



▶ CHAPTER NEWS 1

○ 2 | ○ 1 | ○ 2021



▶ CARDIOLOGY UPDATE.....2



▶ FIT CORNER .....3

▶ CVT CORNER .....4

▶ OTHER NEWS...5

# Nebraska ACC

**SUPPORTING PHYSICIANS, TRAINEES, AND CARDIOVASCULAR TEAM MEMBERS WITH EDUCATION, ADVOCACY, & NETWORKING OPPORTUNITIES**

## Chapter News

Happy 2021! The Nebraska ACC is planning a terrific year of programming. Hope to see you online or in person in the coming year.

- Best wishes to the **Nebraska ACC FIT Jeopardy Team**, composed of Swethika Sundaravel (UNMC), Kashif Shaikh (Creighton), and Amr Youssef (UNMC), who will compete in this year's Inter-State ACC FIT Jeopardy competition. Go Big Red!
- Let's keep up the advocacy wins! Thanks to support from the Nebraska ACC and other state medical organizations, Nebraska **Legislative Bill 840** was passed, prohibiting indoor public use of electronic cigarettes. The Nebraska ACC also hosted a very productive **meeting with State Senator Machaela Cavanaugh** (District 6) on 12/9/20, discussing prior authorization reform and telehealth reimbursement. Similar meetings with other state senators are being planned in 2021. Details will be forthcoming. Contact Nebraska ACC Executive Director [Carmen Chinchilla-Gutierrez](#) to participate.
- Planning is underway for the Nebraska ACC **Cardiovascular Team Spring 2021 Meeting** for nurses, technologists, pharmacists, and other team members. E-mail CVT Liaison [Jessica Livingston](#), MSN, RN-BC, AACC to help plan, and check your e-mail for details soon.
- Save the date: The Nebraska ACC **2021 Annual Meeting** will occur on Wednesday, October 20 at the Omaha Marriott from 5:00 to 8:00 pm. We are thrilled to announce that 2021-22 ACC **President Dr. Dipti Itchhaporla** will travel to Omaha to deliver the keynote address. The Annual Meeting will also feature the annual FIT Poster Competition including podium presentations of the top 2 posters and cash prizes.
- The **Nebraska ACC Bylaws** are being updated from their vintage 1994 form. E-mail voting to approve the new bylaws will occur shortly.
- We want to hear from YOU! Contact [Dr. Anu Tunuguntla](#) if you would like to **write for this Newsletter**. The Newsletter features four brief articles quarterly: Chapter News, Cardiology Update (by a cardiologist), FIT Corner (by a fellow in training), and CVT Corner (by a CV team member).
- Please **follow us** on [Twitter](#) and [Facebook](#)!



**Andrew M. Goldsweig, MD, MS, FACC, FSCAI, FSVM, RPVI  
Governor, Nebraska ACC**



**Nebraska**  
CHAPTER

# CARDIOLOGY UPDATE

## RECENT TRENDS IN MANAGEMENT OF STABLE ISCHEMIC HEART DISEASE

Despite significant advance in therapies, one third of the patients with stable ischemic heart disease (SIHD) report chronic angina. Guidelines recommend beta and calcium channel blockers as first line antianginal therapies. If these therapies are contraindicated or intolerant due to side effects or insufficient to alleviate angina, long-acting nitrates and Ranolazine are used as second line antianginal therapies.

Ranolazine is a selective late-sodium current inhibitor, which decreases calcium overload and diastolic tension within the ischemic myocyte, thereby reduces energy requirement and angina. Ranolazine proved to improve angina as monotherapy or in combination with other antianginals in randomized controlled trials (MARISA trial and CARISA trial), without significant hemodynamic effects.

Ivabradine, selective I (f) inhibitor, is a negative chronotropic agent. In earlier studies, Ivabradine shown to improve angina as monotherapy or as an adjunct therapy (INITIATIVE and ASSOCIATE trials respectively). BEAUTIFUL trial showed Ivabradine improved cardiovascular outcomes in SIHD patients with clinical heart failure (HF) > 70. Ivabradine (SIGNIFY trial) recently shown to improve moderate to severe angina, in patients without heart failure, however, there was an increase in major adverse cardiac events (MACE). Ivabradine is a promising antianginal in HF patients, however, one should be cautious using it in patients without HF.

### When to revascularize SIHD patients?

The COURAGE trial demonstrated that percutaneous coronary intervention (PCI) added no MACE benefit, but it improved angina and quality of life compared to optimal medical therapy (OMT) alone. FAME-2 trial showed MACE benefit with FFR guided PCI. Recent ISCHEMIA trial showed no MACE benefit with revascularization in patients with moderate to high ischemia burden. Again, similar to COURAGE trial, ISCHEMIA showed revascularization improves angina and quality of life. It's important to note that COURAGE, FAME-2 and ISCHEMIA trials excluded significant left main disease. It is essential that patients with SIHD should have left main assessed either invasively or by coronary computed tomographic angiography, in consideration for revascularization.

In conclusion, SIHD patients benefit from OMT and risk factor modification in improving angina and slowing progression of the disease. However, in patients with persistent angina, revascularization improves angina and quality of life. Finally, our patients desire angina free and improved quality of life, and we all should help them accomplish that goal.

### References

1. Chaitman BR et al, MARISA Investigators. Anti-ischemic effects and long-term survival during ranolazine monotherapy in patients with chronic severe angina. *J Am Coll Cardiol*. 2004 Apr 21;43(8):1375-82. doi: 10.1016/j.jacc.2003.11.045. PMID: 15093870.
2. Chaitman BR et al, Combination Assessment of Ranolazine In Stable Angina (CARISA) Investigators. Effects of ranolazine with atenolol, amlodipine, or diltiazem on exercise tolerance and angina frequency in patients with severe chronic angina: a randomized controlled trial. *JAMA*. 2004 Jan 21;291(3):309-16. doi: 10.1001/jama.291.3.309. PMID: 14734593.
3. Tardif JC, et al; INITIATIVE Investigators. Efficacy of ivabradine, a new selective I(f) inhibitor, compared with atenolol in patients with chronic stable angina. *Eur Heart J*. 2005 Dec;26(23):2529-36. doi: 10.1093/eurheartj/ehi586. Epub 2005 Oct 7. PMID: 16214830.
4. Tardif JC, et al; ASSOCIATE Study Investigators. Efficacy of the I(f) current inhibitor ivabradine in patients with chronic stable angina receiving beta-blocker therapy: a 4-month, randomized, placebo-controlled trial. *Eur Heart J*. 2009 Mar;30(5):540-8. doi: 10.1093/eurheartj/ehn571. Epub 2009 Jan 9. PMID: 19136486; PMCID: PMC2649284.
5. Fox K, et al R; BEAUTIFUL Investigators. Ivabradine for patients with stable coronary artery disease and left-ventricular systolic dysfunction (BEAUTIFUL): a randomised, double-blind, placebo-controlled trial. *Lancet*. 2008 Sep 6;372(9641):807-16. doi: 10.1016/S0140-6736(08)61170-8. Epub 2008 Aug 29. PMID: 18757088.
6. Fox K, et al; SIGNIFY Investigators. Ivabradine in stable coronary artery disease without clinical heart failure. *N Engl J Med*. 2014 Sep 18;371(12):1091-9. doi: 10.1056/NEJMoa1406430. Epub 2014 Aug 31. PMID: 25176136.
7. Boden WE, et al; COURAGE Trial Research Group. Optimal medical therapy with or without PCI for stable coronary disease. *N Engl J Med*. 2007 Apr 12;356(15):1503-16. doi: 10.1056/NEJMoa070829. Epub 2007 Mar 26. PMID: 17387127.
8. De Bruyne B, et al; FAME 2 Trial Investigators. Fractional flow reserve-guided PCI versus medical therapy in stable coronary disease. *N Engl J Med*. 2012 Sep 13;367(11):991-1001. doi: 10.1056/NEJMoa1205361. Epub 2012 Aug 27. Erratum in: *N Engl J Med*. 2012 Nov;367(18):1768. Mobius-Winckler, Sven [corrected to Möbius-Winkler, Sven]. PMID: 22924638.
9. Maron DJ, et al; ISCHEMIA Research Group. Initial Invasive or Conservative Strategy for Stable Coronary Disease. *N Engl J Med*. 2020 Apr 9;382(15):1395-1407. doi: 10.1056/NEJMoa1915922. Epub 2020 Mar 30. PMID: 32227755; PMCID: PMC7263833.



**Natraj Katta, MD**  
Interventional Cardiologist  
Bryan Heart, Lincoln, Nebraska

# FIT CORNER

## THE PERFECT MENTOR(S)-MENTEE MATCH: AND THE ELEMENTS THAT DETERMINE SUCCESS

The most influential leaders in history and experts in the field of medicine at one point or another were mentored by those who came before them and each one of those successful matches had certain defining characteristics. The three essential components that make up a successful mentor-mentee match are **the mentee, the mentor, and their alliance** and each one of these components should follow a certain framework to ensure success.

**The mentee** is where it all starts and is probably the most important piece. A good mentee must be committed, focused, clear about what he or she wants, and able to seek and accept feedback from others. He or she must take personal responsibility for their own success, failures, and focus on professional growth. On the same token they should be mindful of their own limitations and know when to seek to help. Mentees should be active in their pursuit for success and avoid falling into a passive state. Mentors are here to guide, support, and point you on the right path but mentees must be willing to walk the path set before them.

**The mentor(s)** should be more than just a successful individual(s) in their field. They must have desire to nurture their proteges, have the ability and availability to commit extensive amounts of time and energy, willingness to share personal experiences including their failures, and willingness to provide constructive feedback when needed. At minimum, a mentor will provide support and guidance, but you should not be trapped by the “one mentor philosophy”. This is old and outdated. Each mentor will have their own defining strengths and weaknesses. Some mentors can be connectors and can forge certain unions with other key individuals who will play important roles in your success. While others may simply help with research or job searching. Get as many mentors as you need to be successful, and if a mentor is not quite a match for you then be honest and seek another. Besides, effective mentoring takes effort, specific skill, and structure which can be quite difficult given all the other responsibilities a mentor may already have.

**The alliance** is the joint venture that both the mentee and mentor experience together. To create a successful alliance both parties must be open to discussing the goals and the expectations of their venture. Both parties must maintain a certain level of respect for each other as well as maintain a certain level of confidentiality. When forming this alliance, I recommend for both parties to start with the end goal in mind. Working backwards to formulate the plan together will keep both of you focused on the endgame and will ensure you do not stray from your goals. Be flexible because your plan will continue to be molded on a day-to-day basis to overcome obstacles and curveballs difficult to foresee. Make sure to set regular meetings and be sure to reflect frequently on where you have been and where you want to go. And remember, as you travel this journey be sure to nurture your relationship by always crediting your mentors for the impact they have had on your success.

In Conclusion, a healthy mentor(s)-mentee alliance is mutually beneficial, nurturing, and constantly evolving. By working together, a mentor-mentee relationship can be a powerful force to propel not only the mentee toward success but may inadvertently bring success and fulfillment to the mentor.

*“I would like to dedicate this article to all of the individuals in my life who have helped mold me into the person I am today – a dedicated physician, loving mother, and role model.”*



**Kristen N. Brown, MD**  
FIT at the University of Nebraska  
Medical Center  
@Kristen\_BrownMD



**Paul P. Dobesh, Pharm.D.,  
FCCP, BCPS, BCCP**  
Professor of Pharmacy Practice and  
Science  
University of Nebraska Medical  
Center College of Pharmacy

# CVT CORNER

## DOACs FOR BIOPROSTHETIC MITRAL VALVES-FINALLY SOME REAL DATA

All the currently approved direct oral anticoagulants (DOACs) are indicated for reducing the risk of stroke in patients with nonvalvular atrial fibrillation (NVAF). Although current guidelines define patients who do not have NVAF as those with moderate to severe mitral stenosis and those with a mechanical heart valve (including TAVR), the amount of data supporting the use of DOACs in patients with AF and a bioprosthetic heart valve was limited.<sup>1</sup>

Only 31 (0.2%) patients in the ARISTOTLE trial with apixaban were enrolled with a bioprosthetic mitral valve.<sup>2</sup> There were 131 (0.6%) patients in the ENGAGE AF-TIMI 48 trial with edoxaban enrolled with a bioprosthetic mitral valve.<sup>3</sup> In both of these trials, the efficacy and safety of the DOAC compared to warfarin in patients with a bioprosthetic mitral valve was similar to the overall study findings.<sup>2,3</sup> In a recent trial, 218 patients undergoing bioprosthetic valve implantation or repair were randomized to edoxaban or warfarin for 3 months. The incidence of death, thromboembolic events, or intracardiac thrombosis was 0% with edoxaban compared to 3.7% with warfarin ( $p < 0.001$  for noninferiority).<sup>4</sup>

In the recently published RIVER trial, 1005 patients with AF and a bioprosthetic mitral valve were randomized to rivaroxaban 20 mg daily or dose-adjusted warfarin to an INR of 2.0-3.0.<sup>5</sup> After 12 months of follow up, the primary endpoint of death and major cardiovascular events occurred in 3.4% of patients receiving rivaroxaban and 5.1% of those receiving warfarin (HR 0.65, 95% CI (0.35-1.20);  $p < 0.001$  for noninferiority). Stroke was significantly reduced with the use of rivaroxaban compared to warfarin (0.6% vs. 2.4%; HR 0.25, 95% CI 0.07-0.88). Valve thrombosis was rare, with only five events with rivaroxaban and three events with warfarin ( $p = NS$ ). Major bleeding was nonsignificantly reduced by 46% with the use of rivaroxaban (1.4% vs. 2.6%).

These new data almost triples the number of patients with AF and a bioprosthetic heart valve evaluated with a DOAC. Although this trial used rivaroxaban, it is probable that other factor-Xa inhibitors would provide similar results. These data should provide comfort for clinicians with the use of a DOAC in patients with AF and a bioprosthetic mitral valve.

### References

1. Nishimura RA, Otto CM, Bonow RO, et al. 2017 AHA/ACC focused update of the 2014 AHA/ACC guideline for the management of patients with valvular heart disease. *J Am Coll Cardiol* 2017;70:252-289.
2. Avezum A, Lopes RD, Schulte PJ, et al. Apixaban in comparison with warfarin in patients with atrial fibrillation and valvular heart disease: findings from the Apixaban for Reduction in Stroke and Other Thromboembolic Events in Atrial Fibrillation (ARISTOTLE) Trial. *Circulation* 2015;132:624-32.
3. Pasciolla S, Zizza LF, Le T, Wright K. Comparison of the efficacy and safety of direct oral anticoagulants and warfarin after bioprosthetic valve replacements. *Clin Drug Investig* 2020;40:839-45.
4. Hong G-R. Edoxaban versus warfarin after surgical bioprosthetic valve implantation or valve repair. Presented at the virtual 2020 ACC Scientific Sessions, March 28–30, 2020.

Guimarães HP, Lopes RD, de Barros Silva IL, et al. Rivaroxaban in patients with atrial fibrillation and a bioprosthetic mitral valve. *N Engl J Med* 2020;383:2117-2126

Did you know? The ACC has a monthly newsletter for CV Team Members. Click on the link below to learn more about what is happening on the national stage!

Read the ACC CV Team Newsletter [here!](#)

## ACC CV TEAM NEWSLETTER

## NEWSLETTER STAFF

ANDREW M. GOLDSWEIG, MD



Governor,  
Nebraska ACC

ANURADHA TUNUGUNTLA, MD



Editor-in-Chief,  
Nebraska ACC

CARMEN CHINCHILLA



Executive Director,  
Nebraska ACC



# EARLY CAREER WEBINAR INVITATION



AMERICAN  
COLLEGE *of*  
CARDIOLOGY

STARTING FROM THE GRASSROOTS!

AN EARLY CAREER GUIDE TO ENGAGEMENT WITH YOUR LOCAL ACC CHAPTER

March 18, 2021- 7 to 8 pm EST

You are invited to attend this ACC-hosted webinar which will highlight the benefits of Early Career engagement in local Chapters, as well as launch the ACC Early Career Leadership Council's Chapter Initiative for 2021. Click [here](#) to register! Please reach out to [Kimarie Chang](#), Staff Liaison, Early Career & FIT Sections, Medical Residents & Students at the ACC.

---

## NEW PHYSICIAN WELLBEING PROGRAM AVAILABLE TO ALL NEBRASKA PHYSICIANS

LIFEBRIDGE NEBRASKA—NEBRASKA'S PHYSICIAN WELLNESS PROGRAM

The Nebraska Medical Association has launched their peer-to-peer physician coaching program LifeBridge Nebraska. LifeBridge Nebraska was developed by physicians, for physicians. It is a FREE coaching program available to all Nebraska physicians, regardless of NMA membership. The NMA hopes Nebraska physicians will reach out as a normal response to acute and chronic stress rather than just “powering through.”

Confidential appointments are self-referred without medical diagnoses, insurance billing, or electronic records. Notification is not given to employers, NMA, or the board of medicine. Program participants can expect complete confidentiality –information and/or identity is never disclosed to others without written consent.

Physicians can connect with LifeBridge Nebraska by calling a confidential third-party call center at 1-888-569-2036. To learn more and to view coach profiles, please visit [nebmed.org/lifebridge](http://nebmed.org/lifebridge). Questions? Please contact Betsy Jones at [betsyj@nebmed.org](mailto:betsyj@nebmed.org).



[Click Here to Learn More](#)