

FDA approves Novartis Vioice® (alpelisib) as first and only treatment for select patients with PIK3CA-Related Overgrowth Spectrum (PROS)

Apr 06, 2022

Vioice is first approved treatment to specifically address the root cause of PROS conditions in select patients 2 years of age and older¹

PROS is a spectrum of rare conditions and is characterized by atypical overgrowths and anomalies in blood vessels, the lymphatic system and other tissues^{2,3}

Approval based on real-world data from EPIK-P1 study, which showed patients treated with Vioice experienced reduction in the size of PROS lesions and improvement of PROS-related signs and symptoms

Novartis to offer robust patient support program that includes assistance to access medication, financial resources for eligible patients and continued education

EAST HANOVER, N.J., April 6, 2022 /PRNewswire/ -- Novartis today announced that the U.S. Food and Drug Administration (FDA) granted accelerated approval to Vioice® (alpelisib) for the treatment of adult and pediatric patients 2 years of age and older with severe manifestations of PIK3CA-Related Overgrowth Spectrum (PROS) who require systemic therapy.¹ Vioice is the first FDA-approved treatment for PROS, a spectrum of rare conditions characterized by overgrowths and blood vessel anomalies impacting an estimated 14 people per million.^{2,3} In accordance with the Accelerated Approval Program, continued approval may be contingent upon verification and description of clinical benefit from confirmatory evidence.

Experience the interactive Multichannel News Release here:

<https://www.multivu.com/players/English/9015251-fda-approves-novartis-vioice-as-treatment-for-pros>

"Today's approval of the first treatment for PROS offers hope for a better quality of life to patients and families affected by these rare conditions," said Kristen Davis, Executive Director of CLOVES Syndrome Community. "PROS conditions can be debilitating and disabling and can result in disruptions to everyday activities. Until today, often the only treatment options for patients were surgical or interventional radiology procedures."

PROS conditions can affect quality of life and pose a range of physical, emotional and social challenges for patients and their families, ranging from functional impacts and developmental delays to chronic pain, mobility issues, and feelings of isolation.³⁻⁶ PROS management can be challenging, requiring collaboration from a multidisciplinary team, and patients and physicians have only had access to interventions focused on symptom management.^{6,7}

"I am proud of this outstanding achievement for the PROS community. The EPIK-P1 study results build on our earlier pre-clinical findings and demonstrate the efficacy of Vioice for select PROS conditions, effectively reducing PROS growths," said Guillaume Canaud, MD, PhD, Necker-Enfants Malades Hospital – AP-HP, the Paris Descartes University, Inserm (INEM Institute Necker Enfants Malades – Centre for Molecular Medicine). "This is a significant advancement in therapy for PROS with the potential to positively change the treatment

trajectory and outcomes for patients."

FDA approval was based on real-world evidence from EPIK-P1, a retrospective chart review study that showed patients treated with Vioice experienced reduced target lesion volume and improvement in PROS-related symptoms and manifestations. The primary endpoint analysis conducted at week 24 showed 27% of patients (10/37) achieved a confirmed response to treatment, defined as 20% or greater reduction in the sum of PROS target lesion volume. Nearly three in four patients with imaging at baseline and week 24 (74%, 23/31) showed some reduction in target lesion volume, with a mean reduction of 13.7%, and no patients experienced disease progression at time of primary analysis. Additionally, at week 24, investigators observed patient improvements in pain (90%, 20/22), fatigue (76%, 32/42), vascular malformation (79%, 30/38), limb asymmetry (69%, 20/29), and disseminated intravascular coagulation (55%, 16/29). These improvements were observed in subsets of patients across the study population (n=57) who reported symptoms at baseline and at week 24.^{1,2}

"The approval of Vioice marks a turning point for patients who, until now, have not had an approved therapy to specifically address their disease," said Victor Bulto, President, Novartis Innovative Medicines US. "We are grateful to the physicians, patients and families who participated in the EPIK-P1 trial. We are continuing to invest in studies to advance the scientific understanding of PROS conditions and to understand the full potential of Vioice."

In EPIK-P1, the most common adverse events (AEs) of any grade were diarrhea (16%), stomatitis (16%), and hyperglycemia (12%). The most common grade 3/4 AE was cellulitis (4%); one adult case was considered treatment-related.¹

Novartis is committed to providing patients with access to medicines, as well as resources and support to address a range of needs. The Novartis Oncology Patient Support Program is available to help guide eligible patients through the various aspects of getting started on treatment, from providing educational information to helping them understand their insurance coverage and identify potential financial assistance options. Patients or providers can call 800-282-7630 or visit Patient.NovartisOncology.com or HCP.Novartis.com/Access to learn more about eligibility and to enroll.

About PIK3CA-Related Overgrowth Spectrum (PROS)

The PROS classification was proposed by researchers and parent representatives of patient-family support and advocacy organizations at a National Institutes of Health workshop in 2013 to unite a group of rare overgrowth conditions caused by PIK3CA mutations.^{4,6} Specific conditions associated with PROS include KTS, CLOVES syndrome, ILM, MCAP/M-CM, HME, HHML, FIL, FAVA, macrodactyly, muscular HH, FAO, CLAPO syndrome and epidermal nevus, benign lichenoid keratosis, or seborrheic keratosis.^{4,6} The estimated prevalence of PROS conditions is approximately 14 people per million.³

About Vioice

Vioice[®] (alpelisib) is a kinase inhibitor that treats rare overgrowth conditions caused by the effects of PIK3CA mutations in adults and children with PIK3CA-Related Overgrowth Spectrum (PROS). Vioice works by inhibiting the PI3K pathway, predominantly the PI3K-alpha isoform.¹ Vioice is the first FDA-approved treatment for PROS conditions. Vioice is not approved for use outside the United States.

FDA approval of Vioice is based primarily on real-world evidence from the EPIK-P1 study. To further understand the long-term efficacy and safety of alpelisib in PROS, Novartis is conducting additional clinical trials. EPIK-P2 is a prospective Phase II multi-center study with a randomized, double-blind, upfront 16-week placebo-controlled period, and extension period to evaluate the safety, the efficacy and pharmacokinetics of alpelisib to treat pediatrics and adults with PROS. EPIK-P3 is a Phase II study to assess long-term safety and

efficacy of alpelisib in people with PROS who participated in EPIK-P1.

Important Safety Information

Indication

VIJOICE® (alpelisib) tablets is a prescription medicine used to treat adult and pediatric patients 2 years of age and older with severe manifestations of PIK3CA-Related Overgrowth Spectrum (PROS) who require systemic therapy.

This indication is approved under accelerated approval based on response rate and duration of response. Continued approval for this indication may be contingent upon verification and description of clinical benefit in confirmatory trials.

Important Safety Information

Patients should not take VIJOICE if they have had a severe allergic reaction to alpelisib or are allergic to any of the ingredients in VIJOICE.

VIJOICE may cause serious side effects. VIJOICE can cause severe allergic reactions. Patients should tell their health care provider or get medical help right away if they have trouble breathing, flushing, rash, fever, or fast heart rate during treatment with VIJOICE. VIJOICE can cause severe skin reactions. Patients should tell their health care provider or get medical help right away if they get a severe rash or a rash that keeps getting worse; reddened skin; flu-like symptoms; blistering of the lips, eyes, or mouth; blisters on the skin or peeling skin, with or without a fever. VIJOICE can cause high blood sugar levels (hyperglycemia). Hyperglycemia is common with VIJOICE and can be severe. Health care providers will monitor blood sugar levels before patients start, and during treatment with, VIJOICE. Health care providers may monitor blood sugar levels more often if patients have a history of type 2 diabetes. Patients should tell their health care provider right away if they develop symptoms of hyperglycemia or its complications, including excessive thirst, dry mouth, urinating more often than usual or having a higher amount of urine than normal, increased appetite with weight loss, confusion, nausea, vomiting, fruity odor on breath, difficulty breathing, or dry or flushed skin. VIJOICE can cause lung problems (pneumonitis). Patients should tell their health care provider right away if they develop new or worsening symptoms of lung problems, including shortness of breath or trouble breathing, cough, or chest pain. Diarrhea is common with VIJOICE and can be severe. Severe diarrhea can lead to the loss of too much body water (dehydration) and kidney injury. Patients who develop diarrhea during treatment with VIJOICE should tell their health care provider right away.

Before taking VIJOICE, patients should tell their health care provider if they have a history of diabetes; skin rash; redness of skin; blistering of the lips, eyes, or mouth; peeling skin; are pregnant, or plan to become pregnant, because VIJOICE can harm their unborn baby. Females who can become pregnant should use effective birth control during treatment with VIJOICE and for 1 week after the last dose. Do not breastfeed during treatment with VIJOICE and for 1 week after the last dose. Males with female partners who can become pregnant should use condoms and effective birth control during treatment with VIJOICE and for 1 week after the last dose.

Patients should tell their health care provider about all the medicines they take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. VIJOICE and other medicines may affect each other and cause side effects. Know the medicines you take. Keep a list of them to show your health care provider or pharmacist when you get a new medicine.

The most common side effects of VIJOICE are diarrhea, mouth sores (stomatitis), and hyperglycemia.

Please see full Prescribing Information for VIJOICE, available at VIJOICE.com.

Disclaimer

This press release contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995. Forward-looking statements can generally be identified by words such as "potential," "can," "will," "plan," "may," "could," "would," "expect," "anticipate," "look forward," "believe," "committed," "investigational," "pipeline," "launch," or similar terms, or by express or implied discussions regarding potential marketing approvals, new indications or labeling for the investigational or approved products described in this press release, or regarding potential future revenues from such products. You should not place undue reliance on these statements. Such forward-looking statements are based on our current beliefs and expectations regarding future events, and are subject to significant known and unknown risks and uncertainties. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those set forth in the forward-looking statements. There can be no guarantee that the investigational or approved products described in this press release will be submitted or approved for sale or for any additional indications or labeling in any market, or at any particular time. Nor can there be any guarantee that such products will be commercially successful in the future. In particular, our expectations regarding such products could be affected by, among other things, the uncertainties inherent in research and development, including clinical trial results and additional analysis of existing clinical data; regulatory actions or delays or government regulation generally; global trends toward health care cost containment, including government, payor and general public pricing and reimbursement pressures and requirements for increased pricing transparency; our ability to obtain or maintain proprietary intellectual property protection; the particular prescribing preferences of physicians and patients; general political, economic and business conditions, including the effects of and efforts to mitigate pandemic diseases such as COVID-19; safety, quality, data integrity or manufacturing issues; potential or actual data security and data privacy breaches, or disruptions of our information technology systems, and other risks and factors referred to in Novartis AG's current Form 20-F on file with the US Securities and Exchange Commission. Novartis is providing the information in this press release as of this date and does not undertake any obligation to update any forward-looking statements contained in this press release as a result of new information, future events or otherwise.

About Novartis

Located in East Hanover, NJ Novartis Pharmaceuticals Corporation – an affiliate of Novartis – is reimagining medicine to improve and extend people's lives. As a leading global medicines company, we use innovative science and digital technologies to create transformative treatments in areas of great medical need. In our quest to find new medicines, we consistently rank among the world's top companies investing in research and development. Novartis employs nearly 15,000 people in the United States. For more information, please visit <https://www.novartis.us>.

Novartis and Novartis US is on Twitter. Sign up to follow @Novartis at <https://twitter.com/novartisnews> and @NovartisUS at <https://twitter.com/NovartisUS>.

For Novartis multimedia content, please visit <https://www.novartis.com/news/media-library>.

For questions about the site or required registration, please contact media.relations@novartis.com.

References

1. Vioice: Prescribing Information. East Hanover, New Jersey, USA: Novartis Pharmaceuticals Corporation; April 2022.
2. Canaud G, et al. EPIK-P1: Retrospective Chart Review Study of Patients With PIK3CA-Related Overgrowth Spectrum Who Have Received Alpelisib as Part of a Compassionate Use Programme. Presented at the 2021 ESMO Congress; September 17-21, 2021.

3. Data on file. Novartis Pharmaceuticals Corp; 2020.
4. Keppler-Noreuil KM, Sapp JC, Lindhurst MJ, et al. Clinical delineation and natural history of the PIK3CA-related overgrowth spectrum. *Am J Med Genet A*. 2014;164A(7):1713-1733.
5. Parker VER, Keppler-Noreuil KM, Faivre L, et al. *Genet Med*. 2019;21(5):1189-1198.
6. Mirzaa G, Conway R, Graham JM Jr, Dobyns WB. PIK3CA-related segmental overgrowth. In: Adam MP, Ardinger HH, Pagon RA, et al., eds. *GeneReviews®* [Internet]. Seattle, WA: University of Washington, Seattle; 1993-2019.
7. Hughes M, Hao M and Luu M. PIK3CA vascular overgrowth syndromes: an update. *Current Opinion in Pediatrics*. 2020;32(4):539-546.

Novartis Media Relations

E-mail: media.relations@novartis.com

Julie Masow

Head, US External Engagement

+1 862 579 8456

julie.masow@novartis.com

Dan Connelly

Novartis Oncology Communications

+1 862 210 0217

daniel.connelly@novartis.com

Novartis Investor Relations

E-mail: investor.relations@novartis.com

North America

Sloan Simpson

+1 862 345 4440

SOURCE Novartis Pharmaceuticals Corporation

Source URL: <https://prod1.novartis.com/us-en/news/media-releases/fda-approves-novartis-vijoice-alpelisib-first-and-only-treatment-select-patients-pik3ca-related-overgrowth-spectrum-pros>

List of links present in page

1. <https://prod1.novartis.com/us-en/us-en/news/media-releases/fda-approves-novartis-vijoice-alpelisib-first-and-only-treatment-select-patients-pik3ca-related-overgrowth-spectrum-pros>

- and-only-treatment-select-patients-pik3ca-related-overgrowth-spectrum-pros
2. <https://c212.net/c/link/?t=0&l=en&o=3466821-1&h=877889175&u=https%3A/www.multivu.com/players/English/9015251-fda-approves-novartis-vijoice-as-treatment-for-pros&a=https%3A/www.multivu.com/players/English/9015251-fda-approves-novartis-vijoice-as-treatment-for-pros>
 3. <https://c212.net/c/link/?t=0&l=en&o=3466821-1&h=295510217&u=https%3A/www.novartis.us/&a=https%3A/www.novartis.us>
 4. <https://c212.net/c/link/?t=0&l=en&o=3466821-1&h=1144246358&u=https%3A/twitter.com/novartisnews&a=https%3A/twitter.com/novartisnews>
 5. <https://c212.net/c/link/?t=0&l=en&o=3466821-1&h=3310926482&u=https%3A/twitter.com/NovartisUS&a=https%3A/twitter.com/NovartisUS>
 6. <https://c212.net/c/link/?t=0&l=en&o=3466821-1&h=4081705260&u=https%3A/www.novartis.com/news/media-library&a=https%3A/www.novartis.com/news/media-library>
 7. <mailto:media.relations@novartis.com>
 8. <mailto:media.relations@novartis.com>
 9. <mailto:julie.masow@novartis.com>
 10. <mailto:daniel.connelly@novartis.com>
 11. <mailto:investor.relations@novartis.com>