GLOSSARY

Adjuvant therapy	a treatment that is added to increase the effectiveness of a primary treatment
Benign	composed of cells that will not invade other unrelated tissues or organs of the body, although it may continue to grow in size abnormally
Biopsy	use to investigate breast lesions by the removal of a piece of tissue for examination under a microscope to see whether cancer cells are present
Cancer	a disease which occurs when cells behave abnormally and divide out of control
Censored data	patients who survive beyond the end or who are lost to follow-up at some point
Chemotherapy	the use of drugs to kill cancer cells by damaging the cancer cells that are dividing
Diagnosis	a formal statement about the nature of a patient's disease
Epidemiology	the study of the distribution and factors involved in the development of diseases in human population
Estrogen	a hormone produced by the ovaries and the adrenal glands, causes some breast cancers to grow
Follow up	to maintain contact with a patient in order to evaluate a diagnosis or to determine the effectiveness of the treatment received
Hormonal therapy	an approach to suppress the growth of hormone that promotes the growth of cancer
Incidence	quantifies the number of new cases of disease that has developed in a population, expressed as a fixed rate (number of cases per 100,000 people per year)
Local therapy	refers to treatment of the breast and surrounding lymph nodes usually in a combination of surgery and radiation therapy
Lumpectomy	excision of the tumor mass, including a clear margin of normal breast cancer around the tumor, along with lymph nodes under the arm
Malignant	composed of cells that invade or spread to other parts of the body

Mammogram is x-ray views of each part of the breast (top to bottom; side-to-side)

to provide more information about the size and character of the

abnormality

Mastectomy complete removal of the breast, the chest wall muscles under the

breast, and some of the axillary nodes

Metastasis a phenomena when cancer cells break away from the primary

tumour and travel via the blood stream or lymphatic system, to

different sites within the body

Prognosis the prediction of the future course and the outcome of disease

process, which may either concern their natural course of their

outcome after treatment

Radiation therapy

Using high-dose x-rays or other high-energy rays to kill cancer cells

by damaging the DNA within the tumour cells

Recurrence reappearance of tumour after previous removal

Supervised learning

is a process of training a neural network by giving an example of

the task to learn

Survival analysis

the analysis of data that corresponds to the time from when an individual enter a study until the occurrence of some particular

event or end-point

Systemic therapy

refers to chemotherapy or hormone therapy to control cancer cells

that may spread beyond the breast and nearby tissues

Tumor an abnormal growth of cell

Uncensored data

involved patients who are observed until they reach the end point

Unsupervised learning

a training model where the network is only given a set of input data and the network itself must seek out shared properties of the data

set, and correlate these similarities into a comprehensive algorithm

as its output