

Treating the <u>root cause</u> of wounds in dystrophic epidermolysis bullosa (DEB)



Look inside this guide to:

- Find out what gene therapy for DEB could mean for you
- See how VYJUVEK works at the genetic level to promote wound healing



Learn more about VYJUVEK

- Studied in clinical trials since 2018
- Some patients have been treated with VYJUVEK since 2020

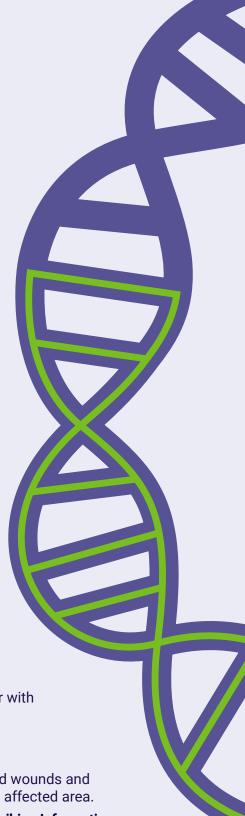
INDICATION AND USAGE

VYJUVEK is a topical gel used to treat wounds in patients 6 months and older with dystrophic epidermolysis bullosa (DEB).

IMPORTANT SAFETY INFORMATION

VYJUVEK gel must be applied by a healthcare provider.

After treatment, patients and caregivers should be careful not to touch treated wounds and dressings for 24 hours. If accidentally exposed to the VYJUVEK gel, clean the affected area.



Genes: What are they and what do they do?

Genes are found inside every cell of our body. They are passed from parents to their children and contain instructions for everything that goes on in your body, including what you look like (such as eye color) and how your body works.

Each gene contains instructions for a specific protein. Proteins are the building blocks for everything in your body and each protein has a specific function.

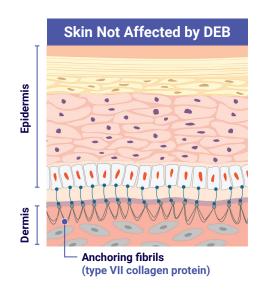
Sometimes, a "gene variant" can occur, which means that a gene has a change in the instructions it carries. When this happens, the related protein may be missing or not work the way that it should. A nonworking or missing protein can cause a genetic condition, such as DEB.



Wound healing and the COL7A1 gene

In most people, a gene called *COL7A1* carries instructions for making a protein called **type VII collagen (type 7 collagen)**. This protein helps form the anchoring fibrils that help hold the skin together.

- Anchoring fibrils bind the inner skin layer (dermis) to the outer skin layer (epidermis)
 - This is critical for strong skin and wound healing



IMPORTANT SAFETY INFORMATION (CONT'D)

Wash hands and wear protective gloves when changing wound dressings. Disinfect bandages from the first dressing change with a virucidal agent and dispose of the disinfected bandages in a separate sealed plastic bag in household waste. Dispose of the subsequent used dressings in a sealed plastic bag in household waste.

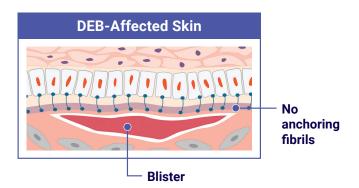
Patients should avoid touching or scratching wound sites or wound dressings.

People with DEB have a nonworking or missing COL7A1 gene

DEB is caused by a *COL7A1* gene variant. This means that people with DEB have cells that can't make enough functioning type 7 collagen. This can reduce the number of anchoring fibrils, sometimes down to zero.

When people don't have enough anchoring fibrils in their skin, their layers of skin can easily separate when the skin rubs against something

The result is fragile skin that has blisters and wounds easily





I like to think about it like this: If our skin is grass and the layer underneath is the dirt, I'm missing the roots of the grass that hold the skin down so that the grass doesn't come right off when people walk on it. I'm missing the thing that holds the skin together. With any minor trauma, my skin can just peel right off.

Emily, living with DEB

What is gene therapy?

Scientists have been studying gene therapy for many conditions since the late 1980s.

In general, gene therapy targets the underlying gene variant in order to treat conditions. This can be done in several different ways, by:

- ▶ Replacing a disease-causing gene with a healthy copy of the gene
- Turning off a disease-causing gene that is not working properly
- Adding a new or modified gene to help treat a condition

VYJUVEK is a gene therapy that adds working *COL7A1* genes directly to skin cells.



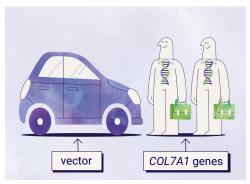
VYJUVEK is the FIRST and ONLY topical gene therapy for DEB

VYJUVEK works by introducing working copies of *COL7A1* genes into skin cells of DEB wounds. This helps skin cells make type 7 collagen protein and form anchoring fibrils.

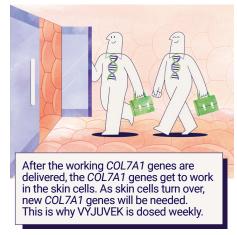
But how does VYJUVEK get COL7A1 genes into skin cells?

VYJUVEK uses something called a "vector" to carry working copies of the *COL7A1* genes into the skin cells that do not have them.

You can think of a vector as a car that helps the *COL7A1* genes get to where they need to go







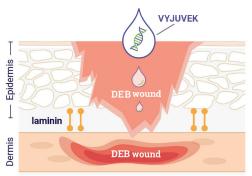
In gene therapy, viruses are commonly used as vectors because they have natural features that allow them to carry genes into cells. VYJUVEK uses a vector that is a modified form of herpes simplex virus (HSV). This modified form does not cause infection or change your DNA. The HSV vector is used for VYJUVEK because it has the ability to:

- ▶ Deliver the *COL7A1* gene into the skin cells
- Carry large genes, such as COL7A1
- Enter skin cells easily

- ▶ Not be affected by the immune system
 - This means VYJUVEK can be applied weekly to promote wound healing

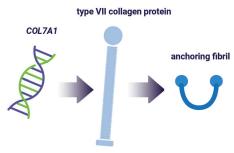
VYJUVEK will not cause a herpes infection. The herpes virus used for VYJUVEK has been modified to remove the parts that allow it to multiply and cause infection. Safety for VYJUVEK was evaluated in the clinical trial and no patients in the trial had active HSV infections.

VYJUVEK is applied directly to wounds to promote healing



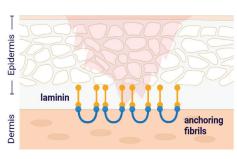
Open wound on skin affected by DEB

VYJUVEK delivers new *COL7A1* genes directly to skin cells in DEB wounds.



New genes form anchoring fibrils

These *COL7A1* genes restore the ability of those cells to make functional **type VII collagen** protein and form **anchoring fibrils**.



Skin treated with VYJUVEK

Anchoring fibrils bind the inner skin layer (dermis) and outer skin layer (epidermis) together and promote wound healing.

VYJUVEK helps promote strong and stable wound healing by forming anchoring fibrils that bind the layers of the skin together. The result? Lasting and complete wound closures for most patients.



Having the treatment available has cut down the healing time and helped me heal faster.

Vanessa, on VYJUVEK since 2019



IMPORTANT SAFETY INFORMATION (CONT'D)

The most common adverse reactions (>5%) were itching, chills, redness, rash, cough, and runny nose. These are not all the possible side effects with VYJUVEK. Call your healthcare provider for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088 or to the Sponsor at 1-844-557-9782.





Krystal Connect—our personalized patient support program—is here to help you throughout your treatment journey

Whether you're considering treatment, ready to start, or looking for more information about DEB, Krystal Connect is here to help



For more information, visit VYJUVEK.com or call 1-844-5-KRYSTAL



IMPORTANT SAFETY INFORMATION (CONT'D)

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