The ARISTOTLE trial looked at two primary outcomes regarding efficacy and safety of apixaban when compared to current clinical recommendations in reducing the risk of post-TAVR thromboembolic and bleeding complications. A total of 617 patients were enrolled; among the 272 patients with AF, 141 were treated with apixaban and 131 with warfarin. This study did show that the apixaban group proved superior in lowering stroke rate at 30 days and 12 months, and apixaban had a lower rate of life-threatening bleed.6

Seeger et. al. assessed the safety and efficacy of apixaban compared to current clinical recommendations in reducing the risk of post-TAVR thromboembolic and bleeding complications. A total of 617 patients were enrolled; among the 272 patients with AF, 141 were treated with apixaban and 131 with warfarin. Results indicated that apixaban therapy may be superior compared to warfarin in preventing stroke in AF patients and has lower bleed risk.6

In conclusion, apixaban is a treatment option for patients with TAVR requiring oral anticoagulation.

References:

1. Food and Drug Administration. Transcatheter Aortic Valve Replacement. Available At: https://www.accessdata.fda.gov/cdrh_docs/pdf13/P130009s005s07c.pdf Accessed June 20th, 2018


Textual content from the image is not directly relevant to the question and does not need to be included in the response.
Because blood glucose levels can directly impact the wellbeing of a patient, it is important to understand the goal levels that should be achieved throughout the patient’s hospital stay. Glucose levels will vary greatly in a person if they are fasting or had eaten recently, and they can be indicative of a patient’s ability to get better during their hospital stay. Glucose levels depend on when the patient has last eaten. Fasting glucose is usually measured around 8-10 hours after eating. Glucose levels begin to rise within about 10 minutes of eating carbohydrates and peak within an hour or so. Blood glucose levels do not usually exceed 140 mg/dL and will return to pre-prandial levels within a few hours. When glucose levels exceed 140 mg/dL in an outpatient setting, it is considered a hyperglycemic state and may require a hemoglobin A1C assessment.

Patients who are admitted to the hospital have different requirements depending on their disease state: glucose levels greater than 140 mg/dL may not require insulin or other therapy, but blood glucose levels 180 mg/dL or greater should be addressed. Close monitoring of blood glucose in hospitalized patients, especially those receiving parenteral nutrition (PN), prevents complications, infections and mortality. Insulin or other medication may be initiated in hospitalized patients to maintain target blood glucose levels within the range of 140-180 mg/dL. Although these goals may vary by patient and institutional policy, typically, blood glucose levels should be monitored for hospitalized patients and maintained at levels that avoid hypoglycemia (<70 mg/dL) and hyperglycemia (>140 mg/dL).

Developing hyperglycemia while on parenteral nutrition has been linked to poorer outcomes that avoid hypoglycemia (<70 mg/dL) and hyperglycemia (>140 mg/dL). Due to normal biological processes, the glucose levels of a patient who is not on PN fluctuates between meals. However, the glucose levels of a PN patient are elevated because the rate at which insulin decreases blood glucose levels is similar to the rate at which dextrose is entering the bloodstream because of constant infusion. Therefore, bedside glucose testing reflects the constant carbohydrate infusion being delivered by PN and yields a higher result than a patient under normal care. This is part of the reason that insulin is typically administered as part of the PN in an effort to reduce stress on the pancreas. A diabetic PN patient may present with higher blood glucose levels and require closer monitoring than a non-diabetic patient. Goal glucose levels are summarized in Tables 1 and 2.

**Table 1: Glucose levels at various stages of carbohydrate consumption for a non-diabetic patient**

<table>
<thead>
<tr>
<th>State</th>
<th>Glucose Levels (mg/dL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fasting (normal blood sugar)</td>
<td>70 – 110</td>
</tr>
<tr>
<td>Post-Prandial (1 to 2 hours after eating)</td>
<td>&lt; 140</td>
</tr>
<tr>
<td>Mostly sedentary patient in hospital setting</td>
<td>&lt; 140 for healthy patients</td>
</tr>
<tr>
<td>Hypoglycemia</td>
<td>≤70</td>
</tr>
</tbody>
</table>

**Table 2: Glucose levels for a patient on parenteral nutrition**

<table>
<thead>
<tr>
<th>TPN Patient / Requirement</th>
<th>Glucose Levels (mg/dL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalized Patient</td>
<td>140 – 180</td>
</tr>
<tr>
<td>Lower Dermatitis</td>
<td>110</td>
</tr>
<tr>
<td>Reassess Insulin</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Adjust Insulin (Hypoglycemic)</td>
<td>≤70</td>
</tr>
</tbody>
</table>

Meet the new Pharmacy Residents

The Valley Hospital Pharmacy Residency Program is nationally accredited by the American Society of Health-System Pharmacists. Upon graduation from schools of pharmacy, pharmacists may choose to further their education through a one-year long post-doctoral residency. This additional training exposes new practitioners to the different aspects of the practice of pharmacy, offers the opportunity to manage special patient populations, and allows application of knowledge and skills in participating as an interprofessional team member.

Elizabeth Hay, BS, MBA, Pharm.D.
Post-Doctoral Community Pharmacy Resident
Dr. Elizabeth Hay recently joined The Valley Hospital as the PGY-1 Community Pharmacy Resident. Born and raised in Clemson, SC, home of the Clemson Tigers, she went on to Clemson University and graduated with a B.S. of Bioengineering. In May 2018, she earned an MBA from The Citadel and a Doctor of Pharmacy from the South Carolina College of Pharmacy at the Medical University of South Carolina. Her interests include transitions of care and specialty pharmacy and she is excited to get started in our outpatient pharmacy. Aside from working in the pharmacy, she loves country music and enjoys golf, hiking, and spending time with her dog, Princess.

Rachel Nottebart, Pharm.D.
Post-Doctoral Pharmacy Practice Resident
Dr. Rachel Nottebart is originally from southern New Hampshire, and earned her Doctorate of Pharmacy from Albany College of Pharmacy and Health Sciences in Albany, NY. Her clinical interests include cardiology, oncology and critical care. She is excited to explore these areas and many more throughout her residency here. Rachel has been dancing since she was 3 years old, and was able to continue throughout college as a member of the ACPHS dance team. When not dancing or working, she can be found skiing, riding her bike along the Hudson River and playing tennis.

Catherine Purtill, BS, Pharm.D.
Post-Doctoral Pharmacy Practice Resident
Dr. Catherine “Cat” Purtill grew up in the Poconos, Pennsylvania and graduated from East Stroudsburg University with a Bachelor degree in Biochemistry and Chemical Biotechnology. Upon graduation, she then earned her Doctor of Pharmacy degree from The University of Findlay College of Pharmacy. Catherine’s current clinical interests are cardiology, pediatrics and emergency medicine. Upon completion of the residency program, Catherine hopes to become board-certified in cardiology. In her free time, Catherine enjoys spending time with her eight nieces and nephews, hiking, painting and researching the best bakeries in town!
Luckow Oncology Pharmacists Earn National Certification

Jooyoung Park, Pharm.D. and David Turberville, Pharm.D., are honored in a celebration of their accomplishment in earning **Board Certified Oncology Pharmacist (BCOP) credential.** This rigorous, prestigious, national credential is for pharmacists who meet eligibility requirements, including at least four years in the practice of oncology pharmacy and pass the national Oncology Pharmacy Specialty Certification exam. Pharmacists with BCOP credential demonstrate advanced knowledge and expertise in managing pharmacotherapy, reducing medication errors, providing education, and addressing the physical and emotional issues in this patient population as a member of the healthcare team. To learn more about national credentialing and certification for pharmacists, please visit www.bpsweb.org.

Kudos to both for successfully completing the requirements to this arduous process!!! Pictured are Jooyoung and David surrounded by the Luckow team.

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Pharmacy faculty publish in national pharmacy journal

Sasha Falbaum, Pharm.D., and Maria Leibfried, Pharm.D., Fairleigh Dickinson University School of Pharmacy & Health Sciences clinical faculty at The Valley Hospital, published a review article in the national, peer-reviewed pharmacy journal, *U.S. Pharmacist.* The article, entitled “Treatment of Pulmonary Embolism,” describes the epidemiology, pathophysiology, presentation, and management of patients with pulmonary embolism. To read the complete publication, please visit the journal’s website at: [https://www.uspharmacist.com/article/treatment-of-pulmonary-embolism](https://www.uspharmacist.com/article/treatment-of-pulmonary-embolism)