

Glossary

Adjuvant chemotherapy

A postoperative treatment for eradicating microscopic non-detectable cancer cells when there is little evidence of cancer presence but there is a risk of residual microscopic cancer cells that could lead to recurrence.

Axillary dissection

A surgical procedure to remove the lymph nodes in the armpit (axillary nodes) hidden under the pectoral major and minor muscles. It is normally performed when there is evidence of cancerous cells in lymph nodes by palpation or imaging, or upon sentinel lymph node biopsy.

Bilateral breast cancer

Cancer occurring in both breasts at the same time or within six months of each other (synchronous), or at different times at least six months apart (metachronous).

Biological subtype

Breast cancer is not considered to be a single disease. It can be further classified into several biological subtypes. These subtypes are determined by immunohistochemical staining of several biological markers (estrogen receptor (ER), progesterone receptor (PR), human epidermal growth factor receptor 2 (HER2), and Ki-67 index). By assessing these biological markers in the primary tumour together rather than individually, further prognostic and predictive information can be obtained. The biological subtypes of breast cancers include luminal A (ER+ and/or PR+, HER2-, and low Ki-67 index), luminal B (HER2-negative) (ER+ and/or PR+, HER2-, and high Ki-67 index), luminal B (HER2-positive) (ER+ and/or PR+, HER2+, and any Ki-67 index), HER2-positive (ER-, PR-, HER2+, and any Ki-67 index) and triple negative (ER-, PR-, HER2-, and any Ki-67 index).³⁶

Breast-conserving surgery

The surgical removal of a cancerous breast lump with a rim of non-cancerous tissue around the lump, without removing the entire breast. The surgery can be lumpectomy, wide local excision, partial mastectomy or segmentectomy.

Breast reconstruction surgery

A surgical treatment that rebuilds the breast contour after mastectomy. A breast implant of the woman's own tissue provides the contour. If desired, the nipple and areola may also be preserved or recreated. Reconstruction is usually done at the time of mastectomy, but it can be done any time later.

Breast surgery

A local therapy to remove the breast tumour.

Cancer Staging

Refer to Appendix II.

Cancer specific death

A death with the underlying cause indicated as cancer. People with cancer who die of other causes are not counted in the death statistics of this report.

Chemotherapy

A treatment that uses one or more cytotoxic drugs to destroy cancer cells. Chemotherapy is often used in addition to surgery or radiation to treat cancer when metastasis (spread) is proven or suspected, when the cancer has come back (recurred), or when there is a strong likelihood that the cancer could recur.

Distant recurrence

Cancer that occurs in organs or tissues distant from the original site or regional lymph nodes, such as lungs, liver, bone marrow, or brain.

Endocrine therapy

A treatment with hormonal drugs that interfere with hormone production or hormone action, or surgical removal of hormone-producing glands to kill cancer cells or cause programmed cell death (apoptosis).

Estrogen receptor positive

The status of cancer cells with receptor proteins that bind the hormone estrogen. Cancer cells that are estrogen receptor positive need estrogen to grow, and may stop growing or die when treated with substances that block the binding with estrogen.

Human epidermal growth factor receptor 2 (HER2) positive

In HER2 positive breast cancer, the cancer cells have an abnormally large number of HER2 genes per cell. When this happens, excessive HER2 protein appears on the surface of these cancer cells. This is called HER2 protein over-expression. Excessive HER2 protein is considered to cause cancer cells to grow and divide more quickly. This is why HER2 positive breast cancer is considered aggressive.

In situ breast cancer

This term refers to early stage breast cancer, when it is confined to the layer of cells where it began. In breast cancer, in situ means that the cancer cells remain confined to ducts (ductal carcinoma in situ). They have not grown into deeper tissues in the breast or spread to other organs in the body, and are sometimes referred to as pre-invasive breast cancers.

Invasive breast cancer

Cancer that has already grown beyond the outer lining of myoepithelial cells or basement membrane where it started, for example breast ducts or lobules (as opposed to carcinoma in situ). Most breast cancers are invasive carcinomas.

Ki-67 proliferation index

Ki-67 protein is a cellular marker for proliferation. It is present at low levels in quiescent cells but increases in proliferating cells. Ki-67 proliferation index, which refers to the percent of tumour cells staining positive as measured by immunohistochemical (IHC) staining, is a specific nuclear marker for cell proliferation. High levels of Ki-67 indicate an aggressive tumour. At present, an index higher than 14% is regarded as high Ki-67 proliferation index.

Latissimus dorsi flap (LD flap)

A method of breast reconstruction that rotates the fan-shaped flat muscle of the back to the chest area.

Locoregional recurrence

Locoregional recurrence occurs when cancer returns after treatment, and occurs at the same site as the original cancer or in the lymph nodes near the site of origin.

Mastectomy

The surgical removal of the entire breast. It is usually used for treating serious breast disease, such as breast cancer.

Metastasis

It is a term used for describing a disease that has recurred at another location in the body.

Mortality

The incidence of death in a population.



Multicentricity

Breast cancer occurring in multiple quadrants of a breast.

Multifocality

Multifocality in breast cancer is defined as the presence of two or more tumour foci (five mm or more apart) within a single quadrant of the breast.

Necrosis

A term used for describing the death of cellular tissue. Necrosis within a cancerous tumour may indicate that the tumour is growing so rapidly that blood vessels are not able to multiply fast enough to nourish some of the cancer cells. Necrosis usually indicates that the tumour is very aggressive and can spread quickly.

Neoadjuvant chemotherapy

In neoadjuvant chemotherapy (preoperative treatment), initial chemotherapy is administered to shrink the primary tumour, thereby rendering local therapy (surgery or radiotherapy) less destructive or more effective.

Progesterone receptor positive

The hormone progesterone will bind to protein in cells. Cancer cells that are progesterone receptor positive need progesterone to grow and will usually stop growing when endocrine therapy drugs block progesterone from binding.

Proliferative lesions with atypia and precancerous breast lesion

Proliferative lesions with atypia include atypical ductal hyperplasia and atypical lobular hyperplasia. In these conditions, there is an overgrowth of cells in the ducts or lobules of the breast tissue, with some of the cells no longer appearing normal. These conditions increase the risk of breast cancer. Lobular carcinoma in situ (LCIS) is considered a precancerous lesion and a risk factor for developing invasive breast cancer in the future, but is not classified as breast cancer.

Radiotherapy

The use of radiation to destroy cancer cells. This type of treatment may be used to reduce the size of a cancer before surgery, or to destroy any remaining cancer cells after surgery.

Risk factors

Risk factors are associated with an increased probability of a specified outcome, for example, the occurrence of a disease. Risk factors are not necessarily the cause of a disease.

Sentinel node biopsy

A surgical procedure to remove the first few nodes receiving lymphatic drainage from the breast tumour in clinically node-negative cancers. This is to determine if breast cancer has spread to the armpit (axillary) lymph node basin.

Survival time

The time from initial diagnosis until the occurrence of death.

Targeted therapy

A type of medication that blocks the growth of cancer cells by interfering with specific targeted molecules needed for carcinogenesis and tumour growth.

Time to recurrence

The time from initial diagnosis until the occurrence of recurrence.

Transverse rectus abdominus muscle flap (TRAM flap)

A method of breast reconstruction in which tissues from the lower abdominal wall receiving its blood supply from the rectus abdominus muscle are used. The tissues from this area are moved up to the chest to create a breast mound and an implant is usually not required. Moving muscles and tissues from the lower abdomen to the chest results in flattening of the lower abdomen.

Triple negative breast cancer

This term is used to describe breast cancers (usually invasive ductal carcinomas) in which the cells lack estrogen receptors and progesterone receptors, and do not have an excess of HER2 protein on their surfaces.

AJCC Cancer Staging System (8th edition) 美國癌症聯合委員會 (AJCC) 第8版的乳癌分期

The American Joint Committee on Cancer (AJCC) Breast Cancer Staging System (8th edition 2018)³⁵ is used for determining cancer staging in the patient cohort. There are two stage groups according to this system: anatomic stage and prognostic stage groups. The anatomic stage group assigns a cancer stage based on the anatomic information on the tumour (T), regional nodes (N), and distant metastases (M) categories. The prognostic stage group, in conjunction with the aforementioned anatomic information (i.e. TNM categories), also takes into account other factors, including the tumour grade, biomarkers [human epidermal growth factor receptor 2 (HER2), estrogen receptor (ER), progesterone receptor (PR)] expression and genomic assays in assigning a stage. Although prognostic stage group was recommended for patient care and was used for reporting of all cancer patients in the United States starting from 2018, it was not used in this report. The reason for this was that patients in the cohort were mostly diagnosed in 2006 to 2016 and the treatment offered to patients in the cohort was based on the prevailing anatomic stage group. It is noted that there is only minimal difference in the TNM anatomic staging between the 7th and 8th edition.

本報告使用美國癌症聯合委員會 (AJCC) 有關乳癌的《癌症期數》(2018年第八版)³⁵ 來斷定受訪患者的癌症期數。這個指引共有兩類癌症分期方法：解剖期數及預後期數。解剖期數使用解剖腫瘤的資料，包括腫瘤大小 (T)、區域性淋巴結狀況 (N) 及遠端擴散 (M) 的資料來斷定癌症期數。預後期數除了使用解剖腫瘤的資料 (即TNM分組) 外，還會考慮其他因素，包括腫瘤的級別，生物學特徵 (第二型人類上皮生長素受體，雌激素受體，黃體酮受體) 及基因測試來斷定癌症期數。儘管由2018年起，該指引推薦使用預後期數用於患者護理及報告美國所有癌症患者，本報告並沒有採用。原因在於本報告的受訪群組大多在2006-2016年間確診，而醫護人員是根據當時常使用的解剖期數來決定患者的治療方案。請注意TNM分組在第七及第八版裡只有很少的改變。

Anatomic stage group 解剖學分期

Stage 階段	Tumour 腫瘤	Node 淋巴結	Metastasis 腫瘤轉移
0	Tis	N0	M0
IA	T1*	N0	M0
IB	T0	N1mi	M0
	T1*	N1mi	M0
IIA	T0	N1**	M0
	T1*	N1**	M0
	T2	N0	M0
IIB	T2	N1	M0
	T3	N0	M0
IIIA	T0	N2	M0
	T1*	N2	M0
	T2	N2	M0
	T3	N1	M0
	T3	N2	M0
IIIB	T4	N0	M0
	T4	N1	M0
	T4	N2	M0
IIIC	Any 任何 T	N3	M0
IV	Any 任何 T	Any 任何 N	M1

T0: no tumour; Tis: carcinoma in situ; T1: tumour size \leq 20mm;

T2: 20mm < tumour size \leq 50mm; T3: tumour size > 50mm;

T4: any size with direct extension to the chest wall and/or to the skin (ulceration or skin nodules)

N0: no positive nodes; N1mi: >0.2-2.0 mm or more than 200 cells; N1: 1-3 positive axillary nodes; N2: 4-9 positive axillary nodes or positive internal mammary nodes; N3: \geq 10 positive axillary nodes, or positive axillary and internal mammary nodes, or positive supraclavicular or infraclavicular nodes

M0: no metastasis; M1: evidence of metastasis

*T1 includes T1mi

**T0 and T1 tumour with nodal micrometastases only are excluded from Stage IIA and are classified as Stage IB.

T0: 沒有腫瘤; Tis: 原位癌組織; T1: 腫瘤大小 \leq 20毫米;

T2: 20毫米 < 腫瘤大小 \leq 50毫米; T3: 腫瘤大小 > 50毫米;

T4: 任何大小，直接擴展至胸壁及 / 或皮膚 (潰瘍或皮膚結節)

N0: 沒有陽性結; N1mi: >0.2-2.0毫米或多於200個細胞;

N1: 1至3個陽性腋下淋巴結;

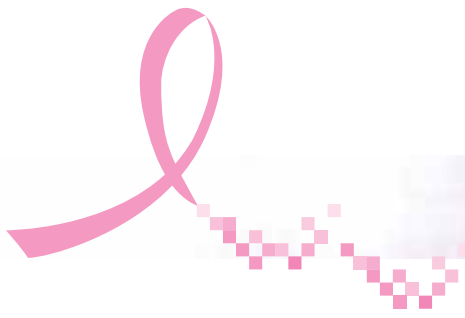
N2: 4至9個陽性腋下淋巴結，或陽性內部乳腺淋巴結;

N3: \geq 10個陽性腋下淋巴結，或陽性腋下及內部乳腺淋巴結，或陽性鎖骨上窩或鎖骨下窩淋巴結

M0: 沒有腫瘤轉移; M1: 有腫瘤轉移證據

*T1涵蓋T1mi

**T0及T1腫瘤若只有微小淋巴結腫瘤轉移，會被排除於IIA期數外而歸納在IB期數內。



Clinical prognostic group 臨床預測分期

When TNM is 腫瘤	And Grade is 細胞等級	And HER2 Status is 第二型人類 上皮生長素受體	And ER Status is 雌激素受體	And PR Status is 黃體酮受體	Then the Clinical Prognostic Stage Group is 分期
Tis N0 M0	Any 任何	Any 任何	Any 任何	Any 任何	0
T1*N0 M0 T0 N1mi M0 T1* N1mi M0	G1	Positive 陽性	Positive 陽性	Positive 陽性	IA
				Negative 陰性	IA
			Negative 陰性	Positive 陽性	IA
				Negative 陰性	IA
				Positive 陽性	IA
				Negative 陰性	IB
	G2	Positive 陽性	Positive 陽性	IA	
			Negative 陰性	IA	
			Positive 陽性	IA	
		Negative 陰性	Positive 陽性	IA	
			Negative 陰性	IA	
			Negative 陰性	IB	
	G3	Positive 陽性	Positive 陽性	IA	
			Negative 陰性	IA	
			Negative 陰性	IA	
		Negative 陰性	Positive 陽性	IA	
			Negative 陰性	IB	
			Negative 陰性	IB	
	T0 N1** M0 T1* N1** M0 T2 N0 M0	G1	Positive 陽性	Positive 陽性	IB
				Negative 陰性	IIA
				Negative 陰性	IIA
			Negative 陰性	Positive 陽性	IB
				Negative 陰性	IIA
				Negative 陰性	IIA
G2		Positive 陽性	Positive 陽性	IB	
			Negative 陰性	IIA	
			Negative 陰性	IIA	
		Negative 陰性	Positive 陽性	IB	
			Negative 陰性	IIA	
			Negative 陰性	IIA	

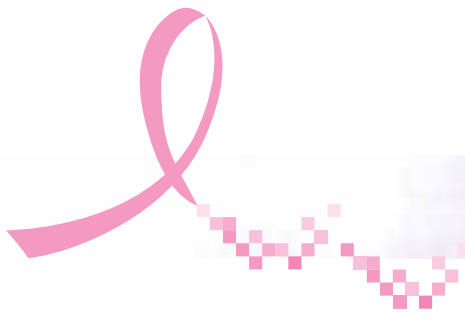
When TNM is 腫瘤	And Grade is 細胞等級	And HER2 Status is 第二型人類 上皮生長素受體	And ER Status is 雌激素受體	And PR Status is 黃體酮受體	Then the Clinical Prognostic Stage Group is 分期	
T0 N1** M0 T1* N1** M0 T2 N0 M0	G3	Positive 陽性	Positive 陽性	Positive 陽性	IB	
			Negative 陰性	Negative 陰性	IIA	
			Negative 陰性	Positive 陽性	IIA	
		Negative 陰性	Positive 陽性	Positive 陽性	IIA	
			Negative 陰性	Negative 陰性	IIB	
			Negative 陰性	Positive 陽性	IIB	
	T2 N1*** M0 T3 N0 M0	G1	Positive 陽性	Positive 陽性	Positive 陽性	IB
				Negative 陰性	Negative 陰性	IIA
			Negative 陰性	Positive 陽性	IIA	
		G2	Positive 陽性	Positive 陽性	Positive 陽性	IIB
				Negative 陰性	Positive 陽性	IIB
			Negative 陰性	Positive 陽性	Positive 陽性	IIB
T0 N2 M0 T1* N2 M0 T2 N2 M0 T3 N1*** M0 T3 N2 M0	G3	Positive 陽性	Positive 陽性	Positive 陽性	IB	
			Negative 陰性	Negative 陰性	IIB	
		Negative 陰性	Positive 陽性	Positive 陽性	IIB	
	G1	Positive 陽性	Positive 陽性	Positive 陽性	IIB	
			Negative 陰性	Positive 陽性	IIB	
		Negative 陰性	Positive 陽性	Positive 陽性	IIB	

Clinical prognostic group 臨床預測分期

When TNM is 腫瘤	And Grade is 細胞等級	And HER2 Status is 第二型人類上皮生長素受體	And ER Status is 雌激素受體	And PR Status is 黃體酮受體	Then the Clinical Prognostic Stage Group is 分期
T0 N2 M0 T1* N2 M0 T2 N2 M0 T3 N1*** M0 T3 N2 M0	G2	Positive 陽性	Positive 陽性	Positive 陽性	IIA
				Negative 陰性	IIIA
			Positive 陽性	IIIA	
		Negative 陰性	Positive 陽性	Positive 陽性	IIA
				Negative 陰性	IIIA
			Negative 陰性	Positive 陽性	IIIA
	G3	Positive 陽性	Positive 陽性	Positive 陽性	IIIB
				Negative 陰性	IIIA
			Negative 陰性	Positive 陽性	IIIA
		Negative 陰性	Positive 陽性	Positive 陽性	IIIA
				Negative 陰性	IIIB
			Negative 陰性	Positive 陽性	IIIB
T4 N0 M0 T4 N1*** M0 T4 N2 M0 Any T N3 M0	G1	Positive 陽性	Positive 陽性	Positive 陽性	IIIA
				Negative 陰性	IIIB
			Positive 陽性	IIIB	
		Negative 陰性	Positive 陽性	Positive 陽性	IIIB
				Negative 陰性	IIIB
			Negative 陰性	Positive 陽性	IIIC
	G2	Positive 陽性	Positive 陽性	Positive 陽性	IIIA
				Negative 陰性	IIIB
			Negative 陰性	Positive 陽性	IIIB
		Negative 陰性	Positive 陽性	Positive 陽性	IIIB
				Negative 陰性	IIIB
			Negative 陰性	Positive 陽性	IIIB
Negative 陰性	Positive 陽性	Positive 陽性	IIIB		
		Negative 陰性	IIIB		
	Negative 陰性	Positive 陽性	IIIB		
Negative 陰性	Positive 陽性	Positive 陽性	IIIB		
		Negative 陰性	IIIB		
	Negative 陰性	Positive 陽性	IIIC		

When TNM is 腫瘤	And Grade is 細胞等級	And HER2 Status is 第二型人類上皮生長素受體	And ER Status is 雌激素受體	And PR Status is 黃體酮受體	Then the Clinical Prognostic Stage Group is 分期
T4 N0 M0 T4 N1*** M0 T4 N2 M0 Any T N3 M0	G3	Positive 陽性	Positive 陽性	Positive 陽性	IIIB
				Negative 陰性	IIIB
			Negative 陰性	Positive 陽性	IIIB
				Negative 陰性	IIIB
	G3	Negative 陰性	Positive 陽性	Positive 陽性	IIIB
				Negative 陰性	IIIC
			Negative 陰性	Positive 陽性	IIIC
				Negative 陰性	IIIC
Any T Any N M1 任何T 任何N M1	Any 任何	Any 任何	Any 任何	Any 任何	IV

- * T1 Includes T1mi.
- * T1 涵蓋 T1mi.
- ** N1 does not include N1mi. T1 N1mi M0 and T0 N1mi M0 cancers are included for prognostic staging with T1 N0 M0 cancers of the same prognostic factor status.
- ** N1並不涵蓋 N1mi。T1 N1mi M0 及T0 N1mi M0會被視作T1 N0 M0 處理。
- *** N1 includes N1mi. T2, T3, and T4 cancers and N1mi are included for prognostic staging with T2N1,T3 N1 and T4 N1, respectively.
- *** N1 涵蓋 N1mi。T2、T3及T4腫瘤若同時 N1mi 會分別被視作 T2N1, T3 N1 and T4 N1處理。



Pathological prognostic group 病理學預測分期

When TNM is TNM 分期	And Grade is 細胞等級	And HER2 Status is 第二型人類上皮生長素受體	And ER Status is 雌激素受體	And PR Status is 黃體酮受體	Then the Clinical Prognostic Stage Group is 分期	When TNM is TNM 分期	And Grade is 細胞等級	And HER2 Status is 第二型人類上皮生長素受體	And ER Status is 雌激素受體	And PR Status is 黃體酮受體	Then the Clinical Prognostic Stage Group is 分期
Tis N0 M0	Any 任何	Any 任何	Any 任何	Any 任何	0	T0 N1** M0 T1* N1** M0 T2 N0 M0	G3	Positive 陽性	Positive 陽性	Positive 陽性	IA
T1*N0 M0 T0 N1mi M0 T1* N1mi M0	G1	Positive 陽性	Negative 陰性	Negative 陰性	IA						
			Negative 陰性	Positive 陽性	Positive 陽性	IA					
				Negative 陰性	Negative 陰性	IA					
		Positive 陽性		Positive 陽性	IA						
		G2	Positive 陽性	Negative 陰性	Negative 陰性	IA					
				Negative 陰性	Positive 陽性	Positive 陽性	IA				
	Negative 陰性				Negative 陰性	IA					
	G3		Positive 陽性		Negative 陰性	Negative 陰性	IA				
				Negative 陰性	Positive 陽性	Positive 陽性	IA				
					Negative 陰性	Negative 陰性	IA				
		T0 N1*** M0 T3 N0 M0	G1		Positive 陽性	Negative 陰性	Negative 陰性	IA			
				Negative 陰性		Positive 陽性	Positive 陽性	IA			
Negative 陰性						Negative 陰性	IB				
G2	Positive 陽性				Negative 陰性	Negative 陰性	IA				
				Negative 陰性	Positive 陽性	Positive 陽性	IA				
					Negative 陰性	Negative 陰性	IB				
	T0 N1** M0 T1* N1** M0 T2 N0 M0		G1		Positive 陽性	Negative 陰性	Negative 陰性	IA			
				Negative 陰性		Positive 陽性	Positive 陽性	IB			
						Negative 陰性	Negative 陰性	IIA			
G2					Positive 陽性	Negative 陰性	Negative 陰性	IA			
				Negative 陰性		Positive 陽性	Positive 陽性	IB			
						Negative 陰性	Negative 陰性	IIA			
		T0 N2 M0 T1* N2 M0 T2 N2 M0 T3 N1*** M0 T3 N2 M0	G1		Positive 陽性	Negative 陰性	Negative 陰性	IA			
				Negative 陰性		Positive 陽性	Positive 陽性	IB			
						Negative 陰性	Negative 陰性	IIA			
G3					Positive 陽性	Negative 陰性	Negative 陰性	IA			
				Negative 陰性		Positive 陽性	Positive 陽性	IB			
						Negative 陰性	Negative 陰性	IIA			

Pathological prognostic group 病理學預測分期

When TNM is TNM 分期	And Grade is 細胞等級	And HER2 Status is 第二型人類 上皮生長素受體	And ER Status is 雌激素受體	And PR Status is 黃體酮受體	Then the Clinical Prognostic Stage Group is 分期
T0 N2 M0 T1* N2 M0 T2 N2 M0 T3 N1*** M0 T3 N2 M0	G2	Positive 陽性	Positive 陽性	Positive 陽性	IB
			Negative 陰性	Positive 陽性	IIIA
			Negative 陰性	Negative 陰性	IIIA
		Negative 陰性	Positive 陽性	Positive 陽性	IB
			Negative 陰性	Positive 陽性	IIIA
			Negative 陰性	Negative 陰性	IIIB
	G3	Positive 陽性	Positive 陽性	Positive 陽性	IIA
			Negative 陰性	Positive 陽性	IIIA
			Negative 陰性	Negative 陰性	IIIA
		Negative 陰性	Positive 陽性	Positive 陽性	IIIB
			Negative 陰性	Positive 陽性	IIIA
			Negative 陰性	Negative 陰性	IIIC

When TNM is TNM 分期	And Grade is 細胞等級	And HER2 Status is 第二型人類 上皮生長素受體	And ER Status is 雌激素受體	And PR Status is 黃體酮受體	Then the Clinical Prognostic Stage Group is 分期
T4 N0 M0 T4 N1*** M0 T4 N2 M0 Any T N3 M0	G3	Positive 陽性	Positive 陽性	Positive 陽性	IIIB
			Negative 陰性	Positive 陽性	IIIB
			Negative 陰性	Negative 陰性	IIIB
		Negative 陰性	Positive 陽性	Positive 陽性	IIIB
			Negative 陰性	Positive 陽性	IIIC
			Negative 陰性	Negative 陰性	IIIC
Any T Any N M1 任何 T 任何 N M1	Any 任何	Any 任何	Any 任何	Any 任何	IV

- * T1 Includes T1mi.
- * T1 涵蓋 T1mi.
- ** N1 does not include N1mi. T1 N1mi M0 and T0 N1mi M0 cancers are included for prognostic
- ** N1並不涵蓋 N1mi。T1 N1mi M0 及T0 N1mi M0會被視作T1 N0 M0 處理。
- *** N1 includes N1mi. T2, T3, and T4 cancers and N1mi are included for prognostic staging with T2N1,T3 N1 and T4 N1, respectively.
- *** N1 涵蓋 N1mi。T2、T3及T4腫瘤若同時 N1mi 會分別被視作 T2N1, T3 N1 and T4 N1處理。