Orkambi® (lumacaftor/ivacaftor) now approved for ages 2-5 years

Orkambi® (lumacaftor/ivacaftor) treats the basic defect in cystic fibrosis in patients who have two copies of the F508del mutation. In patients with two copies of the F508del mutation, the CF protein is degraded within the cell and little to no protein is in the membrane of the cell. Lumacaftor helps to traffic the protein to the surface membrane of the cell, and ivacaftor activates the protein. All of these steps were studied in cells in the laboratory.

In order for a drug to be approved for human use, there must be clinical trials. In the case of Orkambi®, the phase 3 clinical trial was in CF patients with two copies of the F508del mutation and who were greater than 12 years of age. There were two parallel studies (named TRAFFIC and TRANSPORT) in which subjects were randomly assigned to receive active drug or placebo. The results of these studies were published in the New England Journal of Medicine (published online on May 17, 2015 and in the print journal on July 16, 2015). Subjects who received Orkambi® had improved FEV1 values (a measure of pulmonary function) and a lower rate of pulmonary exacerbations compared to subjects who receive placebo. Thus, the FDA approved Orkambi® on July 2, 2015 for CF patients with two copies of F508del and who were greater than or equal to 12 years of age.

The initial FDA approval did not include children who were younger than 12 years of age because studies had not been conducted for this age range. Thus, Vertex Pharmaceuticals, the manufacturer of Orkambi®, conducted studies in children who were 6 to 12 years of age. In a study published in the American Journal of Respiratory and Critical Care Medicine on April 1, 2017, children who had two copies of the F508del mutation and who were treated with Orkambi® had a significant improvement in their body mass index and a significant decrease in the sweat chloride value (sweat chloride decreased by an average of 25 mmol/L). There was no improvement in the FEV1. However, these younger children had higher baseline values of FEV1 compared to subjects in the ≥12 year old study. Thus, it may be more difficult to see an improvement if the baseline FEV1 values are already higher. In order to have a more sensitive measure of lung function, this study of children who were 6-12 years of age utilized another pulmonary function test called the Lung Clearance Index (LCI). (The University of Wisconsin was one of the study sites.) There was a significant improvement in the LCI in response to subjects who received Orkambi®. This data was known prior to the publication in 2017. Vertex submitted the data to the FDA and there was approval of Orkambi® for children 6-12 years of age on September 28, 2016.

Would Orkambi® be beneficial for children with CF who are less than 6 years of age? How would one demonstrate the effectiveness of Orkambi® in this younger population? Fortunately, the FDA has allowed drug manufacturers to address this by the following: if a drug has proven to be safe and effective in an older population, there is no longer a requirement of demonstrating effectiveness in a younger population. Drug manufacturers must demonstrate that the drug can be delivered appropriately to a younger population and that the drug is safe. In case of Orkambi®, Vertex was able to formulate this into granules: for children who were less than 14 kg, lumacaftor 100 mg/ivacaftor 125 mg; and for children who were greater than 14 kg, lumacaftor 150 mg/ivacaftor 188 mg. A study was completed with these granules in children who were 2 through 5 years of age. The study showed that there were appropriate levels of lumacaftor and ivacaftor in the blood stream and that the drug was safe. Additionally, Vertex examined sweat chloride values in these children. The sweat chloride decreased by an average of 32 mmol/L. Thus, the FDA approved Orkambi® for children with CF, ages 2-5 years and who have two copies of the F508del mutation, on August 7, 2018.

Can Orkambi® be used safely in children who are under 2 years of age? There must be a study in order to answer this question. The University of Wisconsin CF Center will be a study site for children who are 1-2 years of age and who have 2 copies of the F508del mutation. We are proud to be selected as a study site and excited to help further the use of this protein modulator in younger patients.
North American Cystic Fibrosis Foundation
Conference: NACFC 2018

Both the UW pediatric and adult cystic fibrosis teams attended the 32nd annual CF conference in beautiful Denver, Colorado this October. We experienced three full days of learning and collaborating with 4,600 of the best minds in the CF community. The conference is hosted by the Cystic Fibrosis Foundation (CFF or Foundation) and gives an opportunity to discuss and reflect on the remarkable progress in CF science, such as the FDA approval of Symdeko and the expansion of Orkambi and Kalydeco to very young children. Additionally, ongoing clinical trials are promising for “triple combination therapies,” which combine Symdeko, and a next-generation modulator to be available in the next 1-2 years for up to 90% of people with CF. Here are a few more updates on some of the exciting new developments to advance research and improve care.

The **INFECTION RESEARCH INITIATIVE** was announced by the CFF with input from the CF community. The CFF will be committing $100 million to the initiative over the next five years. The goal is to improve detection, diagnosis, treatment, and outcomes of infections for people with CF. We know there are many challenges to treating infections in CF, and the goal to find new anti-infective therapies is important to the whole CF community.

CF clinicians also discussed future strategies to address inflammation and mucociliary clearance (mobilizing mucus/sputum). New clinical trials looking at decreasing inflammation in the airways and lung tissue will be enrolling in the near future. Our adult CF center will be participating in one of these studies, investigating a new drug compound: lenabasum. If you are 18 years of age or older and interested you can reach out to the adult CF research coordinator Sophia at 608-263-1244 or scstevens@medicine.wisc.edu.

Finally, one of the most important topics discussed this year was centered on developing partnerships between CF patients, family, and our care teams. This is especially important as people with CF are living longer, making the relationship even more important. An adult living with CF shared that it was comforting for her to know that her CF team valued her as a human being and that she was working hard to make sure she had “a seat at the table.” She also stated, “if we want our clinicians to be better partners, we as patients and families have to hold up our end of the bargain by communicating what’s important to us, sharing the goals that matter most to us, and being honest about what’s not working”.

Please ask us more about the NACFC at your next clinic visit, or visit the cff.org website to learn more about what was covered during the meeting this year.

Adult Clinic Behind the Curtain

Recently, the UW Adult Pulmonary Clinic went through a redesign to improve access to care and the patient experience. As a team we would like you to be aware of a few “behind the curtain” details when you call the clinic.

You will now notice a few options when calling the Pulmonary Clinic main number, 608.263.7203. To best meet your needs here are a few tidbits to consider when deciding which option OR who to talk to about specific questions/needs. As a rule, if you are unsure please select option 4 to speak with a nurse.

**Option 1** - Insurance changes for billing purposes only (example: simple changes due to employment, marriage, etc.). This is not for insurance or billing related questions that our clinic social worker helps with.

**Option 2** - To quickly and easily schedule, reschedule or cancel your routine CF clinic appointment. *If you are sick, need to be seen urgently or requesting hospitalization please use option 4 ONLY*

**Option 3** - Simple medication refills. *If you have medication questions, concerns or need prior authorization please use option 4 ONLY*

**Option 4** - For medical questions. This allows you to directly speak with a clinic nurse who can triage any questions/concerns/needs to one of the CF providers (Dr. Braun, Dr. Cornwell, Brooke LaChance, Jessica La Mar, or Tania Risch). Please use this option for any urgent needs, requests to be seen for a “sick” office visit, hospitalization or home IV antibiotics.

As a reminder, please be mindful when sending MyChart messages. The intent is for simple, non-urgent and general questions. Messages are NOT monitored on the weekends or after 5 pm, often times they may not be answered for 1-2 days. For all urgent questions or concerns please call and speak with a nurse. *Thank you!*
**Have you received your flu shot?**

Just a reminder that flu season is upon us! Have you gotten your flu shot yet? The flu vaccine is available at UW Health clinics and pharmacies. If your insurance does not allow for you to receive the vaccine at our clinics, you can contact your Primary Care Provider’s (PCP) office to ask about flu shot clinic dates, or to set-up a nurse visit.

**A Silver Lining from the Parent Advisory Group**

Did you know that your child with CF may qualify to attend one of the week-long summer Serious Fun Children’s Network camps started by Paul Newman? Your whole family may also qualify to attend the spring or fall weekend family camps. The Midwest camps are North Star Reach in Ann Arbor, MI, and Flying Horse Farms near Columbus, OH. It is no cost to campers while onsite, including food and housing, and is funded by the Newman’s Own Foundation. They cater to all dietary needs, have amazing infectious disease policies, and only allow one child with CF per camping session.

**Pediatric Clinic Behind the Curtain**

With the help of our CF Parent Advisory Group (PAG) we identified a need to share with families how things operate “behind the curtains.” We will be sharing new information with you in each future newsletter.

In this segment we will focus on MyChart messages that come in to our clinics. Did you know, that when you send a MyChart message, these messages are sent on to the nursing team first. The nurses then review the message, answer any questions they can, and if needed send the message on to the provider or appropriate team member. Any messages you respond to are also sent on to the nursing team first to review.

An important thing to remember about MyChart messages is that they are to be used for non-urgent concerns. If you have an urgent need, it is best to call the clinic to have a message sent on to the nursing staff. MyChart messages are typically reviewed once all urgent matters have been addressed. MyChart messages are only addressed during regular business hours, Monday-Friday 8:00 am-4:30 pm. If a MyChart message is sent after hours, on the weekend, or on a Holiday, it will be addressed on the next business day.

If you have more questions about MyChart, please let your team know during your next clinic visit. If you are interested in signing up for MyChart you can sign up at: https://uwhealthmychart.org/mychart/ If you are a parent signing up for a child, you will first need to sign up for your own account, and then will be able to sign your child up as a “proxy.”

**Creative Ideas from Patients and Families**

One of our families had some help last holiday season with the elf on a shelf who had his own vest and compressor. As we all know, it is hard to keep the momentum going all year long and especially with the chaos that can come with the holidays, travel and general excitement. We love seeing these kinds of creative ideas… If you have one, please share and we will pass it along to others. **Have a happy, healthy and safe season and remember, the elf is watching!**
Welcome to P7 the Pediatric Universal Care Unit

This past summer the Pediatric Universal Care Unit (P7) became the home unit for all pediatric patients admitted to the hospital under the Pulmonary Team. This included pediatric patients admitted for CF exacerbation. P7 is a 14-bed unit that opened in October of 2017. We have approximately 30 nurses, 4 nursing assistants and 2 health unit coordinators on this unit.

This relatively small nursing staff have been looking forward to caring for your child on this unit. Over the past year, the unit staff have been training with the pulmonary team to ensure high quality care for your child.

The staff on P7 find great value in working with our patients and their families. We value family centered daily rounds, and your plans and goals for the day as well as the entire hospital stay.

If you find that your child is a patient on our unit you can use our hospital technology to stay connected should you need to return to work, school or home. Just ask and we will get you all set up. Some of our families who have been inpatient have shared that it is important to participate in self-care. As a parent, it is very stressful to be in the hospital with your child. Not only are you worried about the hospital stay, but often our families are managing multiple activities during this time. In addition to regular hospital stress, our families are placed in medical isolation. We recognize this is difficult and can make the stay even more exhausting. The AFCH holds mindfulness in the chapel on Tuesdays and Thursdays 11:30-11:45 am for both parents and staff. We encourage you to join. In addition to the mindfulness, the staff have access to a mindfulness cart that contains self-care items and activities for families and patients to use.

We hope you and your child do not ever need to be admitted, but if you are we look forward to working with you to care for your child.
New Faces

My name is Melanie Nelson and I am a Research Coordinator. I work specifically with people with Cystic Fibrosis. My role is to help patients with CF enroll in clinical trials that are a good fit for them. I assist in scheduling you for all study visits, performing study activities such as sweat tests, and maintaining communication with patients throughout the entirety of the trial. If you have any questions about currently enrolling trials or upcoming trials, feel free to contact me at mnelson@pediatrics.wisc or 608-265-4617.

Thanks!

Mel
Here are a few of the ways patients and providers will benefit from this change:

- **Engagement:** Stronger communication, more collaboration and better relationships means patients will feel more in control of their health care.

- **Disease Management:** Patients can review changes in medication or treatment plans and share up-to-date information with those involved in their care.

- **Safety:** If patients cannot remember certain details or have questions, they can look at their visit notes to read what was discussed and next steps. Patients can also notify us if there are errors in their chart that may impact their care.

- **Adherence:** Patients are more likely to take medication as prescribed.

- **Support for Caregivers:** Caregivers can review the notes and better manage the health needs of the people in their care, including scheduling, reconciling medications and care plan follow-through.

*We are excited to make OpenNotes a part of the UW Health experience!*

**How will OpenNotes Work?**

For ambulatory* encounters, once the note is signed and the encounter has been closed, the note will be released to MyChart. These notes will appear in a new “Notes” tab within the “Appointment & Visits” section. Notes will only be shared prospectively. Notes signed prior to September 25 will NOT be available for release in MyChart.

---

OpenNotes Goes Live at UW Health on September 25, 2018

On September 25, UW Health will join the international movement to make healthcare more transparent and accessible by offering our patients access to provider notes (ambulatory encounters) through MyChart.

**FAST FACTS**

- **85%**
  - Research shows that patients benefit from having access to clinician notes

- **87%**
  - felt more in control of their care

- **72%**
  - said they took better care of themselves

- **27 million**
  - patients have access to OpenNotes today

*Due to technical limitations, notes for encounters in hospital outpatient departments will not be released with this go-live. UW Health plans to start releasing progress notes from hospital outpatient encounters and admissions in 2019*

Source: OpenNotes.org
Proxy Access
Individuals who have proxy access to another patient’s account/medical record will be able to view notes (ambulatory) that have been released to MyChart. Be aware that proxies for teenagers (patient’s age 12-17) will not be able to see their notes in order to protect patient confidentiality for potentially sensitive information. If adult patients would prefer that their proxy NOT view their provider notes, they may revoke proxy access via MyChart.

Which Providers Will Share Notes?
In general, notes written in an ambulatory* setting by an encounter provider will be released.

When appropriate, providers may de-select the “Share w/ Pt” button in Health Link to prevent a specific note from being shared in MyChart. Additional education will be provided to help providers determine when it may be reasonable to keep a note from being released to MyChart.

Remember that HIPAA entitles patients to obtain copies of their complete medical records, including private notes. Therefore, independent of OpenNotes, it’s best to write notes with the ongoing understanding that patients may read them.

Co-Sign, Attestation, Addendum Notes
Co-Sign: If a note requires co-sign, either automatically or opted manually by the provider, then the note will not be released until the co-sign has been completed (and the encounter has been closed).

Attestation: If a co-sign is not required but a supervising provider puts a separate attestation note on the chart, the original note will be released as soon as it has been signed and the encounter has been closed. After the attestation is signed, it will appear underneath the original note in MyChart.

Addendum: If a note is changed or addended after it has been signed, the addended note will “replace” the original note in MyChart. This means the original (non-addended) note will no longer be available.

Images in Notes
Images embedded in notes will be visible for patients in MyChart.

Stay Tuned
Watch upcoming editions of the weekly briefings newsletters for more information and tips to help you prepare for OpenNotes. Or search “Open Notes” on U-Connect to find the dedicated section with articles and resources. If you have questions or comments, please sent them to notes@uwhealth.org.

*Due to technical limitations, notes for encounters in hospital outpatient departments will not be released with this go-live. UW Health plans to start releasing progress notes from hospital outpatient encounters and admissions in 2019
America Family Children's Hospital
Cystic Fibrosis Center
600 Highland Ave. K4/938
Madison, WI 53792-9988

www.uwcfcenter.org