	0	0	0	0	0	0
65	0	167	51	18.29	0	0	0	0	0	0
76	0	160	56	21.88	1	1	0	0	0	0
56	0	174	61	20.15	0	0	0	0	0	0
60	0	172.5	72.9	24.50	1	1	0	0	0	0
70	0	167	61	21.87	0	0	0	0	0	0
77	1	143	60	29.34	1	1	0	0	0	0
				#DIV/0!						
50	1	155	49	20.40	0	0	0	0	0	0
71	0	163	54	20.32	0	0	0	0	0	0
51	1	161	59	22.76	0	0	1	0	0	0
78	0	170	59	20.42	1	0	0	1	0	0
59	0	167	69	24.74	0	0	0	0	0	0
66	0	162	67	25.53	0	0	0	0	0	0
72	1	150	36	16.00	0	0	0	0	0	0
69	1	155	60	24.97	0	1	0	0	0	0
59	0	163	67	25.22	0	0	0	0	0	0
59	0	170	79	27.34	1	0	0	0	0	0
51	0	168	60	21.26	0	0	0	0	0	0
58	0	165	66	24.24	1	0	0	0	0	0
66	0	165	67	24.61	0	0	0	0	0	1



3. ข้อมูลในรูปแบบวันที่: dd/mm/yyyy

previousop_revised	Age at Diag(mo)	Day at LT	PELD score	MELD	Preop Albumin
2	2	21/10/2009	7.5		33.8
1	2	7/7/2010	9.4		32.2
2	6	8/9/2010	21.3		19.3
2	3	3/11/2010	17		28
1	2	29/12/2010	25.9		19.3
1	2	23/2/2011	14.9		28.5
1	4	30/3/2011	18.2		25
1	4	21/7/2011	24.5		19.8
1	4	7/12/2011	14		??
2	1	11/1/2012	27.6		20.8
1	4	02/22/12	16.4		32.7
2	1	21/3/2012	14.4		15
1	4	30/4/2012	16.6		26
2	8	8/8/2012	0		37.9
2	3	22/8/2012	22		25.9
2	5	26/9/2012	18		23.8
2	5	28/11/2012	19		25
1	2	2/1/2013	12		29
1	1.5	13/2/2013	28		21.5
2	36	17/4/2013	2.9		35.9



T	K	I	M	N	O	P	Q	R	S
acT stage	cN stage (	Chemo reg	Last RT date	Op Date	Wait time (da	preCCEA	postCCEA	postopCCEA	Clinical Respons
4	0	2	25/9/17	28/11/17	64	16.9	3.5	0.8	1
3	0	2	01/12/17	11/04/17	132	32.7	5.3	3.7	1
3	0	1	29/1/17	29/3/17	60	17	11	9.4	1
3	2	1	22/1/17	13/2/18	183	1.8	1.1	0.8	1
3	1	1	28/12/17	14/3/18	77			1.9	1
3	1	1	09/01/18	11/04/18	93	19.3	4.9	5.3	1
4	1	1	01/03/18	16/3/18	73	1.7	0.9	1.14	1
3	0	2	31/1/18	04/09/18	64		2.2	1.9	1
3	0	2	19/10/61	23/1/62	96	8.6	4.3	2.18	1
2	0	2	02/01/62	24/4/62	113	18.5	3.5	2.28	1
3	0	1	06/08/61	27/9/61	52	4.7	1.7	2.26	1
4	1	1	25/6/61	07/09/61	74	9.1	7.2	1.09	1
3	0	4	13/3/61	17/8/61	157		5.8	2.57	1
3	0	1	24/10/61	22/1/62	90	18.9	12.6	1.3	1
3	1	2	10/11/60	16/1/62	67	9.1	3.9	2.24	1
3	1	1	06/11/60	24/1/61	79	10.94	10	3.9	1
3	1	2	26/12/60	19/4/61	53		3.1	3.6	1
3	1	1	31/5/61	09/08/61	70	7.3	5.5	6.9	1
3	1	1	09/03/61	06/06/61	89		63.9	275	1
3	1	2	26/3/61	01/06/61	67	21	2.1	1.15	1
3	0	2	02/04/61	03/07/61	92	2	1.61		2
3	1	1	13/4/61	18/8/61	127	42.5	42	3.06	1
3	0	1	10/09/61	04/11/61	55	1.3	1.3	1.06	1
3	2	2	17/1/62	04/06/62	139	4	1.75	206	1
3	2	2	18/9/61	22/11/61	65	1.1		0.75	2
3	0	2	04/10/61	23/11/61	50	27.7		7.37	1
3	1	2	25/9/61	22/11/61	58			1.47	1
3	1	2	11/10/61	10/01/62	91	13.6	4.09	5.8	2
3	2	1	12/10/61	06/01/62	87	6.8	6	6.46	1
4	2	2	31/10/61	16/1/62	77	332	87	2.73	1
3	1	2	27/11/61	25/2/62	90	11.5	2.7	2.7	1
3	2	1	13/12/61	04/03/62	82	5.2	5.9	3.13	1
3	2	2	15/1/61	20/12/61	35	5.1	6.5	8.22	1
3	1	2	18/1/62	23/4/62	96	2.1	1.7	41.88	1



4. ข้อมูลในรูปแบบสัญลักษณ์

F	G	N	O	P
U/D	SMOKING	SEXUAL FUNCTION	REASON FOR SEX	WAS BEFORE
10	2	2	3	1
	1	1	1	3
	1	2	1+3	1
	2	2	3	1
11	2	1	1+2	2
	1	1	1+2+3	4
3	2	1	4	1
2	3	1	1+2	3
2	3	1	5	6
1+2	2	1	1	3
	2	1	3	2
	1	1	3	4
	2	1	1+2+3	4
1+2+4	2	1	1+2	5
11	2	1	3	0
	2	2	4	1
1+2+3	2	1	4	8
10+11	2	2	1+4	8
11	2	2	3	1
10	1	2	1+2	6
1+2+3	2	1	1+2	4
	1	1	3	5
	2	1	3	1
	2	1	3	8

Intraoperative fluid I/O

5755/4130

3855/2872

1970/1000,1590/1730

3046/1905

1590/765

1399/660

4200/1755

3360/2155

3110/1311

1807/468

3090/1525

13700/10019

3304/2760

3557/2319

3840/2815

5252/2415



AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	EH
R resection margin	Margin	Margin (mm)	pFatty change	Pre TB	Pre INR	Use ICG	ICG R15	Pre Sx CEA	Post Sx Alb	Post Sx TE	Post Sx INR	Post Sx CEA	NAC 5FU	NAC
0	0	-		0	1.3	1.02	-	162.4	-	1	-	123.4	0	
-	-	-		0	-	1.08	2.8	23.4	39.6	0.5	-	3	0	
-	-	-	-	0.3	0.94		-	229.2	31.6	0.7	-	17.47	0	
-	-	-	-	-	-		-	-	-	-	-	-		
1	1	-		0	0.2	0.96	7.8	25	-	-	-	-	1	
1	1	-		0	0.9	1.04	-	4.1	30.8	0.5	1.11	1		
0	0	2	-	0.7	1.04	1	12.2	1828	28.9	3.4	1.5	32.2	1	
0	0	12		0	1	1.05	14.6	2.9	25.6	1	1.09	1.6	1	
-	-	-	-		0.93		-	27.2	35.3	0.5	0.87	14.2	1	
-	-	-	-	-	-		-	-	-	-	-	-	0	
1	1	-		0.5	0.93	1	7.6	18.1	24.4	1.1	1.01	4.5	1	
-	-	-	-	-	0.89		-	12.1	-	1.4	-	107	1	
0	0	-		0	0.6	0.9	-	1.5	34.6	0.2	1.1	1.3		
0	0	-		0.4	-		-	7.45	-	-	1.12	2.8	1	
-	-	-	-	1.2	0.9	1	16.4	24.7	-	2.3	1.51	17.5	1	
-	-	-	-	0	-		-	-	-	-	-	3.11	0	
0	0	-		0	-	1.1	19.4	21.5	20.6	1.7	-	1.2	1	
0	0	-		0	1.18	1	10.9	6.3	32.4	0.3	1.13	5.8		
1	1	-		0	-	-	-	175.6	-	-	-	-		
0	0	20		1	0.3	1.02	-	28.87	-	1.7	1.35	87	1	
1	1	-		1	0.7	1.07	1	12.9	11.5	26.5	1.5	1.24	1.8	0
0	0	-		1	0.5	1.01	1	10.9	13.5	-	0.7	5.2	1	
1	1	-		0	0.6	1.08	-	3.7	22.6	1.4	1.17	2.9	1	
0	0	-		1	-	0.97	-	21.79	-	1.6	1.01	6.46		
0	0	6	-	0.4	0.97		28.3	59.5	20	0.3	-	3.5	0	
0	0	1		0	0.8	0.93	-	25.71	30	1.7	1.23	1.42	0	
-	-	-	-	-	-		-	-	-	-	-	-	0	



ขั้นที่ 3: การให้รหัสข้อมูล

1. ข้อมูลในรูปแบบลำดับ

Age	Total LOS (days) (ดูในใบปหน้า admit)	Time to OR(hrs) (ระยะเวลาจากที่ order set OR จนถึงเวลาที่ได้ทำผ่าตัด) (ดูจาก order จากอี้อา หรือจาก วอร์ดเอา เวลาที่ เวลา	Underlying/co morbid	Se	ep	sh	pr	(ก	5=no	6=heart disease	7=renal disease	8=SLE	9=resp	atory disease	other malignancy	disease, cirrhosis	neurologic disease
2	93	8	6	2,4,asthma				2									
1	84	56		2,4,copd				1		1							
1	61	6 OR 9.15			2			2		2							

	K	I	M	N
1	CT/CTA result	0=no CTA 1=diverticulosis 2=cancer 3=colitis 4=normal CTA 5=Aortic aneurysm 6= anorectal disease 7=aorto enteric fistula 8=avm	on	Color moi result
2	0	0	0	
3	1	0	0	1
4	0	0	0	
5	0	0	0	
6	0	0	0	
7	0	0	0	
8	0	0	0	
9	0	0	0	
10	0	0	0	
11	3	2	2	
12	0	0	0	
13	0	0	0	
14	0	0	0	
15	0	0	0	
16	1	2	0	2
17	0	0	0	0
18	0	0	0	0

AG	AH	AI	AJ
T downstaging	ypT stage	N downstaging	Pos LN
0	3	0	1
0	3	0	1
1	2	0	0
1	0	0	0
0	3	0	1
0	3	1	0
0	3	1	0
0	3	1	0
0	3	0	2
1	2	0	1
0	3	0	0
1	2	0	0
0	2	1	0
1	2	0	2
1	0	1	0
1	3	0	0
1	0	0	2
1	0	1	0
0	3	0	4
1	0	1	0
0	3	0	0
1	0	0	0



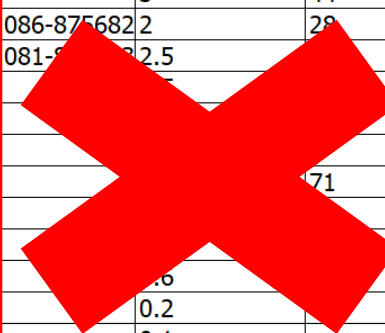
2. ข้อมูลในรูปแบบวันที่: dd/mm/yyyy

BI	BJ	BK	BL	BM
Permanent	Reoperation	Follow up time		
PaceMaker		Year	Month	
		1	11	
		2	11	
		2	2	
		2	3	
		2	5	
		2	5	
		2		
			9	
10/2/2014		3		
		3		
		3	4	
		3	4	
		3	4	
		3	8	
		3	10	
		4	2	
		4	2	
		4	3	
		4	3	
		4	5	
		4	6	
15.08/2012		4	6	

LJ	LK	LL	LM	LN	LO	LP	LQ
Date Dx	date performed	date Operation	date diag for survival		last F/U	date death	f/u time for sun
30/9/2556	19/9/2556	22/10/2556	30/9/2556			18/11/2558	18/11/2558
	27/9/2556	1/2/2555	27/9/2556			12/1/2558	12/1/2558
	12/9/2556	6/11/2556	12/9/2556			6/6/2558	6/6/2558
	10/10/2556	12/11/2556	10/10/2556		16/1/2560		16/1/2560
	9/10/2556	29/10/2556	9/10/2556		29/3/2559		29/3/2559
		9/10/2556	9/10/2556		26/1/2560		26/1/2560
ต.ค.-56		6/10/2554	1/10/2556			29/7/2557	29/7/2557
	21/11/2556	12/2/2557	21/11/2556			7/6/2557	7/6/2557
4/12/2556		1/10/2556	4/12/2556				
17/12/2556		25/3/2557	17/12/2556		29/11/2559		29/11/2559
	18/12/2556	25/12/2556	18/12/2556		4/1/2560		4/1/2560
		9/12/2556	9/12/2556		9/1/2560		9/1/2560
19/1/2557	19/1/2557	18/2/2557	19/1/2557		1/12/2559		1/12/2559
11/2/2557		27/3/2557	11/2/2557			11/11/2557	11/11/2557
19/2/2557	19/2/2557	26/2/2557	19/2/2557			24/10/2557	24/10/2557
		23/4/2557	23/4/2557		27/1		27/10/2559
	19/4/2557	17/6/2557	19/4/2557			20/1/2558	20/1/2558
1/4/2556		20/4/2556	1/4/2556			27/11/2557	27/11/2557
28/4/2557		28/4/2557	28/4/2557				3/8/2558
	พ.ค.-57	27/5/2557	1/5/2557			20/6/2558	20/6/2558
	1/5/2557	4/6/2557	1/5/2557		6/2557		26/6/2557
	12/5/2557	25/6/2557	12/5/2557		1/7/2557		31/7/2557
	1/5/2558	18/6/2558	1/5/2558		18/12/2559		18/12/2559
		27/4/2558	27/4/2558		29/12/2559		29/12/2559
		23/7/2552	23/7/2552			11/4/2559	11/4/2559



AM	AN	AO	AP	AR	AS	AT	AU	AV	AW	AX	
->Recurrence 0=no, 1=liver, 2=lung, 3=Local recurrence			Time recurrence	Alive/death	Last F/U	โทรศัพท์	CRM	timing adju	Regimen(1	Cycle	Turn
	M(0=M0,1=M1post	0=No preop CCRT	indeterminate ,1 = ide	erminate preopCCRT	--> post CCRT no change,2=ide	erminate preopCCRT	--> post CCRT M1)				
0	0	0		A	7 มค 64		0.3	41	1	6	
2	0	0	พค 60 (lung)	A (to last F/U)	16 สค 62	081-086205	0.7				
0	0	0		A	5 มค 64		0.1				
0	0	0		A	มค 64		3.2	29	2	6	
0	0	0		A	24 มค 64	087-810775	0.8	58	2	6	
0	0	0		A (24 มค 64)	16 มีย 59 นัดจะปิด ileostomy แด	089-9870940	081-9303278	ลูก คุณเสวริชญ์ 086-5492946	จังหวัดอุด		
0	0	0		A	17 ธค 63	089-693914	2	13	3	6	
0	0	0		A	24 มค 64	081-661196	1	30	3	6	
4	0	0	สค 59 (liver,lung)	D (liver,lung) 12 มีค	12 มีค 61	086-753720	1.5	58	3	6	
0	0	0		นัด 16 มีค 64	10 กย 63	089-285791	0.5	139	1	6	
4	0	0	เมย 60 (LN,liver,lung,	D	26 สค 61		1.3				
0	0	0		D (Bleeding neurofib	13 พค 59	084-7713367	02-5267414				
0	0	0		A	19 ธค 63	089-613543	2	42	3	6	
0	0	0		A	8 มค 64		3	44	2	6	
1	0	0	กย 59 (liver)	D (liver) 1 สค 61	25 กพ 61	086-875682	2	28	2	6	
0	0	0		A	26 ธค 63	081-8	2.5		2	6	
0	0	0		A	12/3/2020				2	6	
0	0	0		A	2/11/2021				1	6	
0	0	0		A	23/07/2020						
0	0	0		A	18/3/2021			71	3	6	
0	0	0		A	29/4/2021				3	6	
0	0	0		A	17/5/2021				3	6	
0	0	0		A	26/2/2019		0.6				
5	0	0	30/8/2018 pleural,per	A(to last follow up)	10/10/2561		0.2				
0	0	0		A	26110/2562		0.1				
0	0	0		A	27/8/2563		1.1				
0	0	0		A	18/3/2564		1.8	37	3	6	
0	0	0		A	23/12/2562						
0	0	0		A	26/11/2563		1.5	31	3	6	
0	0	0		A	22/2/2563						
4	0	0	29/11/61 lung liver,No	?	11/1/2562		0.3	45	3	6	
0	0	0		A	2/9/2564		0.1				
2	0	0	28/1/61F/U ต่อราขวิสิ	?	20/12/2561			45	3	6	

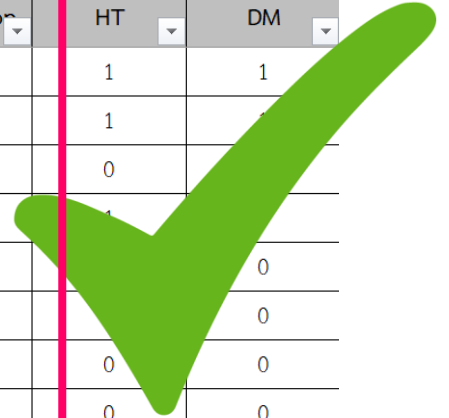


3. ข้อมูลเชิงปริมาณ: Interval, Discrete, Continuous

H	I	J	K	L	M
ing	BMI	menopause osteoporesis		activity on same pc leg pain (Rad.)	
2	4	3/1/1900			1
2	0	1	3		1
	4	3			1
1	4	3			1
2	4	3			1
2	0	3			1
2	4	1			1
2	4	1			1
2	4				1
2	4				1
2	4				1
2	0				1
1	0				1
2	0				1
2	0				1
1	0	3			1
2	0	3			1
2	0	1			1
2	4	1			1
2	0	3			1
2	0	3			1
2	0	2			1
2	0	3			1
2	4	3			1
2	4	3			1
2	4	1			1
2	4	1			1
2	4	3			1
2	0	3			1
2	0	3			1



H	I	J	K	L	M	N
Age	Weight	Height	BMI	ED duration	HT	DM
66.9	81.4	172.0	27.5	36	1	1
69.7	80.4	163.0	30.2	180	1	
62.4	63.4	172.0	21.4	60	0	
65.4	62.7	165.0	23.0	36		
74.0	62.7	166.0	22.8	11		0
61.8	90.2	175.0	29.5	24		0
67.0	60.0	158.0	24.0	12	0	0
36.9	80.0	173.0	26.7	24	0	0
57.0	64.0	161.0	24.7		0	0
55.5	70.0	172.0	23.7	24	0	0
74.3	85.2	170.0	29.5	36	1	0
56.4	59.0	161.0	22.8	12	1	0
50.5	79.2	173.0	26.4	12	0	0
65.0	74.1	167.0	26.6		0	1
53.4	74.1	175.5	24.0	3	0	0
44.8	80.0	166.6	28.8	3	0	0
59.1	54.6	167.0	19.6	24	0	0
72.0	58.0	164.0	21.6	6	1	0
80.0	57.0	160.0	22.3		0	0
85.0	62.0	159.0	24.5	60	0	0
65.2	73.1	164.0	27.2	60	1	0
56.8	54.0	160.0	21.1		0	0



4. ข้อมูลเชิงคุณภาพ: Nominal, Ordinal

CVA	Heart D	anti platelet	anti coagulant	Previous ERCP	WBC	total bilirubin	direct bilirubin	AST	ALT	ALP	ALB	CBD size	CBD Abnormal 1	CBD Abnormal 2
ไม่มี = 0 มี = 1	ไม่มี = 0 มี = 1	ไม่มี = 0 มี = 1	ไม่มี = 0 มี = 1	ไม่เคย = 0 เคย = 1	WBC Admit date	total bilirubin	DB admit date	AST	ALT	ALP	ALB	Last CBD size from imaging cm	No = 0 Bile sludge = 1 Stone = 2	No = 0 Sludge/Stone = 1
Nominal	Nominal	Nominal	Nominal	Nominal	Scale	Scale	Scale	Scale	Scale	Scale	Scale	Scale	Nominal	Nominal
0	0	0	0	0	5700	0.3	0.1	23	29	51	40.6	0.9	0	0
0	0	0	0	1	14100	3.1	2.3	259	130	161	33	1.2	1	1
0	1	1	0	1	7540	0.7	0.4	23	12	126	33.4	0.9	1	1
0	0	0	0	0	5200	1.9	0.7	27	19	57	41.4	0.5	0	0
0	0	0	0	0	5700	1.2	0.5	96	2	139	35.9	1.5	0	0
0	1	1	0	1	7600	1.1	0.5	33	2	56	35.2	0.5	1	1
0	0	0	0	0	4700	3.5	1.3	2	2	64	38	0.4	2	1
0	1	1	0	0	3100	0.8	0.3	25	60	41.3	0.6	0.6	2	1
0	0	0	0	0	5100	3	2.1	124	281	37.2	0.6	0.6	0	0
0	0	0	0	1	5300	0.6	0.3	25	11	41	36.7	1.2	0	0
0	0	0	0	0	12200	1.8	0.7	70	780	369	39.7	0.6	0	0
0	1	1	0	1	8500	1.4	0.3	30	17	112	36.4	0.5	0	0
0	0	0	0	0	4600	0.9	0.3	30	21	75	38.2	1.2	2	1
0	0	0	0	0	6800	0.5	0.3	81	88	181	41.3	0.9	0	0
0	0	0	0	1	5120	0.6	0.3	25	27	109	43.5	0.4	1	1
0	0	0	0	0	9880	0.6	0.2	23	183	102	41.3	0.8	1	1
0	0	0	0	0	5400	0.7	0.3	53	65	103	37.6	0.4	0	0
1	0	1	0	0	5900	0.8	0.3	33	20	137	37.1	1.5	2	1
0	0	0	0	0	9700	1.7	1.2	418	212	126	33.9	0.6	0	0
0	0	0	0	0	8900	1.3	0.8	423	278	526	42.5	1.6	2	1
0	0	0	0	0	6200	2.5	1.7	182	62	261	33.2	1	2	1
0	0	0	0	0	19400	3.1	1.7	272	281	179	39.4	0.7	1	1



K	L	M	N
ผู้ป่วย(Thai=1 , Other=2)ดHPH(1°=1, 2°=2, 3°=3) รวม 2-		Recurrence	U/D
1	1		HT, Obesity, OA knee,Vit D def
1	3 (s/p Rt lower PTX with AI at Rt SCM)	1	ESRD, HT, AF
1	2		ESRD, HT, DM, TVD s/p CABG, CA breast
1	3 (s/p subtotal PTX)	1	ESRD, HT, AR, PTC s/p TTD
1	3		ESRD, HT
1	3		ESRD, HT, Gout
1	l PTX, s/p Rt thyroid lobectomy include	1	ESRD, DLP, HBV
1	2		ESRD, HT
1	1		Ht, Gout, BPH
1	2		ESRD, HT
1	2		ESRD
1	2 (s/p subtotal PTX)		ESRD, HT, DM, Gout
1	2 (s/p subtotal PTX)		ESRD, HT
1	3		ESRD, DM
1	1		DM, DLP, MNG, osteoporosis
1	2		ESRD, hx of LRKT, HT
1	3		ESRD, HT, Thalassemia
1	2		ESRD, HT
1	3		ESRD s/p KT with graft rejection. HT
1	3		ESRD, TVD s/p PCI
1	2 (s/p Rt upper + Lt upper PTX)	1	ESRD s/p KT with graft rejection, DM
1	1		HT , DLP
1	1		Lt renal stone
1	3		ESRD , obesity
1	3	1	ESRD
1	3		ESRD
1	1		DVD s/p CABG , CKD stage 3b , HT, gout , osteoporosis , Rt r
1	3		ESRD , HT , DLP , obesity

Comorbidity	DM	HT	DLP	heart	KD/ESF	stoke	ASA class
DM, HT, Alzeimer	1	1	0	0	0	0	3
CKD, DM, HT, CHF	1	1	0	1	1	0	4
CKD, DM, HT, DLP, TVD S/p CABG	1	1	1	1	1	0	4
stroke, DM, HT,AF, DVT	1	1	0	0	0	1	4
CAD, DM, HT, PE	1	1	0	0	0	0	3
HT, DM, DLP, AF	1	1	0	1	0	0	4
DM, HT, DLP	1	1	1	0	0	0	3
Ht, DLP, CAD	0	1	1	1	0	0	3
COPD, stroke	0	0	0	0	0	1	4
stroke, DM, DLP	1	0	1	0	0	1	
CA pancreas	0	0	0	0	0	0	4
DM, HT	1	1	0	0	0	0	3
HT, CAD	0	1	0	1	0	0	3
ESRD, DM, HT, DLP, stroke	1	1	0	0	0	1	4
CA kidney, HT, stroke	0	1	0	0	0	1	4
stroke, HT, DLP	0	1	1	0	0	1	4
CA lung	0	0	0	0	0	0	3
HT, DLP, AF, TVD	0	1	1	1	0	0	4
HCC, CKD	0	0	0	0	1	0	4
CKD, DM, HT	1	1	0	0	1	0	3

Thank you



หากมีปัญหา/ข้อสงสัย ในการดำเนินการวิจัย
สามารถติดต่อได้ที่

หน่วยวิจัย ภาควิชาศัลยศาสตร์

อาคารหลัก ชั้น 3

เบอร์โทรศัพท์ 02-201-1315

