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The Beat

A publication of the North American Thrombosis Forum

Running With Love

On November 4, 2018, Christina Martin will hit the road and run in Chicago's Hot Chocolate Run, a 15k race. Unlike others, she isn't running for the love of hot chocolate. Christina will run for blood clot awareness and to raise money for the North American Thrombosis Forum in memory of her high school sweetheart Manu Ajamu Williams, who she describes as "the love of my life."



Christina running the Chicago marathon.

"I met him in high school. He was Mr. Cool and I was the nerd with glasses and braces," Christina said. "When we were together, it was the best time of my life."

"After high school and college, I was very much the white collar marketer and he was a nurse. He drove trucks. He worked for UPS. He was very blue collar. It was very funny because it was kind of a yin and yang type of thing," said Christina, describing their relationship. "When I do things, it's very black and white, and I like things to be done a certain way. He was very whimsical and fun. So, we were very much opposites."

Manu's personable energy drew people to him.

"People would walk up to him and know who he was," Christina said. "He was friends with everybody."

IN MEMORY OF MANU "SHAQ" WILLIAMS

Manu Williams, who friends called "Shaq," passed away from a blood clot on September 28, 2014 at the young age of 36. Remembered as a man who everyone loved, Christina describes him as a hard-working, fun-loving man that embraced everyone around him.



Manu and Christina at their high school prom in 1998.

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The MARINER Trial: Know The Risk of Blood Clots in the Hospital



Did you know that in the United States alone 400,000 blood clot events occur in patients recently discharged from the hospital? And that blood clots are the most common cause of preventable hospital deaths?

Researchers are investigating this problem and trying to find a solution. The most recent trial conducted was the MARINER trial, whose results were just released in August at the European Society of Cardiology Congress.

THE MARINER TRIAL

The MARINER trial was a randomized, double-blind study that examined the safety and efficacy of

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Upcoming Events

Celebration of Gratitude

October 25, 2018

The Museum of Science Boston

NATF would like to invite you to join us for the 2018 Celebration of Gratitude, NATF's premier fundraising event. It will be an exciting night of inspiration, fun, and discovery. Guests will get exclusive access to the Museum of Science's blue wing and will get to spend the night exploring the wing's variety of eye-opening exhibits.

Online Blood Clot Support Group

November 5 with Dr. Christian Ruff – Genetics and Blood Clots: What's in the Genes?

December 11 with Dr. Samuel Berkman – What's New? An Update on Bleeding While on Anticoagulants

NATF's Online Blood Clot Support Group offers patients the opportunity to share common concerns, offer support to one-another, and learn up-to-date and accurate information, including new research on blood clot prevention and treatments. Dates and speakers for our upcoming meetings can be found at www.natfonline.org/patients/supportgroups. To register for this online support group, please email info@natfonline.org.

In-Person Blood Clot Support Group at BWH

November 15, 2018

December 5, 2018

Brigham and Women's Hospital, Boston, MA

All support groups start at 7:00 p.m. and are held at Brigham and Women's Hospital. To register, email info@natfonline.org or call 617-730-4120.

Cardiology Updates with Pri-Med

November 6 – New York, NY

December 5 – Boston, MA

NATF is working with Pri-Med to bring you CME designed by cardiologists for cardiologists. As a cardiologist, your knowledge of and expertise on the latest clinical guidelines is crucial for optimizing the care of your patients with cardiovascular comorbidities and risk factors. Participate in this complimentary CME program that meets your specialized educational needs by providing you with the most up-to-date clinical evidence from respected thought leaders in cardiovascular medicine. Check the NATF website (natfonline.org) for more dates and keep an eye out for NATF in a city near you. Register for New York: <https://bit.ly/2Dr8HjX> Register for Boston: <https://bit.ly/2xO1sMN>

New Strategies to Prevent Cardiovascular Events During the First Month After Hospital Discharge

American Society of Hematology Congress

November 30, 2018

San Diego, CA

NATF is excited to be presenting a special symposium at the American Society of Hematology Congress in partnership with Medscape. We look forward to seeing you there!

For more information on any of these events, please visit www.natfonline.org/events. We look forward to hearing from you!



RUNNING WITH LOVE

Continued from page 1

"He loved everybody and people knew that. They felt that," she continued, explaining the way that people seemed to gravitate towards Manu.

"I honestly just think he was sent from God and everybody loved him."



Manu "Shaq" Williams

Since Manu's passing, Christina has dedicated herself to raising awareness around blood clots.

MAKING A CHANGE

"In 2014, when he passed, I decided that I was going to educate people about blood clots, because people don't get it or understand it," explained Christina. Christina founded M.A.W (Manu's initials) Charity Events in 2015, an organization that puts on events to raise money for blood clot awareness. She organized her first charity race in 2015, the "Stop the Clot Chicago 5K" in support of the National Blood Clot Alliance.

"At the end of the day, I had 300 runners. As I was looking at all of the people running, I realized that those people were running because they either suffered from a blood clot or they had lost somebody. I realized that anyone can make a difference and anyone can make a change," she continued.

Since then, Christina has organized a "Fighting Blood Clots with Street Fighter V" video game tournament for blood clot awareness. She also ran in the 2017 Chicago Marathon, sponsored by the National Stroke Foundation.

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rivaroxaban in preventing venous thromboembolism (VTE or blood clot) events and VTE-related deaths in medically ill patients after they were discharged from the hospital.

"The MARINER trial's aim was to optimize the thromboprophylaxis in medically ill patients with the specific aim of reducing venous thrombosis," explained Dr. Ebrahim Barkoudah, Associate Director of Hospital Medicine Unit at Brigham and Women's Hospital.

In the trial, 12,024 medically ill patients were randomized to either receive 10 mg of rivaroxaban once daily, or a placebo. These patients took the medication or the placebo for 45 days. The primary efficacy outcome was symptomatic VTE or VTE-related death, and the principal safety outcome was major bleeding.

Out of the 12,024 patients in the trial, 50 of the 6,007 patients on rivaroxaban and 66 of the 6,012 patients on the placebo experienced symptomatic VTE or VTE-related death. In relation to major bleeding, 12 out of 5,982 patients on rivaroxaban experienced major bleeding and 9 out of 5,980 patients in the placebo group experienced major bleeding.

The trial results were considered neutral. The investigators on the study concluded, "Rivaroxaban was not associated with a significant lower risk of symptomatic venous thromboembolism and death due to venous thromboembolism than placebo. The incidence of major bleeding was low."

According to Dr. Barkoudah, MARINER suggests that rivaroxaban should not be prescribed to medically ill patients in general until researchers examine the evidence further. Secondary endpoints show that certain groups of patients—those with heart failure, for instance—might benefit more from extended VTE thromboprophylaxis, but additional examination and studies will be needed to confirm these results.

RECOGNIZING RISK

While the trial results may not be immediately revolutionizing how patients will be treated, the MARINER

trial does emphasize the risk that patients face while in the hospital and post-discharge.

"This trial added to our knowledge and shed light on how we look at the risk," explained Dr. Barkoudah, emphasizing the importance of hospitalists recognizing the risk of VTE after hospital discharge. "Hospitalists do not see the risk in their patient community because they are discharging the patient, but the risk is out there. The patient leaves with the risk."

"We need to do more to prevent this," Dr. Barkoudah stressed. "We can do a better job to make sure that these VTEs are prevented."

Part of the risk comes from patients being immobile in the hospital and after discharge, when they are no longer being motivated to move by a treatment team. By raising awareness around this issue, patients can be empowered to make sure they are getting the care they need to avoid a blood clot.

"The risk for each patient is individual. I would encourage every patient to start a discussion with their healthcare providers," said Dr. Barkoudah. "The ultimate cure is for everyone to move. Please, if you can get out of bed safely, with the help of physical therapy or the help of a treatment team, do it and do it as soon as possible."



WHAT CAN YOU DO?

If you are spending time in the hospital, talk to your doctor about your risk of developing a blood clot. If you have a history of blood clots, it's important that your healthcare team knows about your medical history and any medications you may be taking, including anticoagulants. Once your healthcare provider knows about your history, there are precautions to help protect you from developing a new blood clot.

Being in the hospital is a scary and stressful time, but knowing the right questions to ask can make all the difference.



Bring Support to your Community!

NATF is looking for patients or healthcare providers that would like to start a blood clot support group in their area.

With short appointment times, it can be difficult for patients to get the answers and support they need to understand and process their blood clot diagnosis. Starting a blood clot support group with the North American Thrombosis Forum can help!

Don't take our word for it! One Boston support group member described their experience as, "Very encouraging. It became very clear that life after a blood clot is certainly a possibility and a real positive possibility."

If you, or someone you know, may benefit from starting a blood clot support group, email kmeredith@natfonline.org to learn more.



A DOAC Deep Dive: Edoxaban

For the past several decades, warfarin has been the go-to anticoagulant (blood thinner) for doctors, but new treatments have recently emerged in the form of direct oral anticoagulants (DOACs). This new class of anticoagulants include apixaban, betrixaban, dabigatran, edoxaban, and rivaroxaban.

NATF is dedicated to offering readers a closer look at each DOAC in order to empower patients to make informed healthcare decisions. In this issue of *The Beat*, NATF takes a closer look at edoxaban:

WHAT IS IT?

Edoxaban, also known as Savaysa, is a blood-thinning medication used to treat or prevent blood clots from forming. It is prescribed to patients with atrial fibrillation to reduce their risk of developing a stroke caused by blood clots. It is also used to treat patients with deep vein thrombosis (DVT) and pulmonary embolism (PE).

"Edoxaban is one of the new classes of blood thinners. Unlike warfarin, which has been the standard blood thinner for over half a century, edoxaban is one of the approved new agents to treat patients who either had a clot or are at risk for having a clot," explained Dr. Christian T. Ruff, an associate physician in the Cardiovascular Division at Brigham and Women's Hospital in Boston, MA.

HOW DOES IT WORK?

Edoxaban is a factor Xa inhibitor, which means it blocks factor Xa in the clotting cascade.

"It works by targeting a specific protein in the clotting cascade, which is how your body forms clots," explained Dr. Ruff. "The clotting cascade can be both good or bad. In cases of atrial fibrillation or venous thromboembolism (VTE or blood clots), we want to limit the body's ability to form dangerous clots. Edoxaban is a factor Xa inhibitor and it inhibits a very specific clotting factor to help thin the blood."

By blocking the factor Xa, the clotting cascade is stopped and blood is not able to form the clot.

WHAT IS UNIQUE ABOUT EDOXABAN?

Each blood thinner has something that makes it unique and best suited for different patients.

"If you compare edoxaban to the other new agents, there are a couple of important advantages," said Dr. Ruff. "Edoxaban has very good efficacy, similar to the other agents, but it is one of the safest of the new blood thinners with respect to major bleeding. In its pivotal trial in atrial fibrillation, it had substantially less major bleeding than warfarin. It's one of the safest blood thinners that we have available."



Edoxaban

"The other nice aspect is that it has a very well-tested dose scheme," Dr. Ruff explained. The recommended dose is 60 mg once daily, but this can be adjusted to 30 mg daily for patients who have impaired kidney function or low body weight to prevent an excess in bleeding. "We know that patients require different dosages in order to get just the right amount of blood thinner, not too much or too little. The dosing strategy as tested in the pivotal clinical trial appears to both protect patients from stroke and lower their risk of serious bleeding."

Edoxaban is a medication that is taken once daily. For patients who have trouble taking their medication or who just prefer to only take medication once a day, this can be a major benefit.

WHAT ARE THE RISKS?

As with all blood thinners, patients on edoxaban must be aware of their increased risk for bleeding.

"We know that the only risk for edoxaban, the only safety risk, which is true for all of the blood thinners, is that it does increase your risk of bleeding," explained Dr. Ruff. "But, there are no other major side effects of the medication and that has been tested in tens of thousands of patients."

Dr. Ruff stressed that serious bleeding, while an important risk to know about, is fairly rare.

"The risk of serious bleeding with these medications is incredibly uncommon. At least 50% less than what we saw with warfarin," he said. "We have to remind patients that because these drugs work by preventing clotting, it will increase their risk of nuisance bleeding, such as minor bruising or nose bleeds, and that these are not reasons to discontinue the medication."

Patients can help manage their bleeding risk by avoiding risky behaviors, such as contact sports and drinking an excess of alcohol. They should also avoid certain other drugs, such as aspirin or NSAIDs, which also increase the risk of bleeding, unless recommended by their physician.

In addition to managing their risk of bleeding, patients need to properly manage their medication in order to avoid a new blood clot. Patients on edoxaban, or any blood thinner, should never stop their medication or change their dosage without talking to their doctor first.

"If you miss even one or two doses of this medication, you are at risk for forming a clot," emphasized Dr. Ruff.

INTERESTED?

If you believe that edoxaban may be a good fit for you, talk to your healthcare provider about your options. NATF's Anticoagulation Comparison Chart is a great tool that you can use with your healthcare provider to discuss which anticoagulant is right for you. The Anticoagulant Comparison Chart can be found at: <https://bit.ly/2OiA6WF>.



RUNNING WITH LOVE

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"I'm doing everything I can to educate people so that they know the symptoms, and they don't become a victim of it," Christina explained. Christina is dedicated to spreading information about blood clots in the hopes that she can help people better understand the condition.

"Having that conversation can make the difference between someone living and dying. I just want to tell people that if they've had a blood clot, just bring it up in normal conversation because you don't know where that information is going to go," Christina stressed. "I believe that if you just plant that seed, you don't know what it's going to do. You could save a life."

If you would like to support Christina's run in memory of Manu, please visit: <https://bit.ly/2N8qqMw>



EAST ANNUAL CONFERENCE

December 6-9, 2018

Boston, MA

Together with world renowned faculty members and practicing primary care physicians, Pri-Med will deliver a curriculum designed to empower you as a primary care professional and provide the necessary knowledge and tools to give your patients high level care.

NATF is offering a special discount code for attendees. Register with the code NATFVIP to receive all 4 days of the conference for \$70, which includes the preconference day.

Register at: <https://bit.ly/2xN169I>



AC FORUM 15TH NATIONAL CONFERENCE THE DIPLOMAT BEACH RESORT FORT LAUDERDALE APRIL 11-13, 2019

This national conference brings together more than 900 physicians, pharmacists, and nurses for presentations by the leading experts in the field of anticoagulation.

The program includes special lectures focusing on recent advances and important issues in anticoagulation therapy, meet the experts lectures, poster presentations of original research, and exhibitors.

Session Highlights

- Combined Therapy – Afib, Coronary and Peripheral Disease
- Optimizing Anticoagulation Clinics
- Controversies and Challenges in VTE
- Moving the Needle – Creating Change at the National Level
- Improving Safety and Quality in Anticoagulation Care
- What Is the Anticoagulation Provider To Do? Real-World Dilemmas

EARLY BIRD REGISTRATION

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