## Acronyms

ACOG	—American College of Obstetricians and
	Gynecologists
ADAMHA	A-Alcohol, Drug Abuse, and Mental Health
	Administration
ARC	—Arteriosclerosis Research Center
CHT	-combined hormone therapy
BLSA	-Baltimore Longitudinal Study of Aging
CRISP	-Computer Retrieval of Information on
	Scientific Projects
CVD	-cardiovascular disease
DES	-diethylstilbestrol
DESI	—Drug Efficacy Study Implementation
	(program)
ERT	-estrogen replacement therapy
ET	-estrogen therapy
FDA	—Food and Drug Administration
FSH	—follicle-stimulating hormone
GAO	-General Accounting Office
GnRH	-gonadotropin-releasing hormone
HDL	-high-density lipoprotein (cholesterol)
HRT	-hormone replacement therapy
ICD	—Institute and Center Director
LDL	-low-density lipoprotein (cholesterol)
LH	—luteinizing hormone
LRC	—Lipid Research Clinic
MPA	-medroxyprogesterone acetate
MRH	-menstrual and reproductive health
NCI	-National Cancer Institute
NCNR	-National Center for Nursing Research
NCRR	-National Center for Research Resources
NDTI	-National Disease and Therapeutic Index
NHLBI	-National Heart, Lung, and Blood Institute
NIA	-National Institute on Aging
NIAAA	-National Institute on Alcohol Abuse and
	Alcoholism
NIAMS	-National Institute of Arthritis,
NUCLID	Musculoskeletal and Skin Diseases
NICHD	-National Institute of Child Health and
	Human Development
NIDA	-National Institute on Drug Abuse
NIDDK	-National Institute of Diabetes and Digestive
NUDE	and Kidney Diseases
NIDR	-National Institute for Dental Research
NIH	-National Institutes of Health
NIMH	-National Institute of Mental Health
NPA	-National Prescription Audit
OTA	Office of Technology Assessment
PDR	-Physician's Desk Reference

PEPI	Postmenopausal Estrogen/Progestin
	Interventions Trial
PHS	—Public Health Service
PMS	premenstrual syndrome
Rx	—prescription
USP	-United States Pharmacopoeia
VLDL	-very low density lipoprotein (cholesterol)
WHR	-waist-to-hip ratio

## Glossary

- Amenorrhea: Absence or abnormal stoppage of the menses.
- Androgen/androgenic: Any substance, e.g., androsterone and testosterone, that stimulates male characteristics.
- Angiogram: A picture of a blood vessel filled with contrast medium.
- Anovulular: Not associated with ovulation.
- Atherosclerosis: A disease characterized by the thickening and loss of elasticity of the arterial walls in which atheromas (a mass of plaque of degenerated thickened arterial intima) containing cholesterol, lipoid material, and lipophages are formed within the intima and inner media of large and medium-sized arteries.
- Atrophy: A wasting away; a diminution in the size of a cell, tissue, organ, or part.
- Beta-blockers: A class of drugs that block cardiac beta receptors.
- Bilateral oophorectomy: Surgical removal of both ovaries.
- Bioavailability: The degree to which a drug or other substance becomes available to the target tissue after administration.
- Bioequivalence: The requirement that a generic product include the same therapeutic ingredient, and that its rate and extent of absorption be the same as the innovative product.
- **Biofeedback:** The provision to a person of visual or auditory evidence of the status of an autonomic body function, e.g., the sounding of a tone when blood pressure is at a desirable level so that the person may exert control over the function.

Cardiovascular disease: Diseases pertaining to the heart and blood vessels.

Case-control studies: An epidemiologic study design that involves two groups, those that have the disease or condition being studied (the cases) and those that do not (the controls), which are compared to a past or existing characteristic relevant to the etiology of the disease or condition.

- Central nervous system: The part of the nervous system that in vertebrates consists of the brain and spinal cord, to which sensory impulses are transmitted and from which motor impulses pass out, and that supervises and coordinates the activity of the entire nervous system.
- Cholesterol: A sterol (fatty substance) produced by all vertebrate cells, particularly the liver, skin, and intestine, and found most abundantly in nerve tissue. See also high-density lipoprotein cholesterol and lowdensity lipoprotein cholesterol.
- Climacteric: The syndrome of endocrine, somatic, and psychic changes occurring at the end of the female reproductive period (menopause).
- Combined hormone therapy (CHT): The use of estrogen combined with progestin for the treatment of menopausal symptoms, e.g., hot flashes, and/or the prevention and treatment of osteoporosis; progestin opposes the carcinogenic effects of estrogen on the endometrium. Also known as hormone replacement therapy (HRT).
- Conjugated estrogens: The sodium salts of the estrogenic compounds, primarily estrone and equilin, that are present as sulfate ester conjugates in pregnant mare urine.
- Contraindication: Any condition that renders a particular line of treatment improper or undesirable.
- Coronary perfusion: The pumping of a fluid through the heart by way of an artery.
- Corpus luteum: A yellow glandular mass in the ovary formed by an ovarian follicle that has matured and discharged its ovum.
- Cyclic regimen: Interrupted episodes with ongoing medication.
- Depomedroxyprogesterone acetate (depo-MPA): A form of progestin.
- Diethylstilbestrol (DES): A synthetic estrogenic compound used to treat menopausal symptoms, vaginitis, and suppressed lactation.
- Dyspareunia: Difficult or painful coitus/intercourse in women.
- Dysuria: Painful or difficult urination.
- Endogenous: Produced within or caused by factors within the organism.
- Endometriosis: The presence of endometrial tissue (the normal uterine lining) in abnormal locations such as the fallopian tubes, ovaries, or the peritoneal cavity.
- Endometrium: The mucous membrane lining the uterus.
- Endothelium: The layer of epithelial cells that lines the cavities of the heart and of the blood and lymph vessels, and the serous cavities of the body.
- Epidemiology: The study of the relationships of various factors determining the frequency and distribution of diseases in the human community.
- Equine estrogen: Estrogen pertaining to, characteristic of, or derived from the horse.

- Erythema: Redness of skin due to congestion of the capillaries.
- Estradiol: The most potent naturally occurring estrogen in humans.
- Estrogen: A generic term for estrus-producing compounds; the female sex hormones including estradiol, estriol, and estrone. In humans, the estrogens are formed in the ovary, adrenal cortex, testis, and fetoplacental unit and are responsible for female secondary sex characteristic development; during the menstrual cycle, they act on the female genitalia to produce an environment suitable for fertilization, implantation, and nutrition of the early embryo. Estrogen is used as a palliative in postmenopausal cancer of the breast and in prostatic cancer, as oral contraceptives, and for relief of menopausal discomforts.
- Estrogen deficiency: The notion that menopause causes an estrogen deficiency that requires replacement.
- **Estrogen replacement therapy (ERT): See** *estrogen therapy.*
- Estrogen therapy (ET): The use of estrogen for the relief of menopausal symptoms, e.g., hot flashes, and/or the prevention and treatment of osteoporosis. Also known as estrogen replacement therapy (ERT).
- Estrone: An estrogen isolated from pregnancy urine, the human placenta, and palm kernel oil, and also prepared synthetically.
- Etiology: The science dealing with causes of disease.
- Exogenous estrogen: Estrogen that is not produced within the body but is provided by other means, e.g., tablets, injection, cream.
- First-pass hepatic effect: See hepatic effect.
- Follicle: The structure on the ovary surface that nurtures a ripening oocyte. At ovulation the follicle ruptures and the oocyte is released. The follicle produces estrogen until the oocyte is released, after which it becomes a yellowish protrusion on the ovary called the corpus luteum.
- Follicle-stimulating hormone (FSH): A pituitary hormone, also known as a gonadotropin, that helps to stimulate hormone and gamete production by the ovaries and testes.
- Follicular depletion: The gradual depletion of follicles in the ovary.
- Food and Drug Administration (FDA): The government agency responsible for drug approval.
- Germ cell: Any cell of an organism whose function is reproduction, e.g., gametes (ova and spermatozoa).
- Gonadotropin: A substance that has a stimulating effect upon the gonads, especially the hormone secreted from the anterior pituitary.
- Gonadotropin-releasing hormone (GnRH): The hormone released from the hypothalamus that causes secretion of gonadotropins from the pituitary gland.

- Healthy user effect: A phenomenon observed in epidemiologic studies in which subject participants exhibit lower incidence of morbidity or mortality than the general population because they are generally in good health while the less healthy either choose not to participate in the study or are excluded.
- Hemostasis: The arrest of bleeding, whether by the physiological properties of vasoconstriction and coagulation or by surgical means.
- Hepatic effect: Pertaining to the liver; the metabolism of estrogen by the liver.
- Hepatobiliary: Related to the gallbladder.
- High-density lipoprotein cholesterol (HDL): A class of cholesterol; low levels of HDL are associated with a decreased risk of heart attack.
- Hormone: A chemical substance produced in the body that has a specific regulatory effect on the activity of certain cells or a certain organ or organs.
- **Hormone replacement therapy (HRT): See** *combined hormone therapy.*
- Hormone therapy: Collectively and generally, this term describes either estrogen therapy or combined hormone therapy when a distinction is not necessary. See *estrogen therapy, combined hormone therapy.*
- Hot flash: Sudden sensations of heat and flushing of the face and torso.
- Hyperinsulinemia: Excessive secretion of insulin.
- Hypermenorrhea: Excessive menstrual bleeding, but occurring at regular intervals and being of usual duration.
- Hyperplasia: Abnormal increase in the number of normal cells in normal arrangement in an organ or tissue, which increases its volume.
- Hypertension: High arterial blood pressure; it may have no known cause, or it may be associated with other diseases.
- Hypertriglyceridemia: An excess of triglycerides in the blood.
- Hypomenorrhea: Diminution of menstrual flow or duration.
- Hypothalamus: The part of the diencephalon forming the floor and part of the lateral wall of the third ventricle; anatomically, it includes the optic chiasm, mammillary bodies, tuber cinereum, infundibulum, and pituitary gland, but for physiological purposes the pituitary gland is considered a distinct structure.

Hysterectomy: Excision of the uterus.

- In vitro: Literally "in glass"; pertaining to a biological process or reaction taking place in an artificial environment, usually a laboratory.
- In vivo: Literally "in the living"; pertaining to a biological process or reaction taking place in a living cell or organism.
- Involutional melancholia: A prolonged psychotic reaction occurring in late middle life, characterized by

depression and paranoid ideas, also known as involutional psychosis.

- Lactation: The secretion of milk
- Life expectancy: An expected number of years of life based on statistical probability.
- Low-density lipoprotein (LDL) cholesterol: A class of cholesterol; high levels of LDL are associated with a greater risk of heart attack.
- Luteinizing hormone (LH): A gonadotropin that, along with FSH, stimulates and directs hormone and gamete production of the ovaries and testes.
- Medicalization: The practice of treating or defining people's experiences as medical problems.
- Medroxyprogesterone acetate (MPA): A form of progestin.
- Menopausal syndrome: Symptoms associated with menopause, e.g., hot flashes, vaginal dryness, osteoporosis.
- Menopause: Cessation of menstruation; the immediate postreproductive phase of a woman's life, when menstrual function ceases due to failure to form ovarian follicles and ova.
- Menorrhagia: Excessive menstruation.
- Menses: The monthly flow of blood from the female genital tract.
- Menstruation: The cyclic physiological discharge of blood from the nonpregnant uterus, occurring usually at approximately 4-week intervals during the reproductive period in female humans.
- Metrorrhagia: Uterine bleeding, usually of normal amount, occurring at completely irregular intervals, the period of flow sometimes being prolonged.
- Moieties: Any part or portion of a molecule.
- Morbidity: The condition of being sick the sick rate; the ratio of sick to well persons in a community.
- Morphology: The science of organic forms and structure.
- Mortality: The ratio of actual deaths to expected deaths; the ratio of the total number of deaths to the population of a specified area in a given time period, generally figured in terms of number of deaths per 1,000,10,000, or 100,000 of population.
- Natural estrogen: An estrogen that is derived from natural sources, e.g., conjugated equine estrogens.
- Natural menopause: Menopause that occurs as a natural part of the aging process, not surgically induced.
- Neuroendocrine stimulation: Stimulation related to the interactions between the nervous and endocrine systems.
- 19-nortestosterone: A form of progestin.
- Norethidrone: A progestational agent similar in action to progesterone.
- Norethidrone acetate: A form of progestin.
- Nulliparity: The state of being a woman who never has borne a viable child.
- Observational studies: An epidemiologic study in which there is no artificial manipulation of the study factor.

Oligomenorrhea: Abnormally infrequent menstruation. Oophorectomy: Excision of one or both ovaries.

- Opposed estrogen: Estrogen that is used in conjunction with progestin.
- Osteoblast: A cell arising from a fibroblast, which, as it matures, is associated with bone production.
- Osteopenia: Any condition involving reduced bone mass.
- Osteoporosis: Abnormal rarefaction of bone; it maybe idiopathic or occur secondary to other diseases.
- Ovaries: Either of the paired female sex glands in which ova are formed.
- Pathophysiology: The physiology of discorded function. Percutaneous: Performed through the skin.
- Perimenopause: The time around the menopause.
- Peripheral conversion: Conversion of estrogen outside of the liver, in peripheral tissues.
- Peripheral nervous system: The autonomic nervous system, the cranial nerves, and the spinal nerves including associated receptors.
- Pharmacodynamics: The study of the actions of drugs on living systems.
- Pharmacokinetics: The rate of change in a physical or chemical system, specifically in relation to drugs.
- Pituitary gland: A gland at the base of the brain that secretes a number of hormones related to reproduction.
- Pituitary gonadotropins: Substances, released by the pituitary, that act to stimulate the gonads.
- Platelets: Any of the disk-shaped structures in the blood of all mammals, chiefly known for their role in blood coagulation.
- PMS: See Premenstrual syndrome.
- Postmenopause: The period of time after the menopause.
- Premature ovarian failure: Condition characterized by the failure to ovulate before the normal age of menopause.
- Premenopause: The stage of life before menstruation stops.
- Premenstrual syndrome: The pattern of symptoms related to the menstrual cycle.
- Progesterone: The steroid hormone produced by the corpus luteum, adrenal cortex, and placenta which serves to prepare the uterus for reception and development of the fertilized ovum by inducing secretion in the proliferated glands. A synthetic preparation is used in the treatment of functional uterine bleeding, menstrual cycle abnormalities, and threatened abortion.
- Progestin: Originally, the crude hormone of the corpus luteum; it has since been isolated in pure form and is now known as progesterone. Certain synthetic and natural progestational agents are called progestins.
- Puerperal: Pertaining to a woman who has just given birth to a child.
- Randomized trials: An epidemiologic experiment in which subjects are randomly allocated into groups, the

"study" and "control" groups, to receive or not to receive an experimental preventive or therapeutic procedure, e.g., a drug.

- Relative risk: In epidemiology, the ratio of the incidence of, or mortality from, a disease in a population exposed to the factor under consideration to the corresponding rate in a population not so exposed.
- Releasing factors: Substances that act to release hormones.
- Selection bias: A distortion in the estimate of effect resulting from the manner in which subjects are selected for a study population.
- Serum lipid profiles: A quantitative representation of the level of serum lipids.
- Serum triglycerides: Esters formed from glycerol and one to three fatty acids; fats and oils are triglycerides.
- Steroid hormones: Hormonal compounds containing four carbon rings interlocked to forma hydrogenated cyclopentophenanthrene-ring system.
- Subarachnoid hemorrhage: A form of stroke characterized by bleeding between the pia mater and arachnoid of the brain.
- Surgical menopause: Menopause following the surgical removal of the ovaries.
- Symptomatology: The combined symptoms of a disease.
- Synthetic estrogen: A synthetically produced/manufactured estrogen product.
- Systemic circulation: Channels through which nutrient fluids of the body flow; often restricted to the vessels conveying blood.
- Testosterone: A hormone secreted by the interstitial cells of the testes, which functions in the induction and maintenance of male secondary sex characteristics; testosterone and its cypionate, enanthate, and propionate esters are used in palliative therapy in inoperable carcinoma of the female breast and certain gynecologic conditions.
- Thromboembolitic disease: Disease related to the obstruction of blood vessels.
- Thrombosis: The formulation or presence of a solid mass formed in the living heart or vessels from constituents of the blood.
- Thyroid: An endocrine gland consisting of two lobes, one on each side of the trachea, joined by a narrow isthmus, producing hormones (thyroxine and triiodothyronine) that require iodine for their elaboration and that are concerned in regulating metabolic rate; it also secretes calcitonin.
- Trabecular: Of or pertaining to a supporting or anchoring strand of connective tissue, e.g., a strand extending from a capsule into the substance of the enclosed organ.

Transdermal: Through the skin.

- Transmenopausal: Occurring across the time period of the menopause.
- Unopposed estrogen: Estrogen used alone.
- Urethra: A passage through which urine is discharged from the bladder to the exterior of the body.
- Urinary stress incontinence: Involuntary escape of urine due to strain on the orifice of the bladder, as in coughing or sneezing.
- Urodynamics: A process that evaluates characteristics of the urine stream and the pelvic musculature, and the activity of the bladder.
- Uterus: The hollow muscular organ in the female in which the fertilized ovum normally becomes embed-

ded and in which the developing embryo and fetus are nourished. Its cavity opens into the vagina below and into a uterine tube on either side.

- Vagina: The canal in the female, from the vulva to the cervix uteri, that receives the penis in copulation and is the birth canal.
- Vaginal atrophy: The wasting or diminution in size of the vagina.
- Vascular tree: The tree-like structure of the blood vessels.
- Withdrawal bleeding: Bleeding associated with combined hormone therapy caused by the stimulation of the endometrium by progestin.