

# SEVEN HILLS TIMES



Volume 5 Issue No 12 December 2021

# An Official Publication of Department of Pharmacy Practice Seven Hills College of Pharmacy

(Autonomous)
Tirupati, Andhra Pradesh.
In association with

**Sri Padmavathi Medical College for Women**, Alipiri Road, Tirupati, Chittoor (Dist.,), Andhra Pradesh, India.

Contact Us:

shcppharmacypractice@gmail.com

Phone: 7730084513, 7702484513

#### **Editorial Board**

Dr.M. Niranjan Babu, Dr. B. Jyothi,
Dr. E Sunil Kumar, Dr. Robin George,
Dr. S. Sirisha, Dr Basily Joseph,
Dr S Divya

### **Student Co-ordinators**

T Rachana, P Bharathi, S Srija

#### **VISION**

To emerge as one of the premier pharmacy colleges in the country and produce pharmacy professional of global Standards.

#### **MISSION**

- To deliver quality academic programs in Pharmacy and empower the students to meet industrial standards.
- To build student community with high ethical standards to undertake R&D in thrust areas of national and international standards.
- To extend viable outreach programs for the health care need of the society.
- To develop industry institute interaction and foster entrepreneurial spirit among the graduates

A Retrospective Study On Prescription
Patterns Of Antiplatelets-Anticoagulants
And Role Of Risk Factors In The
Treatment Of Peripheral Arterial Disease

T Rachana, Pharm D Internee



#### **Background:**

Peripheral arterial disease (PAD) is a distinct atherothrombotic syndrome marked by stenosis (narrowing) and occlusion (obstruction) of peripheral arterial beds, typically those in the lower extremities. Although PAD can be either asymptomatic or symptomatic, both forms are associated with an increased risk of thrombosis. It is associated with multiple risk factors.

Treatment includes lifestyle changes to control risk factors, along with antiplatelet and anticoagulation therapy.

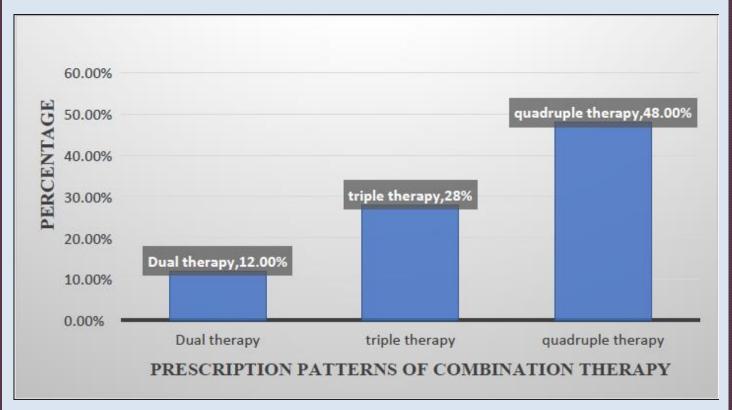
#### **Methodology:**

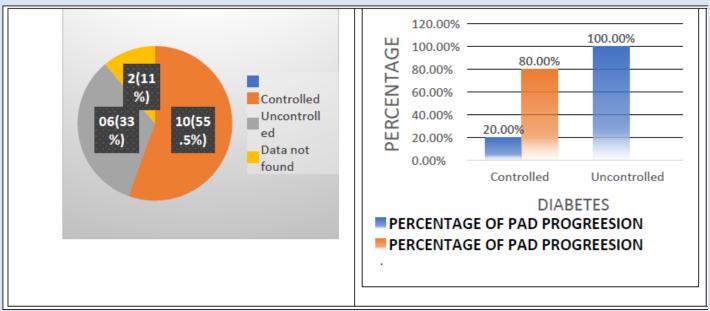
This is a hospital-based Retrospective observational study, conducted in the medical records department of Cardiothoracic and vascular surgery, SVIMS, SPMC(W) — Tirupati. Carried out for a period of 6 months and collected a total of 65 PAD cases. A structured data collection form was used to record the prescription patterns and risk factors of the patient.

#### **Results:**

Out of 65 PAD subjects, antiplatelets were received by 7(11%), anticoagulants received by 1(1.5%), and combination therapy received by 57(88%). The commonly prescribed combination pattern was quadruple therapy 31(48%). According to patient medical records among 38smokers, 23 were involved in smoking cessation and the disease regressed to 87%.

Out of 18 diabetics, 10 subjects had controlled blood sugar levels and the disease regressed to 80%. Overall, 21 hypertensives, 11 subjects had controlled blood pressure and had improved their disease stat to 91%.





Risk Factor Assessment for the progression of PAD

#### **Conclusion:**

This retrospective observational study concluded that the majority of subjects with peripheral arterial disease were received combination therapy and risk factors play a major role in the management of the disease.

# A New Instrument In The World Of Orthopedics' That Connects Leg and Ankle-Patient specific talus spacer

## S Srija, Pharm D V Yr

Product Name: Patient Specific Talus Spacer HDE Applicant: Additive Orthopaedics, LLC

Address: 44 Riverdale Avenue

Monmouth Beach, NJ 07750

Approval Date: February 17, 2021



# **Device Description:**

The Patient Specific Talus Spacer is a solid, polished replica of the patient's bone to allow the patient to regain motion and reduce pain without an amputation or fusion until the time a fusion potentially becomes necessary. The device is available in cobalt-chromium (CoCr) metal alloy conforming to ASTM F75 and produced by laser sintering. The device is available in cobalt-chromium (CoCr) metal alloy conforming to ASTM F75 and produced by laser sintering. All surfaces of the device are hand polished to a mirror finish. The implant is then cleaned and passivated per ASTM A967 and will be sterilized by the end user via steam sterilization.

#### **Indications for Use:**

The Patient Specific Talus Spacer is indicated for avascular necrosis of the ankle joint. The anatomical landmarks necessary for the design and creation of the Additive Orthopaedics Patient Specific Talus Spacer must be present and identifiable on computed tomography scan.

The indication for use statement has been modified from that granted for the HUD designation. The HUD designation was for "avascular necrosis of the ankle joint". It was modified for the HDE approval because patient-specific devices in orthopedics need to include image modality in the indications. Specifically, the image modality influences the device design and is crucial to the patient-specific process. The indications reflect the approved use of the specific image modality that has been validated for safe use of the subject device.

#### How does it work?

The Patient Specific Talus Spacer is designed to match the anatomy of the patient's ankle bone and replace the patient's damaged AVN talus. Movement in the ankle joint can occur where the distal tibia and the Patient Specific Talus Spacer connect.

#### What will it accomplish?

The Patient Specific Talus Spacer provides probable benefits related to improvement in pain with AVN talus patients who have limited treatment options and are high risk for fusion or amputation. The clinical data found the rate of reoperation was low, with 9.4% of cases (total of 32 cases, 31 patients) resulting in reoperation or correction.

#### When should it not be used?

The Patient Specific Talus Spacer should not be implanted in patients who have:

- Use of implant greater than 6 months from date of patient's CT scan.
- Degenerative changes in the ankle, hindfoot, or midfoot joints.
- Presence of an active infection.
- Gross deformity in sagittal (right to left) or coronal (front to back) planes. More than 15 degrees of varus or valgus deformity in the coronal plane, or more than 50% partial dislocation anteriorly or posteriorly of the talus in the sagittal plane.
- Blood supply limitations and previous infections that may prevent healing.
- Physical conditions that would eliminate adequate implant support or prevent healing, including inadequate soft tissue coverage.
- Conditions which may limit the patient's ability or willingness to activities or follow directions post-surgery during the healing period.
- Presence of neurological deficit which would prevent patient compliance post-surgery.
- Sensitivity or allergy to the metal implant. Where material sensitivity is suspected, appropriate tests should be made, and sensitivity should be ruled out prior to implantation.

#### **Contraindications:**

- The Patient Specific Talus Spacer should not be implanted in patients meeting any of the following conditions: HDE H200001:
- FDA Summary of Safety and Probable Benefit 1 of 24
- Use of implant greater than 6 months from date of patient's computed tomography (CT) scan.
- Degenerative changes in the tibiotalar,
- subtalar or talonavicular joints.
- Presence of an active infection.
- Gross deformity in sagittal or coronal planes. More than 15 degrees of varus or valgus deformity in the coronal plane, or more than 50% subluxation anteriorly or posteriorly of the talus in the sagittal plane. Osteonecrosis of the calcaneus, distal tibia or navicular.

#### **Probable Adverse Effects Of The Device On Health:**

- Below is a list of the potential adverse effects (i.e., complications) associated with the use of the device.
- Infection, deep and superficial
- Loosening or migration of the implant
- Nerve damage due to surgical trauma

# Vericiguat-for Chronic Heart Failure

# P Bharathi, Pharm D IV yr

**Brand name:** Verquvo

Class: Soluble guanylate cyclase stimulators

Molecular formula:C19H16F2N8O2

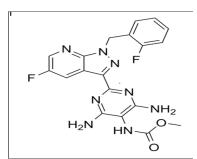
# Dosage:

2.5 mg Verquvo oral tablet, From \$293.49 for 14 tablets.

5 mg Verquvo oral tablet, From \$293.49 for 14 tablets.

10 mg Verquvo oral tablet, From \$618.05 for 30 tablets

#### **Mechanism of Action**



Stimulates soluble guanylate cyclase (sGC), the intracellular receptor for endogenous Nitric Oxide (NO), which catalyzes cyclic guanosine monophosphate (cGMP) production; cGMP plays a role in the regulation of vascular tone. Cardiac contractility, and Cardiac remodelling.

Heart failure is associated with impaired NO synthesis and decreased sGC activity, which may contribute to Myocardial and Vascular dysfunction. By directly stimulating sGC, independently of and synergistically with NO, Verciguat augmets levels of intracellular cGMP, leading to smooth muscles relaxation and vasodilation

#### **PHARMAKOKINETICS**

**Absorption:** The absolute bioavailability of Vericiguat is 93% when taken with food. Results were comparable when Verquva was administered orally as a whole tablet or as crushed tablet in water.

**Distribution:** Vd = 44L (healthy volunteers) Protein bound – 98%

Metabolism: Undergoes Glucuronidation by UGTIA9

Elimination: Urine – 53 % (primarily as inactive metabolite)

Feces – 45% (primarily as unchanged drug)

Half life - 30 hrs (Patients with HF)

#### Do not use Vericiguat if you are Pregnant.

It could harm the unborn baby or cause birth defects. Use effective birth contol to prevent pregnancy while you are using this medicine and for atleast 1 month after your treatment ends. You will need to have a negative pregnancy test before starting this treatment.

#### **Departmental Activities in December 2021:**

Activities	Patient Counselling	Drug Information services	Adverse Drug Reactions	Medication Errors
Number	1236	44	22	07

