## Appendix B

## **Glossary of Terms and Abbreviations**

	List of Abbreviations	FACT	—Foundation for Advancement in Cancer Therapies
AAM	—Alliance for Alternative Medicine	FAM	—Foundation for Alternative Medicine
ACCC	—Association of Community Cancer Cen-	FDA	—Food and Drug Administration (DHHS)
песс	ters	FDCA	—Federal Food, Drug, and Cosmetic Act
ACS	—American Cancer Society	FTC	—Federal Trade Commission
ACSH	—American Council on Science and	FTCA	—Federal Trade Commission Act
АСЗП	Health	GAO	—General Accounting Office (U.S. Con-
VDC	—Agua del Sol	GAU	gress)
ADS AIDS	—Agua del Soi —Acquired Immmodeficiency Syndrome	GRAS	—generally recognized as safe
AMA	—American Medical Association	HCFA	—Health Care Financing Administration
AQA	—American Quack Association	1.00	(DHHS)
ASCO	—American Society for Clinical Oncol-	hCG	—human chorionic gonadotropin
DC/DC	Ogy	HIV	—human immunodeficiency virus
BC/BS	—Blue Cross/Blue Shield	HNF	—Hans Nieper Foundation
BCBSA	—Blue Cross and Blue Shield Associa-	HPB	—Health Protection Branch, Health and
DCDCNI	tion		Welfare Canada
BCBSNJ	—Blue Cross/Blue Shield of New Jersey	HTLV-III	—human T-cell lymphotropic virus, type
BCG	—bacillus Calmette-Guerin		III (formerly, human T-cell leukemia
BP	—Blocking Protein		virus, type III) (see HIV)
BPF	—Blocking Protein Factor	IACVF	—International Association of Cancer Vic-
CACR	—Center for Alternative Cancer Research		tors and Friends
CAG	—Clinical Appraisal Group	IAT	—Immuno-Augmentative Therapy
Caltech	—California Institute of Technology	IATPA	—IAT Patients' Association
CANAH	<ul> <li>Coalition for Alternatives in Nutrition and Healthcare</li> </ul>	ICD	—International Classification of Diseases (9th revision)
CCS	—Cancer Control Society	IL-2	—interleukin-2
CDC	—Centers for Disease Control (Public	IND	—Investigational New Drug
	Health Service, DHHS)	IRB	—Institutional Review Board
CFCM	—Committee for Freedom of Choice in	IRC	—Immunology Researching Centre, Inc.
	Medicine		(Bahamas)
CHAMPUS	<ul> <li>Civilian Health and Medical Program of the Uniformed Services</li> </ul>	IRF	—Immunology Research Foundation (Great Neck, NY)
CIS	—Cancer Information Service (NCI)	JCAHO	—Joint Commission on Accreditation of
CPT	—Current Procedural Terminology (4th		Health Care Organizations
	edition)	LAV	—lymphadenopathy-associated virus
CRS	—Cancer Response System (ACS)	MAC	—Multispecialty Advisory Committee
CT	—computed tomography		(BCBSNJ)
DATTA	—Diagnostic and Therapeutic Technol-	MCHSF	—Medicare Continuous History Sample
	ogy Assessment program (AMA)		File
DHHS	—U.S. Department of Health and Human	M.D.	-medical doctor
	Services	MNP	—Medical Necessity Program (BCBSA)
DMF	—Drug Master File	MSKCC	-Memorial Sloan-Kettering Cancer Cen-
DMSO	—dimethyl sulfoxide		ter
DNA	—deoxyribonucleic acid	NACAA	—National Association of ConsumerAgency
DNCP	—Diet, Nutrition, and Cancer Program		Administrators
	(NCI)	NAPRALER	RT —Natural Product Data Base
D.O.	—doctor of osteopathy	NCAHF	—National Council Against Health Fraud
DP	—Deblocking Protein	NCI	—National Cancer Institute (NIH)
DPF	—Deblocking Protein Factor	NDA	—new drug application
ECaP	Exceptional Cancer Patients	NDGA	—nordihydroguaiarectic acid
ELISA	—enzyme-linked immunosorbent assay	NHCAA	—National Health Care Anti-Fraud Asso-
ERISA	Employee Retirement Income Security	- 12202111	ciation
	Act	NHF	—National Health Federation
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NHL —non-Hodgkins lymphoma NIH —National Institutes of Health (DHHS) NK —natural killer (cells) **NRC** —National Research Council (National Academy of Sciences) **OPMC** —Office of Professional Medical Conduct (State of New York) **OTA** —Office of Technology Assessment (U.S. Congress) PAC —Pharmaceutical Advertising Council PAHO —Pan American Health Organization PC —Progenitor cryptocides **PDO** —Physician Data Ouery (NCI) **PDT** —photodynamic therapy PNI —psychoneuroimmunology PRO —utilization and quality control peer review organization **RCT** —randomized clinical trial **RDA** —recommended daily allowance Rico —Racketeer Influenced and Corrupt Organizations Act **SEER** -Surveillance, Epidemiology, and End Results Program (NCI) TA1 —Tumor Antibody 1 TA2 —Tumor Antibody 2 TC —Tumour Complement TEC —Technology Évaluation and Coverage Program (BCBSA) TIF —tumor induction factor TNF —tumor necrosis factor **UCLA** —University of California at Los Angeles **USCA** —U.S. Court of Appeals USP —U.S. Pharmacopoeia USP DI —U.S. Pharmacopeial Dispensing Information USPS —U.S. Postal Service

## Glossary of Terms

Acupuncture: A treatment that involves piercing the skin with very fine needles at certain key "acupoints" on the body. Acupuncture is based on the theory that energy flows along specific pathways or "meridians" connecting the organs deep in the body with the acupoints on the surface of the body. The flow of energy is believed to be disrupted by disease, and may be restored to equilibrium by acupuncture.

Adjuvant: A substance added to a medical chug that enhances the effect of the active ingredient. In immunology, a substance added to a vaccine that non-specifically enhances its antigenicity. In cancer treatment, "adjuvant chemotherapy" refers to drug therapy used to complement surgical removal of the tumor.

Allopathy/allopathic practitioner: Terms used to refer to mainstream medicine its practitioners. The term was coined by Samuel Hahnemann, the founder of homeopathy, originally as a pejorative term, though it has largely lost that connotation.

Anthroposophy: A spiritual tradition encompassing all aspects of life, including medicine, founded by the Austrian-born clairvoyant Rudolf Steiner in the early 20th century.

Autogenous: Self-generated; originated within the body. As applied to bacterial vaccines, the term denotes those vaccines that are made for each specific patient from cultures originating from that patient, as opposed to stock vaccines which are made from standard cultures.

Autoimmune: Referring to a response of the immune system directed against the body's own tissue, an abnormal state (the immune system is designed to respond to foreign tissue) believed to contribute to a number of chronic diseases (e.g., rheumatoid arthritis, diabetes mellitus).

Behavioral treatments: Referring to treatments based on physical and mental activities, e.g., exercise, relaxation, qi gong.

Benign: Not malignant; in reference to tumors, lacking the capacity to invade normal tissue and metastasize to distant sites.

Biofeedback: A technique based on the theory that one can learn to regulate one's own internal state, including the autonomic nervous system, which had been thought to be beyond conscious control.

Biopsy: The removal and examination, usually microscopic, of tissue from the living body, performed to establish precise diagnosis.

Blinding: In randomized clinical trials, keeping secret which treatment is assigned to participants. When only the patient is kept unaware of his or her treatment assignment, the study is "single-blind." When the person administering treatment (e.g., the physician) also is unaware, the study is "double-blind." Additional layers of blinding can be added as, for example, when a third individual (usually the evaluator of outcomes) also is unaware of treatment assignments.

Brucellosis: A generalized infection involving the reticuloendothelial system caused by species of microorganism genus *Brucella*, that is contracted through contact with goats, cattle, pigs, and dogs.

Cachexia: In cancer, the progressive wasting that occurs in the late stages of disease, resulting from derangements in various metabolic processes.

Cancer: A tumor with the potential for invading neighboring tissue and/or metastasizing to distant sites, or one that has already done so. Cancers are categorized into major classes by their cell types. See also *carcinoma*, *sarcoma*, *lymphoma*, and *leukemia*.

Carcinogen: An agent that causes cancer.

Carcinoma: A cancer arising from epithelial cells, including the external epithelia (mainly skin and linings of the gastrointestinal tract, lungs, and cervix)

- and the internal epithelia that line various glands (e.g., breast, pancreas, thyroid). See *cancer*.
- Chemotherapy: The use of specific chemical agents to arrest the progress of, or eradicate, disease in the body.
- Chiropractic: A system of treatment based on the theory that disease is produced by disruptions in the normal flow of a natural life force termed "Innate Intelligence." This life force flows through the nervous system and is disrupted by displacements of the spinal vertebrae called subluxation. Chiropractic manipulation is intended to correct the subluxation allowing the uninterrupted flow of Innate Intelligence to return the body to full health. As practiced currently in the United States, most chiropractic is limited to treating skeletal abnormalities.
- Chiropractor: A practitioner of chiropractic.
- Chronic: Lingering, lasting, as opposed to acute. A term used to describe persistent disease.
- Clinical trial: A scientific research activity undertaken to define prospectively the effect and value of prophylactic, diagnostic, or therapeutic agents, devices, regimens, procedures, etc., applied to human subjects.
- Control group: In a randomized clinical trial, the group receiving no treatment or some treatment with which the group receiving experimental treatment is compared. The control treatment is generally a standard treatment, a placebo, or no treatment. Compare *experimental group*.
- Conventional: As used in this report, referring to "mainstream" or "orthodox" medical treatment. These terms are used interchangeably, with no intended distinctions among them.
- Cure: (n.) A medical treatment that reliably relieves the patient of the disease. (v.) To heal, to make well, a restoration to health.
- Device, medical: Any instrument, apparatus, or similar or related article that is intended to prevent, diagnose, mitigate, or treat disease or to affect the structure or function of the body.
- Dimethyl Sulfoxide (DMSO): Analkyl sulfoxide, C<sub>2</sub>H<sub>8</sub>OS, a powerful solvent that can dissolve aromatic and unsaturated hydrocarbons, organic compounds, and many other substances. Its biological activities include the ability to penetrate plant and animal tissues and to preserve living cells during freezing. In mainstream medical treatment, it has been shown efficacious for one condition, interstitial cystitis. It is used in a number of unconventional cancer treatment, applied topically in conjunction with other agents.
- Drug: Any chemical or biological substance that maybe applied to, ingested by, or injected into humans in order to prevent, treat, or diagnose disease or other medical conditions.
- Effectiveness: Same as efficacy (see below) except that it refers to "... average or actual conditions of use."

- Efficacy: The probability of benefit to individuals in a defined population from a medical technology applied for a given medical problem under ideal conditions of use.
- Encephalomyelitis: An inflammation of the brain and spinal cord that is caused by infection with any of a number of viruses.
- Endogenous: Developing or originating within the organism, or arising from causes within the organism.
- Enema: A rectal injection for the purpose of clearing out the bowel, or administering drugs or food.
- Etiology: The cause or origin (of disease).
- Experimental group: In a randomized clinical trial, the group receiving the treatment being evaluated for safety and efficacy. The experimental treatment may be anew technology, an existing technology applied to a new problem, or an accepted treatment about whose safety or efficacy there is doubt. Compare *control group*.
- Health fraud: False or unsupported claims for a medical treatment's effectiveness.
- Health: The state of optimal physical, mental, and social well-being, and not merely the absence of disease and infirmity.
- Herbalist: A practitioner who prescribes medicaments of herbal compounds; also, one versed in herbal lore.
- Herbal treatments: Treatments based on the therapeutic use of plant products.
- Homeopathy: A philosophy of treatment founded by Samuel Hahnemann (1755-1843), in which microdoses of medicines are believed to stimulate the body's vital force. Some of these medicines are not known to contain even one molecule of the original compound per dose, but are considered by the homeopath to be extremely powerful. The power of these doses is enhanced by "succession" (violent shaking) performed at various stages in their preparation.
- Immune system: A specialized group of body cells and cell products that respond to foreign organisms and substances in the body. The cell products are largely immunoglobulins (antibodies), produced by specialized white blood cells known as lymphocytes. Some lymphocytes and various other cells of the immune system directly attack foreign organisms.
- Immunity: The condition of being immune; an organism's capacity to resist disease. Immunity may be either innate or acquired. Innate immunity is natural or inherited. Acquired immunity may be active (resulting from either previous exposure to the disease-causing agent or vaccination) or passive (resulting from the transfer of preformed antibodies in immune serum or from mother to fetus).
- Immunotherapy: Cancer treatment that produces antitumor effects primarily through the action of natural host defense mechanisms or by the administration of

- natural mammalian substances. Also called biotherapy and biological therapy.
- In vitro: Literally, "in glass," pertaining to a biological process or reaction taking place in an artificial environment, usually a laboratory. Sometimes used to include the growth of cells from multicellular organisms under cell culture conditions.
- In vivo: Literally, "in the living," pertaining to a biological process or reaction taking place in a living organism. In biomedical research, used to describe experiments or processes in whole animals (e.g., mice, rats, humans), as opposed to those in a test tube or other experimental system.
- IND application (Investigational New Drug application):
  An application submitted to FDA by any person or company for permission to conduct clinical research on an unapproved drug. If approved, the IND exempts the sponsor from the FDCA prohibition against shipping unapproved drugs in interstate commerce for the study or studies specifically described in the IND application.
- Injunction: A prohibitive order issued by a court at the request of one party forbidding another party from committing some act.
- Insurance fraud: Intentional misrepresentation of the facts in order to obtain reimbursement from an insurer.
- Interstate commerce: Traffic, commercial trading, or the transportation of persons or property between States.
- Intravenous: Within a vein or veins.
- Laetrile: Trademark name for l-mandelonitrile-B-glucuronic acid.
- Leukemias: Cancers of the blood-forming organs, characterized by abnormal proliferation and development of leukocytes (white blood cells) and their precursors in the blood and bone marrow. (See *cancer*.)
- Lymphomas: Cancers of cells of the immune system (i.e., the various types of lymphocytes). See *cancer*.
- Macrobiotics: A lifestyle and diet adapted from the Far East and popularized in America by Michio Kushi and others. Macrobiotics is not primarily a treatment for cancer, but it is adopted by some cancer patients. The principles of the diet consist of balancing the "yin" and "yang" energies of foods. Different types of cancer are considered either yin or yang and the macrobiotic program must be adapted to the particular type of cancer and to individual traits.
- Malignant: Referring to tumors that are able to invade neighboring tissue and metastasize to distant sites in the body.
- Medical malpractice: Professional misconduct or unreasonable lack of skill by a physician or other health care provider.
- Metabolic treatment: Anon-specific term used by many unconventional practitioners to refer to a combination of unconventional approaches aimed at improving the

- physical and mental condition of cancer patients, sometimes including the concept of "detoxification."
- Metastasis: The spread of a malignancy to distant body sites by cancer cells transported in blood or lymph circulation.
- Microbe: A minute living organism, especially applied to those minute forms of life that are capable of causing disease in animals, including bacteria, protozoa, and fungi.
- Microorganism: A minute living organism, usually microscopic, such as bacteria, viruses, molds, yeasts, rickettsiae, and protozoa.
- Naprapathy: A system of treatment employing manipulation of connective tissue (ligaments, muscles, and joints) and dietary measures; said to facilitate the recuperative and regenerative processes of the body.
- Naturopathy: The healing of disease through natural methods, making use of physical forces such as air, light, water, heat, massage, etc.
- Neoplasm: A new growth of tissue in which the growth is abnormal, uncontrolled, and progressive. Malignant neoplasms are also called "tumors" or "cancer."
- New Drug: According to the FDA standard it is defined in part as: "any drug... the composition of which is such that such drug is not generally recognized, among experts qualified by scientific training and experience to evaluate the safety and effectiveness of drugs, as safe and effective for use under the conditions prescribed, recommended, or suggested in the labeling thereof." (21 U.S.C. § 321(p)(1)).
- Nontoxic: In general medical use, referring to treatments without adverse effects.
- Nostrum: A medicine of secret composition recommended by its preparer but usually without scientific proof of its effectiveness.
- Oncogene: A gene of which one or more mutant forms is associated with cancer formation.
- Oncologist: A physician who specializes in the treatment of cancer, usually referring to medical oncology, which is a subspecialty of internal medicine.
- Oral: Pertaining to the mouth, taken through or applied in the mouth as an oral medication.
- Osteopathy: A system of treatment founded by Andrew Taylor Still (1828-1917) and based on the theory that the body is capable of making its own remedies against disease and other toxic conditions when it is in normal structural relationship and has favorable environmental conditions and adequate nutrition. It utilizes generally accepted physical, medicinal, and surgical methods of diagnosis and therapy, while placing chief emphasis on the importance of normal body mechanics and manipulative methods of detecting and correcting faulty structure.
- Palliative treatment: Treatment designed to provide relief from a disease or condition (e.g., to provide comfort or reduce pain), but not to cure the disease or

condition.

- Pathogen: A specific causative agent (e.g., a virus or bacterium) of a disease.
- Pathogenesis: The mode of origin and development of a disease process.
- Pathology: The scientific study of the cause of disease and of the associated structural and functional changes that are the result of disease.
- Peptide: Compounds consisting of two or more amino acids linked together by a chemical process that produces one molecule of water for each joining of one amino acid to another. Peptides are the building blocks of proteins.
- Pharmacologic treatments: Treatments based on the administration of chemical agents (other than biological chemicals).
- Physician: An authorized practitioner of medicine, as one graduated from a college of medicine or osteopathy and licensed by the appropriate board.
- Placebo effect: A beneficial effect of a medical technology that cannot be attributed to properties of the technology itself. Often considered psychologically-engendered well-being or improvement in a condition brought on by the belief of the patient that the technology itself is beneficial.
- Placebo: A drug or procedure with no intrinsic therapeutic value. In a randomized clinical trial, a placebo is given to patients in control groups as a means to blind investigators and patients as to whether an individual is receiving the experimental or control treatment.
- Pleomorphic: A term used in microbiology to refer to bacteria that change in size and shape during their life cycle (also called "cell wall deficient" bacteria).
- Prognosis: A forecast as to the probable outcome of an attack of disease; the prospect as to recovery from a disease as indicated by the nature and symptoms of the case.
- Prophylaxis: The prevention of disease and preservation of health.
- Quackery: A slang term used to describe medical treatments that are falsely described to be effective.
- Radiotherapy: The treatment of disease by ionizing radiation.
- Random allocation: In a randomized clinical trial, allocation of individuals to treatment groups such that each individual has an equal probability of being assigned to any group.
- Randomized clinical trial (RCT): An experiment designed to test the safety and efficacy of a medical technology in which people are randomly allocated to experimental or control groups, and outcomes are compared.
- Recurrence: In cancer, the regrowth of tumor tissue after all evidence of it had apparently been eradicated either by surgery or other means (e.g., radiotherapy). A

- recurrence may occur at the site of the original tumor or elsewhere in the body, as metastatic disease.
- Regression (or remission): In relation to cancer, regression refers generally to the shrinking of a tumor by other than surgical means. A complete regression occurs when a tumor that was at one time measurable disappears completely. Partial regression describes the condition where the measurable tumor is reduced by at least 50 percent in size.
- Safety: A judgment of the acceptability of risk in a specified situation.
- Sarcoma: A cancer of supporting tissue of the body (e.g., bone, blood vessels, fibrous tissue, muscle). See
- Spontaneous regression (or remission): In cancer, the disappearance (complete regression) or diminishing by at least 50 percent in size (partial regression) of a tumor without any identifiable cause (i.e., without medical intervention).
- Staging: In oncology, an attempt to define the true extent of cancer in its three compartments, TNM. These refer to the primary tumor (T), regional nodes (N), and metastasis (M). Subscripts ranging from O to 4 are used to denote size and degree of involvement; O indicates undetectable, and 1,2,3, and 4 a progressive increase in size or involvement.

Subcutaneous: Beneath the skin.

- Systemic: Pertaining to or affecting the body as a whole. Terminal: In cancer prognosis, forecasting death due to the growth and progression of the cancer.
- Third-party payer: Private insurers or government insurance programs that pay providers for medical care given to patients they insure, either directly or by reimbursing patients for payments they make.
- Toxicity: Referring to medical treatments, the degree to which they produce unwanted, adverse effects.
- Treatment IND: A provision of the Federal Food, Drug and Cosmetic Act that allows patients with life-threatening or serious diseases to obtain certain drugs that are in late stages of clinical testing, but have not yet been approved by FDA for marketing.
- Tumor: A new growth of tissue in which the multiplication of cells is uncontrolled and progressive. Also called neoplasm.
- Unapproved drug: A drug that has not been approved by the FDA for marketing in the United States.
- Unconventional Cancer Treatment: As used in this report, unconventional cancer treatments include the wide variety of treatments that fall outside the bounds of mainstream medicine. Other terms used by *proponents* to describe all or some of these treatments include: alternative, complementary, non-toxic, holistic, natural, and non-invasive. Those used by the sharpest of *critics* include: unproven, questionable, dubious, quackery, and fraudulent. The term unorthodox is used at times by both proponents and critics.

Vaccine: A preparation of living, attenuated, or killed bacteria or viruses, fractions thereof, or synthesized antigens identical or similar to those found in the disease-causing organisms, that is administered to produce or increase immunity to a particular disease.

Visualization: The use of mental imagery to create positive beliefs that will activate the body's defenses against disease. In one type of visualization, patients

are taught to see their cancer cells as vulnerable and disorganized, and their treatment as powerful and directed only at the cancer cells, sparing the healthy cells. They are also instructed to see their immune systems flushing away the cancer cells.