

## SEVEN HILLS TIMES



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#### 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

Evaluation of Medication Non- Adherence & Prescription Patterns among CAD and CHF Patients at A Tertiary Care Hospital

in South India
D Lavanya, Pharm D Internee



#### **Background Information:**

Cardiovascular diseases are the major leading cause of death in the world now a days. The present aims to evaluate the medication non-adherence and the prescription patterns of CAD & CHF patients.

#### Methodology

This is a cross sectional observational study including a sample size of 250 patients of the Cardiology department, who were interviewed using Morisky's Medication Adherence Scale and questions involving the reasons for their non-adherence and Modified Kuppuswamy Socio-Economic Status (SES) Scale was used to assess the patient's economic status.

#### Results

Out of 250 patients,135 were found out to be adherent to their medication, while the remaining 115 were been non-adherent. Among them, male population was higher than females and also age groups 51-60 and 61-70, having majority of the cases. The most common reasons for non-adherence were Forgetfulness, Stopping medication after use, Feels well and does not need the medicine, Carelessness. More no. of patients were reported from Upper Lower (UL) class according to the Modified Kuppuswamy SES Scale.

In this study, most commonly used prescriptions included Diuretics, Anti-platelet agents, Hypolipidemic drugs, Angiotensin antagonists, Beta Blockers, Cardiac glycosides, Anti-anginals and also Hypoglycaemic agents were also prescribe many times.

#### Conclusion

Patients had been studied for medication non-adherence In additional for prescription pattern studies. We here by conclude that, almost for every two patients studied, one patient was medication non-adherent.

## CLINICAL AND ECONOMIC BURDEN OF DIABETIC FOOT ULCERS: A 5-YEAR LONGITUDINAL MULTI-ETHNIC COHORT STUDY FROM THE TROPICS

#### E Niranjani, Pharm D V yr

#### **Introduction:**

In 2014, there were 422 million people across the globe living with diabetes, with a prevalence of 8.5%. Among adults with diabetes, the lifetime risk of developing a diabetic foot ulcer is 15% to 25%. DFUs present a substantial clinical and economic burden to health systems around the world, with significant reductions in quality of life for those affected. In a 2017 systematic review and meta-analysis, DFU prevalence around the world was estimated at 6.3%, with prevalence in Asia at 5.5%. In 2016, an estimated 131 million people (1.8% of the global overall population) had diabetes related lower extremity complications (DRLEC), with overall age- standardised rates increase of 15.9% between 1990 and 2016.

#### **Study Procedure:**

A ambi-cohort study was conducted at Tan Tock Seng hospital, Singapore with 1724 diabetic foot ulcer patient. From standard data collection form, patient demographic details, reason for admission, hospital procedures or complications, medication (on admissions, in hospital, on discharge) past medical history and length of stay were abstracted during index hospitalizations. Patient's age, sex, race, wound anatomy, comorbidities and clinical biochemical markers present at the date of index DFU diagnosis are reported.

#### Discussion:

DFUs present a substantial burden to global health systems and patients. In 2017, within our healthcare cluster, the direct healthcare cost per patient for hospital care (inpatient and specialist outpatient) and primary care in 2017 was US \$16920 with 30.5% of patients requiring two or more NIU-related admission episodes. This initial evaluation provided a broad overview on the burden of DFUs.Patients within our study population had poor glycaemic control with median HbA1c at 9.9% (IQR 14.8) with a significant proportion suffering from macro (IHD, stroke, ESRF, PAD) and micro (diabetic retinopathy, peripheral neuropathy) vascular complications. With regard to mortality, data within the literature states that 5-year mortality rates were estimated at 45%, 18%, and 55% for neuropathic, neuroischaemic, and ischaemic ulcers, respectively.

#### **Conclusion:**

Similar to global data, there is a high clinical and economic burden of DFU within Southeast Asia and the tropics. Within our study cohort, patients have poor DM control, resulting in high wounds per patient ratio with escalating healthcare costs corresponding to more proximal amputation levels. Patients have a high re-admission rate and required multiple SOC visits. Primary prevention via DM control should be a focus for population health interventions. Patients with PAD are at a significantly higher risk for mortality, major, and minor amputations and should be the subset of patients for early and aggressive limb salvage interventions.

# RELEUKO (Filgrastim – Ayow) Injection – A Newly Approved Drug for the Treatment of Neutropenia Experienced by Patients Undergoing Chemotherapy

#### K. Harini, Pharm.D, 3rd Year

Brand Name: RELEUKO

Generic Name:Filgrastim – AyowMolecular Formula:C845 H1343 N223 O243 S9Drug Class:Hematopoietic AgentsManufacturing Company:Amneal Pharmaceuticals.

**Date of Approval**: Feb 28, 2022.

Dosage Form and Strength:

RELEUKO is a clear, colourless, preservative - free solution available as

#### Vial:

➤ Injection : 300mcg \ml in a single – dose vial.

➤ Injection : 480mcg \1.6ml in a single dose vial.

#### **Prefilled Syringe**

➤ Injection : 300mcg\ 0.5ml in a single – dose prefilled syringe.

➤ Injection: 480mcg\ 0.8 ml in a single – dose prefilled syringe.

Route of Administration: Intravenous (IV) and Subcutaneous (SC).

#### Indication:

RELEUKO is indicated to decrease the incidence of infection as manifested by febrile neutropenia, in patients with non-myeloid malignancies receiving myelosuppressive anti-cancer drugs, associated with a significant incidence of severe neutropenia with fever.

#### **Mechanism of Action:**

- > Colony -Stimulating factors are glycoproteins which act on hematopoietic cells by binding to specific cell surface receptors and stimulating proliferation, differentiation commitment and some end-cell functional activation.
- Filgrastim binds to the G-CSF receptors and stimulates the production of neutrophils in the bone marrow.

#### **ADVERSE REACTIONS:**

- > Allergic Reactions
- > Acute respiratory distress syndrome
- > Fever
- ➤ Cough
- ➤ Shortness of breath
- Numbness
- Diarrhea
- ➤ Hair loss.

#### CONTRAINDICATION:

> RELEUKO is contraindicated in pt .with a history of severe allergic reactions to human granulocyte colony- stimulating factors.

#### **DRUG INTERACTION:**

> Concurrent use of vincristine (chemotherapy drug) and filgrastim my leads to peripheral neuropathy.

#### PHARMACOKINETICS:

#### > ABSORPTION:

Absorbed through IV or S\C . The absolute bioavailability of filgrastim after subcutaneous administration is 60% - 70%.

#### > DISTRIBUTION:

The volume of distribution averaged 150ml \Kg in cancer patients.

#### > METABOLISM:

Filgrastim subject to extracellular proteolytic degradation by neutrophil elastase takes in place liver.

#### **ELIMINATION:**

After intravenous administration, the elimination half-life of filgrastim was 3.5 hrs in both normal subjects and patients with cancer and subject to renal elimination.

### **Departmental Activities March-2022:**

No of Patients Screened	Drug Information Queries	Adverse Drug Reactions	Medication Errors	No of Prescriptions Audited
1036	37	42	08	1142

## Perfect Click











