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Review of Favipiravir drug

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***Abstract**:*
Favipiravir is antiviral drug are usein treatment for Ebola, Lassa and the COVID-19used to treat influenza in Japan .Mechanism action in of Favipiravir is activeagainst a broad range of influence viruses includein follong virus A(H1N1)
Rout of administration is (day1:1200mg twice a day) (day 2-4 800mg twice a day) pharmacology of Favipiravir is(T-705)
***Keywords**: Antiviral; SARV_COV_2, (T-705)*

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I. Introduction:

Favipiravir drug are used in thetreatment of the covid _19.Like MERS(Middle East respiratory syndromeCOV and SARS(severe acute respiratory syndrome) _cov, SARS-COV-2 is an eneloped positive strand RNAVirus.

Favipiravir is a well - known influence medicine thatis now being investigated Favipiravir is (Trade name :Avigan) was developed in the licenced Japan and China by Fujifilm Toyama chemical companyThe single molecule of Favipiravir terminatesOf elongation of the viral RNA. In 2014,Favipiravirwas approved in Japan for use in the event of an out break ofnovel or re- emerging influenza antiviraldrug are either not or insufficiently effective. EMBASE andMEDLINE databases are in the search supplementedis there relevant literature and clinical. Trails. gov. The used of Favipiravir in humans by 27March 2020by all studies about it. Also included in specific AES of interested highlighted inearly phase studies including gastrointinal AES andhyperuricaemia, were also examined.

Mechanism of Action:

Favipiravir (T-705,6-Fluro-3hydroxy-2 pyrazinecarboxamide) It is an antiviral drug.It is RNA dependent or RNA Polymerase of influenza viruses A(H1N1) pdmog,A(H5N1) and it is recently emerged A(H7N9) A phase III clinical evaluation of Favipiravir for influenza therapy completed in Japan. and phase II studies have been completed in United states.

Rout of administration:

We evaluated the inhibitory effects of drugsOn SARs-COV-2replication in a hamaster infection model and in vitro assay. It is not effective to the co- administrationof Favipiravir and GS-441524 a metabolite of remdesivir.
When Favipiravir was administered orally
(day 1:1200 mg twice a day;
day 2-4 : 800 mg twice a day)

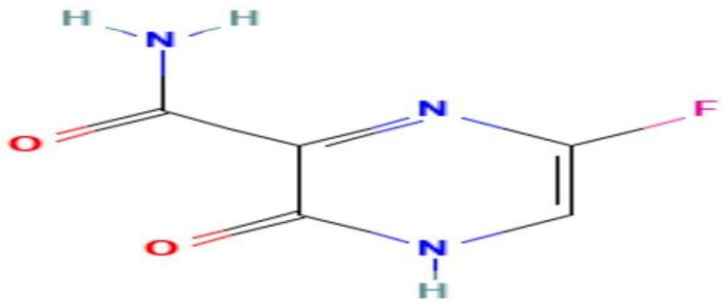
Pharmacology

Favipiravir (T-705) is a synthetic prodrug. Favipiravir is first discovered while asssing
the antiviral activity of chemical agent active against the influenza virus in chemical libraryTo Toyoma chemicals. A lead compound, A/PR/8/34, later designed as T-1105, and it's derivatives were found to have antiviral activities.

Pharmacokinetics and pharmacodynamics:

The antiretroviral drug Favipiravir (FAV) inhibits RNA-dependent RNA polymerase. 39patient enrolled in the study :33 we're admistrimistred Favipiravir1600mg in the twice daily (b.i.d) and 6 wereadministered FPV 1800 mg (b.i.d) on firstly day is follow by 600 mg or 800 mg b.i.d.The median age was 68 years (ranges, 27-89 years), 31 (79.5,%). Patients were men, median body surface area (BSA) was 1.72m.

FAVIPIRAVIR
Brand name - Fabiflu
API -Favipiravir
Packaging - 1*34 Tablets
Strength -200 mg
Manufacturer Name -Glenmark
Chemical structure of Favipiravir (FVR) :



Synthesis of Favipiravir:
Favipiravir (1) was first synthesized in 2000 bya rout consisting of seven steps. The starting material was 3-aminopyrazine-2 carboxylic acid (2). The animation step wascatalyzed by a costly (s) - (-) -2, 2-bis (diphenylphosphino) -1, 1'1-binaphthyl (s-BINAP), fluoridation require using the highly corrosiveolah reagent, while the overall reaction yieldwas approximately 0.44%(scheme 1).Improvedmethodologies for (1) have been reported inrecent year.

Potential drug-drug interaction inPharmacokinetics:
Adverse Drug Reaction (ADR) potential drug are used in many neurological ADRS, of COVID-19 pneumonia management.
The common central Nervous system (CNS) and Peripheral Nervous System (PNS) Adverse Effects of drug used in COVID-19 Management.

Sample size consideration:
In US316 the original sample sizeOf 660subject was designed toProvide >90% power Δ=.05level is the significance at detect least a24- hour difference in median timeto alleviation between Favipiravir arethe place be assuming a 50%Confirmed influenza infection rate.

II. Conclusion :

Favipiravir viral clearance by 7 days or Favipiravir contributes to clinicalimprovement within 14 days. The results indicated for treating COVID-19. Favipiravir is safe or control in theduration of shorting of viral shadding in SARS-COV-2 RNA recurrent positive after by discharge.

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