KEYTRUDA: (Pembrolizumab)

While the makers of Keytruda may represent this drug as a miracle treatment for cancer, many people who have used Keytruda have been burdened with serious side effects that harm them even more than their cancer.

After experiencing the negative effects of this drug for themselves, a growing group of former Keytruda patients has taken it upon themselves to seek compensation for their pain, and it's not too late to receive justice if you have also been harmed by Keytruda.

Whether you've experienced the deleterious effects of this cancer drug for yourself or you want to be as educated as possible on the potential downsides of this drug before you use it, read on to learn everything you need to know about Keytruda, its side effects, and the effort currently underway to receive compensation from the manufacturers of this medication.

What Is Keytruda?

Keytruda is a brand name of pembrolizumab, which is a novel pharmaceutical cancer treatment. This drug is produced by Merck, which is one of the largest pharmaceutical companies in the world. The FDA approved Keytruda for consumer use in 2014, and Merck benefited from the FDA's accelerated approval regulations during the approval process for this drug.

As of 2018, this drug is approved for a number of different types of cancer, and research is underway that Merck hopes will serve as the basis for approval of this drug for even more purposes.

Pembrolizumab was originally developed by a pharmaceutical company called Organon in 2006, and when this company was acquired by Schering-Plough in 2007, interest in applying the finishing touches to this drug for consumer sale remained high.

After Merck acquired Schering-Plough in 2009, however, interest in pembrolizumab slackened until scientists in the UK realized that a similar drug seemed to be a promising treatment for melanoma. Even though Merck didn't have much experience in cancer treatments at the time, they jumped at the opportunity to create a drug that would ride on the coattails of the success that the British scientists had enjoyed.

Testing for this drug was specifically targeted to patients who were deemed likely to have a positive response to pembrolizumab, and this drug was designated as a breakthrough treatment in 2013. Currently, Keytruda is approved for sale in Japan, Europe, and the United States. Eyebrows were raised, however, when Merck unveiled the price for their new cancer wonder drug: $150,000 per year.

Recommended Keytruda Dosage

Keytruda is an intravenous drug, and it isn't available for home use. Instead, patients must visit their oncologist every three weeks and receive this drug as an intravenous infusion. While most intravenous drugs are applied with a single injection, the standard 200 mg Keytruda dose must be applied over the course of 30 minutes.

An oncologist will end Keytruda treatment if cancer progresses beyond reasonably treatable levels or the drug builds up to unacceptably toxic levels in the patient's body. Keytruda treatment will also be ended if 24 months pass without the drug providing any notable results. If Keytruda is used in

combination with chemotherapy, this drug should be administered before chemotherapy if both treatments are being used on the same day.

How Much Does Keytruda Cost?

Merck markets their supposed cancer wonder drug for $12,500 per month, which means the annual cost for this treatment is $150,000. However, most consumers don't end up paying this entire cost; various insurance plans may mitigate the cost of Keytruda, and certain patient assistance programs may also absorb some of this incredibly high price. However, unless they are able to find some sort of financial assistance with treatment, most consumers will be incapable of paying the cost of this treatment, which means that Keytruda treatment is only possible for the very wealthy without help.

Intended Effects of Keytruda

The intended effect of Keytruda is to slow the advance of cancer in the human body. Keytruda is not a form of chemotherapy or radiation therapy; on the contrary, it is a type of immunotherapy that is intended to boost the immune system's capacity to battle certain types of cancers.

Essentially, the purpose of Keytruda is to make your immune system hyperactive in the hopes that this hyperactivity will help your immune T cells track and destroy cancer cells.

Many types of cancers bind to a type of protein called programmed death receptor-1 (PD-1), which is located on the lymphocytes throughout your body. PD-1 is an immune checkpoint, which means that it prevents the immune system from attacking healthy cells in your body.

When cancers attach to PD-1, they are allowed to proliferate because the immune system doesn't notice them, and by binding to these proteins, Keytruda makes it harder for cancer cells to hide from your immune system.

However, it goes without saying that PD-1 serves an important purpose in your body, and when it is blocked, it becomes more likely that your immune system will attack healthy cells. In fact, this is the most common complaint regarding pembrolizumab; in the course of "unmasking" cancer cells so that your immune system can target them, it also confuses your immune system into believing that healthy cells pose an immediate threat.

Even long after a patient discontinues Keytruda treatment, they may still encounter PD-1 dysfunction, which means that their immune system may remain hyperactive and attack healthy tissues for years after they stop using this treatment.

Keytruda Drug Interactions

Keytruda is known to interact with three medications. This drug interacts negatively with lenalidomide (Revlimid), pomalidomide (Pomalyst), and thalidomide (Thalomid). If you are currently using any of these drugs, your doctor will most likely recommend that you do not use Keytruda. Pembrolizumab is also known to interact with high blood pressure since certain infusion reactions are known to cause adverse effects in relation to hypertension.

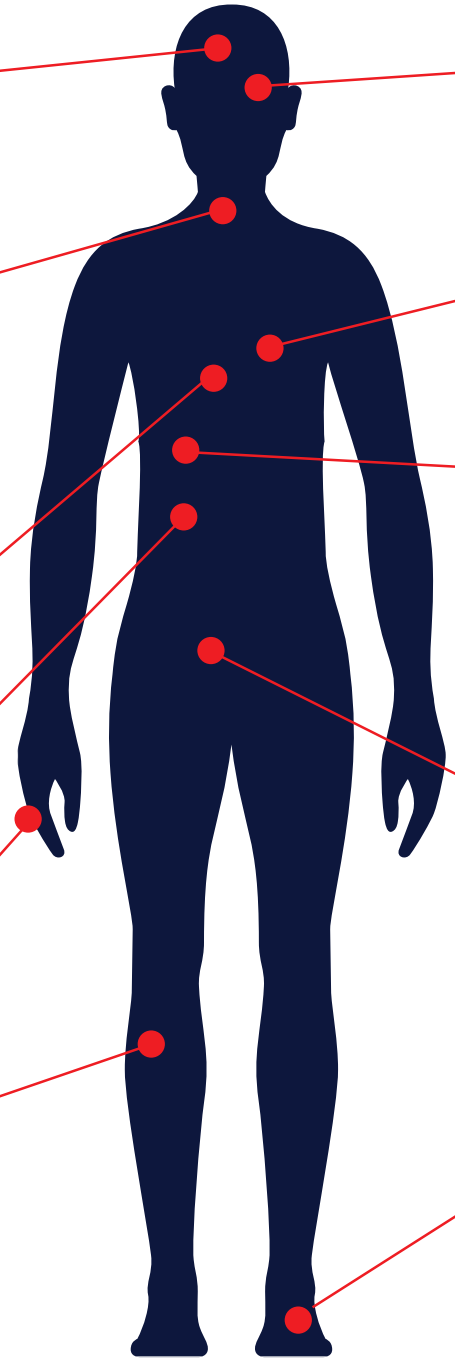
Keytruda is known to have certain disease interactions with the following conditions: infections, infusion reactions, tumor lysis syndrome, colitis, diabetes, liver impairment, multiple myeloma, pneumonitis, renal dysfunction, and thyroid disease.

The Grace Gawler Institute for Cancer Survivorship and Research

Understanding Immunotherapy Side Effects

Immune checkpoint inhibitors (a type of immunotherapy) offer a promising new way to treat cancer for some patients. But these medicines can occasionally cause your immune system to attack normal organs and tissues in your body, affecting the way they work. Serious side effects typically occur in less than 5% of patients, but certain mild side effects can occur in up to 30% – 50% of patients.

Contact your health care professional right away if you think you may be experiencing . . .



Brain inflammation (encephalitis)
Fever; confusion; changes in mood or behavior; neck stiffness; seizures; extreme sensitivity to light.

Hormone gland problems (especially the thyroid, pituitary, adrenal glands, pancreas)
Persistent or unusual headaches; extreme tiredness; weight loss or gain; rapid heartbeat; increased sweating; hair loss; constipation; dizziness or fainting.

Lung problems (pneumonitis)
New or worsening cough; shortness of breath.

Kidney problems
Decrease in the amount of urine; blood in the urine.

Skin problems
Rashes; itching; blistering; painful sores or ulcers.

Joint or muscle problems
Severe or persistent muscle or joint pain; severe muscle weakness.

Eye problems
Blurry or double vision or other vision problems; eye pain or redness.

Heart problems (myocarditis, arrhythmia)
Inflammation of the heart muscle; irregular heartbeat.

Liver problems (hepatitis)
Yellowing of the skin or the whites of the eyes; severe nausea or vomiting; pain on the right side of the stomach area; dark urine; bleeding or bruising more easily than normal.

Intestinal problems (colitis)
Diarrhea or more bowel movements than usual; stools that have blood or are dark, tarry, or sticky; severe stomach-area pain.

Nerve problems
Numbness or tingling in hands or feet; unusual weakness in legs, arms, or face.

Keytruda Indications

An indication is a reason why a doctor will recommend that you use a particular drug. In their approval paperwork for Keytruda, the FDA has included a number of different official indications for the use of pembrolizumab. This regulatory body has approved Keytruda for use in instances of melanomas that cannot be surgically removed or that have metastasized, and it approved this treatment for instances of non-small cell lung cancer (NSCLC).

This drug is also seen as a valid treatment for head and neck squamous cell cancer (HNSCC), classical Hodgkin lymphoma (cHL), urothelial carcinoma, microsatellite instability-high cancer, gastric cancer, and cervical cancer. If you suffer from any of the above conditions, your doctor may recommend that you use Keytruda.

Keytruda Contraindications

Contraindications are reasons why you shouldn't use a drug. If you're currently using corticosteroids or immunosuppressants, for instance, it's recommended that you stop using these drugs before starting Keytruda treatment, but you can start using immunosuppressants again after you start Keytruda treatment to help mitigate the negative effects of this drug.

In addition, women who are pregnant should not use Keytruda, and women who are of child-bearing age should always use contraception while they're undergoing this treatment.

If a woman uses this drug while she is pregnant, it becomes more likely that she will suffer a miscarriage, and since the effects of pembrolizumab on breastfeeding infants are not known, women should also abstain from using this treatment if they are currently breastfeeding.

Since this drug has not been tested on people who have previously suffered from a number of diseases that adversely affect the immune system, you should consult with your doctor if you've ever had HIV, hepatitis, kidney disease, pneumonia, or any severe reactions to other monoclonal antibodies.

Drug Warnings for Keytruda

The FDA released a number of drug warnings for Keytruda as part of the approval process. In general, these warnings pertain to the potential dangers to your immune system that this drug can pose, and they also cover most of the effects that will be addressed in the side effects section. It's important to note, however, that the FDA reiterates their warning that pregnant women should not use Keytruda under any circumstances.

Side Effects of Keytruda

Using Keytruda can cause an incredible array of side effects. While some of these side effects are relatively mild, many of them are quite deadly, and they may kill you much faster than cancer. Some examples of the side effects that can be caused by Keytruda include:

Immune-Mediated Pneumonitis

Pneumonitis is a type of lung inflammation that is usually caused by a virus, but it can also be caused by a dysregulation of the immune system. While inflammation can often get out of hand, it is actually a natural function of the immune system, and when you stub your toe, for instance, inflammation is a critical part of healing your tissues. However, chronic inflammation occurs when

your body thinks that there is a need to heal tissue when there isn't, and immune hyperactivity can also cause inflammation that otherwise wouldn't occur.

The main function of Keytruda is to boost the effects of your immune system, so it's only natural that this drug would cause immune-related (immune-mediated) inflammatory conditions.

Pneumonitis can make it hard to breathe, and it can ultimately lead to serious infections or even death. Some patients take immunosuppressants in conjunction with Keytruda to reduce the impact of immune-mediated conditions such as pneumonitis, but these drugs can often cause complications of their own.

Immune-Mediated Hepatitis

While most types of hepatitis are caused by viruses, liver disease can also be caused by a hyperactive immune system. When you use Keytruda, your immune system may become convinced that your liver presents a danger to your health, and it may react by breaking down your liver tissues. Over time, this effect can lead to a total loss of liver function.

Immune-Mediated Colitis

Colitis is the technical term for ulcers in the colon, and this condition can lead to serious infections that could become life-threatening. Immune-mediated colitis is caused when the immune system believes that your colon tissue is a threat and breaks it down, and you can contract immune-mediated colitis when you take Keytruda due to this drug's immune-boosting effects.

Immune-Mediated Endocrinopathies

Keytruda can cause serious problems with your endocrine system. This hormonal system regulates a number of different bodily functions, but Keytruda can confuse your immune system to the point that it attacks the various organs and glands that regulate your delicate endocrine balance. One type of endocrine dysregulation that Keytruda can cause is called hypophysitis, and this condition is a dysregulation of the pituitary gland that can cause muscular weakness, nausea, and sexual dysfunction.

Thyroid Problems

Keytruda can also cause thyroid problems such as hypothyroidism, hyperthyroidism, and thyroiditis. The thyroid gland regulates your energy levels and metabolism, and it also regulates your mood. Damage to your thyroid can cause you to gain or lose weight, and it can also cause types of emotional instability such as depression.

Immune-Mediated Nephritis and Kidney Dysfunction

Keytruda can also damage your kidneys. It can cause your kidneys to become highly inflamed, and over time, it can lead to a decrease in kidney function or even total kidney failure. If your kidneys fail, you may need to use dialysis treatment.

Immune-Mediated Skin Problems

Researchers and consumers have also noted that Keytruda can cause skin conditions related to immune hyperactivity. Examples of skin diseases that have been caused by this drug include Stevens-

Johnson syndrome, which involves skin blistering and peeling, and exfoliative dermatitis, which causes scales of dead skin to appear on various parts of your body.

General Immune-Mediated Problems

In general, Keytruda causes your immune system to become hyperactive, which can cause a whole slew of different conditions that don't occur when you have a healthy immune system. Examples of the immune-related conditions that can occur when you use this drug include myositis, myasthenia gravis, pancreatitis, sarcoidosis, and encephalitis.

In addition, the immune effects caused by Keytruda can cause your body to reject organ transplants since the immune system plays a big role in determining whether the body will accept a transplanted organ.

Infusion-Related Problems

Some patients may react negatively to the infusion mechanism that is used to administer Keytruda. For instance, some patients have reported reactions such as hypersensitivity and anaphylaxis, and symptoms of infusion-related conditions include wheezing, pruritus, flushing, hypoxemia, and fever.

Later Use of Allogeneic HSCT Therapy

Disturbingly, some patients who used allogeneic hematopoietic stem cell transplantation (HSCT) after trying Keytruda have died.

Combinations with Thalidomide and Dexamethasone

Increased mortality has been noted in patients who added Keytruda to thalidomide treatment.

Fetus Hazards

Animal testing determined that Keytruda can cause damage to infants in utero. While it doesn't appear that Keytruda can cause any birth defects, it can interfere with the way that the body handles pregnancy. Much in the same way that your immune system will turn against healthy tissues if it’s signaling mechanisms are interrupted by Keytruda, this drug can also cause your body to reject the pregnancy and cause miscarriage.

General Adverse Effects

In addition to these serious side effects that have been noted in association with Keytruda, this drug also causes a number of effects that can be categorized into general malaise. For instance, Keytruda can cause bloating of the limbs, widespread bodily aches, and chills.

This drug can also cause constipation, ear congestion, depression, and breathing difficulties. Some patients lose a significant degree of motor function after they use this drug, and other pembrolizumab users also experience fevers and headaches. Hair loss is another common side effect of Keytruda, and even if patients don't lose their hair, they usually experience significant hair and skin dryness.

Some patients may lose their voice after using Keytruda, and they may experience joint pain. Skin paleness, rapid weight gain, slowed heartbeat, and tingling in the hands and feet are also common side effects of this drug, and some symptoms that are considered to be less common include extreme sensitivity to heat and cold and sleep issues. In extreme circumstances, patients may also

lose their vision or notice that their urine becomes darker after using this drug. Nosebleeds, seizures, vomiting, and symptoms of jaundice are further examples of rare, but serious, side effects of this drug.

The Keytruda Controversy

Merck has been embroiled in significant controversy regarding the way that they represent this drug in advertisements. Most ads for Keytruda feature healthy, smiling people getting back into the swing of things and enjoying valuable moments with their families.

However, these actors don't even come close to representing the way that most people who use Keytruda feel; they're often extremely sick and in serious pain due to the side effects of this drug. Even Keytruda's slogan seems to insult patients who have used this drug and experienced detrimental effects: "A chance to live a longer life. It's TRU."

The price that Merck demands forKeytruda has also been a concern of consumers and consumer advocacy groups. Pharmaceutical companies are well aware of the fact that desperate people close to death will pay dearly for a chance to cling to life a little bit longer, and it's often the drugs that are designed for terminal patients that are the most expensive.

This trend can't entirely be explained by graft; drugs for serious conditions like cancer often cost more to develop and produce than other types of treatments for less life-threatening conditions. However, publicly traded companies like Merck are more beholden to their shareholders than they are to consumers, and their quarterly profits matter much more to them than the number of lives they save per year.

Again and again, pharmaceutical companies have been caught padding the costs of potentially life-saving drugs, and one of the common excuses that they use is that they need excess profits to pay for continued innovation. However, as patients see their entire life savings evaporate to pay for a drug that just leaves them sicker than they were before, it's natural for discontent to emerge.

Legal Action Against Keytruda

Merck has received significant legal flak over the way that they handled the clinical trials for Keytruda. These trials were extensive and comprehensive, and they involved hundreds of different cancer patients who wanted to try a novel drug that might improve their condition. However, according to the Center for Responsible Science (CRS), Merck didn't properly inform their trial participants of the potential dangers of the drug.

Instead of targeting Merck directly, CRS has filed a lawsuit against the FDA for allowing these unsafe trials to occur. This mass lawsuit was filed in 2017 on behalf of a number of plaintiffs who were adversely affected by these drug trials, and one of the plaintiffs included the father of 24-year-old Max Vokhgelt, who died two days after trying an experimental cancer therapy.

In the case of Mr. Vokhgelt, investigators discovered that certain toxicity issues can only be determined by testing on humans, and Max was tested for toxicity without his informed consent. Therefore, he was exposed to types of drugs that were more toxic than he could have expected, and his father believes that it was these toxicity tests that led to his death.

In addition, there has been a significant degree of dispute over the patent for Keytruda. Even though the rights to this drug were acquired by Merck as part of their acquisition of Schering-Plough, the

scientists who originally made the drug have contested the status of the patent for Keytruda. This patent dispute is ongoing, and it features a highly tangled web of ownership claims.

After additional clinical trials were conducted to determine the safety of Keytruda for types of cancer beyond its original indications, the FDA issued a warning that this drug could kill patients if it were used in combination with other therapies.

This FDA warning has led to an uptick in the rate of lawsuits filed against Merck for side effects associated with Keytruda. If you've been harmed by this drug, now is the right time to make your voice heard and seek compensation.