

Bilingual Glossary of Cancer Genetics Terms English - Russian

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

Term	Definition	Equivalent or Paraphrase
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.	аномальный
benign (adj)	Something mild that does not threaten health or life. In cancer genetics, “benign” means “not cancerous.”	доброкачественный
blood test (n)	A test in which blood is drawn (usually from the patient’s arm) and sent to a laboratory for analysis. In cancer genetics, blood tests provide cells for genetic sequencing.	анализ крови
breast cancer (n)	Cancer of the breast tissue. This cancer is more common in women, but it can affect men as well.	рак молочной железы
buccal swab (n)	A way to collect DNA from the cells on the inside of a person's cheek.	
ca125 blood test (n)	A blood test used to look for early signs of ovarian cancer in women with a high cancer risk.	Анализ крови на карциному яичников (ca 125)
carrier (n)	A person who carries a genetic mutation in one of the two copies of a particular gene, regardless of whether they get cancer or not.	носитель
cell (n)	A small (microscopic) structure that forms the basic building block of every known living organism.	клетка
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.	хромосома

Term	Definition	Equivalent or Paraphrase
	Each chromosome is made of proteins and a single molecule of DNA, which carries genetic information.	
colonoscopy	A diagnostic test in which a flexible tube with a tiny camera on the end is inserted into the colon (large intestine) through the rectum in order to see the condition of the inside of the colon, or to take a small sample of tissue, or to cut out polyps (small growths).	колоноскопия
condition (e.g. “genetic condition”) (n)	A chronic (long-term) health issue.	заболевание (например, «генетическое заболевание»)
consanguinity (n)	When parents are blood relatives to each other.	кровное родство
DCIS (ductal carcinoma in situ) (n)	A pre-cancerous growth in the breast, which is still within the milk ducts, but has the potential of growing and spreading to other parts of the breast tissue. Sometimes called Stage 0 breast cancer.	протоковая карцинома in situ (ПКИС)
DTC (direct-to-consumer genetic testing) (n)	Genetic testing that is marketed directly to people at home through the internet or the TV etc. instead of through a medical provider.	генетическое обследование напрямую потребителю
deleterious mutation/ disease-causing mutation (n)	A change in a person’s DNA that may cause a medical condition. In cancer genetics, having a disease-causing mutation may increase the <i>chance</i> of getting cancer but does not mean that a person will <i>definitely</i> get cancer.	вредная мутация / болезнетворная мутация
DNA (deoxyribunucleic acid) (n)	The molecule 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. The DNA is organized into chromosomes.	ДНК (дезоксирибонуклеиновая кислота)
DNA banking (n)	The secure, long-term storage of a person’s genetic material. DNA banking allows families to have access to a deceased family member’s DNA. When new genetic testing techniques are developed, doctors can test the banked DNA and use genetic information from the deceased person to tailor medical treatment for living descendants.	создание банка ДНК

Term	Definition	Equivalent or Paraphrase
DNA marker (also called a “genetic marker”) (n)	A readily recognizable genetic trait, gene, or DNA segment.	маркер ДНК (также называется «генетический маркер»)
DNA mutation (n)	A change in the typical order of the chemicals that make up the DNA. Mutations or variants are often compared to misspelled words because chemicals that make up the DNA sequence are not in the expected order.	мутационное изменение ДНК
DNA sequence (n)	The exact order of the chemicals that make up a DNA molecule.	последовательность ДНК
DNA sequencing (n)	The laboratory technique used to determine the exact order of the chemicals that make up a DNA molecule. This is one type of genetic testing.	секвенирование ДНК
dominant (adj)	A genetic trait in which one copy of the gene is sufficient for a trait to be expressed; dominant traits can be inherited from a single parent. In cancer genetics, dominant inheritance refers to conditions in which having only one altered copy of a particular gene pair is sufficient to cause an increased risk for cancer.	доминантный
duplication (n)	A duplication occurs when part of a chromosome is copied abnormally, resulting in extra genetic material.	дупликация
early age of onset (n)	Cancer diagnosed at an early age, usually before the age of 50.	
egg (n)	The reproductive cells of a woman. When fertilized by sperm, the egg will grow into a baby.	яйцеклетка
environmental causes or factors (n)	Causes of illness that come from a person’s surroundings, not from their genetic make-up. Environmental causes of illness include infection, trauma, diet, exposure to toxins, etc. Some environmental causes of illness can be avoided or changed, while genetic causes cannot.	экологические причины / факторы

Term	Definition	Equivalent or Paraphrase
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.	семейный
family history (n)	The medical history of the members of a family.	семейный анамнез
to 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.	бросить монету
fragment (n)	A small piece; an incomplete part of a whole.	фрагмент
gene (n)	A specific sequence of DNA that determines specific traits in an individual.	ген
gene copy (n) normal gene copy (n) altered gene copy (n)	In human cells, DNA is arranged in 23 pairs of chromosomes, for a total of 46 chromosomes. These chromosomes contain all the genes that make up the DNA. One chromosome of each pair is inherited from each parent. As such, individuals have two copies of every gene, one inherited from the mother and one inherited from the father. A normal copy of a gene is one that is found most frequently in the population. Also called the “working copy.” An altered copy of a gene is one that differs from the working copy, and is considered to be “abnormal”. Also called the “non-working copy.”	копия гена нормальная копия гена измененная копия гена
gene deletion (n)	Having a piece of genetic information missing from a gene.	делеция гена
generation (n)	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.	поколение

Term	Definition	Equivalent or Paraphrase
	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.	
genetic (adj)	Having to do with inherited traits.	генетический
genetic counseling (n)	A discussion with a genetic counselor 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.	генетическая консультация
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.	врач-интерн генетической консультации
genetic counselor (n)	A healthcare professional with a specialized graduate degree who works with people undergoing genetic testing. 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.	консультант по генетическим вопросам
genetic discrimination (n)	The act of refusing to provide, or charging more for, insurance or any service based on an individual's genetic make-up.	дискриминация по генетическому признаку
genetic factors (n)	Specific aspects of a person's genetic make-up that influence that person's health and development.	генетические факторы
genetic information (n)	The information encoded in genes, which tells every cell in a body how to grow, what to do and how to reproduce.	генетическая информация

Term	Definition	Equivalent or Paraphrase
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.	генетический материал
genetic predisposition (n)	An increased chance of a person developing a certain trait or disease based on that person's particular genetic makeup.	генетическая предрасположенность
genetic trait (n)	A characteristic within a family that is passed down from parent to child genetically.	генетический признак
geneticist (n)	A doctor or scientist who studies genetics.	генетик
genetic test (n) single gene test (n) gene panel test (n)	A laboratory test designed to determine if a person has a gene mutation or a typical DNA sequence. Single gene test: analysis of one particular gene. Gene panel test: analysis of several genes that have been shown to be associated with a particular condition; <i>Example</i> : breast cancer gene panel.	генетическое тестирование тест одного гена тест группы генов
general population (n)	"Most people." 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.	население в целом
germline testing (n)	Germline testing refers to the analysis of a person's DNA, which he or she inherited from his or her parents. In biology and genetics, the germline is the group of cells that will pass on the genetic material to children, in other words, the cells from which the eggs and sperm come. After the egg and sperm come together to form a baby, these cells will then divide and multiply and will form the	тестирование зародышевой линии

Term	Definition	Equivalent or Paraphrase
	entire body. Germline testing is different from testing the DNA of someone's tumor, which may have a mutation that happened during the person's lifetime and was not inherited from his or her parents.	
hereditary (adj)	Passed down from parent to child.	наследственный
hereditary material (n)	Genetic material that is passed down from parent to child.	наследственные материал
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.	информированное согласие
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..	модель наследования
inherited (adj)	Passed down from parent to child.	унаследованный
Lynch syndrome (n)	An inherited genetic disorder that increases a person's risk of getting cancer of the colon, rectum, uterus, ovaries and other cancers.	синдром Линча
malignant (adj)	In cancer, this term means that the cancer cells or tumor are harmful and have the potential of spreading to other tissues or parts of the body.	злокачественный
metastasis (n)	The spreading of cancer from one organ to another.	метастаз
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.	молекула
multifactorial (adj)	Due to a combination of genetic and non-genetic (environmental, hormonal, etc.) risk factors that act together to determine risk.	мультифакториальный

Term	Definition	Equivalent or Paraphrase
mutation (n)	A change in a gene, which can be deleterious (disease causing) or benign (non-disease-causing). In Spanish, the word is sometimes confused with “mutilation.”	мутация
oncologist (n)	A physician who specializes in diagnosing and treating cancer.	онколог
oophorectomy	The surgical removal of one or both ovaries.	овариэктомия
ovarian cancer (n)	Cancer of the ovaries, the organs in a woman that release eggs.	карцинома яичника
packets of genetic information (n)	A phrase genetic counselors use to describe genes or chromosomes.	наборы генетической информации
pattern (n)	A repeating arrangement or sequence; for example, the pattern of cancers in a family.	модель
pedigree (n)	A family tree that can be used to trace the inheritance of specific genetic traits.	родословная
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.	пенетрантность
predisposition to cancer	Having a change in one of number of specific genes (a genetic mutation) that creates a higher than normal risk of a person developing cancer.	предрасположенность к онкологическим заболеваниям
prognosis (n)	The most likely outcome of a disease process.	прогноз
proliferation (cell proliferation) (n)	The controlled process by which a cell multiplies. Cancer arises when the process of cell division becomes uncontrolled.	пролиферация (пролиферация клеток)

Term	Definition	Equivalent or Paraphrase
prophylactic mastectomy (n)	A mastectomy is the surgical removal of the breast. "Prophylactic" means something done to prevent disease. So a prophylactic mastectomy is the surgical removal of a healthy breast to prevent breast cancer. Prophylactic mastectomy is an option for individuals with a very high breast cancer risk, for example, women with a BRCA mutation.	профилактическая мастэктомия
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.	белок
random (adj)	Happening in an unpredictable way.	произвольный
recessive (adj)	A genetic trait in which both copies of a gene are needed for the trait to be expressed; recessive traits are inherited from both parents, each one contributing one copy of the gene in question. In cancer genetics, recessive inheritance refers to conditions in which both copies of a particular gene pair need to be altered to develop the disease.	рецессивный
recurrence (n)	When something happens again. In cancer, a return of the disease after treatment and after a period of time during which the cancer cannot be detected.	повторяющийся
red flag (n)	A warning sign or a clue.	тревожный сигнал
risk (n)	The chance that something will happen; in the case of cancer genetics, the chance of getting cancer.	риск
at risk (adj)	Has some possibility of getting cancer.	повышенный уровень риска
at average risk (adj)	Has the same possibility of getting cancer as the general population.	средний уровень риска

Term	Definition	Equivalent or Paraphrase
at high risk (adj)	Has a greater possibility of getting cancer than the general population.	высокий уровень риска
at higher risk than 'X' (adj)	Has a greater possibility of getting cancer than "X".	более высокий уровень риска, чем у «X» фактор риска
risk factor (n)	A circumstance that increases the risk of getting cancer.	
runs in the family (e.g. cancer runs in the family) (v)	Is passed down from parents to children to grandchildren.	наследственный (напр. наследственная предрасположенность к раку)
saliva (spit) test (n)	A genetic test done by collecting saliva (spit) instead of blood.	анализ слюны
screen (v)	To test a person for a particular common health problem, even though the person has no symptoms to suggest that they have the problem.	диспансеризация
screening test (n)	A test that looks for a common health problem even though the patient has no symptoms to suggest they have the particular disease.	скрининговый тест
sperm (n)	The reproductive cells of the man. When sperm fertilize a woman's egg, a baby develops.	сперма
sporadic (adj)	Random, once in a while. In genetics, sporadic cancers are those caused by random chance or unknown factors in the environment.	спорадический
statistically significant (adj)	Not caused by chance.	статистически значимый
syndrome (n)	A group of symptoms or features that consistently occur together or a condition characterized by a set of associated features. For example, a hereditary cancer syndrome refers to risk for a group of cancers all caused by a particular gene mutation. BRCA1 mutations	синдром

Term	Definition	Equivalent or Paraphrase
	increase risk for breast and ovarian cancers. This is called Hereditary Breast and Ovarian Cancer Syndrome. See also, Lynch Syndrome.	
test result (n) negative (adj)	A negative result on a genetic test means that the laboratory did not find the specific genetic change that the test was designed to identify.	результат тестирования отрицательный
true negative (n)	When a patient is being tested to see if he or she has a specific genetic change that is present in other family members, a negative result can be considered a “true negative.” This means that instead of having an increased risk for cancer like other family members, they have the same risk as everyone else in the general population.	истинно отрицательный
uninformative negative (n)	Sometimes a family has a strong history of a particular cancer, but no genetic change related to that cancer has been found in that family. An “uninformative negative” result means that a specific test was negative, but is not conclusive because the “family” mutation has not been identified, and/or there may be changes that the test could not detect in the gene being analyzed, or in other genes that were not tested.	неподкрепленный данными отрицательный
positive (adj)	A positive result on a genetic test means that the laboratory did find a specific genetic change that is associated with a hereditary cancer syndrome (a deleterious mutation). In cancer genetics, that means that the patient has an increased risk of getting the cancer(s) associated with the gene.	вариант неизвестного значения
variant of uncertain significance (n)	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. All 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.	положительный
polymorphism (n)	Everyone has some degree of commonly occurring genetic changes that are not associated with cancer. If the test finds this sort of change,	

Term	Definition	Equivalent or Paraphrase
	it reports a “polymorphism.”	полиморфизм
trait (n)	A characteristic.	признак
tumor (n)	An abnormal growth of cells; a tumor can be benign (not harmful) or malignant (harmful, cancer).	опухоль
tumor testing (n)	An analysis of the DNA of someone’s tumor. This analysis is meant to identify changes that a person might have acquired in his/her tumor cells that are not present in the rest of his/her body cells and were not inherited from his/her parents. This testing is often done to help make treatment decisions.	анализ опухоли
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.	ультразвук
ultrasound (n)	An imaging method that uses high frequency sound waves to create a picture of something inside the body.	вариативная экспрессивность
variant (n)	A version of something that differs from the norm. So, a genetic variant is a change to the usual genetic sequence.	вариант

Examples of genes that are often checked in genetic testing

Term	Definition	Equivalent or Paraphrase
BRCA 1	“The Breast Cancer Genes.”	

Term	Definition	Equivalent or Paraphrase
BRCA 2	The tumor suppressor genes that in mutated form tend to be associated with an increased risk of certain cancers and especially breast and ovarian cancers.	
MLH1 MSH2 MSH6 PMS2	<p data-bbox="373 347 726 375">"The Colon Cancer Genes"</p> <p data-bbox="373 412 1409 545">These genes are involved in fixing mistakes that occur when DNA replicates. An abnormality in the MSH6 gene can lead to Lynch Syndrome, a condition linked to increased risk of cancer in the colon, rectum, uterus, ovaries, as well as other organs.</p>	
ATM	<p data-bbox="373 583 1367 678">The ATM gene helps create a protein located in the cell nucleus that controls the rate at which cells grow and divide. The ATM protein also helps cells recognize damaged DNA strands.</p> <p data-bbox="373 716 1402 812">A mutation in the ATM gene can lead to increased risks for cancer or a condition called ataxia-telangiectasia a degenerative neurological condition that causes severe disability.</p>	
PALB2	Another gene in which mutations can lead to breast cancer.	

Family relationships

Term	Definition	Equivalent or Paraphrase
parent	Your mother or father.	родитель
mother	For genetic purposes, the women whose egg was fertilized and grew to be you.	мать
mother-in-law	Your husband or wife's mother.	свекровь (husband's mother) теща (wife's mother)
step-mother	Your father's wife who is not your biological mother.	мачеха
adoptive mother	A woman who is not your biological mother but who accepted legal responsibility for and raised you.	приёмная мать
godmother	A woman chosen by your parents to be your spiritual guide in life, named as such through a ceremony in the Catholic church.	крестная мать
father	For genetic purposes, the man whose sperm fertilized the egg that grew to be you.	отец
father-in-law	Your husband or wife's father.	свёкор (husband's father) тесть (wife's father)
step-father	Your mother's husband who is not your biological father.	отчим
adoptive father	A man who is not your biological father but who accepted legal responsibility for and raised you.	приемный отец
godfather	A man chosen by your parents to be your spiritual guide in life, named as such through a ceremony in the Catholic church.	крестный отец
aunt	Your mother or father's sister or sister-in-law. ¹	тетя

¹ NOTE: For Genetic Counselors, it is very important to know if a relative is a blood relative or a relative by marriage.

Term	Definition	Equivalent or Paraphrase
maternal aunt	Your mother's sister or sister-in-law. ²	тетя по материнской линии
paternal aunt	Your father's sister or sister-in-law. ³	тетя по отцовской линии
uncle	Your mother or father's brother or brother-in-law. ⁴	дядя
maternal uncle	Your mother's brother or brother-in-law. ⁵	дядя по материнской линии
paternal uncle	Your father's brother or brother-in-law. ⁶	дядя по отцовской линии
cousin	Usually understood to be a first cousin.	двоюродный брат (male) двоюродная сестра (female)
first cousin	Your aunt or uncle's child.	двоюродный брат (male) двоюродная сестра (female)
second cousin	Your aunt or uncle's grandchild.	двоюродный племянник (male) двоюродная племянница (female)
grandparent	Your parent's father or mother.	Бабушка (grandma) дед (grandfather) (no separate gender-neutral word in Russian) While Russian has a dedicated gender-neutral word for Parent (родитель), and it is technically possible to derive a gender-neutral

² ibid

³ ibid

⁴ ibid

⁵ ibid

⁶ ibid

Term	Definition	Equivalent or Paraphrase
		<p>Grandparent (<u>прародитель</u>), this word is never used in common, official, or professional language. So, when referring to person's grandparents, you would always address them as <u>Дед</u> (grandfather) and <u>Бабушка</u> (oddly enough, Grandma. Again, while it is possible to say Grandmother (<u>Баба</u> or <u>Бабка</u>), the first option is considered baby talk, and the second is considered offensive outside of historical science (family trees etc.). So it's best not to use it and stick with <u>Дед</u> and <u>Бабушка</u>).</p>
<p>grandmother</p> <p>maternal grandmother</p> <p>paternal grandmother</p>	<p>Your mother or father's mother.</p> <p>Your mother's mother.</p> <p>Your father's mother.</p>	<p>бабушка</p> <p>бабушка по материнской линии</p> <p>бабушка по отцовской линии</p>
<p>grandfather</p> <p>maternal grandfather</p> <p>paternal grandfather</p>	<p>Your mother or father's father.</p> <p>Your mother's father.</p> <p>Your father's father.</p>	<p>дед</p> <p>дед по материнской линии</p> <p>дед по отцовской линии</p>
<p>great aunt</p>	<p>Your mother or father's aunt.</p>	<p>двоюродная бабушка</p>

Term	Definition	Equivalent or Paraphrase
maternal great aunt	Your mother's aunt.	двоюродная бабушка по материнской линии
paternal great aunt	Your father's aunt.	двоюродная бабушка по отцовской линии
great uncle maternal great uncle paternal great uncle	Your father or mother's uncle. Your mother's uncle. Your father's uncle.	двоюродный дед двоюродный дед по материнской линии двоюродный дед по отцовской линии
great grandparents	The parents of any of your grandparents.	Прабабушка (great grandma) прадед (great grandfather) (no separate gender-neutral word in Russian) See comment above under "grandparents".
great grandmother	The mother of any of your grandparents.	прабабушка
great grandfather	The father of any of your grandparents.	прадед
siblings	The children of your father and mother.	родные братья и сестры (no separate gender-neutral word in Russian) If you talk about siblings (i.e. Do you have any siblings?), you should use <u>"родные братья и сестры"</u> since there is no dedicated word for siblings in Russian. Otherwise use: Родной брат – Brother

Term	Definition	Equivalent or Paraphrase
		<p>Родная сестра - Sister</p> <p>Note that while it is possible to omit the first word (родной), you should use it if you want to make a special point about them being the children of the same mother and father, because Russian uses брат and сестра for cousins as well (see Cousins entry above).</p>
twins	A sibling born at the same time as you.	близнецы
identical twins	A twin that developed from the same egg and sperm as you, meaning that you are genetically identical.	однойцевые близнецы
fraternal twins	A twin who developed from a different egg and sperm than you, meaning that you are genetically different and have the same amount of shared genes as any sibling.	разнойцевые близнецы
triplets	Two siblings born at the same time as you.	тройняшки
sister	A sibling who is a girl.	сестра
sister-in-law	Your brother's wife.	невестка
half sister	A girl who is the either the child of your father with a different mother, or the child of your mother with a different father.	единокровная сестра (same father)
		единоутробная сестра (same mother)
step-sister	The daughter of your step-mother or step-father and therefore not biologically related to you.	сводная сестра
brother	A sibling who is a boy.	брат

Term	Definition	Equivalent or Paraphrase
brother-in-law	Your sister's husband.	зять
half brother	A boy who is the either the child of your father with a different mother, or the child of your mother with a different father.	единокровный брат (same father) единоутробный брат (same mother)
step-brother	The son of your step-mother or step-father and therefore not biologically related to you.	сводный брат
niece	Your sibling's daughter.	племянница
nephew	Your sibling's nephew.	племянник
spouse	Your husband or wife.	супруг (husband) супруга (wife)
wife	The woman to whom you are married.	жена
husband	The man to whom you are married.	муж
children	Genetically speaking, the people who are produced from your egg or sperm.	дети
daughter	Your child who is a girl.	дочь
daughter-in-law	Your son's wife.	сноха
step-daughter	Your spouse's daughter who is not your biological child.	падчерица
adoptive daughter	A girl for whom you have accepted legal responsibility and raised even though she is not your biological child.	приемная дочь
god-daughter	A girl for whom you have accepted spiritual responsibility within a ceremony of the Catholic church; she may or may not be biologically	крестная дочь

Term	Definition	Equivalent or Paraphrase
	related to you.	
son	Your child who is a boy.	сын
son-in-law	Your daughter's husband.	зять
step-son	Your spouse's son who is not your biological child.	пасынок
adoptive son	A boy for whom you have accepted legal responsibility and raised even though he is not your biological child.	приемный сын
god-son	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.	крестный сын
ancestor	A person from whom you are descended, usually more remote than a grandparent.	предок
fiancé(e)	The person whom you have promised to marry. Man: fiancé Woman: fiancée	жених (man) невеста (woman)
domestic partner	The person with whom you are living and have an intimate relationship, but to whom you are not married.	сожитель (man) сожительница (woman)
divorced	Having ended a marriage.	разведен (man) разведена (woman)
engaged	Having promised to marry someone.	помолвлен (man) помолвлена (woman)
widow	A woman whose husband has died.	вдова
widower	A man whose wife has died.	вдовец
relative	A person in your family.	родственник

Term	Definition	Equivalent or Paraphrase
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 step-mother; your daughter but not your adopted daughter.	кровный родственник
next-of-kin	Your closest living blood relation.	близкий родственник

Common interpreting errors

Source speech	Interpreted as	More accurate rendition
“Cancer just happens by chance.”	“Cancer happens suddenly.” “Cancer happens because you are unlucky. “	“Sometimes we don’t know what causes cancer. “
cancer genes	cancer cells	genes that may cause cancer when altered (mutated)
“You are at higher risk for developing cancer.”	getting cancer	There is a greater possibility that you might get cancer
“These genes protect us against cancer.”	“They protect us, like the immune system . . . They kill cancer cells . . .”	“These genes help us to not get cancer.”
colonoscopy	scan	

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.”

“In the DNA there are molecule strings – **like** in this picture, each letter is a different molecule string.”

“So a mutation is **like** a broken gene.”

“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** if you are reading a book = and you notice that a word is spelled wrong; that is what this genetic test looks for.”

Genetic counselors may mix the analogy in with more literal descriptions:

Example:

“We know that there are two in particular that when they don’t work right, **when there’s a typo in the instruction manual**, they can cause a high risk for breast and ovarian cancer.”

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 are 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).