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# **PHARMAPEDIA**

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# NITRIC ACID SPRAY FOR COVID



Glenmark and its partner Canada-based SaNOtize Research & Development Corp. on Wednesday announced the launch of its Nitric Oxide Nasal Spray (NONS) under the brand name FabiSpray in India for the treatment of adult patients with COVID-19 who have high risk of progression of the disease.

FabiSpray is designed to kill the COVID-19 virus in the upper airways, and has proven anti-microbial properties with a direct virucidal effect on SARS-CoV-2, the companies said in a press statement. When sprayed over nasal mucosa acts as a physical and chemical barrier against the virus, preventing it from incubating and spreading to the lungs. Glenmark said the Phase 3 trial in India met the key endpoints and demonstrated reduction of viral load of 94% in 24 hours and 99% in 48 hours, and was found to be safe and well tolerated in COVID-19 patients. Nitric Oxide Nasal Spray, is designed to kill the COVID-19 virus in the upper airways. It has proven anti-microbial properties with a direct virucidal effect on SARS-CoV-2.

# Reference:-

https://m.economictimes.com/industry/healthcare/biotech/pharmaceuticals/glenmark-launches-nitric-oxide-spray-against-covid/amp\_articleshow/89447489.cms



# Pfizer's Covid-19 pill retains 89% Efficacy Works on Omicron

Antiviral Covid-19 pills are being seen as game changers in the world's fight against the raging pandemic. While molnupiravir, Merck and Ridgeback Biotherapeutics' oral antiviral med targeting Covid, saw its efficacy at preventing hospitalization drop from 50 to 30 percent between the interim final results. Pfizer's antiviral pill.

Paxlovid has retained its score of 89 percent efficacy against the coronavirus in the final results from the trial. Paxlovid has also been found to be effective against the Omicron variant. Last month, the New York-based drugmaker had said its pill was effective when administered within three days of the onset of Covid-19, based on a study on 1,219 patients. None of the trial patients who received the Pfizer treatment died. The final analysis of the study on 2,246 high-risk patients confirmed the earlier results. The oral pill also retains its effectiveness against the Omicron variant.

Reference: <a href="https://www.pharmacompass.com/radio-compass-blog/pfizer-s-covid-19-pill-retains-89-percent-efficacy-works-on-omicron-csl-buys-vifor-for-us-11-7-billion">https://www.pharmacompass.com/radio-compass-blog/pfizer-s-covid-19-pill-retains-89-percent-efficacy-works-on-omicron-csl-buys-vifor-for-us-11-7-billion</a>

# Amino acid hydrotropes to increase the solubility of indomethacin and carbamazepine in aqueous solution

A number of amino acids (AA) has been investigated as promising hydrotropes to improve the solubility of biopharmaceutics classification system (BCS) class II drugs carbamazepine (CBZ) and indomethacin (IND) via specific complexations in aqueous solution. The amino acids were chosen based on their different side chains (neutral aromatic, aliphatic, polar charged or uncharged) to investigate their hydrotropic performance.

A linear solubility curve was observed between indomethacin and mononeutral hydrophobic amino acids (phenylalanine, tryptophan, isoleucine, proline and valine) https://www.sciencedirect.com

# A universal methodology for reliable predicting the nonsteroidal anti-inflammatory drug

This study utilizes different machine learning scenarios to simulate the solubility of twelve non-steroidal anti-inflammatory drugs (NSAII in the supercritical carbon dioxide (SCCO<sub>2</sub>). The considered NSAL are Fenoprofen, Flurbiprofen, Ibuprofen, Ketoprofen, Loxoprofen, Nabumetone, Naproxen, Nimesulide, Phenylbutazone, Piroxicam, Salicylamide, and Tolmetin. The results show that Ibuprofen and Naproxen are the most soluble and insoluble drugs in SCCO<sub>2</sub>, respectively. https://www.nature.com/articles/s41598-022-04942-4

# **PUZZLE – HIDDEN WORDS**

В			Р	S	Ν	С	0	D
U	L	J	-	Χ		Α	Χ	Е
С	F	G	Е	Z	Е	R	_	С
С	F	Е	כ	0	Υ	0	Е	
Α	Z		Т	K	D	Т	R	S
L	Ν	Т	Е	J	R	Е	D	С
Т	Z	_	U	Ι		Ζ	0	E
Α	Р	C	Т	Α	U	0	Α	Т
В		ď	_	_	Α	_	_	Н
L	W	Р	С	Α	R	D		Α
Е	Α	F	L	R	В	S	G	N
Т	С	S			0	Χ	J	0

- An oral route of administration in which the medication is Placed between the cheek and gum.
- 2. Lower cost alternative to brand name medication
- 3. A natural colourant
- 4. A mixture of two or more substances which melts at the lowest freezing point of any mixture of the components.
- 5. Another name of PEG.

# ANSWERS FOR THE PREVIOUS E-NEWSLETTER PUZZLE: MISSING LETTERS:

1. Coalsence, 2. Orange peel effect, 3.pan coating, 4. Stearic acid, 5. Sintered glass

### JUMBLED LETTERS:

1. Soda ash 2. Lactose 3. Asbestos 4. Beeswax

Send your correct answers to psgcp.ceutics@gmail.com.

The first three participants with correct answers will be acknowledged in the next issue.

# **Competition/ Prizes**

M Pharm team of students won special consolidated prize in national level pharmaceutics video making competition conducted by Academic decipher – Mumbai.



## THE BEAUTIFUL OLD

A vintage advertisement promotes "Cocaine toothache drops" sold at an Albany,New York, pharmacyin March 1885.



# MATCH THE MANUFACTURING SYMBOLS



-Upper limit of the temperature



- Non- Pyrogenic



- Keep away from heat and radiation.



-Expiry date

## **CORNER OF APPRECIATION:**

Congratulating the participants of previous newsletter puzzles.

- 1. Vijay.R, Pharm.D
- 2. Kaaviya Priya.A, Pharm.D
- 3. Bharathi.P, M.Pharm

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