



National Coordinating Center
for the Regional Genetics Networks

**The National Coordinating Center for the
Regional Genetics Networks**

Glossary of Prenatal Genetics Terms

English – Polish

2022 Edition

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In collaboration with:
**The Cross Cultural Health Care
Program (CCHCP)**

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Acknowledgments

Mission of the NCC

The National Coordinating Center for the Regional Genetics Networks (NCC) has been funded by the Health Resources and Services Administration (HRSA) since 2004. Our mission is to improve access to genetics for underserved populations. This mission is accomplished through different programs, many of which are educational tools and resources for non-genetics professionals. Learn more at <https://nccrcg.org>.

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Cindy Roat is an international consultant in language access in health care and patient navigation. She provides training and consulting for health care interpreters, providers, administrators, and patient navigators. Cindy compiled and edited this glossary for the NCC.

The Cross Cultural Health Care Program

The mission of The Cross Cultural Health Care Program (CCHCP) is to serve as a bridge between communities and health care institutions to advance access to quality health care that is culturally and linguistically appropriate. CCHCP provides resources, such as bilingual medical glossaries, as well as medical interpreter, patient navigator, and cultural competence training for individuals and institutions with the goal of systems change. Learn more at: <https://xculture.org>

CCHCP is supporting and coordinating the translation process of this glossary and is providing the glossary free of charge in its online store: <https://xculture.org/store/>

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Preface

The seven Regional Genetics Networks (RGNs), the National Genetics Education and Family Support Center (Family Center), and the National Coordinating Center for the Regional Genetics Networks (NCC) mission is to improve access to quality genetic services for medically underserved populations. This bilingual glossary of terms related to Prenatal Genetics is provided to help enable access to prenatal medical services to limited English proficiency populations.

How to Use the Glossary

This glossary is organized alphabetically in English. The first column shows the term in English. The second column has the definition of the term in English. The third column has the translation of the term.

At the end of the translations of the prenatal genetics terms are:

- A glossary of translations for family relationships terms. It is very important for genetic counselors to know if a relative is a blood relative or a relative by marriage.
- Examples of analogies used in genetics. Genetic counselors often use analogies to explain complex ideas in genetics. An analogy explains a new concept by comparing it to something more common.

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Glossary of Terms

English – Polish

(n) – noun (v) – verb (adj) – adjective (adv) – adverb

Term	Definition	Translation
Abnormal (adj)	Different from what is considered normal, average, or expected, e.g., a gene sequence that is different than that found in most people.	Nieprawidłowy
Abortion (n)	The deliberate ending of a pregnancy by the removal of an embryo or fetus from the womb. Technically, this is called an “induced abortion” in order to distinguish it from a “spontaneous abortion” which is also called a miscarriage or stillbirth. Also called a “termination of pregnancy” or just “termination.”	Aborcja
Adoption (n)	The process of legally taking someone else’s child into your family to raise as your own child.	Adopcja
Amniocentesis (n)	A procedure by which a sample of amniotic fluid is withdrawn from the amniotic sac. This is usually done by inserting a long needle through the abdominal and uterine walls with the guidance of ultrasound.	Amniopunkcja
Amniotic fluid (n)	The liquid that surrounds a fetus as it develops in the uterus. This liquid contains skin cells that have sloughed off the fetus as well as other fetal cells.	Płyn owodniowy
Anencephaly (n)	A neural tube defect that results in insufficient brain growth in a fetus. Babies with anencephaly usually die soon after birth or are stillborn.	Bezmózgowie
Benign (adj)	Something that does not threaten health or life. May refer to a type of change to the DNA that does not create health consequences. E.g., when discussing cancer, “benign” means “not cancerous.”	Łagodny
Birth canal (n)	The passageway from the uterus through the cervix, the vagina, and the vulva through which a baby passes during the birth process.	Kanał rodny

Term	Definition	Translation
Birth defect (n)	A problem or physical difference with how the body works that is present at birth. Birth defects can be caused by genetic abnormalities, environmental influences, random chance, or by circumstances related to the birth process. Also called “congenital malformation” or “congenital anomaly.”	Wada wrodzona
Blood test (n)	A test in which blood is drawn (usually from the patient’s arm) and sent to a laboratory for analysis. In genetics, blood tests may provide cells for genetic sequencing, or blood samples may be used to assess things like protein or hormone levels.	Badanie krwi
Buccal swab (n)	A way to collect DNA from the cells on the inside of a person's cheek.	Wymaz z policzka
Carrier (n)	A person who has a genetic mutation in one of their two copies of a particular gene that is associated with a genetic condition. The other copy of the gene does not have a mutation, so that person usually does not have any medical issues related to the gene change.	Nosiciel
Cell (n)	The smallest (microscopic) functional unit of living organisms. All living things are composed of one or more cells. Within each cell are the structures needed for the cell to process energy, dispose of waste, reproduce, and perform specialized functions.	Komórka
Cervix (n)	The narrow lower part of the uterus than connects to the vagina.	Szyjka
Chorionic Villus Sampling (CVS) (n)	A procedure during pregnancy in which a sample of cells from the placenta is removed to check for possible genetic abnormalities.	Biopsja kosmówki
Chromosome (n)	Thread-like structures located inside the nucleus of cells. In humans, there are 23 pairs of chromosomes, for a total of 46 chromosomes. Each chromosome is made of a long strand of DNA, which carries genetic information.	Chromosom
Chromosome test / Karyotype (n)	A test that looks at the number and types of chromosomes in a cell.	Kariotypowanie
Cleft lip (n)	A congenital malformation that occurs when the upper lip does not form properly, causing an opening in the upper lip that can extend to the nose. This can occur together with a cleft palate or on its own.	Rozszczep wargi

Term	Definition	Translation
Cleft palate (n)	A congenital malformation where the roof of the mouth (palate) does not form properly, resulting in an opening into the nasal cavity. This can occur together with a cleft lip or on its own.	Rozszczep podniebienia
Clinically significant (adj)	If a test result is “clinically significant,” the result indicates a medical problem that can impact a person’s life.	Klinicznie istotny
Condition (e.g., “genetic condition”) (n)	A long-term medical health issue.	Schorzenie, choroba
Consanguinity (n)	When parents are blood relatives to each other.	Pokrewieństwo
Cystic fibrosis (n)	A progressive genetic condition that affects the exocrine glands (the glands that make sweat and digestive juices) and causes the production of thick, sticky mucus. This mucus blocks the pancreatic duct, the intestines, and the lungs, leading to persistent respiratory infections.	Mukowiscydoza
Deleterious mutation/ Disease-causing mutation (n)	A change in a person’s DNA that may cause a medical condition.	Mutacja chorobotwórcza
Deletion (n)	Having a section of genetic information (DNA) missing.	Delecja
Diagnostic test (n)	A medical test that determines whether a patient has a particular medical problem. Diagnostic tests are often used when providers have a specific reason to believe that the medical problem may be present. Compare this to screening tests, which may be given routinely, even if the provider has no reason to believe the patient has a specific problem. Screening tests often only report whether a patient is at <u>an increased risk</u> for the medical problem in question, whereas diagnostic tests report whether the problem is actually present.	Badanie diagnostyczne

Term	Definition	Translation
DNA (Deoxyribonucleic Acid) (n)	<p>The material that carries the genetic information of a cell. It provides the instructions used in the development, functioning and reproduction of the organism of which it is a part.</p> <p>If you could stretch out the DNA of a chromosome and look at it through a microscope, it would look like a long ladder that is twisted into a spiral. The 'sides' of the ladder are made up of alternating phosphate and sugar groups. The 'rungs' are various combinations of two nitrogen bases: Adenine-Thymine and Cytosine-Guanine.</p> <p>Individual sections of DNA that code for specific traits/functions are called genes.</p>	DNA (kwas deoksyrybonukleinowy)
DNA marker (also called a "Genetic marker") (n)	A readily recognizable genetic trait, gene, or DNA segment.	Marker genetyczny
DNA mutation (n)	<p>A change in the typical sequence of the chemicals that make up the DNA, like the change in the order of letters in a word.</p> <p>Mutations or variants are often compared to misspelled words because chemicals that make up the DNA sequence are not in the expected order.</p>	Mutacja genowa
DNA sequence (n)	The exact arrangement of the chemicals that make up a section of DNA.	Sekwencja nukleotydów
DNA sequencing (n)	The laboratory technique used to determine the exact arrangement of the chemicals that make up a section of DNA. This is one type of genetic testing.	Sekwencjonowanie DNA
Dominant (adj)	A genetic trait in which one copy of the gene is sufficient for a trait to be expressed. In a dominant genetic condition, if one copy of the gene has a mutation, the personal will be affected with the condition.	Dominujący
Donor egg or sperm (n)	An egg (singular) or sperm (plural) donated by one person to be joined under laboratory conditions and implanted in a woman's uterus. The donor egg or sperm may come from the woman or man who will raise any resulting child, or they may come from a third party.	Komórka jajowa dawczyni / nasienie dawcy

Term	Definition	Translation
Down syndrome (Trisomy 21) (n)	A genetic condition in which there are three copies of chromosome number 21 instead of two. Down syndrome causes a distinct facial appearance, intellectual disability, developmental delays, and may be associated with thyroid or heart disease.	Zespół Downa
Duplication (n)	Having an extra section of genetic information (DNA). A duplication occurs when part of a chromosome is copied abnormally, resulting in extra genetic material.	Duplikacja
Edwards syndrome (Trisomy 18) (n)	A genetic condition in which there are three copies of chromosome number 18 instead of two. Trisomy 18 is a very severe condition that causes problems with the brain, the heart, the kidneys, and the digestive tract. Most children affected by trisomy 18 die before or soon after birth.	Zespół Edwardsa
Egg (n)	The reproductive cells of a woman. When fertilized by sperm, the egg will grow into an embryo. Also called an "ovum," plural "ova."	Komórka jajowa
Embryo (n)	An unborn mammal, between conception and 8 weeks of gestation.	Zarodek
Fallopian tube (n)	The tube that connects an ovary to the uterus.	Jajowód
False negative (n)	A test result that finds no evidence of a condition when the condition actually does exist. For example, a false negative on a pregnancy test finds that the woman is not pregnant when, in fact, she is pregnant.	Fałszywie ujemny
False positive (n)	A test result that finds evidence of a condition when the condition does NOT actually exist. For example, a false positive on a pregnancy test finds that the woman is pregnant when, in fact, she is not.	Fałszywie dodatni
Familial (adj)	Belonging to a family, e.g., a familial trait is a trait that is shared among family members and may be due to genetic or environmental factors or both.	Rodziny
Family history (n)	The medical history of the members of a biological family.	Wywiad rodzinny
Fertilization (n)	The joining of an egg and sperm to create the first cell that will develop into an embryo, then fetus, then baby.	Zapłodnienie
Fetal surgery (n)	Surgery conducted on a fetus while it is still in the uterus.	Operacja prenatalna

Term	Definition	Translation
Fetus (n)	An unborn mammal, between 8 weeks of gestation to birth.	Płód
First trimester screening (n)	A blood test and ultrasound conducted at 10-13 weeks of pregnancy to screen for Down syndrome (trisomy 21), Edwards syndrome (trisomy 18), and certain other fetal problems.	Badania kontrolne w pierwszym trymestrze
Flip a coin (v)	A random decision-making tool used in the U.S. While a coin is flipped into the air and caught, a person predicts whether it will fall with the “heads” side up or the “tails” side up. If the coin falls as predicted, the person “wins.” This expression is often used as a metaphor for any outcome that is random and has two possible outcomes, and to describe a situation in which each outcome is as likely as the other.	Rzucić monetą
Fragile X syndrome (n)	A genetic condition that affects the FMR1 gene so that it does not function properly. This syndrome causes intellectual disability, behavioral and learning challenges and various physical characteristics that are not life threatening.	Zespół łamliwego chromosomu X
Fragment (n)	A small piece; an incomplete part of a whole.	Fragment
Gene (n)	A specific sequence of DNA that codes for one or many functions within the cell and body.	Gen
General population (n)	<p>“Most people.”</p> <p>For example, if you have the same risk of getting cancer as the general population, that means that you have the same chance of getting cancer as everyone else. This is in contrast to a “high risk population” who has a greater chance of getting cancer than everyone else.</p>	Ogół społeczeństwa
Generation (n)	<p>The people who constitute a single step in a line of descent from an ancestor; a group of people born and living more or less at the same time.</p> <p>Example: You, your brothers, and sisters, all your spouses and your cousins are in the same generation. Your parents, your aunts, and uncles and all their spouses form a previous generation. Your grandparents, their siblings, and spouses from an even earlier generation. Your children and nieces and nephews form a later generation.</p>	Pokolenie
Genetics (adj)	The science of how an organism’s genes interact with the environment to produce certain traits.	Genetyka

Term	Definition	Translation
Genetic counseling (n)	A discussion with a medical professional with expertise in genetics about the basic concepts of genetics, genetic conditions, the chances of being affected by a genetic condition or having a child with a genetic condition, and genetic testing and treatment.	Porada genetyczna
Genetic counseling intern (n)	A genetic counseling student who has not yet completed his/her academic studies and is now practicing under the supervision of a more experienced counselor in preparation for providing genetic counseling services independently after obtaining his/her graduate degree.	Stażysta doradztwa genetycznego
Genetic counselor (n)	A healthcare professional with a specialized graduate degree who works with people who have concerns about genetic conditions in their family. Genetic counselors provide information about genetic conditions, help patients understand their chances of being affected by a genetic condition or having a child with a genetic condition, and help them make informed decisions about testing and treatment. Genetic counselors also provide emotional support to patients and families.	Doradca genetyczny
Genetic discrimination (n)	Occurs when people are treated differently by their employer or insurance company due to their genetic makeup. There are federal and state laws that help protect against genetic discrimination.	Dyskryminacja na podstawie cech genetycznych
Genetic factors (n)	Specific aspects of a person's genetic make-up that influence that person's health and development.	Czynniki genetyczne
Genetic information (n)	The instructions encoded in DNA, which tells every cell in a body how to grow, what to do and how to reproduce.	Informacja genetyczna
Genetic material (n)	All the parts of a cell that carry genetic information. Genetic material could include genes, parts of genes, a group of genes, a DNA molecule, a fragment of DNA, a group of DNA molecules, or the entire set of genetic instructions.	Materiał genetyczny
Genetic predisposition (n)	An increased chance of a person developing a certain trait or disease based on that person's particular genetic makeup.	Predyspozycja genetyczna
Genetic test (n)	A laboratory test designed to determine if a person has a change to their DNA.	Badanie genetyczne
Genetic trait (n)	A characteristic within a family that is passed down from parent to child through their DNA.	Cecha genetyczna

Term	Definition	Translation
Genetic variant (n)	A change from the typical DNA sequences. A genetic variant can be benign, deleterious or of uncertain significance. Also called “mutation,” although “genetic variant” is becoming the more common usage.	Wariant genetyczny
Geneticist (n)	A doctor or scientist who studies genetics.	Genetyk
Hereditary (adj)	Passed down from parent to child.	Dziedziczny
Hereditary material (n)	Genetic material that is passed down from parent to child.	Materiał dziedziczny
In Vitro Fertilization (IVF) (n)	The fertilization of an egg by a sperm outside of a woman’s body. The process involves extracting eggs from a woman’s ovaries, collecting sperm from a man, and combining a sperm and egg in a laboratory dish. The resulting fertilized egg is usually then implanted in a woman’s uterus so that it can develop into a baby.	Zapłodnienie in vitro
Infertility (n)	The inability to have children.	Bezpłodność
Informed consent (n)	The process of agreeing to a procedure or course of treatment after understanding what the procedure/treatment entails, the potential risks and benefits associated with it, and the other options available.	Świadoma zgoda
Inheritance pattern (n)	The manner in which a particular genetic trait or disorder is passed from a parent to a child, e.g., autosomal dominant or recessive, X-linked dominant or recessive, or multifactorial.	Sposób dziedziczenia
Inherited (adj)	Passed down from parent to child.	Odziedziczony
Insertion (n)	Having an extra segment of DNA added in at a place where it is not usually found.	Insercja
Intellectual disability (n)	A condition, varying in severity, in which a person has significant impairments in mental abilities, social skills, and core functions of daily living compared to others their age.	Niepełnosprawność intelektualna
Klinefelter’s syndrome (47, XXY) (n)	A genetic condition in which a male has two copies of the X chromosome and one copy of the Y chromosome; compared to the typical chromosome makeup where a male has one X chromosome and one Y chromosome.	Zespół Klinefeltera (47, XXY)

Term	Definition	Translation
Marker chromosome (n)	A small extra fragment of a chromosome detected when doing a chromosome test like a karyotype. Marker chromosomes can sometimes cause health or development problems, depending on how much and what genetic material is contained within.	Chromosom markerowy
Maternal Serum Screening (MSS or maternal serum alpha-fetoprotein test) (n)	A blood test available to pregnant women that identifies elevated risks for Down syndrome, trisomy 18 and neural tube defects. Usually conducted at in the second trimester, between 14-20 weeks.	Badanie AFP (alfa-fetoproteiny)
Microarray (n)	A high-resolution chromosome test that provides more information than a basic karyotype. A microarray measures the amount of chromosome material in a sample and can detect both large changes (e.g., if there is an extra or missing chromosome) as well as small changes (e.g., if there are very small pieces of chromosomes that are extra or missing). It does not look at the visual appearance or arrangement of chromosomes but measures the amount of genetic material.	Badanie metodą mikromacierzową
Miscarriage (n)	The spontaneous (not intentional) loss of a pregnancy. See “abortion.” Also called pregnancy loss.	Poronienie
Molecule (n)	The smallest unit of a chemical compound that still has the properties of that compound. For example, a molecule of water is made up of two hydrogen atoms and one oxygen atom. Separately, they are just atoms, but when bonded together, they make a water molecule.	Cząsteczka
Mosaicism (n)	A condition in which some, but not all, cells in a sample show a genetic difference.	Mozaicyzm
Multifactorial (adj)	Due to a combination of genetic and non-genetic (environmental, hormonal, etc.) risk factors that act together to determine risk.	Wieloczynnikowy
Mutation (n)	A change in a gene, usually deleterious. See “genetic variant.” In Spanish, the word is sometimes confused with “mutilation.”	Mutacja
Non-Invasive Prenatal Testing (NIPT) (n)	A blood test available to pregnant women that identifies elevated risk for certain genetic conditions in the fetus. This test focuses on fragments of DNA from placental cells – which carry the fetus’ genetic make-up – that are found in the mother’s bloodstream.	Nieinwazyjne badania prenatalne

Term	Definition	Translation
Nuchal thickening (n)	There is a pocket of fluid at the back of the neck of a fetus which can be measured in an ultrasound between 10-14 weeks gestation (called the nuchal translucency). If there is a large amount of fluid at this point, or if later in pregnancy the neck skin itself appears to be thicker, this is associated with a higher risk of chromosome problems and other rare genetic conditions.	Przezierność karkowa
Open Neural Tube Defect (ONTD) (n)	A birth defect of the spine, spinal cord, or brain that results from a hole in the spinal column not closing up when appropriate during early fetal development. The two most common types of ONTDs are spina bifida and anencephaly.	Otwarta wada cewy nerwowej
Ova (n)	See “egg.”	Komórka jajowa
Ovary (n)	The organ in a woman that stores and releases eggs. There are normally two.	Jajnik
Penetrance (n)	The probability that a specific genetic trait will be expressed if a person carries a mutation. “Complete penetrance” means that everyone who carries a particular gene mutation will show the trait related to that altered gene. “Incomplete penetrance” means that only some of the people who have the altered gene will actually show the related trait.	Penetracja
Placenta (n)	The organ that develops together with an embryo in a pregnant woman’s uterus to nourish the embryo through the umbilical cord.	łożysko
Presymptomatic (adj)	Before symptoms appear.	Przedobjawowy
Prognosis (n)	The most likely outcome of a disease process.	Prognoza
Protein (n)	A molecule made up of chains of amino acids. Proteins do most of the work in cells and are required for the structure, function, and regulation of the body's tissues and organs. Genes determine how specific amino acids are put together to form a specific protein.	Białko, proteina
Random (adj)	Happening in an unpredictable way.	Losowy

Term	Definition	Translation
Recessive (adj)	A genetic trait in which both copies of a gene need to be altered for the trait to be expressed; recessive traits are typically inherited from both parents, each one contributing one copy of the gene in question. In prenatal genetics, recessive inheritance refers to conditions in which both copies of a particular gene pair need to be altered to develop a specific disease or condition.	Recesywny
Red flag (n)	A warning sign or a clue.	Znak ostrzegawczy
Replicate (v)	To copy.	Replikować
Reproductive history (n)	The experiences a woman has had related to pregnancy and childbirth. A reproductive history usually includes age at the onset of menses (have a monthly period), age at the beginning of sexual intercourse, age at first conception, number of pregnancies, number of live births, number of miscarriages, number of abortions.	Historia reprodukcyjna
Ring chromosome (n)	An abnormal formation of a chromosome in which the ends of two of the chromosome's arms have linked together to form a ring.	Chromosom pierścieniowy
Risk (n)	The chance that something will happen; in the case of prenatal genetics, the chance that the child will have a genetic condition.	Ryzyko
At risk (adj)	Has some possibility of having a genetic condition.	Istniejące ryzyko
At average risk (adj)	Has the same possibility of having a genetic condition as the general population.	Przeciętne ryzyko
At high risk (adj)	Has a greater possibility of having a genetic condition than the general population.	Zwiększone ryzyko
At higher risk than "X" (adj)	Has a greater possibility of having a genetic condition than "X".	Ryzyko wyższe niż „X”
Risk factor (n)	A circumstance that increases the risk of having a genetic condition.	Czynnik ryzyka
Runs in the family (e.g., sickle cell disease runs in the family) (v)	When a certain condition or trait seems to appear in many members of a single family	Jest cechą rodzinną

Term	Definition	Translation
Screen (v)	To assess a person’s risk for a particular health problem, even if the person has no symptoms to suggest that they have the problem.	Wykonać badania przesiewowe
Screening test (n)	<p>A test that looks to detect a particular health problem, even if a patient has no symptoms of that particular condition.</p> <p>Prenatal screening tests aren’t looking for genetic changes. They are designed to look at hormones, chemicals, other things that indicate a fetus might have a higher risk of a certain condition. They are not DNA results, do not give a definite answer about whether someone is affected, and do not provide a firm diagnosis. They are usually reported as a risk number (e.g., 1 in ____ chance), and if this number is above a certain cut-off point, the result will be categorized as ‘screen positive’ or ‘screen negative’.</p>	Badanie przesiewowe
Semen (n)	A liquid produced by the testes, the prostate gland, the seminal vesicle, and the bulbourethral gland that carries, nourishes and protects sperm cells on their way to fertilizing an egg. Also called seminal fluid.	Nasienie, sperma
Seminal fluid (n)	See “semen.”	Nasienie, sperma
Sickle cell disease (n)	A genetic disorder caused by a mutation in a gene that helps to make hemoglobin, an important part of red blood cells. In sickle cell disease, red blood cells can become sickle-shaped (instead of round as they should be). These affected blood cells do not function properly, and die early, leaving a shortage of red blood cells, and can block blood flow causing pain.	Anemia sierpowata
Sperm (n)	The reproductive cells of the man. When sperm fertilize a woman’s egg, a baby develops.	Plemniki
Sperm donation (n)	The process through which a man allows his sperm to be collected and used to fertilize the eggs of a woman who is not his sexual partner.	Dawstwo nasienia
Spina bifida (n)	A congenital defect of the spine in which part of the spinal cord is exposed through an opening in the bone structure. This may result in nerve damage and some degree of paralysis in the legs.	Rozszczep kręgosłupa
Statistically significant (adj)	A measurement of whether the findings of research are meaningful. Refers to the likelihood that a relationship between two factors is linked by something other than chance.	Statystycznie istotny

Term	Definition	Translation
Teratogen (n)	Something that has the potential to disturb the normal development of an embryo or fetus.	Teratogen
Termination of pregnancy (n)	See “abortion.”	Usunięcie ciąży
<p data-bbox="185 436 354 495">Test results (n) negative (adj)</p> <p data-bbox="207 663 354 695">Positive (adj)</p> <p data-bbox="207 1020 375 1115">Variant of uncertain significance (n)</p> <p data-bbox="207 1377 407 1409">Polymorphism (n)</p>	<p data-bbox="498 436 1089 625">A negative result on a diagnostic genetic test means that the laboratory did not find the specific genetic change that the test was designed to identify. A “screen negative” result on a screening test means that the person’s risk of having whatever the test was designed to find is lower than the risk for most people.</p> <p data-bbox="498 663 1068 789">A positive result on a diagnostic genetic test means that the laboratory did find a specific genetic change that is associated with a hereditary condition (a deleterious mutation).</p> <p data-bbox="498 827 1089 982">A “screen positive” result on a screening test means that the person’s risk of having whatever the test screened for is significantly higher than expected. That still does not mean that the person definitely has that condition.</p> <p data-bbox="498 1020 1084 1339">If the laboratory finds a genetic change for which currently there is not enough information to know if this change is problematic or not, it reports a “variant of uncertain significance.” Basically, this means that the laboratory found a genetic change, but they don’t know what it means. Many of these variants will eventually be reclassified as either a “positive” or “negative” result. Most become “negative” and are thought to represent natural variation between individuals.</p> <p data-bbox="498 1377 1073 1503">Everyone has some degree of commonly occurring genetic changes that are not associated with medical problems. If the test finds this sort of change, it reports a “polymorphism.”</p>	<p data-bbox="1118 436 1284 495">Wynik badania Ujemny</p> <p data-bbox="1141 663 1230 695">Dodatni</p> <p data-bbox="1141 1020 1365 1079">Wariant o nieznannej patogenności</p> <p data-bbox="1141 1377 1276 1409">Polimorfizm</p>
Testes (n)	The organs in a man that create and release sperm. Also called “testicles.” Singular testis.	Jądra
Toxic exposure (n)	Contact with something that is harmful or poisonous.	Ekspozycja na toksyny
Trait (n)	<p data-bbox="498 1682 802 1713">A characteristic of a person.</p> <p data-bbox="498 1751 1084 1839">In genetics, traits are aspects of a person defined or influenced by their genetic code. E.g., Eye color, blood type, risk for certain diseases.</p>	Cecha

Term	Definition	Translation
Translocation (n)	Translocations are a type of chromosome rearrangement. They can be 'balanced', meaning that two chromosomes have pieces that have 'swapped' with each other, but there is still the correct amount of chromosome material. Balanced translocations do not usually cause medical or development problems. They can also be 'unbalanced', where pieces of chromosomes have traded places, but there is missing or extra chromosome material. Unbalanced translocations will often cause medical and development problems.	Translokacja
Typo (n)	A mistyped word; shortened slang for "typographical error." In genetic counseling "a typo" is commonly used as an analogy to refer to mutations or variants in a gene.	Literówka
Ultrasound (n)	An imaging method that uses high frequency sound waves to create a picture of something inside the body, such as a fetus or baby.	USG
Uterus (n)	The organ in a woman's lower abdomen in which a fertilized egg develops into an embryo, then a fetus, then a baby. Also called "womb."	Macica
Vagina (n)	The tube-like part of the female reproductive system that extends from the cervix to the outside of the body.	Pochwa
Variant (n)	A version of something that differs from the norm. So, a genetic variant is a change to the usual genetic sequence.	Wariant
Vas deferens (n)	The tubes that lead from the testes to the urethra, through which sperm is ejaculated.	Nasieniowód
X-linked (adj)	A trait that is influenced or determined by a gene on the "X" chromosome.	Związany z chromosomem X

Family Relationships

For genetic counselors, it is very important to know if a relative is a blood relative or a relative by marriage.

Term	Definition	Translation
Parent	Your mother or father.	Rodzic
Mother	For genetic purposes, the woman whose egg was fertilized and grew to be you.	Matka
Mother-in-law	Your husband or wife’s mother.	Teściowa
Stepmother	Your father’s wife who is not your biological mother.	Macocho
Adoptive mother	A woman who is not your biological mother but who accepted legal responsibility for and raised you.	Matka adopcyjna
Godmother	A woman chosen by your parents to be your spiritual guide in life, named as such through a ceremony in the Catholic church.	Matka chrzestna
Father	For genetic purposes, the man whose sperm fertilized the egg that grew to be you.	Ojciec
Father-in-law	Your husband or wife’s father.	Teść
Stepfather	Your mother’s husband who is not your biological father.	Ojczym
Adoptive father	A man who is not your biological father but who accepted legal responsibility for and raised you.	Ojciec adopcyjny
Godfather	A man chosen by your parents to be your spiritual guide in life, named as such through a ceremony in the Catholic church.	Ojciec chrzestny
Aunt	Your mother or father’s sister or sister-in-law.	Ciotka
Maternal aunt	Your mother’s sister or sister-in-law.	Ciotka ze strony matki
Paternal aunt	Your father’s sister or sister-in-law.	Ciotka ze strony ojca
Uncle	Your mother or father’s brother or brother-in-law.	Wuj
Maternal uncle	Your mother’s brother or brother-in-law.	Wuj ze strony matki
Paternal uncle	Your father’s brother or brother-in-law.	Wuj ze strony ojca, stryj

Term	Definition	Translation
Cousin	Usually understood to be a first cousin.	Kuzyn
First cousin	Your aunt or uncle's child.	Kuzyn pierwszego stopnia
First cousin once removed	Your aunt or uncle's grandchild or your first cousin's child	Dziecko kuzyna
Second cousin	The children of first cousins are second cousins to each other.	Kuzyn drugiego stopnia
Grandparent	Your parent's father or mother.	Dziadek/babcia
Grandmother	Your mother or father's mother.	Babcia
Maternal grandmother	Your mother's mother.	Babcia ze strony matki
Paternal grandmother	Your father's mother.	Babcia ze strony ojca
Grandfather	Your mother or father's father.	Dziadek
Maternal grandfather	Your mother's father.	Dziadek ze strony matki
Paternal grandfather	Your father's father.	Dziadek ze strony ojca
Great aunt	Your mother or father's aunt.	Ciotka rodzica
Maternal great aunt	Your mother's aunt.	Ciotka matki
Paternal great aunt	Your father's aunt.	Ciotka ojca
Great uncle	Your father or mother's uncle.	Wuj rodzica
Maternal great uncle	Your mother's uncle.	Wuj matki
Paternal great uncle	Your father's uncle.	Wuj ojca
Great grandparents	The parents of any of your grandparents.	Pradziadkowie
Great grandmother	The mother of any of your grandparents.	Prababcia
Great grandfather	The father of any of your grandparents.	Pradziadek

Term	Definition	Translation
Siblings	The children of your father and mother.	Rodzeństwo
Half siblings	Siblings (brothers and sisters) who have either the same mother and different fathers, or the same father but different mothers. Half-siblings share some genetic similarity with you.	Rodzeństwo przyrodnie
Stepsiblings	The children of your stepmother but not your father; or the children of your stepfather but not your mother. Stepsiblings do not share any genetic similarity with you.	Rodzeństwo przybrane
Twins	Two siblings born at the same time	Bliźnięta
Identical twins	A twin that developed from the same egg and sperm, meaning that they are mostly genetically identical. Also called monozygotic twins.	Bliźnięta jednojajowe
Fraternal twins	A twin who developed from a different egg and sperm than, meaning that he or she is genetically different and has the same number of shared genes as any other sibling. Also called dizygotic twins.	Bliźnięta dwujajowe
Triplets	Three siblings born at the same time	Trojaczki
Sister	A sibling who is a girl.	Siostra
Sister-in-law	Your brother's wife.	Bratowa/szwagierka
Half sister	A girl who is either the child of your father with a different mother, or the child of your mother with a different father.	Siostra przyrodnia
Stepsister	The daughter of your stepmother or stepfather and therefore not biologically related to you.	Siostra przybrana
Brother	A sibling who is a boy.	Brat
Brother-in-law	Your sister's husband.	Szwagier
Half brother	A boy who is either the child of your father with a different mother, or the child of your mother with a different father.	Brat przyrodni
Stepbrother	The son of your stepmother or stepfather and therefore not biologically related to you.	Brat przybrany
Niece	Your sibling's daughter.	Siostrzenica/bratanica
Nephew	Your sibling's son.	Siostrzeniec/bratanek

Term	Definition	Translation
Spouse	Your husband or wife.	Małżonek
Wife	The woman to whom you are married.	Żona
Husband	The man to whom you are married.	Mąż
Children	Genetically speaking, the people who are produced from your egg or sperm.	Dzieci
Daughter	Your child who is a girl.	Córka
Daughter-in-law	Your son's wife.	Synowa
Stepdaughter	Your spouse's daughter who is not your biological child.	Pasierbica
Adoptive daughter	A girl for whom you have accepted legal responsibility and raised even though she is not your biological child.	Córka adoptowana
Goddaughter	A girl for whom you have accepted spiritual responsibility within a ceremony of the Catholic church; she may or may not be biologically related to you.	Chrześcianka
Son	Your child who is a boy.	Syn
Son-in-law	Your daughter's husband.	Zięć
Stepson	Your spouse's son who is not your biological child.	Pasierb
Adoptive son	A boy for whom you have accepted legal responsibility and raised even though he is not your biological child.	Syn adoptowany
Godson	A boy for whom you have accepted spiritual responsibility within a ceremony of the Catholic church. He may or may not be biologically related to you.	Chrześciak
Ancestor	A person from whom you are descended, usually more remote than a grandparent.	Przodek
Fiancé(e)	The person whom you have promised to marry. Man: fiancé Woman: fiancée	Naręczony Naręczona
Domestic partner	The person with whom you are living and have an intimate relationship, but to whom you are not married.	Konkubent/konkubina

Term	Definition	Translation
Divorced	Having ended a marriage.	Rozwiedziony
Engaged	Having promised to marry someone.	Zaręczony
Widow	A woman whose husband has died.	Wdowa
Widower	A man whose wife has died.	Wdowiec
Relative	A person in your family.	Członek rodziny
Blood relation	A person who is related to you by blood not marriage, e.g., your sister, but not your sister-in-law; your mother but not your stepmother; your daughter but not your adopted daughter.	Krewny
Next of kin	Your closest living blood relation.	Najbliższy krewny

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Analogies

Genetic counselors often use analogies to explain complex ideas in genetics. An analogy explains a new concept by comparing it to something more common. A clue that an analogy is being used are the words “It’s as if” and “It’s like”

Examples:

“Genes are **like** an instruction book or an instruction manual. And in a book, there is a certain sequence to a story.”

“**It’s as if** you were reading through a long book and looking for one typo, for a letter that is mistaken.”

“So, a mutation is **like** an unexpected change in the order of the letters.”

“A gene is **like** a recipe, and mutations are like changes in that recipe.”

“It’s **like** chapters in a book, and like misspellings.”

“Our cells are **like** libraries and our chromosomes are like books.”

“**Like** a flip of a coin.” (to explain that there is a 50% chance that a mutation will be passed on every time the patient has a child).

“Inside every cell are genes, which are **like** instruction books for our bodies; they tell our bodies how to grow and develop.”

“It is kind of **like** you a reading a book and you notice that a word is spelled wrong; that is what this genetic test looks for.”

Some analogies may not work with certain patients, due to linguistic or experiential differences.

Analogies that focus on genes as “letters in a book” may make no sense to speakers of character-based written languages such as Chinese, Japanese, and Korean.

“**It’s as if** you were reading through a long book and looking for one typo, for a letter that is mistaken.”

“So a mutation is **like** an unexpected change in the order of the letters.”

“It’s **like** chapters in a book, and like misspellings.”

“It is kind of **like** if you a reading a book and you notice that a word is spelled wrong; that is what this genetic test looks for.”

Analogies that focus on genes as a recipe may not work for patients who do not cook with written recipes.

“A gene is like a recipe, and mutations are like changes in that recipe.”

Analogies that discuss random chance in terms of a coin toss may not work for patients from cultures where people don't flip coins to make decisions.

“Like a flip of a coin” (to explain that there is a 50% chance that a mutation will be passed on every time the patient has a child).

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