

Use of NOACs in Atrial Fibrillation

Pre-podcast questions

1. Which of these patients diagnosed with atrial fibrillation would be the best candidate for Novel Oral Anticoagulant (NOAC) therapy?

- A. 72-year-old male who underwent a heart valve replacement ten years ago
- B. 56-year-old female who is currently on warfarin and struggles to make it to follow up appointments and warfarin doses due to her work schedule
- C. 60-year-old man who has fairly stable INRs on warfarin, but has trouble making it to follow up appointments due to living far away from the clinic
- D. 73-year-old woman with very stable INRs on warfarin who frequently requests INR checks but does not currently have a Medicare Part D plan

Answer: C. 60 year old man who has fairly stable INRs on warfarin, but has trouble making it to follow up appointments due to living far away from the clinic.

Rationale:

Answer A is incorrect because NOACs are not approved for use in patients with mechanical valves.

Answer B is incorrect because NOACs are not appropriate for patients who have historically poor adherence to medications due to the increased risk of embolic events after just one missed dose.

Answer D is incorrect because there are no coagulation monitoring tests that can be performed to indicate the anticoagulation effect of NOACs. Therefore patients who find comfort in knowing their INR levels would likely not want to switch to these medications. In addition, NOACs are very expensive and patient insurance plans should be considered prior to initiating therapy.

Answer C is correct. NOACs require less frequent monitoring than warfarin making them a good choice for patients who have trouble making it to frequent appointments. In addition, a stable INR on warfarin likely indicates that this patient is also compliant to their medications.

Objective:

Identify patients that are candidates for NOAC medications

2. SW is a 63 year old female who was recently diagnosed with atrial fibrillation. She has a past medical history of diabetes, hypertension, and rheumatoid arthritis well controlled by NSAIDs. Her current medications include metformin 500mg twice daily, lisinopril 10mg once daily, metoprolol succinate 50mg once daily, and naproxen 500mg twice daily. Her physician would like to start her on anticoagulation therapy and feels that she may be a candidate for a NOAC. Which NOAC would be the best for this patient?

- A. Dabigatran 150mg twice daily
- B. Rivaroxaban 20mg once daily
- C. Apixaban 5mg twice daily
- D. Edoxaban 60mg once daily

Answer: C. Apixaban 5mg twice daily.

Rationale: Due to the patient's age and current NSAID medication, she is at risk for a GI bleed. Apixaban is the only NOAC that was not shown to significantly increase the risk of a GI bleed compared to warfarin. Therefore, it would be the best choice for this specific patient.

Objective: Select the most appropriate NOAC given specific patient characteristics

3. Which of the following statements regarding NOACs is true?

- A. Apixaban has been shown to have a significantly lower risk of bleeding compared to warfarin
- B. Rivaroxaban was shown to be inferior to warfarin in preventing ischemic stroke
- C. Apixaban has been shown to have significantly higher all-cause mortality than warfarin
- D. Dabigatran is the only NOAC that has been shown to have an increased risk of GI bleeds compared to warfarin

Answer: A. Apixaban has been shown to have a significantly lower risk of bleeding compared to warfarin

Rationale: In the ARISTOTLE trial, apixaban was shown to have a significantly lower risk of bleeding when compared to warfarin.

Answer B is incorrect because all NOACs, including Rivaroxaban, have been shown to be at least non-inferior to warfarin in clinical trials

Answer C is incorrect because apixaban was shown to have significantly lower all-cause mortality when compared to warfarin in the ARISTOTLE trial

Answer D is incorrect because dabigatran, rivaroxaban, and edoxaban have all been shown to cause a significantly higher rate of GI bleeding compared to warfarin

Objective: Compare and contrast the NOACs used in patients with atrial fibrillation in terms of safety and efficacy.

Post-podcast questions

1. Which of these patients would **NOT** be an appropriate candidate for NOAC therapy?

- A. 59-year-old man who struggles to maintain therapeutic range on warfarin despite proper adherence
- B. 60-year-old woman recently diagnosed with Afib with a CHADS2 score of 2 who has never been on anticoagulation therapy before
- C. 72-year-old man with adequate renal function currently on warfarin (CHADS2 = 4) who has trouble making it into the clinic for appointments
- D. 51-year-old woman with a CHADS2 of 1 who struggles to remain consistent with her diet while on warfarin and misses doses of her medications often

Answer: D. 51 year old woman with CHADS2 score of 1 who struggles to remain consistent with her diet while on warfarin and misses doses of her medications periodically

Rationale:

Answer D is correct. Although this patient struggles to remain consistent with her diet, the fact that she has a history of missed doses of her medications makes her a poor candidate for NOAC therapy due to the short half-life of NOACs and the increased risk of embolic event with a single missed dose.

Answer A is incorrect. Patients who struggle to maintain therapeutic range despite proper adherence to warfarin are typically good candidates for NOAC therapy.

Answer B is incorrect. It is not required to have been on previous anticoagulation therapy prior to initiating NOACs.

Answer C is incorrect. The fast onset of action and short half-life of NOACs make it possible to interrupt therapy 48 hours prior to a procedure without the need for bridging with low molecular weight heparin.

Objective: Identify patients that are candidates for NOAC therapy

2. JP is a 64-year-old male recently started on dabigatran for stroke prevention in atrial fibrillation. His past medical history includes severe GERD, diabetes, and insomnia. JP's current medications include pantoprazole 40mg twice daily, metformin 500mg twice daily, glipizide 5mg once daily, and zolpidem 10mg at bedtime. His pharmacy profile fill records indicate that he is very compliant in taking his medications. Upon reviewing his chart, the pharmacist at the clinic notified the physician that dabigatran may not be the best medication for JP. Why?

- A. Dabigatran is not as effective in preventing embolic events compared to the other NOAC options
- B. Dyspepsia is a common adverse effect of dabigatran. Therefore, it would not be the best choice in a patient with severe GERD
- C. Apixaban may be a more appropriate medication choice due to its once daily dosing
- D. Dabigatran should not be initiated in patients who have not been on any type of anticoagulation therapy in the past

Answer: B. Dyspepsia is a common adverse effect of dabigatran. Therefore, it would not be the best choice in a patient with severe GERD.

Rationale: Answer B is correct. Dyspepsia is a frequent adverse effect of dabigatran which has led to discontinuation in some patients. Since JP has existing GERD, dabigatran may not be the best choice for her. Answer A is incorrect. In the RE-LY trial, dabigatran was actually shown to be superior to warfarin in reducing embolic events. Apixaban is the only other NOAC that was found to be superior to warfarin, with the other two NOACs found to be non-inferior to warfarin.

Answer C is incorrect. Both apixaban and dabigatran have twice daily dosing

Answer D is incorrect. All NOACs can be initiated in patients that have no prior anticoagulation therapy

Objective: Compare and contrast the NOACs used in patients with atrial fibrillation in terms of safety and efficacy

3. TL is a 73-year-old male with atrial fibrillation currently anticoagulated with warfarin. His past medical history includes hypertension, atrial fibrillation, stroke, and depression. Current medications include lisinopril/HCTZ 20/12.5mg once daily, metoprolol tartrate 25 mg twice daily, warfarin 5mg daily, and sertraline 50 mg once daily. He has impaired renal function (CrCl = 34 mL/min) and a documented risk of bleeding (HAS BLED score = 4). During this office visit, TL is wondering if he switching to a NOAC would reduce his bleeding risk while on warfarin. He stated that he doesn't know much about the agents, and is very fearful of having a bleeding event in the future. When asked about medication adherence, TL said that he always remembers his morning pills but sometimes forgets to take his second dose of metoprolol. Which would be the best choice for TL?

- A. Continue warfarin 5mg daily
- B. Dabigatran 150mg twice daily
- C. Rivaroxaban 20mg once daily
- D. Apixaban 5mg twice daily

Answer: A. Continue warfarin 5mg daily

Rationale:

Answer A is correct. Due to this patient's concern about bleeding events and reduced renal function, he would benefit from remaining on warfarin. Although NOACs are labeled for use in reduced renal function, they may cause increased bleeding in these patients. In addition, the patient would likely find comfort in the fact that there is a reversal agent for warfarin currently available in case he does have a bleeding event. There is no reversal agent available for the NOAC medications at this time.

Objective: Select the most appropriate NOAC given specific patient characteristics