



FDA Advisory Committee for exagamglogene autotemcel (Exa-cel) Gene Therapy for SCD

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Sick Cells Webinar - October 9th, 2023

Housekeeping

- Today's webinar is being recorded.
- During the meeting, please minimize your distractions.
- Mute your mic when you aren't speaking.
- We are encouraging video participation to make our group feel more engaged during discussions.
- The recording will be available on the Sick Cells YouTube Channel.

Agenda

- Background of FDA Advisory Committees
- The Importance of FDA Advisory Committees
- History of FDA Advisory Committees for Sickle Cell Disease
- FDA Advisory Committee for Exa-cel Gene Therapy

Background

What is an FDA Advisory Committee?

- The Food and Drug Administration (FDA) is responsible for evaluating the **efficacy and safety** of new therapies.
 - Sometimes requires outside expertise
- The FDA Advisory Committee (Ad Comm) is composed of **outside experts** to help the FDA come to a conclusion of therapy approval.
 - Provide advice on the **safety, efficacy, and appropriate use of products**.
- There are **49** FDA Advisory committees.

Background

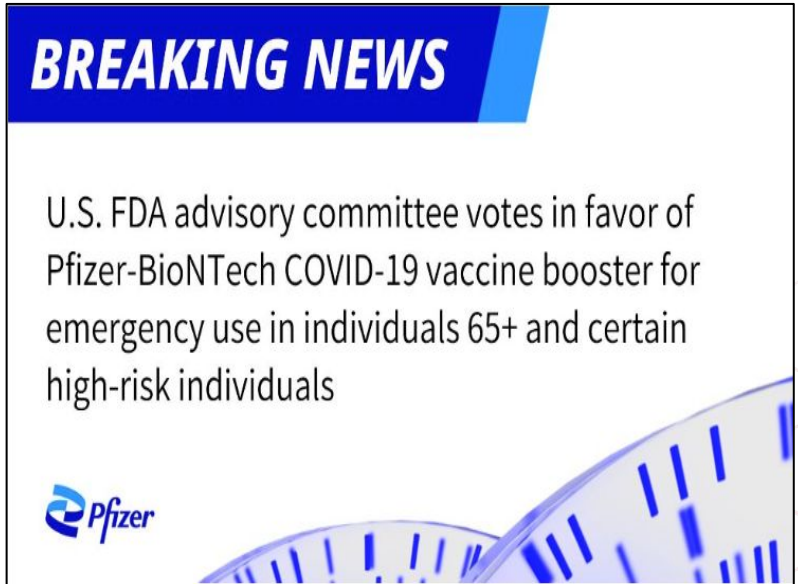
Why does the FDA use advisory committees?

- To include independent experts that work outside of the government
- Work towards an open government by giving the public a voice
- **Encourages patients, caregivers, healthcare professionals, and many more from the public to share their experiences and submit comments.**

Background

When does the FDA use advisory committees?

- The FDA can choose any time during or after the **approval process** to convene an advisory committee.
- When there is **insufficient** scientific evidence of a therapy during clinical trials.
- When a pharmaceutical company applies for accelerated approval or **Fast Track**.



Vaccine Related Biological Products Advisory Committee (VRBPAC)

FDA Applications and Designations

- **Application Types**

- Investigational New Drug (IND) Application.
- New Drug Application (NDA)
- Abbreviated New Drug Application (ANDA)
- **Biologics License Applications (BLA)**
- Drug Applications for Over-the-Counter (OTC) Drugs.

- **Designations**

- **Priority Review**
 - The FDA's goal is to decide on an application within 6 months.
- Breakthrough Therapy
- Accelerated Approval
- Fast Track

Background

Who makes up the FDA advisory committees?

- **Scientific Experts**
 - Researchers, biologists, chemists, clinician-researchers
- **Consumer Representative**
 - Knowledge of consumer rights and needs
- **Industry Representative**
 - May or may not have the ability to vote
 - Present how specific issues can affect the industry
- **FDA Patient Representative**
 - Recruited through the FDA Patient Representative Program
 - Provide input and share disease and treatment experiences

The Importance of an FDA Advisory Committee

“These meetings often represent the FDA's first public discussion of a new medical product and can be an invaluable source of information for patients, health care providers, and others who are interested in the product.”

-Linda Ann Sherman, M.D., M.P.A., former director of the FDA's Advisory Committee Oversight and Management Staff.

Center for Drug Evaluation and Research. “Advisory Committees: Critical to the FDA’s Product Review Process.” *U.S. Food and Drug Administration, FDA*, 4 May 2016, www.fda.gov/drugs/information-consumers-and-patients-drugs/advisory-committees-critical-fdas-product-review-process.

Primary Roles of the FDA Advisory Committee

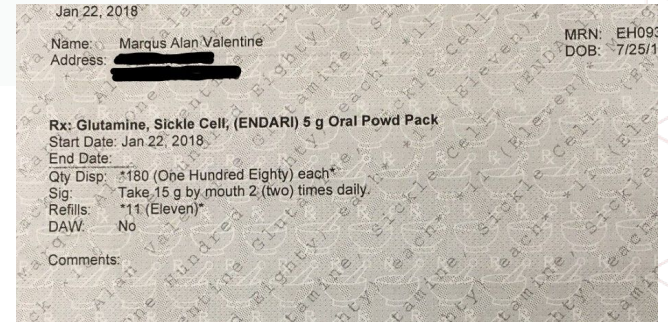
- Provide **independent** expert advice as the FDA evaluates products.
- **Review** and **evaluate** safety, effectiveness, and appropriate use data.
- Discussions are to help ensure the public is clear about the **FDA's expectations**.
- This process and **transparent, independent, and open to the public**.

History of FDA Advisory Committees for Sickle Cell Disease

- Hydroxyurea[®]
- Endari[™] (L-glutamine)
- FDA Advisory Committee information for other SCD therapies

FDA Advisory Committee Recommends Approval of Endari[™] from Emmaus Life Sciences for the Treatment of Sickle Cell Disease

Thursday, May 25, 2017



Hydroxyurea[®]: December 1997

The first FDA advisory committee convening for SCD therapy.

- The advisory committee voted on a **unanimous** decision on recommended approval of hydroxyurea.
- The panel advised on conducting further studies on carcinogenicity.
 - FDA added on the label to require blood counts to be measured every 2 weeks.

Alicia Ault, US FDA approves first drug for sickle-cell anaemia, The Lancet, Volume 351, Issue 9105, 1998, Page 809, ISSN 0140-6736, [https://doi.org/10.1016/S0140-6736\(05\)78941-8](https://doi.org/10.1016/S0140-6736(05)78941-8). (<https://www.sciencedirect.com/science/article/pii/S0140673605789418>)

Endari™: May 24, 2017

First SCD drug to be approved after 20 years and for pediatrics.

- **Marqus and Ashley Valentine, Juanita G, and Mary Brown** were speakers for the Oncologic Drug Advisory Committee (ODAC).
- The committee voted 10-3.
- **Approved July 7th, 2017.**



FDA Ad Comm not required for Oxbryta[®]

- Oxbryta[®] (voxelator) applied for accelerated approval on June 26, 2019.
 - Approved November 25, 2019.
- Advisory Committee was not required due to **significant evidence on safety and efficacy** during clinical trials.

FDA Ad Comm not required for Adakveo[®]

- Adakveo[®] (crizanlizumab-tmca) applied for priority review on May 16, 2019.
 - Approved November 15, 2019.
- Advisory Committee was not required due to **significant evidence on safety and efficacy** during clinical trials.

Lovo-cel from BlueBird Bio will not require an FDA Advisory Committee

- Bluebird Bio's gene therapy for SCD, **Lovo-cel**, applied for **priority review** for FDA approval.
- Advisory committee is not recommended from the FDA.
 - Previous FDA committees have **unanimously** recommended on the approval of BlueBird Bio gene therapies for Beta-Thalassemia.
- Prescription Drug User Fee Act (**PDUFA**) date: Deadlines for the FDA to respond to the application.
 - 10 months after the drug application has been accepted by the FDA
 - 6 months, if the drug is given a priority review.
 - **PDUFA date for Lovo-cel: December 20, 2023.**



FDA Advisory Committee for exagamglogene autotemcel (Exa-cel) Gene Therapy

The [Cellular, Tissue, and Gene Therapies Advisory Committee](#) will convene for the Vertex Pharmaceuticals, Inc. **priority** review for exagamglogene autotemcel (**Exa-cel**) on **October 31, 2023.**

Meeting Materials

- Background material will be available to the public no later than **2 business days** before the meeting (October 31, 2023).
- Background material will be available on the [Advisory Committee Calendar](#) (select “Cellular, Tissue, and Gene Therapies Advisory Committee”)

Public Participation

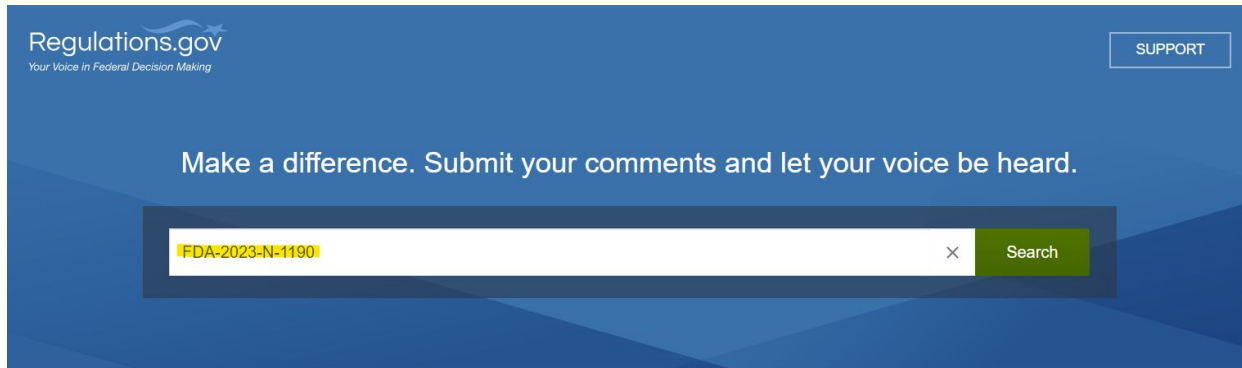
- The meeting will be recorded and [broadcasted](#) live from **9:00 am - 5:00 pm EST**.
- The public can submit comments:
 - Comments received **on or before October 24th** will be provided to the committee to be read during the meeting.
 - Comments received after that date until October 30th will go to the FDA and will be taken into consideration.
- **Electronic Submissions**
 - Portal: <https://www.regulations.gov/>
- **Written/Paper Submissions**
 - Mail: Dockets Management Staff (HFA-305), Food and Drug Administration, 5630 Fishers Lane, Rm. 1061, Rockville, MD 20852.

Oral Presentations

- Oral presentations from the public will be scheduled between approximately **12:35 p.m. and 1:35 p.m. Eastern Time.**
 - Approximately 3-5 minutes each for each speaker
- Submit a brief statement along with their **names, e-mail addresses, and direct contact phone numbers, and an indication of the approximate time requested to make their presentation by 12 p.m. Eastern Time on October 16, 2023.**
 - Speakers will receive a confirmation to speak by October 18, 2023 6 p.m. EST.
 - All submissions (written and oral) **must** include the following information:
 - **Docket No. FDA-2023-N-1190 for Cellular, Tissue, and Gene Therapies Advisory Committee; Notice of Meeting; Establishment of a Public Docket; Request for Comments-Sickle Cell Disease, Meeting Date: October 31, 2023**
- Speaker registration, please contact **Cicely Reese or Marie DeGregorio**
CBERCTGTAC@fda.hhs.gov

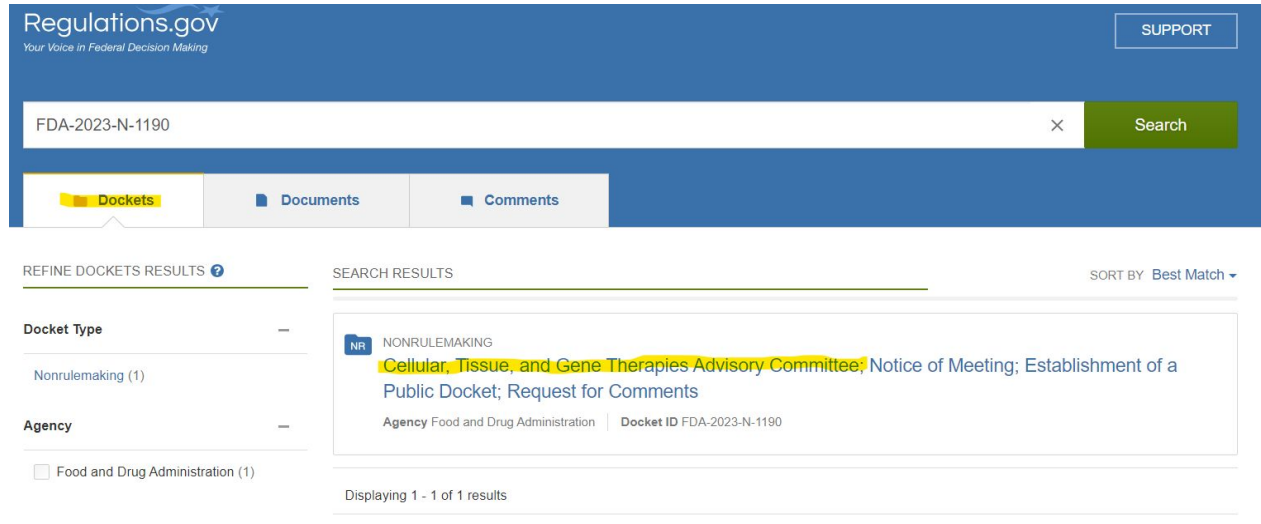
How to Submit an Electronic Submission for Public Comments

- **Step 1:** Access the electronic submission [portal](https://www.regulations.gov/) (<https://www.regulations.gov/>).
- **Step 2:** Copy the docket number (**FDA-2023-N-1190**) and enter it into the search function.



How to Submit an Electronic Submission for Public Comments Cont.

Step 3: Click the “Dockets” tab, you will then see the advisory committee “Cellular, Tissue, and Gene Therapies Advisory Committee; Notice of Meeting; Establishment of a Public Docket; Request for Comments”.



The screenshot shows the Regulations.gov website interface. At the top, there is a search bar containing the text "FDA-2023-N-1190" and a green "Search" button. Below the search bar, there are three tabs: "Dockets" (which is highlighted in yellow), "Documents", and "Comments".

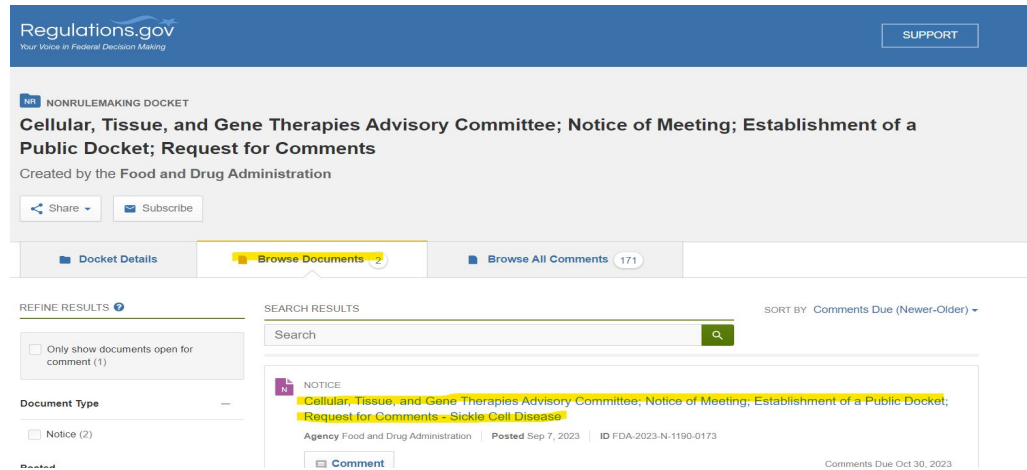
Below the tabs, there are two columns. The left column is titled "REFINE DOCKETS RESULTS" and contains two sections: "Docket Type" with a dropdown menu showing "Nonrulemaking (1)", and "Agency" with a dropdown menu showing "Food and Drug Administration (1)".

The right column is titled "SEARCH RESULTS" and contains a single result. The result is a "NONRULEMAKING" docket with the title "Cellular, Tissue, and Gene Therapies Advisory Committee; Notice of Meeting; Establishment of a Public Docket; Request for Comments". Below the title, it shows "Agency Food and Drug Administration" and "Docket ID FDA-2023-N-1190".

At the bottom of the search results, it says "Displaying 1 - 1 of 1 results".

How to Submit an Electronic Submission for Public Comments Cont.

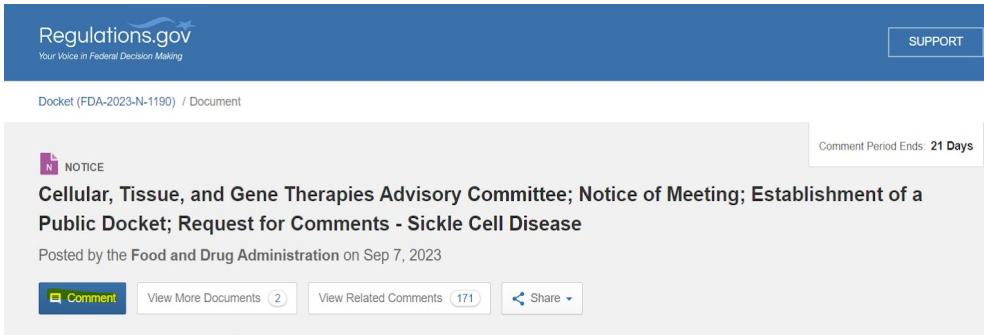
Step 4: Click the “Browse Documents” tab; you will then see the advisory committee “*Cellular, Tissue, and Gene Therapies Advisory Committee; Notice of Meeting; Establishment of a Public Docket; Request for Comments - Sickle Cell Disease*”. This is where you will submit public comments.



The screenshot shows the Regulations.gov interface for a public docket. The header includes the site logo and a 'SUPPORT' button. The docket title is 'Cellular, Tissue, and Gene Therapies Advisory Committee; Notice of Meeting; Establishment of a Public Docket; Request for Comments', created by the Food and Drug Administration. Below the title are 'Share' and 'Subscribe' buttons. A navigation bar highlights the 'Browse Documents' tab, which is currently selected. To the left, there are filters for 'Document Type' (Notice (2)) and a checkbox for 'Only show documents open for comment (1)'. The search results area shows a search bar and a list of documents, with the top result being the docket title. A 'Comment' button is visible at the bottom of the document card. The page also indicates 'Comments Due Oct 30, 2023'.

How to Submit an Electronic Submission for Public Comments Cont.

Step 5: After clicking the link, there will be a blue button for “*Comment*”. You will see a fillable form to add your comments.



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SUPPORT

Docket (FDA-2023-N-1190) / Document

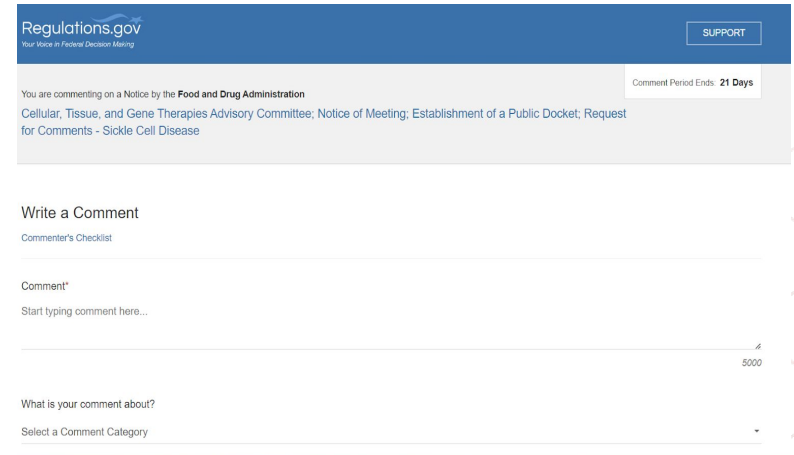
NOTICE

Comment Period Ends: 21 Days

Cellular, Tissue, and Gene Therapies Advisory Committee; Notice of Meeting; Establishment of a Public Docket; Request for Comments - Sickle Cell Disease

Posted by the Food and Drug Administration on Sep 7, 2023

Comment View More Documents (2) View Related Comments (171) Share



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SUPPORT

Comment Period Ends: 21 Days

You are commenting on a Notice by the **Food and Drug Administration**
Cellular, Tissue, and Gene Therapies Advisory Committee; Notice of Meeting; Establishment of a Public Docket; Request for Comments - Sickle Cell Disease

Write a Comment

Commenter's Checklist

Comment*

Start typing comment here...

5000

What is your comment about?

Select a Comment Category

Alternate Way to Submit an Electronic Submission for Public Comments

- Click the [link](#) to the federal register for the “Cellular, Tissue, and Gene Therapies Advisory Committee.”
- Click the green button “Submit a Formal Comment”

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 The Daily Journal of the United States Government

N Notice

Cellular, Tissue, and Gene Therapies Advisory Committee; Notice of Meeting; Establishment of a Public Docket; Request for Comments-Sickle Cell Disease

A Notice by the Food and Drug Administration on 09/07/2023

Comments on this document are being accepted at Regulations.gov.

SUBMIT A FORMAL COMMENT

Thank you for taking the time to create a comment. Your input is important.

Once you have filled in the required fields below you can preview and/or submit your comment to the Health and Human Services Department for review. All comments are considered public and will be posted online once the Health and Human Services Department has reviewed them.

You can view alternative ways to comment or you may also comment via Regulations.gov at <https://www.regulations.gov/comment/09/07/2023/4110001713>.

Comment*

What is your comment about?

Upload File(s) note: You can attach your comment as a file and/or attach supporting documents to your comment. Attachment Requirements.

Email

It will NOT be posted on regulations.gov

Opt to receive email confirmation of submission and tracking number?

Tell us about yourself! I am...

An Individual An Organization Anonymous

You are filing a document into an official docket. Any personal information included in your comment text and/or uploaded attachment(s) may be publicly viewable on the web.

Read and understand the statement above.

Please review the Regulations.gov privacy notice and user notice.

Additional Information

- **PDUFA date for exagamglogene autotemcel (exa-cel): December 8, 2023.**
- [NIH Toolkit: Participate In FDA Advisory Committee Meetings: Providing Testimony](#)
- [NIH Toolkit: Participate In FDA Advisory Committee Meetings: Tips for Success](#)
- [Public Conduct for FDA Advisory Committee Meetings.](#)
- [Sick Cells Toolkit: Submitting Written Comments](#)



Thank You!

Please feel free to contact Mariah Scott (mscott@sickcells.org) for additional questions!

