

FDA APPROVED DRUGS

S.NO	DRUG NAME	INDICATION
1	Gilteritinib 40mg flim coated tablet.	Indicated as Monotherapy of adult patients who have replaced or refractory acute mycloid leukaemia(AML) with as FLT3 mutation.
2	Naftifine HCL USP Cream 2% w/w and Naftifine HCL USP bulk.	Indicated for the treatment of Superficial fungal infection of the skin (Tineacoporis and tinea cruris).
3	Entrectinib capsules 100mg & 200mg	Adult patient with metastatic non small cell lung cancer (NSCLC) Whose tumors are ROSI- POSITIVE. Adult & pediatic patients 12 yrs of age and older with solid tumors.
4	Sitagliptin fentanyl phosphate tablet 35mg, 70mg, 140g.	As an adjunct top diet and exercise to improve glycemic compounds in adults with type II diabetic mellitus.
5	Imeglimin hydrochloride tablet 500mg/1g and bulk drug.	Type II Diabetic mellitus.
6	Apalutamide 60mg tablet and bulk drug .	For Treatment of patients with metastatic castration-resistant prostate cancer (MCRPC) and Non Metastatic , castration-resistant prostate cancer (NM-CRPC).

Our Achievement

Our College Student Dakshinesh P Qualified in GPAT 2022 and secured 3870th Rank



GRADUATE PHARMACY APTITUDE TEST (GPAT)-2022

NTA SCORE CARD

Application No.	220210012132	Roll No.	TN02000372	 
Candidate's Name	DAKSHINESH P			
Mother's Name	JAGADEESWARI P			
Father's Name	PARAMESWARAN C			
Category	OBC-NCL	Person with Benchmark Disability(PwBD)	NO	
Gender	MALE	Date of Birth	28-10-2000	
State of Residence	TAMIL NADU	Nationality	INDIAN	

Score

0FE628A6D4F78DDE6E2597177BB3A1F8

Marks obtained	Max Marks	NTA Score	All India Rank	Validity of Score
128	500	92.3398274	3870	Three Years
Marks Obtained in words	One Hundred Twenty Eight Only			
NTA Score in Words	Ninety Two point Three Three Nine Eight Two Seven Four Only			
Result:	QUALIFIED			



NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

T PRABHA

for successful April - 05 - 08, 2022 online lab workshop

Computer Aided Drug Design for SARS-CoV-2

conducted by IIT Madras during

April 05 - 08, 2021

Devendra Jalihal

Prof. Devendra Jalihal
Chairman
Centre for Continuing Education, IITM

Prof. Andrew Thangaraj

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras



Indian Institute of Technology Madras

Roll No: LABWS21BT0151001034

To validate and check scores: <https://nptel.ac.in/noc>

Our College Staff Dr. Prabha, Completed NPTEL Online Course



NANDHA PHARMA ALERT

An Exclusive Newsletter from Drug Information Center,
NANDHA COLLEGE OF PHARMACY,
(B.Pharm - NBA Accredited) Koorapalayam, Erode- 52, Tamilnadu.
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Issue -2
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GREEN CHEMISTRY AND SUSTAINABILITY METRICS IN THE PHARMACEUTICAL MANUFACTURING SECTOR

This year marks the 30th anniversary of green chemistry of green chemistry and this review focuses on developments and discussion on the application of green chemistry metrics within the last year with a focus on the pharmaceutical processing field. In the early 90's , the concept of green and sustainable chemistry was developed and is currently in a phase of increased implementation. Goal number 3 of the UN-SDG's ensure healthy lives and promote well being foe all at all ages as well as goal number 12 'ensures sustainable consumption and production patterns' provide a framework for the fine chemical and pharmaceutical industry to rethink processes and to contribute to the sustainability goals. The lectures on atmospheric chemistry in the stratosphere of Paul J . Crutzen and his later assessment of the impact of humans on our planet inspired and encourages many scientist and industry leaders. Paul Crutzen's discoveries helped to set the stage for the Montreal Protocol and international actions to close the ozone hole. Global alignment on principles and measurable metrics for local actions to reduce ozone depleting substance resulted in a huge positive impact on the global environment.

The main goal of the pharmaceutical industry is to develop and manufacture high quality pharmaceuticals to treat or heal patients at the same time, the industry must meet the expectations of share holders and ensure complaints under a complex set of national and international regulations.

REFERENCE : Jochen Becker, Carolin Manske , Stefam Randl current opinion in green and sustainable chemistry.

Mr. Vinoth Kumar IV B.Pharm

GILTERITINIB

INTRODUCTION :

Gilteritinib is an AXL receptor tyrosine kinase inhibitor used to treat relapsed or refractory acute myeloid leukemia.

MECHANISM OF ACTION :

Gilteritinib is a potent inhibitor of both of the mutations, internal tandem duplications (ITD) and Tyrosine kinase domain (TKD), of the FLT3 receptor.

In the same note, gilteritinib also inhibits AXL and ALK tyrosine kinase. FLT3 and AXL are molecules involved in the growth of cancer cells.

DOSAGE FORM & STRENGTHS :

Tablet – 40mg.

PHARMACOKINETICS :

ABSORPTION : In a fasted state in humans, t_{max} is reported to be of 4–6 hrs.

VOLUME OF DISTRIBUTION : The estimated apparent central and peripheral volume of distribution is 1092 L and 1100 L respectively. This value indicated an extensive tissue distribution.

METABOLISM : Gilteritinib is primarily metabolized in the liver by the activity of CYP3A4.

ROUTE OF ADMINISTRATION : From the administration dose, Gilteritinib is mainly excreted in feces which represent 64.5% of the administered dose while 16.4% is recovered in urine either as the unchanged drug or as its metabolites.

HALF-LIFE : The reported median half-life of Gilteritinib was of app. 45-159hrs,

ADVERSE REACTION :

Cardiovascular : Edema (40%), Hypotension (22%)

Dermatology : Skin rash (36%)

Gastrointestinal : Abdominal pain (18%), constipation (28%), Diarrhea (35%), Dysgeusia (11%), Nausea (30%), Stomatitis (41%; grades ≥ 3 ; 7%), vomiting (21%).

Hematologic & Oncologic : Febrile neutropenia (17% - 27%; grades ≥ 3 : 17% to 26%).

Nervous System : Dizziness (22%), Fatigue ($\leq 44\%$), Headache (24%), Insomnia (15%), malaise ($\leq 44\%$), Neuropathy (18%).

Neuromuscular & Skeletal : Arthralgia ($\leq 50\%$), Myalgia ($\leq 50\%$)

Ophthalmic : Eye Disease (25%)

Renal : Renal insufficiency (21%)

Respiratory : Cough (28%), Dyspnea (35%)

Miscellaneous : Fever (41%).

MONITORING PARAMETERS :

Blood Counts and serum chemistries prior to therapy initiation, at least once weekly for the first month once every other week for the second month, and once monthly thereafter; ECG prior to the start of the next 8 and 15 of cycle 1, and prior to the start of the next 2 subsequent cycles. Monitor for signs/symptoms of differentiations syndrome, pancreatitis, and posterior reversible encephalopathy syndrome.

REFERENCE : <https://go.drugbank.com/drug/DB06616>

Ms. Anusiya IV B.Pharm



CASE REPORTS

INTRODUCTION

Aerococci are gram positive streptococcus like organisms widely distributed in the hospital environment. The most common species of aerococci include aerococcus urinea, A. viridans, and A. sanguinicola. 2 of these, A. viridans is primarily an opportunistic pathogen causing bacteremia, endocarditis, and UTI.

CASE DESCRIPTION

A 75 yrs old hypertensive female with history of chronic kidney disease present in to the emergency room with altered sensorium for 20 days. She had history of deteriorating mental status and generalized for the last 1 month. On examination, the patient was afebrile, drowsy, and responsive to painful stimuli. The patient was transferred to intensive care unit for further treatment, intubated in view of low Glasgow coma scale, and connected to mechanical ventilator. On the day of admission, laboratory tests revealed elevated blood glucose level (224mg/dL), high HbA1c (8%), elevated serum sodium level (178mmol/L), elevated chlorine level (135mmol/L), Low potassium level (3.3mmol/L), and elevated creatine (2.0mg/dL) and blood urea (310mg/dL). Arterial blood gas analysis showed the presence of metabolic acidosis. Erythrocyte sedimentation rate, procalcitonin, and D-dimer levels were normal. Peripheral smear showed leukocytosis with neutrophilic preponderance and thrombocytopenia. Ultrasonography of abdomen revealed bilateral grade I renal disease. Echocardiogram findings were not remarkable. Urine culture on CLED media showed no growth. Blood cultures obtained from two different sites were cultured on automated

system (BD BACTES FX 40). Both cultures showed growth within 20 hrs. Direct Smear from blood culture bottles showed the presence of gram positive cocci. Automated identification system (VITEK 2@ COMPACT) identified the organism from both cultures as A. Viridans (93% probability). The isolate was sensitive to penicillin, linezolid, ampicillin, erythromycin, clindamycin, and levofloxacin and resistant to cotrimoxazole. The patient was treated empirically with ceftriaxone.

CONCLUSION :

Aerococcus genus includes seven species of which, report on A. Urinae and A. sanguinicola species are freely available while very few cases of A. viridans bacteremia have been reported. Through rare, A. viridans is an emerging nosocomial pathogen. Scarcity of reports in the literature could be attributed to its close resemblance to viridans group of streptococci. Most clinical laboratory settings make use of conventional methods to identify organisms. Hence, A. viridans which is similar to streptococci in producing alpha-hemolytic colonies on blood agar, appears as gram-positive cocci on gram staining, and is mostly misidentified or reported as a contaminant. In this case, A. viridans produced beta-hemolytic colonies on blood agar and appeared as gram-positive COCCI in groups resembling micrococccae. But emerging resistance to penicillin and vancomycin has been reported in previous studies, so it is vital to incorporate automated methods in detecting doubtful specimens and formulate guidelines for therapy so that future cases can be identified early and treated with appropriate antibiotics.

Ms. Pradhira III B.Pharm

INTERESTING MEDICAL FACTS:

The human gut contains about 1 kg of bacteria in fact there are more bacteria growing in and on body than there are human cells. There are 137 million light sensitivity cells in the eye's retina and the fluids fill the eye is changed 15 times a day. Your ribs move about 5 million times a year every time you breathe. The human heart beats about 30 million times a year.