

9-1-2020

Repurposing Drugs: A therapeutic option to control the outbreak of new infective pathogens

Binita Dutta
pradeep.mm@manipal.edu

Ankita Menon

Pradeep M. Muragundi

Follow this and additional works at: <https://impressions.manipal.edu/mjps>

Recommended Citation

Dutta, Binita; Menon, Ankita; and Muragundi, Pradeep M. (2020) "Repurposing Drugs: A therapeutic option to control the outbreak of new infective pathogens," *Manipal Journal of Pharmaceutical Sciences*: Vol. 6 : Iss. 2 , Article 13.

Available at: <https://impressions.manipal.edu/mjps/vol6/iss2/13>

This Review Article is brought to you for free and open access by the MAHE Journals at Impressions@MAHE. It has been accepted for inclusion in Manipal Journal of Pharmaceutical Sciences by an authorized editor of Impressions@MAHE. For more information, please contact impressions@manipal.edu.

Repurposing Drugs: A therapeutic option to control the outbreak of new infective pathogens

Binita Dutta¹, Ankita Menon², Pradeep M Muragundi^{2*}

Email: pradeep.mm@manipal.edu

Abstract

There has been limited development, approval and manufacturing of new medicines for the chemotherapeutic intervention of diseases caused by viral infections. The limited development could be due to multitudinous reasons such as a sudden outbreak of pathogenic microorganism, or a lack of financial incentives by the industry to invest in development and clinical trials. Drug repurposing (DR) is one of the drug development strategies adopted by the healthcare system to combat diseases caused by the sudden outbreak of pathogens characterized by its pandemic potential or a rare form of cancer, for which there is no effective therapy available. However, there are possible limitations to this strategy such as legal or regulatory barriers, intellectual property rights linked to the original drug, an increase in the manufacturing capacity or a negative perception towards the use of repurposed drugs by clinicians and patients. In this opinion paper, we have summarized the repositioning of the off-label generic drugs as a possible therapeutic avenue to combat microbial infections such as the recent outbreak of Coronavirus infection, COVID-19.

Key words: Cost saving, Drug repurposing, Generic drugs, Infective pathogen, Virus

Binita Dutta, Ankita Menon, Pradeep M Muragundi*

1 Adjunct Professor, Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Education, Manipal-576104, India,

2 Department of Pharmacy Management, Manipal College of Pharmaceutical Sciences, Manipal Academy of Higher Education, Manipal- 576104, India

* Corresponding Author

Date of Submission: 15 Jun 2020, Date of Revision: 19 Aug 2020

Date of Acceptance: 19 Aug 2020

How to cite this article: Dutta B, Menon A, Muragundi P M. Repurposing Drugs: A therapeutic option to control the outbreak of new infective pathogens. *MJPS* 2020; 6(2): 105-108.