

Glossary

of HIV/AIDS-Related Terms

6th Edition | December 2008



Offering Information on HIV/AIDS
Treatment, Prevention, and Research



Introduction

AIDSinfo is pleased to present the sixth edition of the *Glossary of HIV/AIDS-Related Terms*.

The Glossary is designed as a resource to help health care providers, caseworkers, community-based organizations, and people living with HIV/AIDS and their families and friends understand complex HIV/AIDS terminology.

New in this edition:

- More than 170 new and updated terms, definitions, and abbreviations.
- An updated “Additional Resources” section.

The sixth edition’s updated “Additional Resources” section provides details about useful resources for HIV/AIDS information. For each resource included, there is a helpful description of services along with contact information, Internet addresses, hours of operation, and specifics such as bilingual capability.

A Spanish-language version of the glossary, *Glossario del VIH/SIDA*, is also available. Both glossaries, along with an English-Spanish HIV/AIDS terms translation tool, are available on the AIDSinfo and infoSIDA Web sites.

AIDSinfo, a service of the U.S. Department of Health and Human Services (HHS), is a trusted source for information about HIV/AIDS treatment, clinical trials, and medical practice guidelines for consumers and health care providers. AIDSinfo is collectively sponsored by the National Institutes of Health (NIH), Centers for Medicare and Medicaid Services (CMS), Health Resources and Services Administration (HRSA), and the Centers for Disease Control and Prevention (CDC).

Speak with a Health Information Specialist at *AIDSinfo*'s **toll-free** number (**800-448-0440**) or online (**<http://www.aidsinfo.nih.gov/LiveHelp/Default.aspx>**). *AIDSinfo* Specialists provide free, confidential, and personalized answers to your questions about HIV treatment and clinical trials. *AIDSinfo* Health Information Specialists can also assist you with navigating the *AIDSinfo* and *infoSIDA* Web sites as well as other Web sites sponsored by the National Library of Medicine, such as *ClinicalTrials.gov*, PubMed, and MedlinePlus.

There are many ways to take advantage of *AIDSinfo*'s helpful resources:

Web Sites: www.aidsinfo.nih.gov and www.aidsinfo.nih.gov/infosida

Live Help: <http://www.aidsinfo.nih.gov/LiveHelp/Default.aspx>
Monday–Friday, 12–4 PM EST. Spanish-speaking staff available.

E-mail: ContactUs@aidinfo.nih.gov
Spanish-speaking staff available.

Telephone: 800-448-0440 (Toll free)
Monday–Friday, 12–5 PM EST. Spanish-speaking staff available.

TTY/TDD: 888-480-3739

***AIDSinfo*...your trusted source for information about HIV/AIDS treatment, clinical trials, and medical practice guidelines for consumers and health care providers.**

Glossary

AACTG

See: Adult AIDS Clinical Trials Group

Acquired Immunity

The body's ability to fight or prevent a specific infection. This ability can be acquired either actively (by having and recovering from an infection or by being vaccinated against an infection) or passively (by receiving antibodies from an outside source, such as breast milk or donated blood components).

See Also: Active Immunity
Passive Immunity

Acquired Immunodeficiency Syndrome (AIDS)

A disease of the body's immune system caused by the human immunodeficiency virus (HIV). AIDS is characterized by the death of CD4 cells (an important part of the body's immune system), which leaves the body vulnerable to life-threatening conditions, such as infections and cancers.

See Also: AIDS-Defining Condition
AIDS-Related Cancer
Human Immunodeficiency Virus (HIV)
Opportunistic Infection (OI)

Acquired Resistance

See: Primary Resistance

ACTG

See: AIDS Clinical Trials Group

Active Immunity

Protection from a specific infection that develops after having and recovering from the infection or after being vaccinated against the infection.

See Also: Acquired Immunity

Acute HIV Infection

Also known as primary HIV infection or acute retroviral syndrome (ARS). The period of rapid HIV replication that occurs 2 to 4 weeks after infection by HIV. Acute HIV infection is characterized by a drop in CD4 cell counts and an increase in HIV levels in the blood. Some, but not all, individuals experience flu-like symptoms during this period of infection. These symptoms, collectively known as AIDS-related complex, can include fever, inflamed lymph nodes, sore throat, and rash. These symptoms may last from a few days to 4 weeks and then go away.

See Also: AIDS-Related Complex (ARC)

Acute HIV Infection and Early Diseases Research Program (AIEDRP)

A program funded by the National Institute of Allergy and Infectious Diseases (NIAID) to conduct research with people who have been recently infected with HIV. This research is aimed at understanding how HIV infects humans and how the disease progresses to AIDS. Scientists believe that events that occur during acute and early infection may determine the ultimate course of the disease.

Acute Retroviral Syndrome (ARS)

See: Acute HIV Infection

ADAPs

See: AIDS Drug Assistance Programs

ADC

See: AIDS Dementia Complex

Adenopathy

See: Lymphadenopathy Syndrome (LAS)

Adenovirus

A type of virus that commonly causes respiratory tract and eye infections. Adenovirus-based vaccines are being studied as a potential way of introducing viral particles that may stimulate an immune response against HIV, thereby preventing or treating HIV infection.

See Also: Retrovirus
Preventive HIV Vaccine

Adherence

Closely following (adhering to) a prescribed treatment regimen. Requires a patient to take the correct dose of a drug at the correct time, exactly as prescribed. Failure to adhere to an anti-HIV treatment regimen can lead to virologic failure and drug resistance.

See Also: Virologic Failure
Drug Resistance

Adjuvant

Substance added to a drug that enhances or modifies the original drug. Also refers to a substance added to a vaccine to improve the body's immune response to that vaccine.

ADR

See: Adverse Drug Reaction

Adult AIDS Clinical Trials Group (AACTG)

A large clinical trial organization that conducts clinical research to test treatment and prevention strategies for adult HIV infection and AIDS. The AACTG is funded by the National Institute of Allergy and Infectious Diseases (NIAID).

See Also: Clinical Trial

Adverse Drug Reaction (ADR)

Any drug effect that is unwanted, unpleasant, or potentially harmful. These effects may be mild and may disappear when the drug is stopped or may subside as the body adjusts to the drug. Other ADRs, such as skin rashes, anemia, or organ damage, are more serious. ADRs may be assigned grades of 1 (mild) to 4 (serious) to describe the strength of the reaction.

See Also: Side Effect

Adverse Effect

See: Adverse Event

Adverse Event (AE)

Any unfavorable and unintended sign (i.e., an abnormal laboratory finding), symptom, or disease associated usually in relation to timing, with the use of a drug or other intervention, whether or not the event is considered related to this product.

See Also: Adverse Drug Reaction (ADR)

AETCs

See: AIDS Education and Training Centers

Agammaglobulinemia

Absence or low levels of antibodies in the blood. This condition leaves a person vulnerable to infections.

See Also: Antibody

Agency for Healthcare Research and Quality (AHRQ)

An agency of the U.S. Department of Health and Human Services (HHS) that sponsors and conducts research on health care results, quality, cost, use, and access.

AHRQ

See: Agency for Healthcare Research and Quality

AIDS

See: Acquired Immunodeficiency Syndrome

AIDS Case Definition

See: AIDS-Defining Condition

AIDS Clinical Trials Group (ACTG)

A clinical trials network that evaluates treatments and new therapeutic approaches for the treatment of HIV infection and opportunistic diseases related to HIV/AIDS in adults.

AIDS-Defining Condition

Any of a list of illnesses that, when occurring in an HIV-infected person, leads to a diagnosis of AIDS, the most serious stage of HIV infection. AIDS is also diagnosed if an HIV-infected person has a CD4 count less than 200 cells/mm³, whether or not that person has an AIDS-defining condition. The Centers for Disease Control and Prevention (CDC) published a list of AIDS-defining conditions in 1993. The 26 conditions include candidiasis, cytomegalovirus disease, Kaposi's sarcoma, *Mycobacterium avium* complex, *Pneumocystis jiroveci* pneumonia, recurrent pneumonia, progressive multifocal leukoencephalopathy, pulmonary tuberculosis, invasive cervical cancer, and wasting syndrome.

See Also: Acquired Immunodeficiency Syndrome (AIDS)

AIDS Dementia Complex (ADC)

Also called HIV-associated dementia. A progressive mental disorder with different nervous system effects and mental symptoms. Mental symptoms may include memory loss; speech problems; inability to concentrate; poor judgment; or mood changes, such as depression. Nervous system effects may include behavior changes, such as not being able to perform daily tasks, and motor difficulties, such as loss of control of the legs or moving slowly or stiffly. ADC is considered an AIDS-defining condition in people with HIV.

AIDS Drug Assistance Programs (ADAPs)

Programs authorized under Title II of the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act that operate in all 50 states, the District of Columbia, Guam, Northern Mariana Islands, Puerto Rico, and the Virgin Islands. These programs provide HIV-related

prescription drugs to underinsured and uninsured individuals living with HIV/AIDS.

AIDS Education and Training Centers (AETCs)

A network of 15 regional centers that conduct targeted, multidisciplinary HIV education and training programs for health care providers. The mission of these centers is to increase the number of health care providers who are educated and motivated to counsel, diagnose, treat, and manage individuals with HIV infection and to assist in the prevention of high-risk behaviors that may lead to infection. AETCs are administered by the Health Resources and Services Administration (HRSA).

AIDS Encephalopathy

Malfunction of the brain as a result of HIV infection. Can occur as part of acute HIV infection or can result from chronic HIV infection.

AIDSinfo

A U.S. Department of Health and Human Services (HHS) project that offers the latest federally approved information on HIV/AIDS clinical research, treatment and prevention, and medical practice guidelines for people living with HIV/AIDS, their families and friends, health care providers, scientists, and researchers. The service includes a Web site with "Live Help," a toll-free hotline (1-800-448-0440); responses to e-mail inquiries; and a variety of publications that include treatment guidelines, drug fact sheets, and fact sheets based on the guidelines. <http://www.aidsinfo.nih.gov>

AIDS-Related Cancer

A cancer that is more common or more aggressive in people with HIV. These cancers include certain types of immune system cancers (lymphomas), Kaposi's sarcoma (KS), cancers that affect the anus and the cervix, and others. Having HIV appears to play a role in the development and progression of these cancers, although people without HIV can also have them.

AIDS-Related Complex (ARC)

A group of complications that commonly occur in the early stage of

HIV infection. These may include recurrent fever, unexplained weight loss, swollen lymph nodes, diarrhea, herpes, or fungal infection of the mouth and throat.

See Also: Acute HIV Infection

AIDS Service Organization (ASO)

A health association, support agency, or other service actively involved in the prevention and treatment of HIV/AIDS.

AIEDRP

See: Acute HIV Infection and Early Diseases Research Program

Alanine Transaminase (ALT)

See: Liver Function Tests

Alkaline Phosphatase

An enzyme normally present in certain cells within the liver, bone, kidney, intestine, and placenta. When cells are destroyed in those tissues, the enzyme leaks into the blood, and levels rise in proportion to the severity of the condition. Measurement of this enzyme is one way to evaluate the health of the liver.

ALT

See: Alanine Transaminase

Amino Acid

A building block the body uses to make proteins.

See Also: Protein

Anaphylaxis

Also called anaphylactic shock. A rare but life-threatening, whole-body allergic reaction. Symptoms may appear quickly and include difficulty breathing, swelling of the throat or other parts of the body, rapid drop in blood pressure, dizziness, or unconsciousness.

Anaphylaxis can be triggered by foods, drugs, insect stings, or exertion, depending on an individual's sensitivity.

Anemia

A lower than normal number of red blood cells. Symptoms may include fatigue, chest pain, or shortness of breath.

Anorexia

Lack or loss of appetite.

Antagonism

See: Drug Antagonism

Antenatal

See: Prenatal

Antepartum

The time period before childbirth (refers to the mother).

Antibiotic

A natural or man-made substance that can kill or stop the growth of micro-organisms, such as bacteria or fungi, that can cause infections.

Antibody

Also known as immunoglobulin. A protein produced by the body's immune system to recognize and fight infectious organisms and other foreign substances that enter the body. Each antibody is specific to a particular piece of an infectious organism or other foreign substance. Antibodies develop after the first exposure to a substance.

See Also: Antigen

Antifungal

A natural or man-made substance that can kill or stop the growth of a fungus.

Antigen

Any substance considered foreign to the body that can stimulate the body to produce antibodies against it. Antigens include bacteria,

viruses, and allergens such as pollen.

See Also: Antibody

Antigen-Presenting Cell (APC)

A type of cell that collects foreign materials (antigens), digests them into small pieces, and displays or presents the pieces on its surface. Other cells of the immune system recognize these pieces and become activated to fight the foreign invader. APCs include B lymphocytes, macrophages, and dendritic cells.

See Also: Antigen

B Lymphocytes

Dendritic Cell

Macrophage

Antineoplastic

A natural or man-made substance that can kill or stop the growth or spread of cancer cells.

Antiprotozoal

A natural or man-made substance that can kill or stop the growth of single-celled micro-organisms called protozoa.

Antiretroviral (ARV)

A drug that interferes with the ability of a retrovirus, such as HIV, to make more copies of itself.

See Also: Antiretroviral Therapy (ART)

Highly Active Antiretroviral Therapy (HAART)

Retrovirus

Antiretroviral Pregnancy Registry

An ongoing project to collect observational, nonexperimental information about the use of antiretrovirals during pregnancy. Information from the registry is used to help health care providers and patients weigh the potential risks and benefits of treatment during pregnancy. The registry does not use patient names, and registry staff obtain information from the patients' physicians.

<http://www.APRegistry.com>

Antiretroviral Therapy (ART)

Treatment with drugs that inhibit the ability of retroviruses, such as HIV, to multiply in the body. The antiretroviral therapy recommended for HIV infection is referred to as highly active antiretroviral therapy (HAART), which uses a combination of drugs to attack HIV at different points in its life cycle.

See Also: Highly Active Antiretroviral Therapy (HAART)
Retrovirus

Antisense Drug

A man-made segment of DNA or RNA that can lock onto a strand of DNA or RNA from a virus or other micro-organism. This marks the organism's genetic instructions for destruction and prevents the organism from making more copies of itself.

See Also: Deoxyribonucleic Acid (DNA)
Ribonucleic Acid (RNA)

Antiviral

A natural or man-made substance that can kill or stop the growth of a virus.

APC

See: Antigen-Presenting Cell

Aphthous Ulcer

A painful shallow sore in the mouth. The sore is usually oval shaped, with a yellow-white center surrounded by a narrow red ring. Aphthous ulcers are 1/8- to 1/4-inch across and have no blisters. They occur on the soft surfaces of the mouth, such as the inner cheeks, inner lips, soft areas of the roof and floor of the mouth, tongue, gums, and throat.

Apoptosis

The deliberate, programmed death of a cell. Apoptosis occurs as a normal part of life and helps the body stay healthy. If cells are damaged (for example, cancerous cells or cells infected with HIV), the body orders those cells to die in order to contain the disease.

Approved Drug

In the United States, the Food and Drug Administration (FDA) must approve a drug before it can be marketed and sold to the public. The approval process involves several steps, including laboratory and animal studies, clinical trials for safety and efficacy, filing of a New Drug Application (NDA) by the manufacturer of the drug, FDA review of the application, and FDA approval/rejection of the application.

See Also: New Drug Application (NDA)

ARC

See: AIDS-Related Complex

Area Under the Curve (AUC)

A measure of how much drug reaches a person's bloodstream in a given period of time (usually the time between each dose or within 24 hours of a dose). The AUC is calculated by plotting the drug's blood levels on a graph at different times during the set period to form a curve. The area under this curve reflects the total drug exposure in the set time period.

Arm

Any of the treatment groups in a clinical trial. Most clinical trials have two arms, but some have three or even more. Each arm receives a different treatment or placebo.

See Also: Clinical Trial
Placebo

ARS

See: Acute Retroviral Syndrome

ART

See: Antiretroviral Therapy

Arthralgia

Joint pain with additional symptoms such as heat, redness, tenderness to touch, loss of motion, or swelling.

ARV

See: Antiretroviral

ASO

See: AIDS Service Organization

Aspartate Aminotransferase (AST)

See: Liver Function Tests

Aspergillosis

An infection of the lungs caused by the fungus *Aspergillus*. The infection may also spread through the blood to other organs.

Symptoms include fever, chills, difficulty in breathing, and coughing up blood. If the infection reaches the brain, it may cause dementia.

AST

See: Aspartate Aminotransferase

Asymptomatic

Having no obvious signs or symptoms of disease.

Ataxia

Partial or complete loss of coordination of voluntary muscular movements. This can interfere with a person's ability to walk, talk, eat, and perform other tasks of daily living.

Atherosclerosis

A condition that results from the gradual buildup of fatty substances, including cholesterol, on artery walls. Use of PIs may increase cholesterol levels, which increases the risk of developing atherosclerosis. However, a recent study has shown that long-term HAART may actually decrease the risk of atherosclerosis.

See Also: Cholesterol

Attachment Inhibitor

Class of anti-HIV drugs that prevents the virus from attaching to a new, healthy host cell, thus preventing cell infection.

See Also: Entry Inhibitor

Attenuated

A term used to describe a bacterium or virus that has been changed in the laboratory so that it is not harmful to people. Attenuated viruses are often used as vaccines, because they can no longer cause disease but can still stimulate a strong immune response. Examples include the vaccines against polio (Sabin oral vaccine), measles, mumps, and rubella.

AUC

See: Area Under the Curve

Autoantibody

An antibody directed against the body's own tissue.

See Also: Antibody

Avascular Necrosis (AVN)

Death of bone (also known as osteonecrosis) caused by a loss of blood supply to the bone tissue. AVN has occurred in the hip bones of some people with HIV, but it is not clear if bone death occurs because of HIV infection itself or as a side effect of anti-HIV drugs. Symptoms include pain in the affected area of the body, limited range of motion, joint stiffness, limping, and muscle spasms. If untreated, AVN can cause progressive bone damage that leads to bone collapse.

See Also: Osteonecrosis

AVN

See: Avascular Necrosis

B2M

See: Beta-2 Microglobulin

Bactericide

A natural or man-made substance that kills bacteria.

Bacteriostatic

A natural or man-made substance that can prevent bacteria from reproducing but cannot actually kill existing bacteria.

Bacterium

A microscopic organism consisting of one simple cell. Bacteria occur naturally almost everywhere on earth, including in soil, on skin, in the human gastrointestinal tract, and in many foods. Some bacteria can cause disease in humans.

Baseline

An initial measurement (for example, CD4 count or viral load) made before starting treatment or therapy for a disease or condition. In people infected with HIV, the baseline measurement is used as a reference point to monitor HIV infection.

Basophil

An infection-fighting white blood cell that causes inflammation in response to a micro-organism or other foreign invader.

B Cell

See: B Lymphocyte

B-Cell Lymphoma

A type of cancer of the lymphatic tissue. People with HIV are more prone to non-Hodgkin's and other B-cell lymphomas, some of which are considered AIDS-defining conditions in people with HIV.

See Also: Lymphoma

Non-Hodgkin's Lymphoma (NHL)

bDNA Assay

See: Branched-Chain DNA Assay

Beta-2 Microglobulin (B2M)

A protein found on the surface of white blood cells. Increased production or destruction of white blood cells causes B2M levels in the blood to increase. This increase is seen in people with cancers involving white blood cells and in people with advanced HIV disease.

b.i.d.

Twice-a-day dosing instructions.

Bilirubin

A yellowish substance excreted by the liver. Its measurement can be used as an indication of the health of the liver. Large quantities of bilirubin may cause the skin to take on a yellow tint (jaundice), and very high levels may cause brain damage.

See Also: Jaundice

Bioavailability

Rate and extent to which a drug is absorbed and available in the tissues of the body.

Biological Response Modifier (BRM)

A natural or man-made substance that can boost, direct, or restore immune system function.

Biopsy

The surgical removal and examination of an organ or tissue to aid in diagnosis and treatment of a health condition.

Black Box Warning

Information found at the beginning of a drug's prescribing information, manufacturer labeling, and promotional material. This information highlights important safety information, such as serious side effects, drug interactions, or use restrictions. The black box

warning is one of the strongest warnings issued by the Food and Drug Administration (FDA) and is reserved for drugs with significant risks or monitoring requirements.

See Also: Package Insert

Blip

A temporary increase in viral load in someone who previously had undetectable virus and who later returns to having undetectable virus. The viral load during a blip is usually low (50 to 500 copies/mL).

See Also: Undetectable Viral Load (UDVL)

Blood-Brain Barrier

A selective obstacle between circulating blood and brain tissues that prevents damaging substances from reaching the brain. Certain substances easily cross the blood-brain barrier; others are completely blocked.

B Lymphocyte

Also known as a B cell. Infection-fighting white blood cell that develops in the bone marrow and spleen. B lymphocytes produce antibodies. In people with HIV, the ability of B lymphocytes to do their job may be damaged.

See Also: Antibody

Body Habitus Changes

Abnormal changes in the body's physical characteristics.

See Also: Wasting Syndrome

Lipoatrophy

Lipohypertrophy

Bone Marrow Suppression

See: Myelosuppression

Booster

An additional dose or doses of a vaccine given after the initial dose to enhance the immune response to the vaccine. Also used as a term to describe a medicine given to enhance another medicine,

such as using ritonavir (RTV) as a booster with other PIs.

Branched-Chain DNA (bDNA) Assay

A test that measures a person's viral load (level of HIV RNA in the blood) to identify HIV infection and to monitor disease progression and treatment effectiveness. Results are reported as the number of HIV RNA copies per milliliter of blood. bDNA assay is an alternative to measuring viral load by reverse transcriptase-polymerase chain reaction (RT-PCR).

See Also: Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR)
Viral Load (VL)

BRM

See: Biological Response Modifier

Bronchoscopy

Visual examination of the bronchial passages of the lungs using an endoscope (a curved, flexible tube containing fibers that carry light down the tube and project an enlarged image of the bronchial passages onto a viewing screen). Can also be used for extraction of material from the lungs.

Budding

The final step in the HIV life cycle, in which an individual virus pushes out (or "buds") from the host cell, steals part of the cell's outer envelope, and frees itself to attach to and infect another host cell.

Buffalo Hump

See: Dorsocervical Fat Pad

See Also: Body Habitus Changes

Burkitt's Lymphoma

Also known as small, noncleaved-cell lymphoma. A type of non-Hodgkin's lymphoma. There are three types of Burkitt's lymphoma, one type occurs in people with weakened immune systems, such as those with AIDS.

See Also: Non-Hodgkin's Lymphoma (NHL)

Cachexia

Loss of weight, muscle wasting, fatigue, weakness, and decrease of appetite in someone who is not actively trying to lose weight. Usually associated with serious disease.

CAM

See: Complementary and Alternative Medicine

Candidiasis

Infection caused by a species of the yeast-like fungus *Candida*, usually *C. albicans*. Candidiasis can affect the skin; nails; and mucous membranes throughout the body, including the mouth (thrush), esophagus, vagina, intestines, and lungs. The infection appears as white patches when in the mouth or any other mucous membrane. Candidiasis is considered an AIDS-defining condition in people with HIV.

Cardiomyopathy

A condition that weakens the heart muscle or causes a change in heart muscle structure. Cardiomyopathy is associated with inadequate heart pumping or other heart function abnormalities. Cardiomyopathy may occur in HIV-infected people with advanced disease. Irregular heartbeat, abnormal heart and breath sounds, decreased heart function, or heart enlargement may indicate cardiomyopathy.

CARE Act

See: Ryan White CARE Act

CBC

See: Complete Blood Count

CBO

See: Community-Based Organization

CCR5

Chemokine receptor 5 (CCR5) is a protein on the surface of some

immune system cells. It is one of two coreceptors that HIV can use along with the CD4 receptor to bind to and enter host cells. (The other coreceptor is CXCR4.)

See Also: Coreceptor
CXCR4
CD4 Receptor
CCR5 Receptor Blocker

CCR5 Receptor Blocker

Class of anti-HIV drug that stops HIV from binding to the CCR5 coreceptor, a receptor that most strains of HIV need to enter cells. Without the ability to bind to CCR5, HIV entry is halted.

See Also: CCR5
Coreceptor

CD4 Cell

Also known as helper T cell or CD4 lymphocyte. A type of infection-fighting white blood cell that carries the CD4 receptor on its surface. CD4 cells coordinate the immune response, which signals other cells in the immune system to perform their special functions. The number of CD4 cells in a sample of blood is an indicator of the health of the immune system. HIV infects and kills CD4 cells, which leads to a weakened immune system.

See Also: CD4 Cell Count
CD4 Receptor

CD4 Cell Count

A measurement of the number of CD4 cells in a sample of blood. The CD4 count is one of the most useful indicators of the health of the immune system and the progression of HIV/AIDS. A CD4 cell count is used by health care providers to determine when to begin, interrupt, or halt anti-HIV therapy; when to give preventive treatment for opportunistic infections; and to measure response to treatment. A normal CD4 cell count is between 500 and 1,400 cells/mm³ of blood, but an individual's CD4 count can vary. In HIV-infected individuals, a CD4 count at or below 200 cells/mm³ is considered an AIDS-defining condition.

See Also: CD4 Cell

CD4 Percentage

The percent of lymphocytes (white blood cells) that are CD4 cells. This measurement is less likely to vary in between blood tests than CD4 count, but CD4 count remains a more reliable measure of immune function than CD4 percentage for most people.

See Also: CD4 Cell Count
CD4 Cell

CD4 Receptor

A specific molecule present on the surface of a CD4 cell. HIV recognizes and binds to a CD4 receptor and a coreceptor to gain entry into a host cell.

See Also: CD4 Cell
Coreceptor

CD8 Cell

Also called a cytotoxic T lymphocyte (CTL), killer T cell, or suppressor T cell. A type of white blood cell that is able to identify and kill cells infected with bacteria, viruses, or other foreign invaders.

CDC

See: Centers for Disease Control and Prevention

CDCINFO

A service sponsored by the Centers for Disease Control and Prevention (CDC) to provide referrals, education, and information about topics including HIV/AIDS, other sexually transmitted diseases (STDs), immunizations, and disease outbreaks. The CDCINFO hotline number is 1-800-CDCINFO (232-4636).

Cell-Mediated Immunity

Immune protection provided by the direct action of immune cells. With this type of immune protection, the response to infectious micro-organisms is performed by specific cells—such as CD8 cells, macrophages, and other white blood cells—rather than by antibodies. The main role of cell-mediated immunity is to fight viral infections.

See Also: Macrophage
Antibody
Immune Response

Cellular Immunity

See: Cell-Mediated Immunity

Centers for Disease Control and Prevention (CDC)

An agency of the U.S. Department of Health and Human Services (HHS) that is charged with protecting the health and safety of citizens at home and abroad. The CDC serves as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and education activities designed to improve the health of the people of the United States.
<http://www.cdc.gov>

Centers for Medicare and Medicaid Services (CMS)

Previously known as the Health Care Financing Administration (HCFA). An agency of the U.S. Department of Health and Human Services (HHS) responsible for administering Medicare, Medicaid, State Children's Health Insurance Program (SCHIP), Health Insurance Portability and Accountability Act (HIPAA), Clinical Laboratory Improvement Amendments (CLIA), and other health-related programs.

Central Nervous System (CNS)

The part of the nervous system made up of the brain, spinal cord, and spinal nerves. These serve as the main processing center for the whole nervous system and together control all the workings of the body. HIV can infect and damage parts of the central nervous system.

Cerebrospinal Fluid (CSF)

A clear, colorless fluid that fills the spaces in the brain and the central canal of the spinal cord as well as the spaces between nerve cells.

Cervical Cancer

A condition in which a cancerous growth (also called a malignancy) develops on the lower portion of the uterus (cervix).

See Also: Cervical Dysplasia

Pap Smear

Human Papillomavirus (HPV)

Cervical Dysplasia

The abnormal growth of cervical cells, usually with no symptoms. It can be detected by a Pap smear, and treatment can prevent it from progressing to cervical cancer.

See Also: Cervical Cancer

Pap Smear

Human Papillomavirus (HPV)

Cervical Intraepithelial Neoplasia (CIN)

A general term for the growth of abnormal cells on the surface of the cervix. Numbers from 1 to 3 may be used to describe how much of the cervix contains abnormal cells.

See Also: Cervical Dysplasia

Cervix

The lower, narrow end of the uterus that forms a canal between the uterus and vagina.

Chancroid

A sexually transmitted disease (STD) caused by a bacterium called *Hemophilus ducreyi*. Often causes swollen lymph nodes and painful sores on the penis, vagina, or anus. The lesions appear after an incubation period of 3 to 5 days and may facilitate HIV transmission.

Chemical Barrier

A mechanism that uses chemicals to try to prevent sexually transmitted infections (STIs), including HIV infection. Microbicides are currently being studied as chemical barriers to prevent the transmission of STIs.

See Also: Microbicide

Chemokines

Proteins that serve as chemical messengers to control the activities of the immune system. Chemokines are involved in a wide variety of processes, including the control of infectious diseases, cancers, and inflammation. Chemokines include interferons, interleukins, and many other small proteins.

Chemoprevention

Also known as chemoprophylaxis. The use of natural or man-made agents to help reduce the risk of or delay the development or recurrence of a disease, such as cancer.

Chemoprophylaxis

See: Chemoprevention

Chemotherapy

Treatment with anticancer drugs that kill or prevent the growth and division of cells. The drugs enter the bloodstream and travel through the body killing mostly cancer cells, but some healthy cells may be killed as well.

Chlamydia

A sexually transmitted disease (STD) caused by a bacterium called *Chlamydia trachomatis*. The bacteria infect the genital tract and, if left untreated, can cause damage to the female and male reproductive systems, resulting in infertility.

Cholesterol

A fat-like substance used as a building block for cells. Cholesterol is both made by the liver and absorbed from food and is carried in the blood. When blood cholesterol levels are too high (hyperlipidemia), some of the cholesterol is deposited on the walls of the blood vessels, increasing the risk of heart disease and atherosclerosis.

Use of PIs may also increase cholesterol levels.

See Also: Hyperlipidemia

Chronic Idiopathic Demyelinating Polyneuropathy (CIPD)

Chronic, spontaneous loss or destruction of myelin, a white fatty material that protects and insulates nerve cells. People with CIPD show progressive, usually symmetrical weakness in the arms and legs. CIPD can be one of the symptoms of lactic acidosis or progressive multifocal leukoencephalopathy.

See Also: Lactic Acidosis

Progressive Multifocal Leukoencephalopathy (PML)

CIN

See: Cervical Intraepithelial Neoplasia

CIPD

See: Chronic Idiopathic Demyelinating Polyneuropathy

CIPRA

See: Comprehensive International Program of Research on AIDS

Clade

A group of organisms that are genetically similar and descended from a single parent organism. With HIV, the term clade refers to a group of specific HIV-1 strains within an HIV subtype. For example,

HIV-1 subtype M contains clades A through H, J, and K. Clades B and C account for the majority of HIV infections around the world.

See Also: Subtype

C

Class-Sparing Regimen

An anti-HIV drug regimen that purposefully does not include one or more classes of anti-HIV drugs. A class-sparing regimen may be prescribed to save certain classes of drugs for later use or to avoid side effects specific to a class. For example, a PI-sparing regimen would not include any PIs. Because some PIs may cause an increase in cholesterol in the blood, a PI-sparing regimen might be prescribed for an HIV-infected person who already has high cholesterol levels.

Clinical Alert

The National Institutes of Health (NIH) publishes these electronic bulletins containing urgent early results of clinical trials. The data in these bulletins warn about possible morbidity (sickness rates) and mortality (death rates) in participants involved in the clinical trials.

Clinical Endpoint

A measurement used in clinical trials to evaluate the effect of the treatment being tested. Examples of clinical endpoints for HIV disease include death, serious drug toxicity, or development of an AIDS-defining illness. Because these endpoints may be difficult to measure without long-term follow-up, surrogate (substitute) short-term endpoints, such as a change in viral load or CD4 count, may also be used as clinical endpoints.

See Also: Clinical Trial

Clinical Failure

The occurrence or recurrence of HIV-related infections or a decline in physical health despite taking an HIV treatment regimen for a minimum of 3 months. Clinical failure may occur as a result of virologic or immunologic failure.

See Also: Virologic Failure

Immunologic Failure

Clinical Practice Guidelines

Recommendations by panels of expert health care practitioners designed to assist clinicians and patients in making decisions about appropriate health care for specific diseases and conditions.

Clinical Progression

A term for the overall progression of a disease as measured by deterioration of clinical outcomes. In an HIV-infected person, clinical progression may be defined as the occurrence or recurrence of HIV-related events (after at least 3 months on an antiretroviral regimen), excluding immune reconstitution syndromes. HIV-infected patients who have a CD4 T-cell count less than 100 cells/mm³ are considered to have a high likelihood of clinical progression.

Clinical Trial

A research study that uses human volunteers to answer specific health questions. Carefully conducted clinical trials are regarded as the fastest and safest way to find effective treatments for diseases and conditions as well as other ways to improve health. Interventional trials use controlled conditions to determine whether experimental treatments or new ways of using known treatments are safe and effective. Observational trials gather information about health issues from groups of people in their natural settings. Clinical trials may be prospective (studying data from a time point forward) or retrospective (studying data from collected records in the past).

ClinicalTrials.gov

An online, searchable database of information about clinical trials sponsored by governments, pharmaceutical companies, and other organizations. This database is managed by the National Institutes of Health (NIH) through its National Library of Medicine (NLM).
<http://www.clinicaltrials.gov>

See Also: Clinical Trial

CMAX

Also called maximum concentration. The maximum (peak) amount of drug measurable in the blood after a dose is administered.

See Also: CMIN

CMIN

Also called minimum concentration. The lowest (trough) amount of drug measurable in the blood after a dose is administered.

See Also: CMAX

CMS

See: Centers for Medicare and Medicaid Services

CMV

See: Cytomegalovirus

CMV Retinitis

See: Cytomegalovirus Retinitis

CNS

See: Central Nervous System

Coccidioidomycosis

Also called desert fever, San Joaquin Valley fever, or valley fever. An infectious disease caused by the inhalation of spores of *Coccidioides immitis*. The disease is especially common in hot, dry regions of the Southwestern United States and Central and South America. It is an AIDS-defining condition in people with HIV.

See Also: AIDS-Defining Condition

Cognitive Impairment

Loss of the ability to process, learn, and remember information. The progression of HIV disease may lead to cognitive impairment.

See Also: AIDS Dementia Complex

Cohort

A group of individuals who are alike in some way. For example, the people in a cohort of HIV-infected individuals are all infected with HIV.

Coinfection

Infection with more than one virus, bacterium, or other micro-organism at a given time. For example, an HIV-infected individual may be coinfecting with hepatitis C virus (HCV) or tuberculosis (TB).

Colitis

Inflammation of the colon (large intestine). This may lead to intestinal bleeding, ulcers, or perforations (holes) in the colon.

Combination Therapy

Two or more drugs used together to achieve optimal results in controlling HIV infection. Combination therapy has proven more effective in decreasing viral load than monotherapy (single-drug therapy), which is no longer recommended for the treatment of HIV. An example of combination therapy is the use of two NRTIs plus a PI or an NNRTI.

Community-Based Organization (CBO)

A service organization that provides social services to local clients. CBOs include nonprofit organizations and free clinics targeted at helping people with HIV.

Community Programs for Clinical Research on AIDS (CPCRA)

Also known as the Terry Bein Community Programs for Clinical Research on AIDS. A network of clinical research units composed of community-based health care providers. CPCRA's aim is to serve populations under-represented in previous clinical trials. CPCRA is funded by the National Institute of Allergy and Infectious Diseases (NIAID).

Comorbid Condition

Any disease or condition that occurs at the same time as another disease or condition. The second disease may worsen or be worsened by the initial disease. For example, tuberculosis (TB) may occur as a comorbid condition in an individual infected with HIV, and the HIV infection may worsen the TB.

Compassionate Use

General term used to describe any program that provides an experimental therapy outside of clinical trials to patients who do not have any FDA-approved treatment options (for example, HIV-infected individuals who have extensive drug resistance to approved anti-HIV drugs). To enroll in compassionate use programs, an individual has to meet strict medical criteria.

See Also: Expanded Access
Investigational Drug

Complementary and Alternative Medicine (CAM)

Health care practices not currently considered part of conventional medicine. A therapy is called complementary when it is used in addition to conventional treatments. It is called alternative when it is used instead of conventional treatment. CAM includes a broad range of healing therapies, approaches, and systems. Some examples of CAM are acupuncture, herbs, homeopathy, chiropractic, hypnosis, and traditional Chinese medicine.

Complete Blood Count (CBC)

A general blood test that measures the levels of white and red blood cells, platelets, hematocrit, and hemoglobin in a sample of blood. Changes in the amounts of each of these may indicate infection, anemia, or other health problems.

Comprehensive International Program of Research on AIDS (CIPRA)

A program administered by the National Institute of Allergy and Infectious Diseases (NIAID) to support research and development of practical, affordable, and acceptable methods to prevent and treat HIV/AIDS in resource-poor countries.

Concentration

The relative amount of a substance, such as an administered drug or a circulating enzyme, found in a particular location, such as the blood or a specific organ. For example, drug concentrations are often reported as the amount of drug in a measured sample of blood.

See Also: CMIN
CMAX

Condyloma Acuminatum

See: Genital Warts

Contagious

Easily passable between people through normal day-to-day contact. For example, chicken pox is both an infectious (causing infection) and a contagious disease. In contrast, HIV is an example of an infectious disease that is not a contagious disease (i.e., it cannot be passed from person to person through casual contact).

Contraindication

A specific situation in which a particular treatment should NOT be used, because it may be harmful to the patient. For example, some anti-HIV drugs are primarily broken down by the liver and should not be given to people who have liver damage.

Controlled Trial

A control is a standard against which experimental treatments may be compared and evaluated for safety and effectiveness. In clinical trials, one group of patients may be given an experimental drug, while another group (the control group) is given either a standard treatment for the disease or a placebo.

See Also: Placebo

Core

The inner protective coat of protein that surrounds the genetic material of most viruses. In HIV, the core is mostly made up of the p24 protein, which surrounds two copies of HIV's genetic material.

Coreceptor

A protein on the surface of a cell that serves as a second binding site for a virus or other molecule. Although the CD4 protein is HIV's primary receptor, the virus must also bind to either the CCR5 or CXCR4 coreceptor to get into a host cell.

See Also: CCR5

CXCR4

CD4 Receptor

CPCRA

See: Community Programs for Clinical Research on AIDS

Creatinine

A protein found in muscles and blood and excreted by the kidneys into the urine. The level of creatinine in the blood or urine provides a measure of kidney function. Increased levels of creatinine indicate abnormal or impaired kidney function.

Cross Resistance

Cross resistance occurs when a micro-organism has changed, or mutated, in such a way that it loses its susceptibility to multiple drugs simultaneously. For example, HIV resistance to one NNRTI drug usually produces resistance to the entire NNRTI drug class.

See Also: Drug Resistance

Non-Nucleoside Reverse Transcriptase Inhibitor (NNRTI)

Mutation

Cross Sensitivity

A drug reaction that may occur again with the use of a different, but related, drug. Cross sensitivity can occur within a drug class, such as when a person reacts to all NNRTIs similarly after treatment with

just one. Cross sensitivity can also occur among chemically similar drug classes. For example, a person who has a negative side effect to a sulfa-based antibiotic is at risk for the same negative side effect if he or she takes any other sulfa-based drug.

Cryotherapy

The use of liquid nitrogen to freeze and destroy a lesion or growth to prevent further spread of the growth. In people with HIV, it is used to treat lesions caused by Kaposi's sarcoma (KS) and condyloma acuminatum (genital warts).

See Also: Genital Warts

Kaposi's Sarcoma (KS)

Cryptococcal Meningitis

A life-threatening infection of the membranes surrounding the brain and the spinal cord caused by the fungus *Cryptococcus neoformans*. Symptoms include headache, dizziness, stiff neck, and—if untreated—coma and death. Immunocompromised individuals, such as those with HIV, are more susceptible to this infection. It is considered an AIDS-defining condition in people with HIV.

Cryptococcosis

An infection caused by the fungus *Cryptococcus neoformans*.

This fungus typically enters the body through the lungs and usually spreads to the brain, causing cryptococcal meningitis. In some cases, it can also affect the skin, skeletal system, and urinary tract. It is considered an AIDS-defining condition in people with HIV.

See Also: Cryptococcal Meningitis

Cryptosporidiosis

A diarrheal disease caused by the protozoa *Cryptosporidium*.

Symptoms include abdominal cramps and severe chronic diarrhea. It is considered an AIDS-defining condition in people with HIV.

See Also: *Cryptosporidium*

Cryptosporidium

The protozoan that causes cryptosporidiosis. It is found in the intestines of animals and may be transmitted to humans by direct contact with an infected animal, by eating contaminated food, or by drinking contaminated water.

See Also: Cryptosporidiosis

CSF

See: Cerebrospinal Fluid

CTL

See: Cytotoxic T Lymphocyte

Cutaneous

Of, relating to, or affecting the skin.

CXCR4

Chemokine receptor 4 (CXCR4, also known as fusin) is a protein on the surface of some immune system cells. It is one of two coreceptors that HIV can use along with the CD4 receptor to bind to and enter host cells. (The other coreceptor is CCR5.)

See Also: Coreceptor

CD4 Receptor

CCR5

CYP450

See: Cytochrome P450

Cytochrome P450 (CYP450)

A system of enzymes, located primarily in the liver, that participates in the breakdown of drugs. Many drugs inhibit or enhance the activity of these enzymes. Any change in CYP450 enzyme activity may cause an increase or decrease in blood levels of drugs that are broken down through this system.

See Also: Drug Interaction

Cytokine

A protein produced by white blood cells that acts as a chemical messenger between cells. Cytokines can stimulate or inhibit growth or activity of immune cells and are essential for a coordinated immune response. Cytokines include the interleukins and the interferons.

See Also: Interleukin (IL-2, IL-7)
Interferon (IFN)

Cytomegalovirus (CMV)

A herpesvirus that can cause infections, including pneumonia (infection of the lungs), gastroenteritis (infection of the gastrointestinal tract), encephalitis (inflammation of the brain), or retinitis (infection of the eye), in immunosuppressed people. Although CMV can infect most organs of the body, HIV-infected people are most susceptible to CMV retinitis.

See Also: Cytomegalovirus Retinitis
Herpesviruses

Cytomegalovirus Retinitis

An infectious eye disease caused by cytomegalovirus (CMV). People with CMV retinitis can lose their vision, and CMV retinitis is the most common cause of blindness among people infected with HIV.

See Also: Cytomegalovirus (CMV)

Cytopenia

A condition in which the production of one or more kind of blood cells is greatly reduced or stops completely. Some drugs used to treat HIV or cancer may cause cytopenia.

Cytotoxic

Toxic or destructive to cells. For example, cancer chemotherapy is cytotoxic, because it destroys both cancerous and noncancerous cells.

Cytotoxic T Lymphocyte (CTL)

See: CD8 Cell

DAART

See: Directly Administered Antiretroviral Therapy

DAIDS

See: Division of Acquired Immunodeficiency Syndrome

Data and Safety Monitoring Board (DSMB)

An independent committee of community representatives and clinical research experts who review data while a clinical trial is in progress to ensure that participants are not exposed to undue risk. A DSMB may recommend that a trial be stopped if there are safety concerns or if the trial objectives have been achieved, or the DSMB can require changes to the study design to ensure safety of participants.

Dementia

See: AIDS Dementia Complex (ADC)

Dendritic Cell

A type of antigen-presenting cell that picks up foreign substances from the bloodstream and presents them to other parts of the immune system, which activates an immune response against the foreign invader.

See Also: Antigen-Presenting Cell (APC)
Antigen

Dendritic Cell Vaccine

Vaccine made of antigens and dendritic antigen-presenting cells. Dendritic cell vaccines are being studied as possible therapeutic HIV vaccines to treat HIV-infected people.

See Also: Therapeutic HIV Vaccine
Dendritic Cell

Deoxyribonucleic Acid (DNA)

Chemical structure that contains the genetic instructions for reproduction and protein synthesis for all cells and for many viruses.

Department of Health and Human Services (HHS)

The U.S. government's principal agency for protecting the health of all Americans and for providing essential human services. HHS includes more than 300 programs that cover a wide spectrum of activities. More than 300 programs are administered by 11 operating divisions, including the Centers for Disease Control and Prevention (CDC), the Food and Drug Administration (FDA), and the National Institutes of Health (NIH). HHS works closely with state and local governments, and many HHS-funded services are provided at the local level by state or county agencies or through private-sector grantees. <http://www.hhs.gov/>

Desensitization

A gradual increase in the dose of a medicine to avoid severe side effects. Desensitization procedures are sometimes used when administering some anti-HIV drugs and antibiotics.

DEXA

See: Dual Energy X-Ray Absorptiometry Scan

Diabetes

Also known as diabetes mellitus. A disease characterized by high levels of sugar in the blood (hyperglycemia). It can be caused by too little insulin (a hormone produced by the pancreas to regulate blood sugar), resistance to insulin, or both. Some anti-HIV drugs may cause or worsen diabetes.

See Also: Hyperglycemia
Insulin Resistance

Diarrhea

Uncontrolled, loose, watery, and frequent bowel movements caused by diet, infection, drug, or irritation or inflammation of the intestine. Severe or long-lasting diarrhea can lead to weight loss and malnutrition. The most common infectious organisms that cause HIV-related diarrhea include cytomegalovirus (CMV); the parasites *Cryptosporidium*, *Microsporidia*, and *Giardia*; and the bacteria *Mycobacterium avium* and *Mycobacterium intracellulare*. Bacteria

and parasites that cause diarrheal symptoms in otherwise healthy people may cause more severe, prolonged, or recurrent diarrhea in people with HIV or AIDS.

Directly Administered Antiretroviral Therapy (DAART)

Method of ensuring that a person takes anti-HIV drugs as prescribed. DAART requires that a caregiver directly observe the patient ingest the anti-HIV drugs to increase adherence to the treatment plan.

See Also: Adherence

Directly Observed Therapy (DOT)

Directly Observed Therapy (DOT)

A treatment strategy to ensure adherence, in which a health care provider or other observer watches a patient take each dose of a drug. This strategy is used with diseases like tuberculosis (TB) and HIV infection, in which adherence is important for effective treatment and to prevent emergence of drug resistance.

See Also: Adherence

Discordant Couple

A pair of long-term sexual partners in which one person is infected with a sexually transmitted infection (such as HIV) and the other is not.

Disseminated

Widely dispersed across the entire body. In immunocompromised people, such as those with AIDS, coinfections (e.g., cryptococcosis, histoplasmosis, *Mycobacterium avium* complex, etc.) may become disseminated and spread through the bloodstream to infect lymph nodes, bone marrow, liver, spleen, spinal fluid, lungs, and the intestinal tract.

Division of Acquired Immunodeficiency Syndrome (DAIDS)

A division of the National Institutes of Health's (NIH's) National Institute of Allergy and Infectious Diseases (NIAID). DAIDS was formed in 1986 to address the national research needs created

by the HIV/AIDS epidemic; to increase basic knowledge of the pathogenesis, natural history, and transmission of HIV disease; and to support research to promote HIV detection, treatment, and prevention.

See Also: National Institute of Allergy and Infectious Diseases (NIAID)
National Institutes of Health (NIH)

DNA

See: Deoxyribonucleic Acid

Dorsocervical Fat Pad

A type of lipodystrophy (a problem in the way the body produces, uses, and distributes fat) in which fatty tissue builds up on the upper back and neck. It most often occurs in HIV-infected people as a result of PI or NRTI drug treatment. This fat buildup, also known as buffalo hump, may be associated with other metabolic side effects, such as high insulin levels.

See Also: Lipodystrophy
Body Habitus Changes

Dosage

The scheduled administration of individual drug doses, usually expressed as a quantity per unit of time. For example, a prescribed drug dosage may be 200 mg per day (but the individual dose could be 100 mg in the morning and 100 mg in the evening).

Dose

The measured amount of a therapeutic agent that is taken at one time, or the total amount taken during one time period. For example, a single dose of 100 mg may be taken at one time, or a total dose of 1,000 mg may be taken during one 5-day treatment period.

See Also: Dosage

Dose-Ranging Study

Clinical trial in which different doses of a drug are tested to determine which is the safest and most effective. Before drugs are

approved by the FDA, they must go through Phase I and II dose-ranging studies.

See Also: Clinical Trial
Phase I Trial
Phase II Trial

Dose-Response Relationship

The relationship between the dose of a drug and its corresponding effect on the body. If a drug exhibits a dose-response effect, it means that as the dose increases, so does the effect.

DOT

See: Directly Observed Therapy

Double-Blind Study

A clinical trial design in which neither the participants nor the study staff know which individuals are receiving the experimental treatment and which are receiving a placebo (or another control therapy). Double-blind trials produce more objective results, because the expectations of the study staff and the participants do not affect the outcome.

See Also: Controlled Trial

DRESS

See: Drug Rash with Eosinophilia and Systemic Symptoms

Drug Antagonism

An interaction between two or more drugs in which one drug blocks or reverses the effect of another drug.

Drug Class

A group of drugs that share common properties, such as mechanisms of action.

Drug Concentration

See: Concentration

Drug-Drug Interaction

A change in the way a drug works when it is taken along with another drug. The effect may be an increase or a decrease in the action of either drug, or it may be a side effect that does not normally occur with either drug alone.

See Also: Drug Interaction

Drug Formulation

See: Formulation

Drug Holiday

See: Structured Treatment Interruption (STI)

Drug Interaction

An effect that can occur when one drug is taken with another drug or when a drug is taken with particular foods. Possible effects include changes in absorption from the digestive tract, changes in the rate of the drug's breakdown in the liver, new or increased side effects, or changes in the drug's activity.

See Also: Drug-Drug Interaction

Drug Rash with Eosinophilia and Systemic Symptoms (DRESS)

A rare but life-threatening allergic drug reaction that sometimes occurs in people taking certain NNRTIs. Symptoms include severe rash along with fever, blood abnormalities, and organ inflammation.

Drug Resistance

The ability of some micro-organisms, such as bacteria, viruses, and parasites, to adapt so that they can multiply even in the presence of drugs that would normally kill them.

Drug Toxicity

See: Toxicity

DSMB

See: Data and Safety Monitoring Board

Dual Energy X-Ray Absorptiometry (DEXA) Scan

A painless test that uses low energy x-rays to measure the mineral content of bones. DEXA scans are commonly used to test for osteopenia or osteoporosis and are also used to evaluate lipodystrophy.

See Also: Osteopenia
Osteoporosis
Lipodystrophy

Dyslipidemia

Abnormal levels of fat in the blood, usually referring to abnormally high levels. Dyslipidemia may occur as a result of HIV infection or as a side effect of some anti-HIV drugs.

See Also: Hyperlipidemia

Dyspnea

Difficult or labored breathing.

EBV

See: Epstein-Barr Virus

EF

See: Eosinophilic Folliculitis

E

Effectiveness

The measure of the success of a treatment for a particular disease or condition.

Efficacy

The ability of a treatment to produce the desired effect on the disease or condition being treated.

ELISA

See: Enzyme-Linked Immunosorbent Assay

Encephalitis

Inflammation of the brain, which can be caused by a virus infection. The brain tissue swells, which may lead to the destruction of nerve cells, bleeding within the brain, and brain damage.

Endemic

A term that refers to diseases associated with particular geographic regions or populations. For example, malaria is endemic in tropical regions of the world where mosquitoes carry the parasite that causes malaria.

Endpoint

General term for a measurement used to analyze results of a clinical trial. Common endpoints of a clinical trial are dose-limiting toxicity of a study drug and progression of the disease or condition being studied.

See Also: Surrogate Endpoint
Clinical Endpoint

End-Stage Disease

The final period or phase in the course of a disease that leads to a person's death. An example of this is end-stage renal disease (ESRD), in which a person's kidneys have deteriorated to the point that the damage is life threatening and likely fatal.

Enteric

Of or relating to the intestines. This term also refers to a coating used on some drugs to prevent the breakdown of the drug by the stomach before it has a chance to be absorbed by the intestines.

Enteritis

Inflammation of the small intestine caused by bacterial or viral infection. Often causes diarrhea and dehydration and may also involve the stomach and large intestine.

See Also: Colitis

Entry Inhibitor

A class of anti-HIV drugs designed to disrupt the ability of HIV to enter a host cell through the cell's surface. This class includes receptor inhibitors (CD4, CCR5, or CXCR4) and fusion inhibitors.

See Also: Fusion Inhibitor

Envelope

The outer protective membrane of HIV that is composed of two layers of fat-like molecules called lipids. HIV uses specific proteins embedded in the envelope to attach to and enter host cells.

Enzyme

A protein that helps a chemical reaction happen by decreasing the energy needed for the reaction to occur.

Enzyme-Linked Immunosorbent Assay (ELISA)

A highly sensitive laboratory test used to determine the presence of antibodies to HIV in the blood or saliva. Positive ELISA test results indicate that a person is HIV infected, but these results should be confirmed with a highly specific laboratory test called a Western blot.

See Also: Western Blot

Antibody

Eosinophilia

A condition in which the number of eosinophils (a type of white blood cell) in the blood is higher than normal. Eosinophilia is often a response to infection or allergens (substances that cause an allergic reaction).

Eosinophilic Folliculitis (EF)

A type of folliculitis (inflammation of hair follicles) characterized by recurring patches of inflamed, pus-filled sores that occur primarily on the face and sometimes on the back or upper arms. The sores usually spread, may itch intensely, and often leave areas of darker-than-normal skin (hyperpigmentation) when they heal. HIV-associated EF most commonly occurs in people with low CD4 counts.

Epidemic

A disease that has spread rapidly through a segment of the human population in a given geographic area.

Epidemiology

The branch of medical science that studies the occurrence, distribution, and control of a disease in populations.

Epithelium

The protective covering of the internal and external organs of the body, including the lining of blood vessels, body cavities, glands, and organs. In addition to its protective properties, the epithelium also provides a surface to absorb and secrete chemicals needed by the body.

Epitope

A particular segment of an antigen that the body's antibodies can recognize and bind to.

See Also: Antibody
Antigen

Epstein-Barr Virus (EBV)

A human herpesvirus that causes infectious mononucleosis (mono), a contagious disease. Symptoms of infectious mononucleosis are fever, sore throat, and swollen lymph nodes. EBV infection can also lead to oral hairy leukoplakia, Burkitt's lymphoma, and nasopharyngeal carcinoma, especially in immunocompromised people, such as those with HIV.

See Also: Burkitt's Lymphoma
Human Herpesviruses
Oral Hairy Leukoplakia (OHL)

Eradication

In terms of an infectious disease, the complete removal of a pathogen (such as HIV). Although eradication of HIV is currently not possible, antiretroviral treatment can control the disease through the suppression of viral load.

See Also: Viral Load (VL)

Erythema

Abnormal redness of the skin caused by a buildup of red blood cells in the capillaries.

Erythema Multiforme

A type of rash that can occur in response to drugs, illness, or infections, such as herpes simplex or mycoplasma infections. Severe forms of this condition include Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN). These may also be serious side effects of some anti-HIV drugs.

See Also: Stevens-Johnson Syndrome (SJS)
Toxic Epidermal Necrolysis (TEN)

Erythrocyte

Red blood cell. The primary function of erythrocytes is to carry oxygen throughout the body.

Etiology

The branch of medical science that studies causes of disease. Such causes are called etiologic agents. For example, HIV is the etiologic agent of AIDS.

Exclusion/Inclusion Criteria

See: Inclusion/Exclusion Criteria

Expanded Access

Refers to any of the Food and Drug Administration (FDA) procedures that allow distribution of experimental drugs to people who are failing currently available treatments and are unable to participate in ongoing clinical trials. These procedures include compassionate, treatment, or emergency use.

See Also: Compassionate Use

Experimental Drug

See: Investigational Drug

Extensively Drug-Resistant Tuberculosis (XDR-TB)

A relatively rare type of tuberculosis that is resistant to almost all anti-tuberculosis drugs, including the two best first-line drugs and the best second-line drugs. XDR-TB is of special concern for people infected with HIV or other conditions that can weaken the immune system.

False Negative

A test or procedure result that incorrectly indicates a negative or normal result when an abnormal condition is actually present.

False Positive

A test or procedure result that incorrectly indicates a positive or abnormal result when no abnormal condition is actually present.

Fanconi Syndrome

A disorder of the kidney in which certain substances that are normally absorbed into the bloodstream by the kidneys are released into the urine instead. Fanconi syndrome can be caused by faulty genes, or it may result later in life as a result of kidney damage. It is a relatively uncommon adverse effect of some antiretroviral drugs.

Fat Maldistribution/Redistribution

See: Lipodystrophy

FDA

See: Food and Drug Administration

FDC

See: Follicular Dendritic Cell

First-Line Regimen

The recommended treatment plan and drugs used when treating a person for the first time.

Fixed-Dose Combination

A capsule or tablet that contains two or more drugs. This type of drug formulation allows a patient to take multiple drugs at one time to decrease pill burden and increase adherence.

See Also: Pill Burden
Formulation

Follicular Dendritic Cell (FDC)

A specific type of dendritic cell found in lymphoid tissues, such as the thymus and lymph nodes.

See Also: Dendritic Cell

Food and Drug Administration (FDA)

The U.S. Department of Health and Human Services (HHS) agency responsible for ensuring the safety and effectiveness of drugs, biologics, vaccines, and medical devices. The FDA also works with the blood banking industry to safeguard the nation's blood supply.

Formulation

The physical form in which a drug is administered. Examples include tablets, capsules, liquids, topical creams and ointments, and injectable solutions. A single drug may be available in multiple formulations.

Fungus

A group of primitive organisms that includes mushrooms, yeasts, rusts, and molds, some of which can infect humans and cause disease. For example, mouth thrush is caused by the fungus *Candida*.

Fusin

See: CXCR4

Fusion Inhibitor

A class of anti-HIV drugs that inhibits the fusing of HIV's outer envelope with the host cell membrane, which prevents infection of the cell.

See Also: Envelope

Gamma Globulin

The part of blood that contains antibodies. It is also available as an injectable treatment that can provide temporary protection from certain infections.

See Also: Antibody
Passive Immunotherapy

GART

See: Genotypic Assay

Gastrointestinal (GI)

Of or relating to the stomach or intestines.

G-CSF

See: Granulocyte-Colony Stimulating Factor

Gene

A short segment of DNA or RNA that acts as a blueprint for building a specific protein.

See Also: Deoxyribonucleic Acid (DNA)
Ribonucleic Acid (RNA)

Generic

A generic drug is one that has the same active ingredient(s) as a brand-name drug in dosage, safety, strength, how it is taken, quality, performance, and intended use.

Gene Therapy

An experimental technique that uses genes to treat or prevent disease. This technique may eventually allow doctors to treat a disorder by inserting a gene into a patient's cells instead of using drugs or surgery.

See Also: Gene

Genetic Engineering

Artificially changing an organism's genetic material (DNA or RNA) to change particular characteristics of that organism. This laboratory technique can produce proteins for use as drugs and vaccines.

For example, a virus such as canarypox virus (which does not cause disease in humans) can be genetically engineered so that it produces specific HIV proteins. The modified canarypox virus can then be tested as an experimental HIV vaccine.

Genital Ulcer Disease

Sores on the genitals, usually caused by a sexually transmitted disease (STD), such as herpes, syphilis, or chancroid. The presence of genital ulcers may increase the risk of becoming infected with HIV through sexual intercourse.

Genital Warts

Also known as condyloma acuminatum and venereal warts. Growths or bumps that appear in and around the vagina, anus, or cervix in females or on the penis, scrotum, groin, or thigh in males. They can be raised or flat, single or multiple, small or large. Some cluster together to form a cauliflower-like shape. They are caused by the human papillomavirus (HPV) and are usually flesh-colored and painless.

See Also: Human Papillomavirus (HPV)

Genitourinary Tract

Also called genitourinary system, urogenital system, or urogenital tract. The organs involved in the production and excretion of urine and in reproduction.

Genome

The complete set of genes for a particular organism.

See Also: Gene

Genotypic Antiretroviral Resistance Test (GART)

See: Genotypic Assay

Genotypic Assay

Also known as Genotypic Antiretroviral Resistance Test (GART). A test that determines if HIV is resistant to particular anti-HIV drugs. The test analyzes a sample of the virus from an individual's blood to

identify any genetic mutations that are associated with resistance to specific drugs.

See Also: Drug Resistance
Mutation

GI

See: Gastrointestinal

Glycoprotein

A substance composed of both a protein and a carbohydrate (a sugar molecule) joined together by a chemical linkage.

GM-CSF

See: Granulocyte Macrophage-Colony Stimulating Factor

Gonorrhea

A sexually transmitted disease (STD) caused by the bacterium *Neisseria gonorrhoeae*. Many people with gonorrhea have no symptoms. If symptoms do occur, they may include burning on urination, frequent urination, yellow or green discharge from the genitals, redness or swelling of the genitals, or a burning or itching sensation of the genitals. Active gonorrhea infection may increase the risk of becoming infected with HIV through sexual intercourse.

gp120

Glycoprotein 120. One of the proteins embedded in the outer envelope of HIV. gp120 projects from the surface of HIV and binds to the CD4 receptor on CD4 cells, which initiates the process by which HIV enters and infects a host cell.

See Also: Envelope

gp160

Glycoprotein 160. A precursor of HIV envelope proteins gp41 and gp120. gp160 is cut by HIV protease to form gp120 and gp41.

See Also: gp120

gp41

Protease

gp41

Glycoprotein 41. One of the proteins embedded in the outer envelope of HIV. gp41 plays a key role in HIV's infection of CD4 cells by fusing HIV's envelope with the host cell membrane, which allows the virus to enter the cell.

See Also: Envelope
Fusion Inhibitor

Granulocyte

A type of white blood cell particularly important in fighting bacterial infections.

Granulocyte-Colony Stimulating Factor (G-CSF)

A protein that stimulates the production of infection-fighting white blood cells. A laboratory-made version of G-CSF, called filgrastim, is used to treat low white blood cell levels, which may occur after chemotherapy or as a result of certain diseases.

Granulocyte Macrophage-Colony Stimulating Factor (GM-CSF)

A protein that stimulates the production of infection-fighting white blood cells. A laboratory-made version of GM-CSF, called sargramostim, is used to treat low white blood cell levels, which may occur after chemotherapy or as a result of certain diseases.

Granulocytopenia

A lower than normal number of specific white blood cells called granulocytes.

Guillain-Barré Syndrome

A rare disorder that causes the immune system to attack the peripheral nervous system (PNS). The PNS connects the brain and spinal cord with the rest of the body. Damage to these nerves makes it hard for them to transmit signals. As a result, muscles have trouble responding to the brain.

HAART

See: Highly Active Antiretroviral Therapy

Half-Life

The time period in which the concentration of a drug falls to half its original concentration.

HBV

See: Hepatitis B Virus

HCFA

See: Health Care Financing Administration

HCV

See: Hepatitis C Virus

Health Care Financing Administration (HCFA)

See: Centers for Medicare and Medicaid Services (CMS)

Health Resources and Services Administration (HRSA)

A U.S. Department of Health and Human Services (HHS) agency that directs national health programs aimed at improving the health of Americans by assuring quality health care to underserved, vulnerable, and special-needs populations. Among other functions, HRSA administers the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act and the AIDS Education and Training Centers (AETCs) to provide treatment and services for those affected by HIV/AIDS.

See Also: AIDS Education and Training Centers (AETCs)
Ryan White CARE Act

HELLP Syndrome

A term that stands for Hemolysis, Elevated Liver enzyme levels, and a Low Platelet count. This is a rare but serious complication that can develop in the third trimester of pregnancy. Symptoms may include liver, blood pressure, and bleeding problems that can harm both the mother and the baby. Pregnant women taking NRTIs for HIV infection are at an increased risk for developing HELLP syndrome.

Helper T Cell

See: CD4 Cell

Hematocrit

A laboratory measurement that determines the percentage of red blood cells in a sample of blood. In women, red blood cells are normally 37% to 47% of the blood. In men, red blood cells are normally 40% to 54% of the blood.

Hematotoxic

Toxic or destructive to the blood or bone marrow.

Hemoglobin

A protein in red blood cells that transports oxygen from the lungs to the tissues of the body.

Hemolysis

Rupture of red blood cell membranes, which causes a release of hemoglobin.

See Also: Hemoglobin

Hemophilia

A hereditary blood defect that occurs almost exclusively in males and is characterized by delayed clotting of the blood. This leads to difficulty in controlling bleeding, even after minor injuries.

Hepatic

Pertaining to the liver.

Hepatic Necrosis

Death of liver cells.

See Also: Hepatotoxicity

Hepatic Steatosis

Accumulation of too much fat inside liver cells. Also known as fatty liver.

See Also: Lactic Acidosis

Hepatitis

Inflammation of the liver. This condition can lead to liver damage and liver cancer.

See Also: Hepatitis B Virus (HBV)
Hepatitis C Virus (HCV)
Coinfection

Hepatitis B Virus (HBV)

The virus that causes hepatitis B, an inflammation of the liver that can lead to liver damage and liver cancer. HBV is spread through contact with the blood of an infected person, through sexual intercourse, or from mother to child during childbirth. A vaccine is available to prevent infection with this virus, and hepatitis B can be treated with several drugs.

Hepatitis C Virus (HCV)

The virus that causes hepatitis C, an inflammation of the liver that can lead to liver damage and liver cancer. HCV is primarily spread through contact with the blood of an infected person. There is no vaccine for HCV, and the only current treatment for hepatitis C is a combination of the drugs peginterferon and ribavirin.

Hepatomegaly

Enlargement of the liver.

Hepatotoxicity

A general term for liver damage. Often caused by drugs, including those used to treat HIV infection. Symptoms of hepatotoxicity include nausea, vomiting, abdominal pain, loss of appetite, diarrhea, unusual tiredness or weakness, jaundice (yellowing of the skin and eyes), and unusual swelling or weight gain. Laboratory testing may show increased levels of liver enzymes in the blood.

See Also: Liver Function Tests

Herpes Simplex Virus 1 (HSV-1)

A virus that causes cold sores or fever blisters on the mouth or around the eyes and that can be transmitted to the genital region. The virus can become latent (inactive), and symptoms disappear. Stress, trauma, other infections, or suppression of the immune system can reactivate the latent virus, and symptoms can return.

See Also: Herpesviruses

Herpes Simplex Virus 2 (HSV-2)

A virus that causes painful sores around the anus or genitals. The virus can become latent (inactive), and symptoms then disappear until the virus is reactivated. HSV-2 may be transmitted either sexually or from an infected mother to her infant during birth.

Herpesviruses

A family of viruses that includes several individual members, including herpes simplex viruses 1 and 2 (HSV-1 and -2), cytomegalovirus (CMV), varicella zoster virus (VZV), Epstein-Barr virus (EBV), and Kaposi's sarcoma herpesvirus (KSHV or HHV-8). Each of these viruses can cause disease in humans.

Herpes Zoster

See: Varicella Zoster Virus (VZV)

HGH

See: Human Growth Hormone

HHS

See: Department of Health and Human Services

Highly Active Antiretroviral Therapy (HAART)

The name given to treatment regimens that aggressively suppress HIV replication and progression of HIV disease. The usual HAART regimen combines three or more anti-HIV drugs from at least two different classes.

Histoplasmosis

A lung disease caused by the fungus *Histoplasma capsulatum*. Symptoms are similar to those of influenza. People with severely damaged immune systems, such as those with AIDS, are vulnerable to a very serious form of the disease called progressive disseminated histoplasmosis. This form of histoplasmosis typically lasts a long time and involves organs other than the lungs. Histoplasmosis is considered an AIDS-defining condition in people with HIV.

HIV

See: Human Immunodeficiency Virus

HIV-1

The HIV type responsible for the majority of HIV infections worldwide.

See Also: Human Immunodeficiency Virus (HIV)
HIV-2

HIV-2

A virus that is closely related to HIV-1 and that also causes immune suppression and AIDS. Although the two viruses are very similar, immunodeficiency seems to develop more slowly and to be milder in people infected with HIV-2. The majority of HIV-2 cases have been found in West Africa. Not all drugs used to treat HIV-1 infection are effective against HIV-2.

See Also: Human Immunodeficiency Virus (HIV)
HIV-1

HIV-Associated Adult-Onset Nemaline Myopathy

See: Nemaline Rod Myopathy (NM)

HIV Decay

See: Viral Decay

HIV Prevention Trials Network (HPTN)

A worldwide clinical trials network established by the National Institutes of Health (NIH) to develop and evaluate the safety and efficacy of nonvaccine HIV interventions designed to prevent the transmission of HIV.

HIV RNA

See: Viral Load (VL)

HIV Vaccine Trials Network (HVTN)

An international group of scientists and educators that was formed in 1999 by the Division of AIDS (DAIDS) of the National Institute of Allergy and Infectious Diseases (NIAID). The main goal of HVTN is to find a safe and effective preventive HIV vaccine. HVTN staff and volunteers around the world are also involved in helping community members understand the general science of HIV/AIDS vaccines, research methods, and clinical trials processes.

See Also: Preventive HIV Vaccine

HLA-B*5701

See: Human Leukocyte Antigen

HLA-B Testing

See: Human Leukocyte Antigen

Hodgkin's Lymphoma

A type of cancer that affects certain white blood cells. Symptoms include enlarged lymph nodes, fever, night sweats, weight loss, and itching. This type of cancer most commonly affects people ages 15 to 40, people older than 55, and people who are HIV infected. It is also known as Hodgkin's disease.

See Also: Lymphoma

Non-Hodgkin's Lymphoma (NHL)

Horizontal Transmission

A term used to describe transmission of a disease from one individual to another, except from parent to offspring. For example,

HIV can be spread horizontally through sexual contact or exposure to infected blood. In contrast, spread of disease from parent to offspring is called vertical transmission.

See Also: Vertical Transmission

Hormone

A chemical produced in one part of the body and passed through the blood to another part of the body to regulate its structure or function. HIV infection and AIDS can affect the production of hormones and cause imbalances in hormones, such as estrogen and testosterone.

HPTN

See: HIV Prevention Trials Network

HPV

See: Human Papillomavirus

HRSA

See: Health Resources and Services Administration

HSV-1

See: Herpes Simplex Virus 1

HSV-2

See: Herpes Simplex Virus 2

HTLV-I

See: Human T-Cell Lymphotropic Virus Type I

Human Growth Hormone (HGH)

A protein produced in the pituitary gland that stimulates the liver to produce somatomedins (substances that stimulate growth of bone and muscle). A laboratory-made version of HGH, called serostim, has been approved by the Food and Drug Administration (FDA) as a treatment for AIDS wasting syndrome.

See Also: Wasting Syndrome

Human Herpesviruses

See: Herpesviruses

Human Immunodeficiency Virus (HIV)

The virus that causes Acquired Immunodeficiency Syndrome (AIDS). HIV is in the retrovirus family, and two types have been identified: HIV-1 and HIV-2. HIV-1 is responsible for most HIV infections throughout the world, whereas HIV-2 is found primarily in West Africa.

See Also: Acquired Immunodeficiency Syndrome (AIDS)

Retrovirus

H

Human Leukocyte Antigen (HLA)

Also known as major histocompatibility complex (MHC). Found on the surface of almost every cell in the body, HLAs are proteins that play an important role in controlling the immune system by identifying substances as foreign to the body. The type of HLA proteins a person inherits from his or her parents is important in identifying good matches for tissue grafts and organ transplants. Variants of an HLA protein may be expressed in some individuals, and these variations may increase the risk of developing certain diseases or experiencing certain drug reactions. For example, some HLA types are associated with either a faster or slower progression of HIV disease. In addition, expression of the HLA-B*5701 variant is associated with hypersensitivity to abacavir, an anti-HIV drug.

Human Papillomavirus (HPV)

A virus that causes various warts, including plantar and genital warts. Some strains of HPV can also cause cervical cancer.

See Also: Cervical Cancer

Genital Warts

Human T-Cell Lymphotropic Virus Type I (HTLV-I)

A virus in the same family (retrovirus) as HIV. In rare cases, HTLV-1 can cause adult T-cell leukemia/lymphoma, a rare and aggressive cancer of the blood. People infected with HTLV-1 may also develop myelopathy, a disease of the spinal cord.

See Also: Retrovirus

Humoral Immune Response

See: Humoral Immunity

See Also: Cell-Mediated Immunity

Humoral Immunity

Term used to describe the body's antibody-based immune response, as opposed to its cell-based immune response (cell-mediated immunity). Immune cells called B cells produce antibodies against foreign invaders.

See Also: Antibody

Cell-Mediated Immunity

B Lymphocyte

HVTN

See: HIV Vaccine Trials Network

Hyperadiposity

See: Lipohypertrophy

Hypergammaglobulinemia

Higher than normal amounts of gamma globulins (antibodies) in the blood.

See Also: Antibody

Hyperglycemia

Higher than normal glucose (sugar) levels in the blood.

See Also: Diabetes

Hyperlipidemia

Elevated concentration of lipids (cholesterol, triglycerides, or both) in the blood. Hyperlipidemia increases the risk of serious heart diseases. In HIV-infected individuals, hyperlipidemia may occur as a side effect of PI treatment.

Hyperplasia

An abnormal increase in the number of cells in a tissue or an organ.

Hypersensitivity

An exaggerated or excessive response to a specific agent (such as a drug or antigen) that can sometimes be life-threatening or cause death.

Hypersensitivity Reaction

See: Hypersensitivity

Hypertension

Also known as high blood pressure. Hypertension is a condition in which the force of blood being pumped through blood vessels exerts too much pressure on the walls of blood vessels. When pressure increases and stays too high, it can cause damage to blood vessels (e.g., hardening of the arteries or atherosclerosis), the heart, the brain, the eyes, and other vital organs.

Hypertriglyceridemia

Elevated levels of triglycerides in the blood. Hypertriglyceridemia can increase the risk of serious heart disease. This condition may occur as a side effect of protease inhibitor treatment.

See also: Triglycerides
Hyperlipidemia

Hypogammaglobulinemia

A deficiency of gamma globulins (antibodies) in the blood. This condition may occur in late stages of HIV disease, when the immune system has been severely damaged.

See Also: Antibody

Hypogonadism

Inadequate activity of the ovaries or testes. This can result in abnormally low levels of gonadal hormones (androgens and estrogens) and problems with sperm or egg production. Hypogonadism may occur in men and women with HIV.

Hypoxia

A condition in which not enough oxygen reaches the tissues of the body.

Idiopathic

Without a known cause.

Idiopathic Thrombocytopenia Purpura (ITP)

A rare autoimmune disorder characterized by a shortage of platelets in the blood, which results in bruising and spontaneous bleeding.

See Also: Platelet

IDU

See: Injection Drug User

IFN

See: Interferon

IG

See: Immunoglobulin

IHS

See: Indian Health Service

IL-2

See: Interleukin-2

IL-7

See: Interleukin-7

IM

See: Intramuscular

IMPAACT

See: International Maternal Pediatric Adolescent AIDS Clinical Trials Network

Immune Complex

Term used to describe an antibody bound to an antigen.

See Also: Antibody
Antigen

Immune Reconstitution Syndrome (IRS)

Also known as immune restoration disease (IRD) or immune reconstitution inflammatory syndrome (IRIS). An inflammatory reaction that can occur when an immunocompromised person's immune system improves, such as when a person with HIV disease begins anti-HIV treatment and experiences an increase in CD4 cell count. Fever, along with swelling, redness, or discharge at the site of an injury or infection, may signal that an infection that was previously unnoticed by a weak immune system is now a target of a stronger immune system. Although IRS indicates that a person's immune system has grown healthier, it can be a serious, sometimes fatal condition and must be treated aggressively.

Immune Response

The body's defensive reaction to a foreign invader, such as a virus, bacterium, or fungus. The immune response includes both humoral (antibody-based) and cell-mediated immunity.

See Also: Cell-Mediated Immunity
Humoral Immunity

Immune System

The collection of cells and organs whose role is to protect the body from foreign invaders. Includes the thymus, spleen, lymph nodes, B and T cells, and antigen-presenting cells.

Immunity

Protection against or resistance to disease.

Immunization

See: Vaccination

Immunocompetent

Able to mount a normal immune response.

Immunocompromised

Unable to mount a normal immune response because of an impaired immune system.

Immunodeficiency

Inability to produce normal amounts of antibodies, immune cells, or both.

Immunogenicity

The ability of an antigen or vaccine to stimulate an immune response.

See Also: Antigen
Vaccine

Immunoglobulin (IG)

See: Antibody

Immunologic

Related to the immune system, which defends the body against infection and disease.

Immunologic Failure

Occurs when an HIV-infected individual's CD4 count decreases below the baseline count or does not increase above the baseline count within the first year of anti-HIV treatment. People who experience virologic failure but do not switch to an effective drug regimen usually progress to immunologic failure within about 3 years. Immunologic failure may be followed by clinical failure.

See Also: Baseline
Virologic Failure
Clinical Failure

Immunomodulator

A natural or man-made substance that can modify the functioning of the immune system.

Immunomodulatory Therapy

See: Immunomodulator

Immunosuppression

Inability of the immune system to function normally. May be caused by drugs (for example, chemotherapy) or result from certain diseases (for example, HIV infection).

Immunotherapy

Treatment to stimulate or restore the body's immune system to fight disease.

Incidence

The rate of occurrence of new cases of a particular disease in a given population. Often reported as the number of cases per 100,000 people.

Inclusion/Exclusion Criteria

A specific set of selection rules that determine whether a person is eligible to enroll in a particular clinical trial. For example, some trials may not accept people with chronic liver disease or with certain drug allergies. Others may exclude men or women or only include people with a certain CD4 count or viral load.

See Also: Clinical Trial

Incubation Period

The period between infection with a micro-organism and the development of symptoms.

See Also: Window Period

IND

See: Investigational New Drug (IND) Application

Indian Health Service (IHS)

The agency within the U.S. Department of Health and Human Services (HHS) responsible for providing Federal health services to American Indians and Alaska Natives.

Infection

Establishment of an infectious micro-organism in a suitable host. The term is also used to refer to disease caused by an infectious micro-organism.

Infectious

Capable of causing infection.

Informed Consent

A person's agreement to participate in a clinical trial after understanding all aspects of the trial, including potential risks and benefits.

See Also: Clinical Trial

infoSIDA

The Spanish-language companion Web site to *AIDSinfo*, which offers information on HIV/AIDS treatment and clinical trials.

Infusion

Administration of a solution (such as a glucose, salt, or drug solution), usually into a vein.

Injection Drug Use

The abuse of drugs by injecting them into a vein. Sharing of syringes transmits blood-borne viruses (such as HIV, hepatitis), which can spread rapidly through populations of injection drug users (IDUs). The sharing of needles and supplies (e.g., syringes, water, mixing spoon) is thought to be three times more likely to transmit HIV than sexual intercourse.

Injection Drug User (IDU)

See: Injection Drug Use

Injection Site Reaction

An adverse effect, such as a rash, on the skin where an injection or shot was given.

Inoculation

See: Vaccine

INSIGHT

See: International Network for Strategic Initiatives in Global HIV Trials

Institutional Review Board (IRB)

A committee of experts who review and monitor clinical trials to ensure that they are ethical and that the rights of study participants are protected. Federal regulations dictate that any institution that conducts or supports clinical trials must have an IRB.

Insulin

A hormone produced by the pancreas to regulate blood sugar. Because of this regulatory activity, insulin plays a role in the development and control of diabetes mellitus and other conditions that affect blood sugar levels.

See Also: Diabetes

Insulin Resistance

An abnormal body response to insulin, a hormone that regulates glucose (sugar) levels. People with insulin resistance have abnormally high blood levels of insulin, which may lead to heart and cholesterol problems and obesity. Insulin resistance may occur in HIV-infected individuals taking certain PIs.

Insulin Sensitivity

The body's ability to respond to insulin's signal to take up glucose from the blood. Normal insulin sensitivity encompasses a wide range; people who have low insulin sensitivity may also be considered insulin resistant, which would result in an increase of insulin secretion.

Integrase

An HIV protein that plays an important role in the virus's life cycle. Integrase inserts HIV's genetic information into the infected cell's own DNA.

See Also: Integration

Integrase Inhibitor

A class of anti-HIV drugs that prevents the HIV integrase protein from inserting HIV's genetic information into an infected cell's own DNA.

See Also: Integrase

Integration

The process by which HIV integrase inserts HIV's genetic material into an infected cell's own DNA. This crucial step in HIV's life cycle is targeted by the class of anti-HIV drugs called integrase inhibitors.

See Also: Integrase
Integrase Inhibitor

Intensification

Adding additional anti-HIV drugs to an existing treatment regimen, usually because that regimen failed to adequately control HIV replication.

Interaction

See: Drug Interaction

Interferon (IFN)

A cytokine (protein that regulates immune system activity) that the body produces to fight viruses. Laboratory-made versions of IFN are used in the treatment of some viral infections and cancers. There are three main types of interferon: alpha, beta, and gamma. IFN alpha is used to treat hepatitis C virus (HCV) infection and many cancers, including Kaposi's sarcoma (KS).

See Also: Cytokine
Hepatitis C Virus (HCV)
Kaposi's Sarcoma (KS)

Interleukin-2 (IL-2)

A cytokine (protein that regulates immune system activity) that can increase the production of certain disease-fighting white blood cells. During HIV infection, IL-2 levels gradually decline. A laboratory-made version of IL-2 is used to treat some cancers and has been studied as a way to increase the number of CD4 cells and other immune system cells in people with HIV.

See Also: Cytokine

Interleukin-7 (IL-7)

A cytokine (protein that regulates immune system activity) produced in small amounts in bone marrow cells that increases the body's production of certain disease-fighting white blood cells. Laboratory-produced IL-7 is a drug product that appears to induce HIV replication in latent, or resting, infected cells. Activation of HIV in resting cells allows antiretroviral drugs to target HIV in those cells.

See Also: Cytokine

International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Network

A clinical trials network that evaluates treatments for HIV-infected children and adolescents and also develops new therapeutic approaches for preventing mother-to-child transmission (MTCT) of HIV.

International Network for Strategic Initiatives in Global HIV Trials (INSIGHT)

A clinical trials network that evaluates strategies for optimizing treatment by doing large simple trials in HIV-infected individuals.

Interstitial Nephritis

A kidney disorder caused by inflammation of the small spaces between parts of the kidney. The condition is a potential side effect of certain anti-HIV drugs.

Intervention

In medicine, a treatment or action taken to prevent or treat a disease or to improve health in other ways.

Intramuscular (IM)

Relating to the area within a muscle. Intramuscular also refers to an injection made directly into a muscle.

Intrapartum

The time period spanning labor and delivery.

Intravaginal

Within the vagina.

Intravenous (IV)

Inside a vein. Intravenous also refers to an injection made directly into a vein.

Intravenous Immunoglobulin (IVIG)

A solution of antibodies taken from healthy donors and injected into the veins of people with low or abnormal antibody production to help protect them from infections.

See Also: Antibody

In Utero

The time period when an unborn baby is in its mother's uterus.

Investigational Drug

Also known as experimental drug. A drug that has not been approved by the Food and Drug Administration (FDA) to treat a particular disease or condition. The safety and effectiveness of an investigational drug must be tested in clinical trials before the manufacturer can request FDA approval for a specific use of the drug.

See Also: Clinical Trial

Investigational New Drug (IND) Application

Investigational New Drug (IND) Application

The process through which data about an experimental drug is submitted to and reviewed by the Food and Drug Administration (FDA) before the drug is allowed to be tested in clinical trials.

See Also: Clinical Trial

New Drug Application (NDA)

Investigational Drug

In Vitro

Latin for “in glass.” Indicates that a research study was conducted in an artificial environment created outside a living organism (for example, in a test tube or petri dish).

In Vivo

Latin for “in life.” Indicates that a research study was conducted in a living organism (animal or human).

IRB

See: Institutional Review Board

IRIS

See: Immune Reconstitution Syndrome

IRS

See: Immune Reconstitution Syndrome

Isosporiasis

An infection caused by the protozoan *Isospora belli*, which enters the body through contaminated food or water. Symptoms include diarrhea, fever, headache, abdominal pain, vomiting, and weight loss. Isosporiasis is considered an AIDS-defining condition in people with HIV.

ITP

See: Idiopathic Thrombocytopenia Purpura

IVIG

See: Intravenous Immunoglobulin

Jaundice

Yellowing of the skin, mucous membranes, whites of the eyes, and body fluids. Jaundice is caused by increased levels of bilirubin, and it is associated with liver and gallbladder disease.

See Also: Bilirubin

Kaposi's Sarcoma (KS)

A type of cancer caused by an overgrowth of blood vessels, which causes pink or purple spots or small bumps on the skin.

The condition can also occur inside the body, especially inside the intestines, lymph nodes, and lungs. When inside the body, KS can be life threatening. In people infected with HIV, KS is considered an AIDS-defining condition. A virus called Kaposi's sarcoma herpesvirus (KSHV) or human herpesvirus 8 (HHV-8) is associated with Kaposi's sarcoma.

See Also: Kaposi's Sarcoma Herpesvirus (KSHV)

Kaposi's Sarcoma Herpesvirus (KSHV)

Also known as Human Herpesvirus 8 (HHV-8). The virus associated with Kaposi's sarcoma (KS), a type of cancer that is considered an AIDS-defining condition in people with HIV.

See Also: Herpesviruses
Kaposi's Sarcoma (KS)

Karnofsky Score

A score between 0 and 100 assigned by a health professional after watching a patient perform common tasks. A score of 100 means that the patient has normal physical abilities with no signs of disease. Decreasing numbers mean that the patient has less ability to perform activities of daily living.

Killer T Cell

See: CD8 Cell

KS

See: Kaposi's Sarcoma

KSHV

See: Kaposi's Sarcoma Herpesvirus

Lactic Acidosis

A condition caused by a buildup of lactate, a cellular waste product, in the blood. Symptoms, if any, may include stomach and breathing problems and general weakness. Severe, untreated lactic acidosis can be life threatening. Increased lactate levels, often combined with hepatic steatosis, may occur in HIV-infected individuals taking NRTIs.

See Also: Hepatic Steatosis

LAS

See: Lymphadenopathy Syndrome

Latency

The time period when an infectious organism is in the body but is not producing any noticeable symptoms. In HIV disease, latency usually occurs in the early years of infection. Also refers to the period when HIV has integrated its genome into a cell's DNA but has not yet begun to replicate.

Latent HIV Reservoir

A collection of resting cells (such as T cells) in the body that are infected with HIV. The virus is spread within the body when these host cells become active.

See Also: Latency

Latent Period

See: Latency

Lentivirus

A subgroup of the retrovirus family that includes HIV. Lentiviruses are characterized by a long time period between infection and the onset of symptoms (long latent period).

See Also: Retrovirus

Incubation Period

Lesion

An area of the body where tissue is abnormal, such as an infected patch or sore on the skin.

Leukocyte

See: White Blood Cell

Leukocytosis

An abnormally high number of white blood cells in the blood. This condition usually occurs during infection or inflammation.

See Also: White Blood Cell

Leukopenia

A lower than normal number of total white blood cells. A white blood cell count less than 4,000 cells/mL is considered leukopenia.

Leukoplakia

See: Oral Hairy Leukoplakia (OHL)

LGV

See: Lymphogranuloma Venereum

Life Cycle

A sequence of developmental phases that cells or organisms undergo. For example, a cell's life cycle ends with division; a virus's life cycle includes replication within a host cell.

Linear Gingival Erythema

Inflammation of the gums that usually appears as a red band around the gums in the back of the mouth. Also known as HIV gingivitis or red-band gingivitis.

LIP

See: Lymphoid Interstitial Pneumonitis

Lipid

Any member of a chemical group of fats or fat-like substances.

Lipid Profile

A group of blood tests that are often ordered together to evaluate an individual's risk for heart disease or stroke. These tests include

measurements of total cholesterol, HDL cholesterol (“good” cholesterol), LDL cholesterol (“bad” cholesterol), and triglycerides.

See Also: Cholesterol

Triglycerides

Hyperlipidemia

Lipoatrophy

Loss of body fat from particular areas of the body, especially the arms, legs, face, and buttocks. Lipoatrophy is a potential side effect of some NRTIs.

Lipodystrophy

A problem with the way the body produces, uses, and distributes fat. Lipodystrophy is associated with certain anti-HIV drugs. HIV-related lipodystrophy includes the body changes known as buffalo hump and protease paunch.

See Also: Body Habitus Changes

Lipohypertrophy

Lipohypertrophy

Also known as hyperadiposity. Abnormal buildup of fat, particularly in the breasts, on the back of the neck and upper shoulders (buffalo hump), deep within the abdomen (protease paunch), or in fatty growths known as lipomas. Lipohypertrophy may occur with the use of some PIs and NRTIs.

See Also: Body Habitus Changes

Lipodystrophy

Liver Function Tests

Blood tests that measure the levels of liver enzymes (proteins made and used by the liver) to determine if the liver is working properly. The liver enzymes that are routinely measured as part of liver function tests are aspartate aminotransferase (AST) – also called serum glutamic oxaloacetic transaminase (SGOT), alanine aminotransferase (ALT) – also called serum glutamic pyruvic transaminase (SGPT), and gamma-glutamyltransferase (GGT). Increased levels of these enzymes indicate that the liver has been damaged.

See Also: Hepatotoxicity

Localized

A term used to describe a disease or treatment that affects only a specific or limited part of the body rather than the entire body.

See Also: Systemic

Log

This mathematical term represents a change in value of what is being measured by a factor of 10. Changes in viral load (the amount of HIV in the blood) are often reported as logarithmic or log changes. For example, if the viral load is 20,000 copies/mL, then a 1-log increase equals a 10-fold (10 times) increase, or 200,000 copies/mL. A 2-log increase equals a 100-fold increase, or 2,000,000 copies/mL.

Long-Term Nonprogressors

People who have been infected with HIV for a number of years (usually at least 7) but who have had stable CD4 cell counts of 600 cells/mL or more, no HIV-related diseases, and no need for anti-HIV therapy.

Lumbar Puncture

See: Spinal Tap

Lymph

A clear, slightly yellow fluid that carries disease-fighting white blood cells from the blood to and from body tissues.

Lymphadenopathy Syndrome (LAS)

Swollen, firm, and possibly tender lymph nodes. The causes range from infection, such as HIV, the flu, or mononucleosis, to lymphoma (cancer of the lymphoid tissue).

See Also: Lymph Nodes

Lymph Nodes

Very small organs of the immune system that are located throughout the body. Lymph fluid that bathes body tissues is filtered through lymph nodes as it carries white blood cells to and from the blood.

See Also: Lymph
Lymphadenopathy Syndrome (LAS)

Lymphocyte

A type of infection-fighting white blood cell found in the blood, lymph, and lymphoid tissue.

Lymphocyte Proliferation Assay

A laboratory test that measures the ability of lymphocytes (infection-fighting white blood cells) to recognize an antigen and to make more copies of themselves (proliferate) in response to the antigen encountered.

See Also: Antigen

Lymphogranuloma Venereum (LGV)

A sexually transmitted disease (STD) caused by a species of the *Chlamydia* bacterium. It is characterized by genital lesions and swelling of lymph nodes in the groin.

See Also: Chlamydia

Lymphoid Interstitial Pneumonitis (LIP)

A lung disorder that causes hardening of the parts of the lung that aid in oxygen absorption. The cause of LIP is unknown, and there is no clear treatment. LIP is an AIDS-defining condition in HIV-infected children.

Lymphokine

A cytokine (chemical messenger that affects the immune response) secreted by white blood cells.

See Also: Cytokine

Lymphoma

Cancer of the lymphoid tissues. Some types of lymphomas, such as non-Hodgkin's lymphoma and Hodgkin's disease, are associated with HIV infection.

Lymphopenia

A lower than normal number of lymphocytes, a specific type of white blood cell.

Lymphoproliferative Response

An immune system response that results in a rapid increase in the number of white blood cells.

Lysis

The destructive breaking apart of a cell.

MAC

See: *Mycobacterium Avium* Complex

Macrophage

A type of disease-fighting white blood cell that destroys foreign invaders and stimulates other immune system cells to fight infection.

MACS

See: Multicenter AIDS Cohort Study

Magnetic Resonance Imaging (MRI)

A noninvasive technique that uses magnetic fields and radio waves instead of x-rays to produce three-dimensional computerized images of the body's internal tissues and organs.

Maintenance Therapy

Also known as secondary prophylaxis. A treatment to prevent an infection from coming back after it has been brought under control.

Major Histocompatibility Complex (MHC)

See: Human Leukocyte Antigen (HLA)

Malabsorption Syndrome

A condition that occurs when the intestines have problems absorbing nutrients. Malabsorption syndrome is associated with HIV infection and can cause loss of appetite, muscle pain, and weight loss.

See Also: Wasting Syndrome

Malaise

A general feeling of discomfort or not feeling well.

Malaria

A disease, more common in areas with warm climates (e.g., South America, Africa), that is caused by a parasite and transmitted by the bite of an infected female mosquito. People infected with malaria have flu-like symptoms, most commonly chills and fever. More

severe symptoms, such as seizures and coma, may also develop. Malaria is harder to prevent and treat in people with weakened immune systems, such as those infected with HIV.

Malignant

Referring to uncontrolled cell growth that may spread to other tissues, such as in cancer.

Mast Cell

A type of leukocyte.

See Also: Leukocyte

Maternal-Child Transmission

See: Mother-to-Child Transmission (MTCT)

MDR-TB

See: Multiple Drug-Resistant Tuberculosis

M

Medication Event Monitoring System (MEMS)

A method of measuring drug adherence that uses a computer chip embedded in a pill bottle lid to record the date and time each dose is taken. Current obstacles to its use include its large size, the possibility of malfunction when refrigerated, and inaccurate reporting when pillboxes are used in place of the original bottle.

See Also: Adherence

Directly Observed Therapy (DOT)

MedlinePlus

A database of health information developed by the National Library of Medicine (NLM). MedlinePlus has information on several hundred diseases and conditions as well as other health information. <http://www.nlm.nih.gov/medlineplus/>

Memory T Cell

A specific type of infection-fighting T cell that can recognize foreign invaders that were encountered during a prior infection or vaccination. At a second encounter with the invader, memory T cells

can reproduce to mount a faster and stronger immune response than the first time the immune system responded to the invader.

See Also: T Cell

MEMS

See: Medication Event Monitoring System

Meningitis

Inflammation of the membranes that surround the brain or spinal cord. Meningitis can be caused by a bacterium, fungus, or virus, such as HIV.

Messenger RNA (mRNA)

A molecule that carries genetic instructions for building a particular protein from the cell's DNA to the place in a cell where proteins are assembled. There, the messenger RNA serves as a blueprint for the construction of a specific protein.

See Also: Translation

Transcription

Metabolic

Related to the processes of metabolism, or the chemical changes in living things by which substances are built up or broken down.

Metabolic Syndrome

Also known as Syndrome X. A cluster of disorders that affect the body's metabolism, including high blood pressure, high insulin levels, excess body weight, and abnormal cholesterol levels. Some anti-HIV drugs may cause or worsen these metabolic disorders.

Metabolism

The physical and chemical reactions that produce energy for the body. Metabolism also refers to the breakdown of drugs or other substances within the body, which may occur during digestion or elimination.

M

MHC

See: Major Histocompatibility Complex

Microbe

A living organism that can be seen only through a microscope, such as bacteria, protozoa, viruses, and fungi.

Microbicide

A natural or man-made substance that kills microbes. Researchers are studying the use of microbicides to prevent the transmission of sexually transmitted diseases (STDs), including HIV infection.

See Also: Microbe

Microbicide Trials Network (MTN)

A clinical trials network that evaluates the development of microbicides to reduce the transmission of HIV.

See Also: Microbicide

M

Microsporidiosis

An infection of the intestines caused by a parasite. The infection can cause diarrhea and wasting (loss of weight and strength) in people with HIV.

Mitochondria

Rod-like structures that produce energy for a cell.

Mitochondrial Toxicity

A condition in which mitochondria are damaged. This condition is a potential side effect of NRTIs and can cause problems in the heart, nerves, muscles, pancreas, kidneys, and liver.

See Also: Mitochondria

Molluscum Contagiosum

A disease of the skin and mucous membranes caused by a virus. The condition causes pearly white or flesh-colored bumps on the face, neck, underarms, hands, and genital region. In people with

HIV, molluscum contagiosum can get worse with time and often becomes resistant to treatment.

Monotherapy

The use of only one drug to treat a disease. For HIV, combination therapy with three or more active anti-HIV drugs has proven to be more effective than monotherapy. Combination therapy, also known as highly active antiretroviral therapy or HAART, is now the gold standard for HIV treatment.

See Also: Highly Active Antiretroviral Therapy (HAART)

Morbidity

The rate of sickness or disease within a certain population.

Mortality

The death rate, measured as the number of deaths within a certain population. The measure can apply to death from a particular disease or condition.

Mother-to-Child Transmission (MTCT)

The passage of HIV from an HIV-infected mother to her infant. The infant may become infected while in the womb, during labor and delivery, or through breastfeeding.

See Also: Vertical Transmission

MRI

See: Magnetic Resonance Imaging

mRNA

See: Messenger RNA

MSM

Abbreviation for men who have sex with men.

MTCT

See: Mother-to-Child Transmission

MTN

See: Microbicide Trials Network

M-Tropic Virus

See: R5-Tropic Virus

See Also: CCR5

Mucocutaneous

Relating to mucous membranes and the skin. Examples of mucocutaneous areas include the mouth, lips, eyes, vagina, and anal area.

Multicenter AIDS Cohort Study (MACS)

An ongoing study of HIV infection in homosexual and bisexual men. The study is cofunded by the National Institute of Allergy and Infectious Diseases (NIAID); the National Cancer Institute (NCI); and the National Heart, Lung, and Blood Institute (NHLBI) and is conducted at four clinical centers. Information about the natural history of HIV disease, the impact of treatment on disease progression, the role of genetic factors, and other long-term therapy issues are continually reported from study evaluations.

Multi-Class Antiretroviral Therapy

See: Highly Active Antiretroviral Therapy (HAART)

Multiple Drug-Resistant Tuberculosis (MDR-TB)

A tuberculosis (TB) infection that does not respond to two or more standard anti-TB drugs. MDR-TB usually occurs when inadequate or improper treatment allows the bacteria that cause TB to continue multiplying and become drug resistant.

See Also: Tuberculosis (TB)

Mutation

A change or adaptation, such as in a virus, that can be passed down to future generations of virus. Mutations can occur only when a virus is actively replicating, and not when anti-HIV drugs have suppressed the viral load to an undetectable level. If HIV replication

is not well controlled, an individual's original HIV strain can adapt to infect different cell types or resist different anti-HIV drugs.

See Also: Drug Resistance

Myalgia

Muscle pain or tenderness that spreads throughout the body and is usually accompanied by a general feeling of discomfort or weakness.

Mycobacterium Avium Complex (MAC)

An infection caused by two bacteria, *Mycobacterium avium* and *M. intracellulare*, found in soil and dust particles. The infection can be limited to a specific area or can spread throughout the body. This life-threatening disease is extremely rare in people who are not infected with HIV, and MAC is considered an AIDS-defining condition in HIV-infected people.

Mycobacterium Avium-Intracellulare (MAI)

An infection caused by *Mycobacterium intracellulare*, which is found in soil and dust particles. The infection can be limited to a specific area or can spread throughout the body. This life-threatening disease is extremely rare in people who are not infected with HIV, and MAI is considered an AIDS-defining condition in HIV-infected people.

See Also: AIDS-Defining Condition

Mycobacterium Avium Complex (MAC)

Mycobacterium tuberculosis

The bacterium that causes tuberculosis (TB).

See Also: Tuberculosis (TB)

Mycosis

Any disease caused by a fungus.

Myeloablation

Severe myelosuppression.

See Also: Myelosuppression

Myelosuppression

Decreased bone marrow function that results in reduced production of red blood cells, white blood cells, or platelets. Myelosuppression is a side effect of certain anti-HIV drugs.

Myopathy

A disease of muscle tissue. Myopathy may be caused by certain anti-HIV drugs or may be a consequence of HIV infection itself.

M

Nadir

The lowest level to which viral load (the amount of HIV in the blood) falls after a person starts anti-HIV treatment. Also refers to the lowest CD4 count a person reaches during HIV infection.

National Cancer Institute (NCI)

An institute of the National Institutes of Health (NIH) and the U.S. government's principal agency for cancer research and training. This institute provides health information and supports programs focusing on the causes, diagnosis, prevention, and treatment of cancer; rehabilitation from cancer; and the continuing care of cancer patients and the families of cancer patients. <http://www.nci.nih.gov>

National Institute of Allergy and Infectious Diseases (NIAID)

An institute of the National Institutes of Health (NIH) that conducts and funds research to better understand, treat, and prevent infectious, immunologic, and allergic diseases. <http://www3.niaid.nih.gov>

National Institutes of Health (NIH)

A multi-institute agency of the U.S. Department of Health and Human Services (HHS). NIH conducts research in its own laboratories and funds research in universities, medical schools, hospitals, and other research institutions throughout the United States and abroad. <http://www.nih.gov>

National Library of Medicine (NLM)

An institute of the National Institutes of Health (NIH) and the world's largest medical library. NLM collects materials in all areas of biomedicine and health care and is involved in biomedical aspects of other fields, such as technology and the social sciences. <http://www.nlm.nih.gov>

National Prevention Information Network (NPIN)

A national reference, referral, and distribution service for information on HIV/AIDS, other sexually transmitted diseases (STDs), and tuberculosis (TB), sponsored by the Centers for Disease Control and Prevention (CDC). <http://www.cdcnpin.org>

Natural History Study

A study designed to investigate the natural development of a disease or condition over time.

Natural Killer (NK) Cell

A type of white blood cell that is able to kill tumor cells and cells infected with viruses or other foreign invaders.

NCI

See: National Cancer Institute

NDA

See: New Drug Application

Nemaline Rod Myopathy (NM)

A rare disorder in which thread-like rods grow inside muscle cells and can lead to debilitating muscle weakness. It can develop as a result of a genetic defect or as a complication of HIV.

Neonatal

The time period from birth through the first 4 weeks after birth.

Neoplasm

Also called a tumor. Any new, abnormal growth of tissue. Neoplasms may be benign (not cancerous) or malignant (cancerous).

Nephritis

Inflammation of the kidney that can occur as a side effect of some anti-HIV drugs.

Nephrotoxic

Toxic or destructive to the kidneys.

Neuralgia

Sharp, shooting pain along a nerve pathway.

Neuropathy

A disorder that occurs when nerve cells are damaged. Symptoms range from a tingling sensation or numbness in the toes and fingers to paralysis. Neuropathy can occur as a result of HIV infection or as a side effect of certain anti-HIV drugs.

See Also: Peripheral Neuropathy

Neutropenia

A lower than normal number of neutrophils (a type of white blood cell) in the blood. Moderate to severe neutropenia can increase the chance of developing bacterial infections. Neutropenia may occur as a result of HIV infection or as a side effect of some anti-HIV drugs.

See Also: Neutrophil

Neutrophil

A type of white blood cell that can engulf and kill foreign invaders, such as bacteria.

New Drug Application (NDA)

An application submitted by a drug manufacturer to the Food and Drug Administration (FDA) for a license to market and sell a particular drug in the United States. The drug manufacturer files an NDA after information from clinical trials is available for FDA review.

See Also: Investigational New Drug (IND) Application

NHL

See: Non-Hodgkin's Lymphoma

NIAID

See: National Institute of Allergy and Infectious Diseases

NIH

See: National Institutes of Health

NK Cell

See: Natural Killer Cell

NLM

See: National Library of Medicine

NNRTI

See: Non-Nucleoside Reverse Transcriptase Inhibitor

NNRTI-Sparing Regimen

Drug combination that omits the use of any NNRTIs so that the drug class can be saved for use in future treatment.

See Also: Class-Sparing Regimen

Non-Hodgkin's Lymphoma (NHL)

A cancer of the lymphoid tissue that can affect the lymph nodes, spleen, bone marrow, and other organs of the immune system. This type of cancer typically develops in people with weakened immune systems, including organ transplant recipients and people with HIV or AIDS.

See Also: Hodgkin's Lymphoma Lymphoma

Non-Nucleoside Reverse Transcriptase Inhibitor (NNRTI)

A class of anti-HIV drugs that bind to and disable HIV-1's reverse transcriptase enzyme, a protein that HIV needs to make more copies of itself. Without functional reverse transcriptase, HIV replication is halted. Current NNRTI drugs are only effective against HIV-1 and not against HIV-2.

See Also: Reverse Transcriptase (RT)

Non-Steroidal Anti-Inflammatory Drug (NSAID)

A class of drugs that can reduce inflammation, swelling, stiffness, and joint pain. They are used to treat arthritis and mild to moderate pain. Some common NSAIDs are aspirin and ibuprofen.

NPIN

See: National Prevention Information Network

NRTI

See: Nucleoside Reverse Transcriptase Inhibitor

NRTI-Sparing Regimen

Drug combination that omits the use of any NRTIs so that the drug class can be saved for use in future treatment.

See Also: Class-Sparing Regimen

NSAID

See: Non-Steroidal Anti-Inflammatory Drug

Nucleic Acid

Chemical structure that stores genetic information. There are two types of nucleic acid, DNA and RNA. Human genetic information is stored as DNA, whereas HIV's genetic information can be stored as both DNA and RNA.

See Also: Deoxyribonucleic Acid (DNA)
Ribonucleic Acid (RNA)

Nucleic Acid Test

A laboratory test that can detect very small amounts of specific genetic material in blood, plasma, or other tissue. This test can detect several types of viruses and is used to screen blood from blood donors.

Nucleoside

A precursor to a building block of DNA or RNA. Nucleosides must be chemically changed into nucleotides before they can be used to make DNA or RNA.

See Also: Deoxyribonucleic Acid (DNA)
Ribonucleic Acid (RNA)
Nucleotide

Nucleoside Analogue Reverse Transcriptase Inhibitor (NRTI)

A class of anti-HIV drug. Nucleoside analogues are faulty versions of the building blocks necessary for HIV reproduction. When HIV's reverse transcriptase enzyme uses a nucleoside analogue instead of

a normal nucleoside, reproduction of the virus's genetic material is halted. Also called nucleoside analogues or nukes.

See Also: Nucleoside

Reverse Transcriptase (RT)

Nucleoside-Associated Resistance Mutation (NAM)

A viral mutation that increases HIV resistance to treatment by NRTI drugs.

See Also: Thymidine Analogue Mutation (TAM)

Nucleotide

A building block of DNA or RNA, the chemical structures that store genetic information.

See Also: Deoxyribonucleic Acid (DNA)

Ribonucleic Acid (RNA)

Nucleotide Analogue Reverse Transcriptase Inhibitor (NtRTI)

A class of anti-HIV drug. Nucleotide analogues are faulty versions of the building blocks necessary for HIV reproduction. When HIV's reverse transcriptase enzyme uses a nucleotide analogue instead of a normal nucleotide, reproduction of the virus's genetic material is halted. Although technically different from nucleoside analogues, nucleotide analogues work in the same way. Also called nucleotide analogues or nukes.

See Also: Nucleotide

Reverse Transcriptase (RT)

Nucleus

The part of a cell that contains the organism's genetic information.

Nuke

Slang term for nucleoside/nucleotide reverse transcriptase inhibitors (NRTIs).

See Also: Nucleoside Analogue Reverse Transcriptase Inhibitor (NRTI)

Nucleotide Analogue Reverse Transcriptase Inhibitor (NtRTI)

OAR

See: Office of AIDS Research

Observational Study

See: Clinical Trial

OBT

See: Optimized Background Therapy

Occupational Exposure

Exposure to potentially infectious material, such as blood, tissue, body fluids, medical equipment, or supplies, while at work. The exposure could occur through a needlestick, a cut with an object, contact with the mucous membrane, or contact with skin that has a break in it.

Office of AIDS Research (OAR)

The office within the National Institutes of Health's (NIH's) National Institute of Allergy and Infectious Diseases (NIAID) responsible for the scientific, budgetary, legislative, and policy elements of the NIH HIV/AIDS research program.

Off-Label Use

Prescribed use of a drug for a condition other than one approved by the Food and Drug Administration (FDA) or for a patient population or at a dosage not approved by the FDA.

OHL

See: Oral Hairy Leukoplakia

OI

See: Opportunistic Infection

Open-Label Trial

A clinical trial in which both the researchers and the participants know who is getting which drug or vaccine.

See Also: Double-Blind Study

Opportunistic Infection (OI)

An illness caused by any one of various organisms that occur in people with weakened immune systems, including people with HIV/AIDS. OIs that are common in people with AIDS include *Pneumocystis jiroveci* pneumonia (PCP); cryptosporidiosis; histoplasmosis; toxoplasmosis; other parasitic, viral, and fungal infections; and some types of cancers.

Optimized Background Therapy (OBT)

The anti-HIV drugs in a treatment regimen that are chosen for an individual on the basis of resistance testing and treatment history. In clinical trials, patients often receive either the drug being tested or a placebo (sugar pill for comparison) in addition to OBT, so that they do not receive monotherapy or no treatment.

Oral Hairy Leukoplakia (OHL)

A white-colored, hairy, or ribbed patch that appears on the side of the tongue and inside the cheeks. It develops mainly in people with weakened immune systems, including people with HIV. It is caused by Epstein-Barr virus (EBV), a member of the herpesvirus family.

See Also: Epstein-Barr Virus (EBV)

Osteonecrosis

Also referred to as avascular necrosis. A medical condition in which bone tissue dies. Osteonecrosis affects some people with HIV, but it is unclear if it develops as a complication of HIV infection or as a side effect of anti-HIV drugs.

See Also: Avascular Necrosis (AVN)

Osteopenia

A medical condition in which bones lose their minerals and become less dense, making them weaker and easier to break.

Osteoporosis

Severe loss of bone mass, density, and strength. Although usually an age-related disorder, osteoporosis may also occur as a result of HIV infection or as a side effect of anti-HIV drugs.

p24

An HIV protein that makes up the virus core that surrounds HIV's genetic material.

See Also: Core

Package Insert

Also known as prescribing information or product label. A document prepared by the manufacturer of a drug and approved by the Food and Drug Administration (FDA) to describe a drug's approved uses, dosages, contraindications, potential side effects, and other relevant information. This information is inserted inside each manufactured drug bottle and attached to any promotional or labeling materials.

PACTG

See: Pediatric AIDS Clinical Trials Group

Palliative Care

Medical care that helps to alleviate symptoms of chronic illnesses without offering a cure. Palliative care offers therapies to comfort and support patients with terminal illnesses.

Pancreas

A gland located near the stomach that secretes digestive fluids that help to break down fats, proteins, and carbohydrates. The pancreas also secretes the hormones insulin and glucagon, which help to stabilize blood sugar.

Pancreatitis

Inflammation of the pancreas that can cause severe pain.

Laboratory tests that indicate pancreatitis include increased blood levels of triglycerides and the pancreatic enzyme amylase.

See Also: Pancreas

Pancytopenia

A lower than normal number of all types of blood cells, including red and white blood cells and platelets.

Pandemic

An outbreak of an infectious disease, such as HIV, that affects people or animals over an extensive geographic area. Also known as a global epidemic.

See Also: Epidemic

Papilloma

A tumor that grows on the skin, such as a wart or polyp. Human papillomavirus (HPV) is the virus that causes papillomas, including genital warts.

See Also: Human Papillomavirus (HPV)
Genital Warts

Pap Smear

A method for the early detection of cancer and other abnormalities of the female genital tract. A Pap smear is done by placing a speculum in the vagina, locating the cervix, and then scraping a thin layer of cells from the cervix. The cells are placed on a slide, sent to a laboratory, and analyzed for abnormalities. HIV-infected women often have abnormal results of Pap smear tests, usually as a result of human papillomavirus (HPV) infection.

See Also: Human Papillomavirus (HPV)
Cervical Cancer

Parasite

An organism that lives and feeds on or within another living organism and causes some degree of harm. Immunocompromised people, such as those infected with HIV, are more likely to develop parasitic infections, such as *Pneumocystis jiroveci* pneumonia (PCP) and toxoplasmosis.

Parenteral

Any route of administration, such as for a drug, into the body other than through the digestive system. For example, through the veins (intravenous), into the muscles (intramuscular), or through the skin (subcutaneous).

Paresthesia

Abnormal sensations, such as burning, tingling, or a “pins-and-needles” feeling, that occur without external stimulation. Paresthesia can occur as a symptom of peripheral neuropathy or as a side effect of certain anti-HIV drugs.

See Also: Peripheral Neuropathy

Passive Immunity

The body’s ability to prevent or fight a specific infection after receiving antibodies from another person. The most common example of passive immunity is when an infant receives the mother’s antibodies by consuming her breast milk.

See Also: Antibody

Passive Immunotherapy

The transfer of antibodies from one person to another to help the recipient fight infection. An example of passive immunotherapy is the use of plasma donated by healthy HIV-infected people who have high CD4 counts and high levels of anti-HIV antibodies. The plasma is administered to people with AIDS who have lost CD4 cells and can no longer make their own antibodies. Passive immunotherapy has been used with limited success in treating advanced HIV disease in adults, but it is still sometimes used in HIV-infected children.

See Also: Passive Immunity

Pathogen

General term for any disease-causing organism.

Pathogenesis

General term for the origin and development of disease.

PBMC

See: Peripheral Blood Mononuclear Cell

PCP

See: *Pneumocystis jiroveci* Pneumonia

PCR

See: Polymerase Chain Reaction

Peak Concentration

See: CMAX

Pediatric AIDS Clinical Trials Group (PACTG)

Now known as the International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Network. A large clinical trials network that evaluates treatments for HIV-infected children and adolescents and that develops new therapeutic approaches for preventing mother-to-child transmission (MTCT) of HIV.

See Also: International Maternal Pediatric Adolescent AIDS Clinical Trials (IMPAACT) Network

Pelvic Inflammatory Disease (PID)

An infection of the upper female genital tract affecting the uterus, fallopian tubes, and ovaries. It is usually caused by the bacteria responsible for two common sexually transmitted diseases (STDs), gonorrhea and chlamydia. If left untreated, PID can cause severe pain, tubal pregnancy, and infertility. Severe cases may even spread to the liver and kidneys, causing dangerous internal bleeding and death.

People Living with AIDS (PLWA)

Infants, children, adolescents, and adults infected with HIV/AIDS.

PEP

See: Post-Exposure Prophylaxis

PEPFAR

See: President's Emergency Plan for AIDS Relief

Peptide

A short chain of amino acids that are chemically linked to one another. Longer chains of amino acids are referred to as polypeptides.

See Also: Polypeptide
Amino Acid

Perianal

Around the anus.

Perinatal

The time period spanning shortly before and after birth.

Perinatal Transmission

See: Mother-to-Child Transmission

Peripheral Blood Mononuclear Cell (PBMC)

A general term for white blood cells that contain one nucleus, particularly lymphocytes and macrophages.

See Also: Lymphocyte
Macrophage

Peripheral Neuropathy

Condition characterized by sensory loss; pain; muscle weakness; and wasting of muscle in the hands, legs, or feet. It may start with burning or tingling sensations or numbness in the toes and fingers. In severe cases, paralysis may occur. Peripheral neuropathy may result from HIV infection itself or may be a side effect of certain anti-HIV drugs, particularly NRTIs.

See Also: Neuropathy

Persistent Generalized Lymphadenopathy (PGL)

Chronic and persistent swollen lymph nodes in at least two areas of the body for at least 3 months. PGL occurs in people with persistent bacterial, viral, or fungal infections and in individuals with weakened immune systems, including people with HIV.

PGL

See: Persistent Generalized Lymphadenopathy

P

Pharmacokinetics

The interaction of a drug with the body over a period of time. General pharmacokinetic processes are absorption, distribution, metabolism, and excretion. These processes are usually measured through blood and urine samples.

Pharmacology

The branch of medical science that studies the chemistry, effects, and uses of drugs. Pharmacology includes the study of a drug's therapeutic value, toxicology, and interaction with the body (pharmacokinetics).

See Also: Pharmacokinetics

Phase I Trial

An initial clinical study of new drugs or other therapies in small groups of healthy volunteers, usually 20 to 80 people. This phase of clinical trial determines initial drug safety and side effects.

Phase II Trial

An early clinical study that evaluates the safety and effectiveness of new drugs or other therapies. Phase II trials also help determine short-term side effects and risks associated with new drugs. This trial phase usually recruits no more than 100 people affected with the disease or condition under study.

Phase III Trial

A clinical study that compares the effectiveness of new drugs to standard therapies for the disease or condition in question. This trial phase recruits a large population of people with the disease or condition being studied, ranging from several hundred to several thousand volunteers. The results of these trials are used to evaluate the overall risks and benefits of the drug and to provide the information needed for the Food and Drug Administration (FDA) to consider the drug for approval.

Phase IV Trial

A clinical study that occurs after a drug has been approved by the Food and Drug Administration (FDA) to determine long-term safety and effectiveness. Sometimes referred to as a post-marketing study. This trial phase recruits the largest population of patients to gain additional information about the drug's risks, benefits, and optimal use.

Phenotypic Assay

A laboratory test that determines by direct experiment whether a particular strain of HIV is resistant to anti-HIV drugs. This is different from a genotypic assay, which uses an indirect method to find out if a particular strain of HIV has specific genetic mutations that are associated with drug resistance.

See Also: Resistance Testing
Genotypic Assay

Photosensitivity

Increased sensitivity of skin to sunlight or ultraviolet light. Photosensitivity commonly causes reddening and blistering of the skin and in time increases a person's risk of skin cancer. Photosensitivity may occur as a side effect of some drugs or as a result of HIV infection.

PHS

See: Public Health Service

PI

See: Protease Inhibitor

PID

See: Pelvic Inflammatory Disease

Pill Burden

The number and schedule of pills taken each day in a particular anti-HIV drug regimen. A high pill burden may lead to decreased

treatment adherence because of the difficulty of taking a large number of pills properly.

See Also: Adherence

PI-Sparing Regimen

An anti-HIV drug regimen that does not include a PI.

See Also: Protease Inhibitor (PI)
Class-Sparing Regimen

Placebo

Sometimes called a sugar pill. A pill or other treatment that looks like the treatment being tested in a clinical trial but does not actually contain the active ingredient. Placebos are used in some clinical trials to control for what is called the “placebo effect”: an effect that is caused by the power of suggestion alone. The effects of the placebo are then compared with the effects of the active ingredient to determine if the ingredient is truly effective.

See Also: Placebo Effect

Placebo-Controlled Study

A study that identifies the true effect of a treatment by comparing results in patients taking the actual treatment to those in patients taking an inactive look-alike, or placebo, treatment.

See Also: Placebo Effect

Placebo Effect

A positive or negative response to an inactive treatment (placebo) caused by a patient’s or researcher’s expectations that a particular treatment will have an effect.

See Also: Placebo
Placebo-Controlled Study

Plasma

The clear, liquid part of the blood in which red blood cells, white blood cells, and platelets are suspended. Plasma contains nutrients, wastes, salts, gases, and proteins.

Platelet

A type of cell in the blood responsible for clotting. When blood vessels are damaged, platelets help to form a plug that prevents the loss of blood.

PLWA

See: People Living With AIDS

PML

See: Progressive Multifocal Leukoencephalopathy

PMTCT

See: Prevention of Mother-To-Child Transmission

Pneumocystis jiroveci

A type of fungus that can cause severe pneumonia in humans, particularly in people with weakened immune systems, and especially in people with AIDS. *P. jiroveci* is related to *P. carinii*, the species for which PCP (originally, *P. carinii* pneumonia) is named.

See Also: *Pneumocystis jiroveci* Pneumonia (PCP)

***Pneumocystis jiroveci* Pneumonia (PCP)**

A lung infection caused by *Pneumocystis jiroveci*, a fungus related to *P. carinii* (the species for which PCP was originally named). PCP occurs in people with weakened immune systems, such as people with HIV. It is considered an AIDS-defining condition in HIV-infected individuals. The first signs of infection are difficulty breathing, high fever, and dry cough.

See Also: *Pneumocystis jiroveci*

Polymerase Chain Reaction (PCR)

A laboratory technique that rapidly replicates tiny amounts of DNA so that it can be detected and measured.

See Also: Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR)

Polyneuritis

Inflammation of several nerves at the same time.

Polypeptide

A long chain of amino acids that are chemically linked to one another. Shorter chains of amino acids are referred to as peptides.

See Also: Amino Acid
Peptide

Polyvalent Vaccine

A vaccine that combines multiple antigens. This type of vaccine may produce a stronger immune response or may provide protection from multiple strains of an infectious organism.

See Also: Antigen
Vaccine

Post-Exposure Prophylaxis (PEP)

Administration of anti-HIV drugs within 72 hours of a high-risk exposure, including unprotected sex, needle sharing, or occupational needle stick injury, to help prevent development of HIV infection.

See Also: Prophylaxis
Pre-Exposure Prophylaxis (PrEP)

Postnatal

The time period following birth (refers to the newborn).

See Also: Postpartum
Prenatal

Postpartum

The time period after childbirth (refers to the mother).

See Also: Postnatal
Antepartum

PPD

See: Purified Protein Derivative

Preclinical

Refers to the preliminary testing of investigational drugs in laboratory animals that occurs before human testing may begin.

Preconception Counseling

A specific type of health care recommended by the American College of Obstetrics and Gynecology for all women of childbearing age prior to pregnancy. Its purpose is to identify risks of pregnancy and childbirth for both mother and child, to provide education and counseling targeted to a woman's individual needs, and to treat or stabilize medical conditions prior to pregnancy in order to optimize the mother's and infant's health.

Pre-Exposure Prophylaxis (PrEP)

The use of antiretroviral drugs as a preventive measure to potentially decrease the risk of HIV transmission. Similar to providing antimalarial drugs to travelers in countries with high rates of malaria as a preventive measure.

Prenatal

Period of time spanning conception to the beginning of labor.

P

PrEP

See: Pre-Exposure Prophylaxis

Prescribing Information

See: Package Insert

President's Emergency Plan for AIDS Relief (PEPFAR)

The U.S. government initiative to combat the global HIV/AIDS epidemic. PEPFAR's goal is to work with international, national, and local leaders worldwide to support integrated HIV prevention, treatment, and care programs. PEPFAR was originally signed into law in May 2003 and reauthorized in August 2008.

<http://www.pepfar.gov/>

Prevalence

The number of people in a population who are affected with a particular disease or condition at a given time. Prevalence can be thought of as a snapshot of all existing cases of a disease or condition at a specified time.

See Also: Incidence

Prevention of Mother-to-Child Transmission (PMTCT)

Prevention of the passage of HIV from an HIV-infected mother to her infant, whether in the womb, during labor and delivery, or through breastfeeding.

Preventive HIV Vaccine

A vaccine designed to prevent HIV infection in people who are HIV negative. Preventive HIV vaccines are not designed to treat those already infected with HIV.

See Also: Therapeutic HIV Vaccine

Primary HIV Infection

See: Acute HIV Infection

Primary Isolate

A strain of HIV taken from an infected individual, as opposed to a strain grown in the laboratory.

Primary Prophylaxis

Treatment to prevent the development of a particular disease.

See Also: Chemoprevention
Chemoprophylaxis
Prophylaxis

Primary Resistance

When an individual is infected by a strain of HIV-1 that is already resistant to one or more antiretroviral drugs.

Proctitis

Inflammation of the lining of the rectum.

Product Label

See: Package Insert

Progressive Multifocal Leukoencephalopathy (PML)

A rare brain and spinal cord disease caused by a virus and usually seen only in immunocompromised individuals, such as those with HIV. Symptoms vary but include loss of muscle control, paralysis, blindness, speech problems, and an altered mental state. This disease often progresses rapidly and may be fatal. PML is considered an AIDS-defining condition in people with HIV.

Prophylaxis

Treatment to prevent the onset of a particular disease or to prevent recurrence of symptoms of an existing infection that has been brought under control.

Prospective Study

See: Clinical Trial

Protease

An enzyme that breaks down long polypeptides into smaller protein units. HIV's protease enzyme cuts long chains of HIV polypeptide into the smaller, active proteins used in HIV replication.

See Also: Polypeptide

Protease Inhibitor (PI)

A class of anti-HIV drug that prevents replication of HIV by disabling HIV protease. Without HIV protease, the virus cannot make more copies of itself.

See Also: Protease

Protein

A highly complex biological molecule consisting of specific combinations of amino acids linked together by chemical bonds. Proteins are required for the structure, function, and regulation of the body's cells, tissues, and organs. Each protein has a unique set of functions. Examples of proteins are enzymes; cytokines; antibodies; and the major components of hair, skin, and muscle.

See Also: Peptide

Amino Acid

Polypeptide

Protocol

The detailed plan for conducting an experiment, such as a clinical trial. A clinical trial protocol is a lengthy document that describes the trial's rationale, purpose, information about the drug or vaccine being studied, participant inclusion/exclusion criteria, study endpoints, and details of the trial design.

See Also: Clinical Trial

Endpoint

Inclusion/Exclusion Criteria

Protozoa

Large, diverse group of unicellular (one-celled) animals. Some protozoa cause diseases in people with weakened immune systems, such as people with HIV or AIDS. Protozoa are responsible for some of the AIDS-defining opportunistic infections, notably toxoplasmosis and cryptosporidiosis.

Provirus

A DNA version of HIV's genetic material that has been integrated into the host cell's own DNA.

See Also: Integration

Pruritus

An intense itching sensation that produces the urge to rub or scratch the skin for relief.

Public Health Service (PHS)

An office within the U.S. Department of Health and Human Services (HHS). The Public Health Service is composed of several agencies, including the Food and Drug Administration (FDA) and the National Institutes of Health (NIH) that oversee different aspects of health care in the United States. Guidelines for the management of various diseases, including HIV infection, are released through the PHS.

PubMed

Database and search engine that provides access to citations for more than 18 million biomedical articles dating back to the 1950s. The database is maintained by the National Library of Medicine (NLM). PubMed includes links to free full-text articles, when available, and also connects users with related resources. <http://www.ncbi.nlm.nih.gov/entrez>

Pulmonary

Pertaining to the lungs.

Purified Protein Derivative (PPD)

A substance used in the tuberculin skin test to determine if a person has been exposed to *Mycobacterium tuberculosis*, the bacterium that causes tuberculosis (TB). PPD is usually injected just below the skin. A hard red bump or a swollen area at the injection site indicates that the person was exposed to the bacterium. Additional tests are required to determine if the person has active TB infection.

See Also: Tuberculin Skin Test

Tuberculosis (TB)

q.d.

Once-a-day dosing instructions.

q.i.d.

Four-times-a-day dosing instructions.

R5-Tropic Virus

Also known as M-tropic virus. A strain of HIV that uses the chemokine receptor CCR5 as a coreceptor to bind to and infect human cells. HIV is usually R5-tropic at early stages of infection, but the virus can switch to a different coreceptor (for example, CXCR4) as the disease progresses.

See Also: X4-Tropic Virus

CCR5

Chemokines

Coreceptor

Randomized Trial

A type of clinical trial in which participants are assigned by chance to one of two or more treatment or placebo groups. A randomized trial design helps researchers gather meaningful information and make valid statistical calculations.

See Also: Clinical Trial

Placebo

Rapid Test

A type of HIV-1 enzyme-linked immunosorbent assay (ELISA) that can detect antibodies to HIV in the blood in less than 30 minutes with greater than 99% sensitivity and specificity. A positive rapid test result should be confirmed by an HIV Western blot test.

See Also: Enzyme-Linked Immunosorbent Assay (ELISA)

Western Blot

R

Rebound

See: Viral Rebound

Receptor

A protein on the surface of a cell that serves as a binding site for substances outside the cell, such as HIV floating free in the blood.

See Also: Coreceptor

CD4 Receptor

Recombinant

Produced by genetic engineering. Also refers to a new organism or compound produced by inserting the genetic material of one organism into the genetic material of another organism.

See Also: Genetic Engineering

Refractory

Refers to a disease or condition that has gotten worse despite treatment.

Regimen

See: Treatment Regimen

Relapse

The return of signs and symptoms of a disease after a patient has been free of those signs and symptoms.

Remission

The period during which symptoms of a disease diminish or disappear. In people infected with HIV, effective treatment regimens may result in the remission of HIV-associated symptoms and conditions.

Renal

Pertaining to the kidneys.

Replication

See: Viral Replication

Rescue Therapy

See: Salvage Therapy

Reservoir

See: Latent HIV Reservoir

Resistance

See: Drug Resistance

Resistance Testing

Laboratory testing to determine if an individual's HIV strain is resistant to any anti-HIV drugs.

See Also: Genotypic Assay
Phenotypic Assay
Drug Resistance

Retinal Detachment

Separation of the retina from the inner wall of the eye. Retinal detachment can be a complication of cytomegalovirus (CMV) retinitis and can cause vision loss.

See Also: Cytomegalovirus Retinitis

Retinitis

Inflammation of the retina, the thin layer of tissue that lines the inside back wall of the eye and functions like the film of a camera. In people with HIV, retinitis can be caused by cytomegalovirus (CMV). If untreated, retinitis can lead to blindness. Symptoms include floating spots, flashing lights, blind spots, and blurred vision.

See Also: Cytomegalovirus (CMV)
Cytomegalovirus Retinitis

Retrospective Study

See: Clinical Trial

R

Retrovirus

A type of virus that stores its genetic information in a single-stranded RNA molecule and constructs a double-stranded DNA version of its genes using a special enzyme called reverse transcriptase. The DNA copy is then integrated into the host cell's own genetic material. HIV is an example of a retrovirus.

See Also: Reverse Transcriptase (RT)
Integration
Provirus

Reverse Transcriptase (RT)

An enzyme found in HIV and other retroviruses. RT converts single-stranded HIV RNA into double-stranded HIV DNA. Some anti-HIV drugs interfere with this stage of HIV's life cycle.

See Also: Nucleoside Analogue Reverse Transcriptase Inhibitor (NRTI)
Nucleotide Analogue Reverse Transcriptase Inhibitor (NtRTI)
Non-Nucleoside Reverse Transcriptase Inhibitor (NNRTI)
Provirus
Retrovirus

Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR)

A laboratory test that measures the amount of HIV RNA (also known as viral load) in a blood sample by replicating HIV's genetic material to measurable levels. RT-PCR is the primary way that health care providers monitor HIV infection and its treatment.

See Also: Polymerase Chain Reaction (PCR)
Viral Load (VL)

Ribonucleic Acid (RNA)

Chemical structure that carries genetic instructions for protein synthesis. Although DNA is the primary genetic material of cells, RNA is the genetic material for some viruses.

See Also: Deoxyribonucleic Acid (DNA)
Messenger RNA (mRNA)

RNA

See: Ribonucleic Acid

RT

See: Reverse Transcriptase

RT-PCR

See: Reverse Transcriptase-Polymerase Chain Reaction

R

Ryan White CARE Act

The Ryan White Comprehensive AIDS Resources Emergency (CARE) Act is federal legislation that addresses unmet health needs of people living with HIV/AIDS by funding primary health care and support services that enhance access to and retention in care. The CARE Act is administered by the Health Resources and Services Administration (HRSA).

See Also: Health Resources and Services Administration (HRSA)

Salmonella Septicemia

Salmonella is a bacterium that enters the body through ingestion of contaminated food or water. Symptoms of infection include nausea, vomiting, and diarrhea. *Salmonella* septicemia is a severe infection that circulates through the whole body. Recurrent *Salmonella* septicemia is considered an AIDS-defining condition in people with HIV.

Salvage Therapy

Also known as rescue therapy. An HIV treatment regimen designed for people who have used many different anti-HIV drugs in the past, have failed at least two anti-HIV regimens, and have extensive drug resistance.

SAMHSA

See: Substance Abuse and Mental Health Services Administration

SAT

See: Self-Administered Therapy

SAT

See: Subcutaneous Adipose Tissue

SC

See: Subcutaneous

Seborrheic Dermatitis

A skin condition common in people with HIV. It is characterized by loose, greasy or dry, white to yellowish scales, with or without reddened skin. Seborrheic dermatitis may involve the skin of the scalp, eyebrows, eyelids, nasolabial creases, and lips; behind the ears; in the external ear; and on the trunk, particularly over the sternum and along skin folds. The cause is unknown.

Secondary Prophylaxis

See: Maintenance Therapy

Self-Administered Therapy (SAT)

Administration of a medication by the person taking it. In self-administered therapy, the patient is in control of taking his or her medication and is unsupervised.

See Also: Directly Observed Therapy (DOT)

Semen-Derived Enhancer of Virus Infection (SEVI)

A collection of the enzyme prostatic acidic phosphatase (PAP) that is found in semen and that can increase the likelihood of HIV infection.

Sepsis

A serious blood-borne infection that is usually caused by bacteria. Immunocompromised people, such as those with HIV disease, are at increased risk for sepsis.

Seroconversion

The process by which a newly infected person develops antibodies to HIV. These antibodies are then detectable by an HIV test. Seroconversion may occur anywhere from days to weeks or months following HIV infection.

See Also: Window Period

Serologic Test

A laboratory test to determine if an individual has antibodies to a particular foreign invader, such as a virus. A positive serologic test indicates that an individual is infected or has had an infection in the past.

Seroprevalence

The number or proportion of people in a given population who have positive serologic tests for a particular infection.

Serostatus

The presence or absence of detectable antibodies against an infective agent, such as HIV, in the blood. Seronegativity, or seronegative status, means that the person has no detectable

antibodies and is not infected with the agent or has not had the chance to develop antibodies to an early infection. Seropositivity, or seropositive status, means that the person has detectable antibodies and is infected with the agent or had previously been infected with the agent.

Serum

The clear, thin, and sticky fluid that separates from blood when it clots.

Serum Glutamic Oxaloacetic Transaminase (SGOT)

See: Liver Function Tests

Serum Glutamic Pyruvate Transaminase (SGPT)

See: Liver Function Tests

Set Point

The viral load established within a few weeks to months after infection, after the initial burst of virus replication has subsided. The viral set point is thought to remain steady for an indefinite period of time if the infection is not treated with anti-HIV drugs. An individual's viral set point may determine how quickly HIV infection will progress without treatment. Higher set points suggest that disease will progress faster than lower set points.

Sexually Transmitted Disease (STD)

Also known as a sexually transmitted infection (STI). Any infection spread by the transmission of organisms from person to person during sexual contact.

SGOT

See: Serum Glutamic Oxaloacetic Transaminase

SGPT

See: Serum Glutamic Pyruvate Transaminase

Shingles

A disease caused by varicella zoster virus (VZV), which also causes chickenpox. VZV remains in the nerve roots of everyone who has had chickenpox, and it can become active years later to cause shingles. Shingles causes numbness, itching, or severe pain followed by clusters of blister-like lesions in a strip-like pattern on one side of the body. The pain can persist for weeks, months, or years after the rash heals.

See Also: Varicella Zoster Virus (VZV)

Side Effect

An action or effect of a drug (or vaccine) other than desired therapeutic effects. The term usually refers to an undesired or negative effect (adverse effect), such as headache, skin irritation, or liver damage.

Simian Immunodeficiency Virus (SIV)

A virus similar to HIV that can infect monkeys, chimpanzees, and macaques and can cause a disease similar to AIDS in some of these animals. Because the two viruses are closely related, researchers study SIV as a way to learn more about HIV. However, SIV cannot infect humans, and HIV cannot infect monkeys.

SIT

See: Structured Intermittent Therapy

SIV

See: Simian Immunodeficiency Virus

SJS

See: Stevens-Johnson Syndrome

Spinal Tap

Also known as lumbar puncture. A procedure in which cerebrospinal fluid from the lower spine is extracted with a needle for examination.

Splenomegaly

Enlargement of the spleen.

Sputum Analysis

Method of detecting certain infections (especially tuberculosis) by analyzing sputum, the mucus matter that collects in the respiratory and upper digestive passages and is expelled by coughing.

Standard of Care

A treatment plan that experts agree is appropriate, accepted, and widely used for a given disease or condition.

Statins

A shortened name for a class of cholesterol-lowering drugs called HMG-CoA reductase inhibitors. Drugs in this class lower cholesterol by slowing down the body's production of cholesterol and by increasing the liver's ability to remove cholesterol from the blood.

See Also: Cholesterol

STD

See: Sexually Transmitted Disease

Stem Cell

A generic cell that can make exact copies of itself indefinitely but can also produce specialized cells for various tissues in the body, such as heart muscle, brain tissue, and liver tissue.

Steroid

A general class of substances that are structurally related to one another and share the same chemical skeleton. Some hormones and drugs are steroids. For example, natural testosterone and its man-made derivatives help build muscle mass. Corticosteroid drugs are used to reduce swelling and pain.

Stevens-Johnson Syndrome (SJS)

A severe and sometimes fatal form of skin rash characterized by red, blistered spots on the skin; blisters in the mouth, eyes, genitals,

or other moist areas of the body; peeling skin that results in painful sores; and fever, headache, and other flu-like symptoms. Internal organs may also be affected. SJS may occur as a severe reaction to certain drugs, including NNRTIs used to treat HIV infection.

STI

An abbreviation used for either structured treatment interruption or for sexually transmitted infection (also known as sexually transmitted disease, or STD).

See Also: Structured Treatment Interruption (STI)
Sexually Transmitted Disease (STD)

Stomatitis

Inflammation or irritation of the mucous membranes in the mouth.

Strain

A type of virus that has a common ancestry but also clear-cut physiologic distinctions, often in resistance profiles. For example, HIV molecules that express nucleoside-associated resistance mutations are a separate viral strain than wild-type HIV molecules, which do not express resistance mutations.

Structured Intermittent Therapy (SIT)

A type of structured treatment interruption that is characterized by time-based treatment cycles (weeks or months on and off anti-HIV drugs).

See Also: Structured Treatment Interruption (STI)

Structured Treatment Interruption (STI)

Also known as a drug holiday. A planned, doctor-supervised discontinuation of anti-HIV drugs. Goals of STI include reduced toxicity, reduced treatment costs, and improved quality of life.

Subclinical Infection

An infection or phase of an infection without obvious symptoms or signs of disease.

Subcutaneous (SC)

Beneath the skin, or administration of a substance beneath the skin.

Subcutaneous Adipose Tissue (SAT)

A type of adipose (fat) tissue found directly under the skin. Both loss (lipoatrophy) and gain (lipohypertrophy) of this fat tissue can occur as a side effect of HIV infection and some of the drugs used to treat HIV infection, especially PIs and NRTIs.

See Also: Visceral Adipose Tissue (VAT)

Substance Abuse and Mental Health Services Administration (SAMHSA)

The lead agency within the U.S. Department of Health and Human Services (HHS) for improving the quality and availability of substance abuse prevention, addiction treatment, and mental health services in the United States.

Subtype

HIV is classified into two types, HIV-1 and HIV-2. Within HIV-1 are groups of similar viral strains. These are the major (M) subtype and non-M (new [N] and outlier [O]) subtypes. The majority of HIV-1 infections are by M-subtype viral strains. Subtype M HIV-1 is further broken down into nine genetically distinct strains known as clades.

See Also: Clade

Subunit HIV Vaccine

Also known as a component vaccine. Subunit vaccines contain only part of the HIV virus (such as individual proteins or peptides) produced in the laboratory by genetic engineering techniques.

See Also: Vaccine

Genetic Engineering

Superinfection

A new infection acquired on top of an existing infection. For example, a person infected with one strain of HIV-1 can, if exposed to a different strain, become infected with the new strain in addition to the existing strain. Superinfection can complicate HIV treatment

by requiring additional drugs to target the newly introduced HIV strain.

Surrogate Endpoint

A short-term outcome, such as a change in viral load or CD4 count that may be used as a substitute to reflect a clinical target outcome, such as mortality or disease progression. For example, a change in viral load (HIV RNA level) may be a surrogate endpoint for the progression of HIV to AIDS as a clinical endpoint.

See Also: Clinical Endpoint

Surrogate Marker

See: Surrogate Endpoint

Susceptible

Having little resistance to a specific infectious disease. Also used to describe an HIV strain that is not resistant to a particular anti-HIV drug.

Sustained Viral Suppression

See: Sustained Virologic Response

Sustained Virologic Response

The continued, long-term suppression of HIV RNA as a result of successful treatment with highly active antiretroviral therapy regimens.

S

Syncytium

A giant cell formed by the fusing together of two or more smaller cells. HIV-infected cells can fuse with uninfected cells to form syncytia. The presence of so-called syncytia-inducing variants of HIV has been correlated with rapid disease progression in HIV-infected individuals.

Syndrome

A set of symptoms or conditions that occur together and suggest a certain disease or an increased chance of developing a disease.

Syndrome X

See: Metabolic Syndrome

Synergy

An interaction between two or more drugs that produces an effect greater than the sum of their individual effects.

Syphilis

A sexually transmitted disease (STD) caused by the bacterium *Treponema pallidum*. In the early stage of syphilis, a genital or mouth sore called a chancre develops but eventually disappears on its own. However, if the disease is not treated, the infection can progress over the years to affect the heart and central nervous system. Syphilis can also be transmitted from an infected mother to her fetus during pregnancy, with serious health consequences for the infant.

Systemic

A term used to describe a disease or treatment that affects the body as a whole.

TAM

See: Thymidine Analogue Mutation

Tanner Staging

A method for determining an adolescent's stage of sexual development, irrespective of chronological age. In HIV treatment, Tanner staging is used to determine the appropriate treatment guidelines to follow: adult, adolescent, or pediatric.

TAT

See: Total Adipose Tissue

TB

See: Tuberculosis

T Cell

A type of lymphocyte (disease-fighting white blood cell). The T stands for the thymus, the organ in which T cells mature. T cells include CD4 cells and CD8 cells, which are both critical components of the body's immune system.

See Also: CD4 Cell
CD8 Cell
Lymphocyte

T-Cell Exhaustion

Also known as T-cell depletion. T-cell exhaustion occurs when the body's T cells become progressively less able to continue their activity against a virus or other infective agent. This depletion of T-cell function occurs with long-term infection, such as HIV.

T-Cell Precursor

An immature cell in the thymus that eventually matures and develops into a differentiated T cell.

TEN

See: Toxic Epidermal Necrolysis

Teratogenic

Causing harm to a fetus by interfering with normal prenatal development. Many drugs, including some anti-HIV drugs, are teratogenic when taken by pregnant women.

Testosterone

A hormone necessary for normal male sexual development and functioning and also important in maintaining muscle strength and mass. Testosterone is sometimes used for the treatment of HIV-related wasting syndrome and to increase muscle mass and decrease body fat in people with HIV. Testosterone replacement therapy is also used to raise testosterone levels in people with HIV-related hypogonadism.

See Also: Wasting Syndrome
Hypogonadism

Therapeutic Drug Monitoring (TDM)

Measurement of anti-HIV drug levels in an individual's blood. These measurements are then used to make appropriate adjustments to the dosage of the drug. TDM may help improve the drug's effect and reduce side effects by keeping the blood level in a specific target range. TDM is mainly used for drugs in which small changes in drug levels cause large changes in drug effect.

See Also: Therapeutic Index (TI)
Pharmacokinetics

Therapeutic HIV Vaccine

Any HIV vaccine used for the treatment of an HIV-infected person. Therapeutic HIV vaccines are designed to boost an individual's immune response to HIV infection to better control the virus. This therapeutic approach is currently being tested in clinical trials.

See Also: Preventive HIV Vaccine

Therapeutic Index (TI)

A measure of a drug's ability to achieve the desired effect in an individual. Many anti-HIV drugs have a narrow TI, which means that small changes in levels of the drug may produce big effects. Doses

of these drugs are sometimes adjusted using therapeutic drug monitoring (TDM).

See Also: Therapeutic Drug Monitoring (TDM)

Thrombocytopenia

A lower than normal number of blood platelets (cells important for blood clotting).

See Also: Platelet

Thrush

See: Candidiasis

Thymidine Analogue Mutation (TAM)

A mutation in HIV's reverse transcriptase (RT) enzyme that can occur with the use of the NRTIs zidovudine and stavudine. TAMs make HIV resistant to these drugs and may limit a person's treatment options.

See Also: Nucleoside Analogue Reverse Transcriptase Inhibitor (NRTI)
Reverse Transcriptase (RT)

Thymus

An organ in the chest behind the breastbone. This organ is an essential part of the immune system, because it is the site where infection-fighting T cells develop.

See Also: T Cell

TI

See: Therapeutic Index

T

t.i.d.

Three-times-a-day dosing instructions.

Titer

A laboratory measurement of the amount of a given compound in solution. For example, an antibody titer is the measurement of the amount of a particular antibody in a sample of blood.

T Lymphocyte

See: T Cell

Tolerability

Term used to indicate how well a particular drug is tolerated or endured when taken by people at the usual dosage. Good tolerability means that drug side effects do not cause people to stop using the drug.

Tolerance

A decreasing response to repeated doses of a drug, requiring a dose increase to continue the effects of the drug.

Topical

A substance, such as a cream or lotion, applied to body surfaces such as the skin or mucous membranes.

Total Adipose Tissue (TAT)

Adipose (fat) tissue is primarily located under the skin (subcutaneous adipose tissue) but is also found around internal organs (visceral adipose tissue). Together, these two types of fat tissue are called total adipose tissue. Lipodystrophy, or changes in body fat, are a potential side effect of some anti-HIV drugs, especially PIs and NRTIs.

See Also: Subcutaneous Adipose Tissue (SAT)

Visceral Adipose Tissue (VAT)

Lipodystrophy

Toxic Epidermal Necrolysis (TEN)

A severe form of Stevens-Johnson syndrome involving at least 30% of the total body skin area.

See Also: Stevens-Johnson Syndrome (SJS)

Toxicity

Ability to poison or otherwise harm the body.

See Also: Adverse Event

T

Toxoplasmosis

An infection caused by the parasite *Toxoplasma gondii*. The parasite is carried by cats, birds, and other animals and is also found in soil contaminated by cat feces and in meat, particularly pork. Infection can occur in the lungs, retina of the eye, heart, pancreas, liver, colon, testes, and brain. Toxoplasmosis of the brain is considered an AIDS-defining condition in people with HIV.

Transcription

One of the steps in the HIV life cycle. Transcription is the process by which the HIV DNA provirus is used as a template to create copies of HIV's RNA genetic material as well as shorter strands of HIV RNA called messenger RNA (mRNA). HIV mRNA is then used in a process called translation to create HIV proteins and continue the virus's life cycle.

See Also: Provirus

Translation

Messenger RNA (mRNA)

Translation

The step in the HIV life cycle that follows transcription. Translation is the process by which the genetic information contained in HIV mRNA is used to build HIV proteins using the host cell's protein-making machinery. Once these HIV proteins are produced, they can combine with copies of HIV's RNA genetic material to form new, complete copies of HIV.

See Also: Transcription

Transplacental

Across or through the placenta. Usually refers to the exchange of nutrients, waste products, and other materials (for example, drugs or infectious organisms) between the mother and the fetus.

Treatment-Experienced

A term used to describe HIV-infected individuals who are currently being treated with anti-HIV drugs or who have taken anti-HIV drugs in the past.

See Also: Treatment-Naive

Treatment Failure

A broad term that describes failure of an anti-HIV treatment to adequately control HIV infection. The three types of HIV treatment failure are virologic, immunologic, and clinical failure. Factors that contribute to treatment failure include poor adherence, drug resistance, and drug toxicity.

See Also: Virologic Failure

Immunologic Failure

Clinical Failure

Treatment-Naive

A term used to describe HIV-infected individuals who have never taken anti-HIV drugs.

See Also: Treatment-Experienced

Treatment Regimen

A structured plan of treatment, usually with drugs, that is implemented to improve or maintain health.

Trial Design

The structure of a clinical study or trial. Examples include open-label or double-blind, comparative or observational.

Triglycerides

Fat-like substances that help transfer energy from food into cells. Triglyceride levels that are too high increase the risk of heart disease and have been associated with diabetes and pancreatitis. Elevated triglyceride levels are a potential side effect of some PIs.

Triple-Class Experienced

A term used to describe an HIV-infected patient who has been treated with drugs from each of the following three anti-HIV drug classes: nucleotide/nucleoside reverse transcriptase inhibitors; non-nucleoside reverse transcriptase inhibitors; and protease inhibitors.

Tropism

See: Viral Tropism

T

Trough Concentration

See: CMIN

Trough Level

See: CMIN

T-Tropic Virus

See: X4-Tropic Virus

Tuberculin Skin Test

A test performed by injecting purified protein derivative (PPD) extract under the skin. A person who receives this test must return to his or her health care provider after 48 to 72 hours so that the skin's reaction can be evaluated. A hard red bump or a swollen area at the injection site indicates that the person has been exposed to the bacterium that causes tuberculosis (TB). Additional tests are required to determine if the person has active TB infection.

See Also: Purified Protein Derivative (PPD)
Tuberculosis (TB)

Tuberculosis (TB)

An infection caused by the bacterium *Mycobacterium tuberculosis*. TB bacteria are spread through the air when a person with active TB coughs, sneezes, or speaks. Breathing in the bacteria can lead to infection in the air sacs of the lungs. Symptoms of TB in the lungs include cough, tiredness, weight loss, fever, and night sweats. Although the disease usually occurs in the lungs, it may also affect the larynx, lymph nodes, brain, kidneys, or bones. A person with both TB and HIV is more likely to develop tuberculosis disease than a person infected only with the TB bacterium, and TB is considered an AIDS-defining condition in people with HIV.

See Also: Tuberculin Skin Test

UD VL

See: Undetectable Viral Load

Undetectable Viral Load (UD VL)

The point at which levels of HIV RNA in the blood are too low to be detected with a viral load test. This does not mean that the virus has stopped replicating or has been removed from the body entirely, only that the small amount of virus remaining is below the test's ability to measure it. The viral load below which a test cannot detect the virus depends on the brand of the viral load test.

See Also: Viral Load (VL)

Vaccination

Administration of a vaccine for either preventive or therapeutic purposes.

See Also: Vaccine

Preventive HIV Vaccine

Therapeutic HIV Vaccine

Vaccine

A substance that stimulates the body's immune response in order to prevent or control an infection. A vaccine is typically made up of some part of a bacteria or virus that cannot itself cause an infection. Researchers are testing vaccines both to prevent and treat HIV/AIDS; however, there is currently no vaccine approved for use outside of clinical trials.

See Also: Preventive HIV Vaccine

Therapeutic HIV Vaccine

Vaccinia

A cowpox virus that is used as a vaccine against smallpox infection and as a vector, or carrier, for other types of vaccines. In HIV vaccine clinical trials, vaccinia and other herpesviruses have been used as vectors.

See Also: Vector

Herpesviruses

Varicella Zoster Virus (VZV)

A virus in the herpes family that causes chicken pox (usually during childhood) and may reactivate later in life to cause shingles.

See Also: Herpesviruses

Shingles

V

VAT

See: Visceral Adipose Tissue

Vector

A harmless virus or bacteria used as a vaccine carrier to deliver pieces of a disease-causing organism (such as HIV) into the body's cells to stimulate a protective immune response.

See Also: Vaccine

Vertical Transmission

A term used to describe the transmission of a disease from parent to offspring. For example, HIV can be spread vertically from mother to child during pregnancy, at birth, or through breastfeeding.

See Also: Mother-to-Child Transmission (MTCT)
Horizontal Transmission

Viral Decay

The reduction of viral reservoirs in the body. Decay of a virus may be measured by pharmacokinetic studies.

Viral Evolution

The changes that occur in a population of viruses as they adapt to specific conditions and changes in the host environment.

Viral Load (VL)

The amount of HIV RNA in a blood sample, reported as number of HIV RNA copies per milliliter of blood plasma. The VL provides information about the number of cells infected with HIV and is an important indicator of HIV progression and of how well treatment is working. The VL can be measured by different techniques, including branched-chain DNA (bDNA) and reverse transcriptase-polymerase chain reaction (RT-PCR) assays. VL tests are usually done when an individual is diagnosed with HIV infection and at regular intervals after diagnosis.

See Also: Branched-Chain DNA (bDNA) Assay
Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR)

V

Viral Load Test

Test that measures the quantity of HIV RNA in the blood. Results are reported as the number of copies of HIV RNA per milliliter of blood plasma. The two types of HIV viral load test are reverse transcriptase-polymerase chain reaction (RT-PCR) and branched chain DNA (bDNA).

See Also: Viral Load (VL)

Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR)
Branched-Chain DNA (bDNA) Assay

Viral Rebound

Reappearance of HIV in the blood after having been successfully suppressed to undetectable levels as a result of anti-HIV drug treatment.

See Also: Undetectable Viral Load (UD VL)

Virologic Failure

Viral Replication

The process a virus undergoes to produce a copy of itself.

Viral Set Point

See: Set Point

Viral Suppression

Halting of the function or replication of a virus. In HIV, optimal viral suppression is measured as the reduction of viral load (HIV RNA) to undetectable levels and is the goal of highly active antiretroviral therapy (HAART).

Viral Tropism

Refers to which type of coreceptor HIV uses when binding to a cell during infection. HIV can bind to the CXCR4 coreceptor (X4-tropic) or to the CCR5 coreceptor (R5-tropic) on a cell surface. Although the virus often prefers one coreceptor to the other, it also can be dual/mixed-tropic HIV that can bind to either coreceptor. Viral tropism may switch, or change from preference of one coreceptor to the other, during the course of an HIV infection.

See Also: CCR5
CXCR4

Viremia

The presence of virus in the bloodstream.

Viricide

Any substance that can destroy or inactivate a virus.

Virion

A mature virus particle that exists freely outside a host cell.

Virologic Control

See: Viral Suppression

Virologic Failure

Inability of anti-HIV drug treatment to reduce viral load or to maintain suppression of viral load. Virologic failure is the most common type of treatment failure and may lead to immunologic and clinical failure.

See Also: Immunologic Failure
Clinical Failure
Viral Load (VL)

Virology

The study of viruses and viral disease.

Virus

A microscopic organism that requires a host cell to make more copies of itself. Examples of human diseases caused by virus infections are AIDS, measles, mumps, rubella, polio, influenza, and the common cold.

Visceral Adipose Tissue (VAT)

A type of adipose (fat) tissue that surrounds internal organs in the abdominal cavity. Accumulation of this fat is known as central fat deposition or visceral lipohypertrophy, and may occur as a side effect of some anti-HIV drugs, especially PIs and NRTIs.

See Also: Subcutaneous Adipose Tissue (SAT)

Body Habitus Changes

VL

See: Viral Load

VZV

See: Varicella Zoster Virus

Wasting Syndrome

The involuntary loss of more than 10% of body weight in addition to more than 30 days of either diarrhea or weakness and fever. Wasting refers to the loss of muscle mass, although part of the weight loss may also be due to loss of fat. HIV-associated wasting syndrome is considered an AIDS-defining condition.

Western Blot

A laboratory technique used to detect a specific protein. A Western blot test to detect HIV proteins in the blood is used to confirm a positive HIV antibody test (ELISA).

See Also: Enzyme-Linked Immunosorbent Assay (ELISA)

White Blood Cell

Also known as a leukocyte. These cells make up the immune system and include lymphocytes, monocytes, neutrophils, eosinophils, macrophages, and mast cells. White blood cells are made by bone marrow and help the body fight infection and other diseases.

WHO

See: World Health Organization

WIHS

See: Women's Interagency HIV Study

Wild-Type Virus

A term to describe viral strains (including strains of HIV) that have not acquired any genetic mutations that create special characteristics, such as resistance to particular drugs.

Window Period

The time period between a person's infection with HIV and the appearance of detectable anti-HIV antibodies. Because antibodies to HIV take some time to form, an HIV antibody test will not be positive immediately after a person is infected. The time delay typically ranges from 14 to 21 days, but varies for different people.

Nearly everyone infected with HIV will have detectable antibodies by 3 to 6 months after infection.

See Also: Enzyme-Linked Immunosorbent Assay (ELISA)

Antibody

Women's Interagency HIV Study (WIHS)

A multicenter study established in 1993 to research the impact of HIV infection in women. The study's ultimate goal is to gain a better understanding of and provide adequate support for women who are currently HIV infected or who are at risk for HIV infection. The study is jointly supported by the National Cancer Institute (NCI), the National Center for Research Resources (NCRR), the National Institute of Allergy and Infectious Diseases (NIAID), the National Institute of Child Health and Human Development (NICHD), and the National Institute on Drug Abuse (NIDA).

World Health Organization (WHO)

The United Nations' health organization. Responsible for providing leadership on global health matters, shaping the health research agenda, setting standards, articulating evidence-based policy options, providing technical support to countries, and monitoring and assessing health trends.

X4-Tropic Virus

Also known as T-tropic virus. A strain of HIV that uses the chemokine receptor CXCR4 as a coreceptor to bind to and infect human immune cells. Although some HIV-1 strains are X4-tropic from the beginning of infection, it is more common for the virus to switch to using the CXCR4 coreceptor as the disease progresses.

See Also: R5-Tropic Virus

Chemokines

Coreceptor

CXCR4

XDR-TB

See: Extensively Drug-Resistant Tuberculosis

Yeast Infection

See: Candidiasis

Additional Resources

FEDERAL RESOURCES

AIDS.gov

U.S. Department of Health and Human Services
200 Independence Avenue, SW
Washington, DC 20201

Description: AIDS.gov provides comprehensive governmentwide information on HIV/AIDS for the general public, Federal agencies, state staff/public health departments, Federal grantees, medical institutions, research institutions, and HIV/AIDS-related organizations.

Spanish: Yes

E-mail: contact@AIDS.gov

Web: <http://www.aids.gov>

CDC-INFO (Formerly the CDC National AIDS Hotline)

P.O. Box 13827
Research Triangle Park, NC 27709

Description: CDC-INFO offers anonymous, confidential HIV/AIDS information to the American public. Trained staff answer questions about HIV infection and AIDS in English and Spanish and provide TTY service for the deaf. They provide referrals to appropriate services, including clinics, hospitals, local hotlines, counseling and testing sites, legal services, health departments, support groups, educational organizations, and service agencies throughout the United States. Callers can also order publications, posters, and other informational materials.

Toll-Free: 800-CDC-INFO (800-232-4636)

TTY: 888-232-6348

Spanish:	Yes
Hours:	24 hours/7 days
E-mail:	cdcinfo@cdc.gov
Web:	http://www.cdc.gov/hiv/

CDC National Prevention Information Network (CDC NPIN)

A service of the Center for Disease Control National Center for HIV, STD, and TB Prevention (NCHSTP)

P.O. Box 6003

Rockville, MD 20849-6003

Description: The Centers for Disease Control and Prevention (CDC) NPIN is a national reference, referral, and distribution service for information about HIV/AIDS, STDs, and TB prevention, treatment, and support services. NPIN staff serve a diverse network of people who work in international, national, state, and local settings.

Toll-Free: 800-458-5231

International

Callers: 404-679-3860

Fax: 888-282-7681

Spanish: Yes

E-mail: info@cdcnpin.org

Web: <http://www.cdcnpin.org/>

Live Help Hours: Monday-Friday, 9 a.m.-6 p.m., E.S.T.

Business Hours: Monday-Friday, 9 a.m.-6 p.m., E.S.T.

ClinicalTrials.gov

A service of the National Institutes of Health (NIH)
Developed by the National Library of Medicine (NLM)
8600 Rockville Pike
Bethesda, MD 20894

Description: *ClinicalTrials.gov* provides patients, family members, health care professionals, and other members of the public easy access to information on clinical trials for a wide range of diseases and conditions, including HIV infection. The site provides information about a trial's purpose, who may participate, study site locations, and contact information.

Toll-Free: 888-FINDNLM (888-346-3656)

International

Callers: 301-594-5983

Fax: 301-402-1384

E-mail: custserv@nlm.nih.gov

Web: <http://www.clinicaltrials.gov>

Directory of Information Resources Online (DIRLINE)

National Library of Medicine (NLM)
Specialized Information Services

Description: DIRLINE is an online directory of more than 8,000 health-related organizations willing to respond to public inquiries in their specialty areas.

Phone: 301-496-1131 or 301-496-3147

Fax: 301-480-3537

E-mail: tehip@teh.nlm.nih.gov

Web: <http://dirline.nlm.nih.gov>

Drugs@FDA

- Description:** The Food and Drug Administration (FDA) is a regulatory agency that enforces the Food, Drug, and Cosmetic Act and the Public Health Service Act, assuring that drugs and biologics are safe and effective for their intended uses and properly labeled. Drugs@FDA provides the approval history, label history, and label information for all drugs that have been approved by the FDA. The site is updated daily.
- E-mail:** Question/comment form available at: <http://www.fda.gov/cder/comment/commentdrugcat.htm>
- Web:** <http://www.accessdata.fda.gov/scripts/cder/drugsatfda>
-

FDA HIV and AIDS Web site

5600 Fishers Lane
Rockville, MD 20857

- Description:** The Food and Drug Administration (FDA) is a regulatory agency that enforces the Food, Drug, and Cosmetic Act and the Public Health Service Act, assuring that drugs and biologics are safe and effective for their intended uses and properly labeled. The FDA HIV and AIDS Web site provides information about product approval, labeling changes, safety warnings, and public hearings. It also provides links to pages about HIV therapies, the FDA HIV/AIDS timeline, and other government resources for HIV/AIDS.
- Toll-Free**
- Help Line:** 888-INFO-FDA (888-463-6332)
- E-mail:** Question/comment form available:
<http://www.fda.gov/comments/webform.html>
- Web:** <http://www.fda.gov/oashi/aids/HIV.html>

Health Hotlines

Sponsored by the National Library of Medicine (NLM)
6707 Democracy Boulevard, Suite 510
Bethesda, MD 20892

Description: Health Hotlines is a listing of organizations with toll-free telephone numbers derived from the NLM's Directory of Information Resources Online (DIRLINE). The organizations included in Health Hotlines provide health-related information and services related to AIDS, cancer, maternal and child health, aging, substance abuse, disabilities, mental health, and more. To assist Spanish speakers, each entry includes the organization name in Spanish and English. The Health Hotline entries also show whether the organizations offer resources in Spanish.

Phone: 301-496-3147
Fax: 301-480-3537
E-mail: HealthHotlines@nih.gov
Web: <http://healthhotlines.nlm.nih.gov>

HIV/AIDS Housing – U.S. Department of Housing and Urban Development (HUD)

Office of HIV/AIDS Housing

Office of Community Planning and Development

U.S. Department of Housing and Urban Development

451 Seventh St., SW, Room 7212

Washington, DC 20410-7000

Description: The HUD Web site addresses housing needs for people living with HIV/AIDS. It also provides contact information for state resources.

Toll-Free

Help Line: Numbers vary by state and can be found online at: <http://www.hud.gov/offices/cpd/aidshousing/local>

TTY/TDD 800-877-8339

Fax: 202-708-9313

Spanish: Yes

E-mail: HOPWA@hud.gov

Web: <http://www.hud.gov/offices/cpd/aidshousing>

MedlinePlus

A service of the National Institutes of Health (NIH)

Developed by the National Library of Medicine (NLM)

8600 Rockville Pike

Bethesda, MD 20894

Description: MedlinePlus provides online information to help answer health questions. This Web site combines authoritative information from NLM, NIH, other government agencies, and health-related organizations. MedlinePlus has extensive information about drugs, an illustrated medical encyclopedia, interactive patient tutorials, and breaking health news.

Toll-Free: 888-FINDNLM (888-346-3656)

International

Callers: 301-594-5983

Fax: 301-402-1384
E-mail: custserv@nlm.nih.gov
Web: <http://www.medlineplus.gov>

National Center for Complementary and Alternative Medicine (NCCAM)

National Institutes of Health
P.O. Box 7923
Gaithersburg, MD 20898

Description: NCCAM is one of the 27 Institutes and Centers that make up the National Institutes of Health (NIH). NCCAM supports scientific research on complementary and alternative medical (CAM) practices, trains scientists and researchers, and disseminates information to health care providers and the public. The NCCAM site features health information; details about CAM research and training opportunities; and Live Help, an online chat service.

Toll-Free: 888-644-6226

TTY: 866-464-3615

International

Caller: 301-519-3153

Fax: 866-464-3616

Hours: Monday-Friday 8:30 a.m.-5 p.m., E.S.T.

E-mail: info@nccam.nih.gov

Web: <http://www.nccam.nih.gov>

Live Help Online: <http://www.nccaminfo.org/livehelp>

National Center for Health Statistics

Sponsored by the U.S. Department of Health and Human Services
and the Centers for Disease Control and Prevention

3311 Toledo Road
Hyattsville, MD 20782

Description: The National Center for Health Statistics compiles statistical information to guide actions and policies to improve the health of Americans. The National Center for Health Statistics' Web site is an excellent source of information about HIV/AIDS in America. It provides statistics on new AIDS cases, hospital discharges and length of stays, and death rates.

Toll-Free: 866-441-NCHS (866-441-6247)

Phone: 301-458-4000

E-mail: cdcinfo@cdc.gov

Web: <http://www.cdc.gov/nchs/fastats/aids-hiv.htm>

National HIV and STD Testing Resources

Description: A Web site where users can search for HIV and other STD testing locations near them. The site also provides information on how HIV and STD tests work, who is at risk, and links to other sites with more information about HIV and STDs.

Spanish: Yes

E-mail: info@cdcpin.org

Web: <http://hivtest.org>

National Institute for Dental and Craniofacial Research (NIDCR)

Sponsored by the National Institutes of Health

9000 Rockville Pike

Bethesda, MD 20892-2190

Description: The NIDCR is one of the 27 Institutes and Centers that make up the National Institutes of Health (NIH). The NIDCR Web site provides information regarding oral (mouth) problems related to HIV infection and explains the most common oral problems linked to HIV. The site also features photographs of the various conditions. Contact NIDCR's National Oral Health Information Clearinghouse for information about oral, dental, and craniofacial health at the number below.

Phone: 301-402-7364

E-mail: nidcrinfo@mail.nih.gov

Web: <http://www.nidcr.nih.gov/OralHealth/Topics/HIV>

Office of Minority Health Resource Center

Resource Center

P.O. Box 37337

Washington, DC 20013-7337

Description: The Office of Minority Health (OMH) is the Department of Health and Human Services agency that focuses on improving and protecting the health of racial and ethnic minority populations. OMH operates the OMH Resource Center (OMHRC), which serves as an information and referral service on minority health issues for professionals, community groups, consumers, and students. The staff also offer technical assistance to small community-based HIV/AIDS organizations and HIV/AIDS service organizations.

Toll-Free: 800-444-6472

Spanish:	Yes
Fax:	301-251-2160
Hours:	Monday-Friday 9 a.m.-5 p.m., E.S.T.
E-mail:	info@omhrc.gov
Web:	http://www.omhrc.gov

NON-FEDERAL RESOURCES

AIDS Community Research Initiative of America (ACRIA)

230 West 38th Street
17th Floor
New York, NY 10018

Description: AIDS Community Research Initiative of America (ACRIA) is a collaborative and independent not-for-profit organization that provides a database of studies for new treatments for HIV/AIDS and related diseases and conducts a comprehensive HIV health literacy program.

Phone 212-924-3934
Fax: 212-924-3936
Spanish: Yes
E-mail: info@acria.org
Web: <http://www.acria.org/index.html>

AIDSMAP

Sponsored by NAM
Lincoln House
1 Brixton Road
London
SW9 6DE UK

Description: On the AIDSMAP Web site you can find daily news on developments in the world of HIV. The site includes comprehensive, searchable databases of HIV treatment and care information and HIV organization listings for more than 175 countries. The Key Topic Guides page of the site gives you an overview of aidsmap.com resources in more than 30 topic areas.

Phone: +44-0-20-7840-0050
Fax: +44-0-20-7735-5351
E-mail: info@nam.org.uk
Web: <http://www.aidsmap.com>

American Academy of HIV Medicine (AAHIVM)

1705 DeSales Street, NW
Suite 700
Washington, DC 20036

Description: The AAHIVM is a membership organization of health care providers dedicated to promoting excellence in HIV/AIDS care. The Web site offers patient resources, including a free searchable database of HIV specialists throughout the country.

Toll-Free: 866-241-9601
Phone: 202-659-0699
Fax: 202-659-0976
Hours: Monday-Friday 9 a.m.-5 p.m., E.S.T.
E-mail: info@aahivm.org
Web: <http://aahivm.org>

Antiretroviral Pregnancy Registry

Research Park
1011 Ashes Drive
Wilmington, NC 28405

- Description:** The Antiretroviral Pregnancy Registry was established to evaluate exposures to antiretroviral medications during pregnancy and to estimate the prevalence of major birth defects. The registry is designed to provide an early warning signal of teratogenicity and to assist clinicians and patients in weighing potential risks and benefits of HIV treatment.
- Toll-Free:** United States, Canada: 800-258-4263 (Voicemail available after business hours); United Kingdom, Germany, France (toll-free): 00800-5913-1359; Other European Countries: +32-2-714-5028; International: 910-256-0238
- Fax:** United States: 800-800-1052; United Kingdom, Germany, France (toll-free): 00800-5812-1658; Other European Countries: +32-2-714-5024; International: 910-256-0637 or +44-1628-789-666
- Multilingual:** The Antiretroviral Pregnancy Registry call center in Brussels has multilingual capability.
- Hours:** United States, Canada: Monday-Friday, 8:30 a.m.- 6 p.m., E.S.T.
- E-mail:** registries@Kendle.com
- Web:** <http://www.apregistry.com>

HIV InSite

University of California San Francisco (UCSF)
Center for HIV Information (CHI)
4150 Clement Street, Box 111V
San Francisco, CA 94121

Description: HIV InSite's Web site includes the *HIV InSite Knowledge Base* section, a complete online textbook with extensive references and related links organized by topic. This database also contains details on drug interactions. The site provides free, anonymous access to all of the site's content.

Fax: 415-379-5547

E-mail: info@hivinsite.ucsf.edu

Web: <http://hivinsite.ucsf.edu/InSite>

HIV Medicine Association

1300 Wilson Blvd
Suite 300
Arlington, VA 22209

Description: The Infectious Diseases Society of America (IDSA) created the HIV Medicine Association (HIVMA) in fall 2000 to provide an organizational home for medical professionals engaged in HIV medicine. Through its activities, HIVMA supports clinicians in overcoming the challenges inherent in providing high quality health care to patients living with HIV disease.

HIVMA represents the diversity of medical subspecialties practicing HIV medicine, including internal medicine, family practice, infectious diseases, oncology, and obstetrics-gynecology. As of September 2008, HIVMA has more than 3,600 members representing 49 states, the District of Columbia, Puerto Rico, the

Virgin Islands, and 36 countries outside of the United States.

Phone Number: 703-299-0200
Fax: 703-299-0204
E-mail: hivma@idsociety.org
Web: <http://www.hivma.org/>

International AIDS Society

International AIDS Society HQ
 Ave. Louis Casañ 71
 P.O. Box 20
 CH - 1216 Cointrin
 Geneva, Switzerland

Description: The International AIDS Society is the world's leading independent association of HIV/AIDS professionals. They convene the world's largest meetings on HIV/AIDS, provide critical platforms for presenting new research, share best practices, and advance the fight against HIV/AIDS. They promote dialogue, education, and networking. IAS helps close gaps in knowledge and expertise at every level of response. They provide support services to their members, help them do what they do best, advance the state of the art, expand access to HIV prevention and treatment, and impact mitigation.

International

Callers: +41-(0)22-7 100 800
Fax: +41-(0)22-7 100 899
E-mail: info@iasociety.org
Web: <http://www.iasociety.org/>

International Association of Physicians in AIDS Care (IAPAC)

123 Madison Street

Suite 1400

Chicago, IL 60602

Description: IAPAC provides educational services to its membership on best clinical practices in managing HIV and its associated complications. IAPAC offers the Global AIDS Learning and Evaluation Network (GALEN), a medical training and certification initiative for physicians who treat HIV in the developing world.

Phone: 312-795-4930

Fax: 312-376-1620

E-mail: iapac@iapac.org

Web: <http://www.iapac.org/>

Johns Hopkins HIV Guide

Description: This Web site of the Johns Hopkins AIDS Service is a resource for physicians and other health care professionals who provide care and treatment to people living with HIV. The site features an excellent multi-media presentation on HIV drug resistance, an HIV/AIDS Continuing Medical Education (CME) section, a Q & A Forum for both clinicians and patients, and the ABX Guide to Antibiotics.

E-mail: feedback@hopkins-hivguide.org

Web: <http://www.hopkins-hivguide.org/>

Joint United Nations Programme on AIDS (UNAIDS)

20, Avenue Appia
CH-1211 Geneva 27
Switzerland

Description:

UNAIDS, the Joint United Nations Programme on HIV/AIDS, is an innovative joint venture of the United Nations family, bringing together the efforts and resources of 10 UN system organizations in AIDS response to help the world prevent new HIV infections, care for people living with HIV, and mitigate the impact of the epidemic.

With its headquarters in Geneva, Switzerland, the UNAIDS Secretariat works on the ground in more than 80 countries worldwide. Coherent action on AIDS by the UN system is coordinated in countries through the UN theme groups and the joint programs on AIDS.

UNAIDS helps mount and support an expanded response to AIDS – one that engages the efforts of many sectors and partners from government and civil society.

International

Callers: 41-22-791-3666
Fax: 41-22-791-4187
Multilingual: Spanish, French, Russian
E-mail: rtdata@unaids.org
Web: <http://www.unaids.org/>

Kaiser Family Foundation

2400 Sand Hill Road
Menlo Park, CA 94025
or
1330 G Street, NW
Washington, DC 20005

Description: The Kaiser Family Foundation Web site publishes *The Kaiser Daily HIV/AIDS Report*, which summarizes news stories and provides links to the original articles. The *Kaiser Daily HIV/AIDS Report* covers legislative, political, legal, scientific, and business developments in HIV/AIDS. Issues include Medicare reform, Medicaid, patients' rights, access, the uninsured, minority health, children's health, and health care advertising.

Phone: CA 650-854-9400; DC 202-347-5270

Fax: CA 650-854-4800; DC 202-347-5274

E-mail: info@kaisernetwork.org

Web: <http://www.kff.org/hiv aids/>

**Tufts School of Medicine
Nutrition and HIV Research**

150 Harrison Avenue
Jaharis 2
Boston, MA 02111

Description: This Web site focuses on the role of good nutrition in living with HIV/AIDS. Information about good nutrition, lipodystrophy, unintentional weight loss (wasting) or gain, nausea, fatigue, and food and water safety are just a few of the diverse topics this site covers.

Phone: 617-636-3811

Fax: 617-636-3810

E-mail: med-nutrition-infection@tufts.edu

Web: <http://www.tufts.edu/med/nutrition-infection/hiv/>

**National Alliance of State and Territorial AIDS Directories
(NASTAD)**

444 North Capitol Street, NW
Suite 339
Washington, DC 20001

Description: NASTAD is a nonprofit national association of state health department HIV/AIDS program directors who are responsible for administering HIV/AIDS health care, prevention, education, and supportive services programs funded by state and Federal governments. The NASTAD Web site provides online access to health department contact information through its *State HIV Program Directory*, which includes information for the 50 United States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Islands.

Phone: 202-434-8090
Fax: 202-434-8092
E-mail: nastad@nastad.org
Web: <http://www.nastad.org>

**National Clinician's Post-Exposure Prophylaxis Hotline
(PEPLine) (for health care providers only)**

University of California San Francisco (UCSF)
Box 1365
San Francisco, CA 94143-1365

Description: PEPLine offers clinicians up-to-the-minute advice on managing occupational exposures to HIV, hepatitis viruses, and other blood-borne pathogens. Emergency calls made during evening, weekend, and holiday hours are forwarded to on-call clinicians. Nonemergency calls will be returned during business hours.

Toll-Free: 888-448-4911
Hours: 24 hours/7 days
Fax: 415-476-3454
Web: <http://www.nccc.ucsf.edu/Hotlines/PEPLine.html>

Perinatal Hotline (for health care providers only)

University of California San Francisco (UCSF)

Box 1365

San Francisco, CA 94143-1365

Description: The National Perinatal HIV Consultation and Referral Service (Perinatal Hotline) provides free 24-hour clinical consultation and advice for treating HIV-infected pregnant women and their infants. Staff will also discuss indications for and interpretations of rapid and standard HIV testing in pregnancy.

Toll-Free: 888-448-8765

Hours: 24 hours/7 days

Fax: 415-476-3454

Web: <http://www.nccc.ucsf.edu/Hotlines/Perinatal.html>

WARMLINE (for health care providers only)

University of California San Francisco (UCSF)

Box 1365

San Francisco, CA 94143-1365

Description: The National HIV Telephone Consultation Service (Warmline) offers physicians and other health care providers up-to-the-minute HIV clinical information and individualized expert case consultation across the broad range of clinical HIV/AIDS problems. The Warmline is a free service staffed by clinicians experienced in HIV care.

Toll-Free: 800-993-3413
(Voice mail available 24 hours/7 days)

Hours: Monday-Friday, 5 a.m.-5 p.m., P.S.T

Fax: 415-476-3454

Web: <http://www.nccc.ucsf.edu/Hotlines/Warmline.html>

Women, Children, and HIV—Resources for Prevention and Treatment

Sponsored by The François-Xavier Bagnoud Center (FXBC) of the University of Medicine and Dentistry of New Jersey (UMDNJ) and

The Center for HIV Information

University of California San Francisco (UCSF)

School of Medicine

Description:

This Web site provides resources on the prevention and treatment of HIV infection in women and children for health workers, program managers, and policy makers in resource-poor settings. This FXBC program:

- disseminates state-of-the-art clinical information and training resources on mother-to-child transmission (MTCT) of HIV and related topics,
- communicates the best practices in prevention of mother-to-child transmission (PMTCT) of HIV and caring for infected children,
- disseminates PMTCT program resource materials,
- disseminates state-of-the-art clinical information and training resources on perinatally acquired pediatric HIV infection, and
- implements services responsive to the needs of the CDC Global AIDS Program (CDC/GAP).

Spanish:

Yes

Local:

973-972-0410

Fax:

973-972-0399

E-mail:

Editor@WomenChildrenHIV.org

Web:

<http://www.womenchildrenhiv.org>

World Health Organization (WHO)

Avenue Appia 20
1211 Geneva 27
Switzerland

Description: As the directing and coordinating authority on international health, the World Health Organization (WHO) takes the lead within the UN system on the global health sector response to HIV/AIDS. The WHO HIV/AIDS Program provides evidence-based, technical support to WHO Member States to help them scale up treatment, care, and prevention services and maintain and increase access to drugs and diagnostics. This is to ensure a comprehensive and sustainable response to HIV/AIDS. The WHO Web site has fact sheets and technical publications about HIV/AIDS as well as international statistics and guidelines by country. The site also links to the individual WHO HIV/AIDS Web sites by region.

International Callers: + 41-22-791-2111

Fax: + 41-22-791-3111

Multilingual: Spanish, French, Russian, Arabic, Chinese
E-mail: info@who.int

Web: http://www.who.int/topics/hiv_aids/en

Abbreviations

A

AACTG	Adult AIDS Clinical Trials Group
ACTG	AIDS Clinical Trials Group
ADAP	AIDS Drug Assistance Program
ADC	AIDS Dementia Complex
ADR	Adverse Drug Reaction
AE	Adverse Event
AETC	AIDS Education and Training Center
AHRQ	Agency for Healthcare Research and Quality
AIDS	Acquired Immunodeficiency Syndrome
AIEDRP	Acute HIV Infection and Early Diseases Research Program
ALT	Alanine Transaminase
APC	Antigen-Presenting Cell
ARC	AIDS-Related Complex
ARS	Acute Retroviral Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral
ASO	AIDS Service Organization
AST	Aspartate Aminotransferase
AUC	Area Under the Curve
AVN	Avascular Necrosis

B

B2M	Beta-2 Microglobulin
bDNA	Branched-Chain DNA
BRM	Biological Response Modifier

C

CAM	Complementary and Alternative Medicine
CARE	Comprehensive AIDS Resources Emergency
CBC	Complete Blood Count
CBO	Community-Based Organization
CCR5	Chemokine Receptor 5
CDC	Centers for Disease Control and Prevention
CIN	Cervical Intraepithelial Neoplasia
CIPD	Chronic Idiopathic Demyelinating Polyneuropathy
CIPRA	Comprehensive International Program of Research on AIDS
CMAX	Maximum Concentration
CMIN	Minimum Concentration
CMS	Centers for Medicare and Medicaid Services
CMV	Cytomegalovirus
CNS	Central Nervous System
CPCRA	Community Programs for Clinical Research on AIDS
CSF	Cerebrospinal Fluid
CTL	Cytotoxic T Lymphocyte
CXCR4	Chemokine Receptor 4
CYP450	Cytochrome P450

D

DAART	Directly Administered Antiretroviral Therapy
DAIDS	Division of Acquired Immunodeficiency Syndrome
DEXA	Dual Energy X-Ray Absorptiometry
DNA	Deoxyribonucleic Acid
DOT	Directly Observed Therapy
DRESS	Drug Rash with Eosinophilia and Systemic Symptoms
DSMB	Data and Safety Monitoring Board

E

EBV	Epstein-Barr Virus
EF	Eosinophilic Folliculitis
ELISA	Enzyme-Linked Immunosorbent Assay

F

FDA	Food and Drug Administration
FDC	Follicular Dendritic Cell

G

GART	Genotypic Antiretroviral Resistance Test
G-CSF	Granulocyte-Colony Stimulating Factor
GGT	Gamma-Glutamyltransferase
GI	Gastrointestinal
GM-CSF	Granulocyte Macrophage-Colony Stimulating Factor
gp	Glycoprotein

H

HAART	Highly Active Antiretroviral Therapy
HBV	Hepatitis B Virus
HCFA	Health Care Financing Administration
HCV	Hepatitis C Virus
HELLP	Hemolysis, Elevated Liver Enzyme Levels, and Low Platelet Count
HGH	Human Growth Hormone
HHS	Department of Health and Human Services
HHV	Human Herpesvirus
HIV	Human Immunodeficiency Virus
HLA	Human Leukocyte Antigen
HPTN	HIV Prevention Trials Network
HPV	Human Papillomavirus
HRSA	Health Resources and Services Administration

HSV	Herpes Simplex Virus
HTLV-I	Human T Cell Lymphotropic Virus Type I
HVTN	HIV Vaccine Trials Network

I

IDU	Injection Drug User
IFN	Interferon
IG	Immunoglobulin
IHS	Indian Health Service
IL	Interleukin
IM	Intramuscular
IMPAACT	International Maternal Pediatric Adolescent AIDS Clinical Trials Network
IND	Investigational New Drug
INSIGHT	International Network for Strategic Initiatives in Global HIV Trials
IRB	Institutional Review Board
IRIS	Immune Reconstitution Inflammatory Syndrome
IRS	Immune Reconstitution Syndrome
ITP	Idiopathic Thrombocytopenia Purpura
IV	Intravenous
IVIG	Intravenous Immunoglobulin

K

KS	Kaposi's Sarcoma
KSHV	Kaposi's Sarcoma Herpesvirus

L

LAS	Lymphadenopathy Syndrome
LGV	Lymphogranuloma Venereum
LIP	Lymphoid Interstitial Pneumonitis

M

MAC	<i>Mycobacterium Avium</i> Complex
MACS	Multicenter AIDS Cohort Study
MAI	<i>Mycobacterium Avium-Intracellulare</i>
MDR-TB	Multiple Drug-Resistant Tuberculosis
MEMS	Medication Event Monitoring System
MHC	Major Histocompatibility Complex
MRI	Magnetic Resonance Imaging
mRNA	Messenger RNA
MSM	Men Who Have Sex with Men
MTCT	Mother-to-Child Transmission
MTN	Microbicide Trials Network

N

NAM	Nucleoside-Associated Resistance Mutation
NCI	National Cancer Institute
NDA	New Drug Application
NHL	Non-Hodgkin's Lymphoma
NIAID	National Institute of Allergy and Infectious Diseases
NIH	National Institutes of Health
NK Cell	Natural Killer Cell
NLM	National Library of Medicine
NM	Nemaline Rod Myopathy
NNRTI	Non-Nucleoside Reverse Transcriptase Inhibitor
NPIN	National Prevention Information Network
NRTI	Nucleoside/Nucleotide Reverse Transcriptase Inhibitor
NSAID	Non-Steroidal Anti-Inflammatory Drug

O

OAR	Office of AIDS Research
OBT	Optimized Background Therapy
OHL	Oral Hairy Leukoplakia
OI	Opportunistic Infection

P

PACTG	Pediatric AIDS Clinical Trials Group
PBMC	Peripheral Blood Mononuclear Cell
PCP	<i>Pneumocystis jiroveci</i> Pneumonia
PCR	Polymerase Chain Reaction
PEP	Post-Exposure Prophylaxis
PEPFAR	President's Emergency Plan for AIDS Relief
PGL	Persistent Generalized Lymphadenopathy
PHS	Public Health Service
PID	Pelvic Inflammatory Disease
PI	Protease Inhibitor
PLWA	People Living with AIDS
PMTCT	Prevention of Mother-to-Child Transmission
PML	Progressive Multifocal Leukoencephalopathy
PNS	Peripheral Nervous System
PPD	Purified Protein Derivative
PrEP	Pre-Exposure Prophylaxis

R

RNA	Ribonucleic Acid
RT	Reverse Transcriptase
RT-PCR	Reverse Transcriptase-Polymerase Chain Reaction

S

SAMHSA	Substance Abuse and Mental Health Services Administration
SAT	Self-Administered Therapy
SAT	Subcutaneous Adipose Tissue
SC	Subcutaneous
SEVI	Semen-Derived Enhancer of Virus Infection
SGOT	Serum Glutamic Oxaloacetic Transaminase
SGPT	Serum Glutamic Pyruvate Transaminase
SIT	Structured Intermittent Therapy

SIV	Simian Immunodeficiency Virus
SJS	Stevens-Johnson Syndrome
STD	Sexually Transmitted Disease
STI	Structured Treatment Interruption
STI	Sexually Transmitted Infection

T

TAM	Thymidine Analogue Mutations
TAT	Total Adipose Tissue
TB	Tuberculosis
TDM	Therapeutic Drug Monitoring
TEN	Toxic Epidermal Necrolysis
TI	Therapeutic Index

U

UD VL	Undetectable Viral Load
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V

VAT	Visceral Adipose Tissue
VL	Viral Load
VZV	Varicella Zoster Virus

W

WHO	World Health Organization
WIHS	Women's Interagency HIV Study

XYZ

XDR-TB	Extensively Drug-Resistant Tuberculosis
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