Glossary

Adjuvant therapy

Therapy given in addition to or following surgery or other primary therapy to reduce the risk of recurrence

Antiarrhythmic drug

Drug given to combat irregularity of heartbeat, classified according to mechanism of action:

- Class I: Sodium channel blockade
  - A. Moderate phase-0 depression and slow conduction (2+); usually prolong repolarization
  - B. Minimal phase-0 depression and slow conduction (0 to 1+); usually shorten repolarization
  - C. Marked phase-0 depression and slow conduction (3+ to 4+); little effect on repolarization
- Class II: β-adrenergic blockade
- Class III: Prolong repolarization
- Class IV: Ca^{2+}-channel blockade

Axillary node-positive

Axillary lymph node involvement in breast cancer patients. Following apparently curative surgery for the primary tumour, the strongest prognostic indicator of recurrence or death from breast cancer is histological involvement of axillary nodes at surgery.

Hyperlipidaemia (also referred to as hyperlipaemia or lipaemia)

The presence of abnormally large amounts of lipid in the circulating blood. Primary hyperlipidaemia may be classified according to the genetic and metabolic disorder, resulting in the following categories:

Familial hypercholesterolaemia, which is usually heterozygous but very rarely may be homozygous, is characterized by a type IIa pattern (see hyperlipoproteinaemia) but occasionally a type IIb pattern may be present;

Familial hypertriglyceridaemia is usually associated with a type IV or type V pattern;

Familial combined hyperlipidaemia may be characterized by elevated cholesterol only, elevated triglyceride only or elevated cholesterol and triglyceride, and type IIa, type IV or type IIb patterns may be found;

Familial dysbetalipoproteinaemia (remnant hyperlipoproteinaemia or broad-β disease) shows the type III pattern;

Lipoprotein lipase deficiency or *apolipoprotein C-II deficiency* show a type I or type V pattern.

Hyperlipoproteinaemia

An increase in the lipoprotein concentration of the blood. The classification proposed by WHO (1970) is based solely on the patterns of the particular lipoproteins that are elevated; it reflects neither clinical status nor genetic or metabolic characteristics and should not be used as a diagnostic classification.

Type I (hyperchylomicronaemia) is characterized by the presence of chylomicrons and by normal or only slightly increased concentrations of very low-density lipoproteins (VLDLs);

Type IIa (hyper-β-lipoproteinaemia) is characterized by an elevation in the concentration of low-density lipoproteins (LDLs);

Type IIb is characterized by an elevation in the concentration of LDLs and VLDLs;

Type III ('floating β' or 'broad β' pattern) is characterized by the presence of VLDLs having an abnormally high cholesterol content and an abnormal electrophoretic mobility;

Type IV (hyperpre-β-lipoproteinaemia) is characterized by an elevation in the concentration of VLDLs, by no increase in the concentration of LDLs and by the absence of chylomicrons;

Type V (hyperpre-β-lipoproteinaemia and chylomicronaemia) is characterized by an elevation in the concentration of VLDLs and the presence of chylomicrons.

Lipoproteins

Water- (or plasma-) soluble complexes or compounds of lipids with proteins

Chylomicrons (from the intestine) and **very low-density lipoproteins** (VLDLs; produced in the liver) are composed largely of triglycerides and function to transport triglycerides to tissues for metabolic use or storage. VLDLs contain only 10–15% of total serum cholesterol.

Low-density lipoproteins (LDLs; from intravascular metabolism of VLDLs) and **high-density lipoproteins** (HDLs; from intestine, liver and intravascular metabolism) transport cholesterol, with LDL being the major cholesterol carrying lipoprotein in normal human plasma (60–70% of total serum cholesterol).

Oestrogen and progesterone receptors

Cytoplasmic receptors which can be measured in breast cancer and other cells. Tumours that are oestrogen- or progesterone-receptor-positive are more likely to respond to hormonal therapies such as tamoxifen or other anti-oestrogens

Phase I trial

A trial in which a pharmaceutical is given for the first time to humans. The aim of a phase I trial is to determine the maximal tolerated dose of a drug and to describe its toxicity. Such a trial is usually done in a group of patients whose disease has failed to respond to all standard therapy.

Phase II trial

A trial in which a drug which has already passed through phase I testing is tested to determine its degree of activity.

Phase III trial

A randomized comparative trial in which two drugs or therapies are compared. This may be carried out for patients with metastatic disease, or in the adjuvant setting.

Recurrence

After surgical removal or other therapy for cancer, there may be no visible or measurable disease (by X-ray, clinical or other means). If a tumour then reappears, either at the site of the original primary or elsewhere, this constitutes a recurrence.

Response

In cancer patients, this is generally defined as a shrinkage of a measurable tumour by $\geq 50\%$ (partial response) or a complete disappearance of all measurable or visible tumour (complete response).

Reference

WHO (1970) Classification of hyperlipidaemias and hyperlipoproteinaemias. *Bull. WHO*, **43**, 891–915