Descriptive Analysis of COVID-19 Clinical Trials Curated on the CURE ID Platform

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Introduction

CURE ID is an internet-based data repository (https://cure.ncats.io/explore), developed collaboratively by FDA and NCATS/NIH. It is designed to capture real-world clinical outcome data to advance drug repurposing and inform future studies and clinical trials for infectious diseases with high unmet medical need. It also serves as a repository of clinical trials curated from https://www.clinicaltrials.gov with the intention of keeping the infectious diseases community updated on the various clinical trials underway.

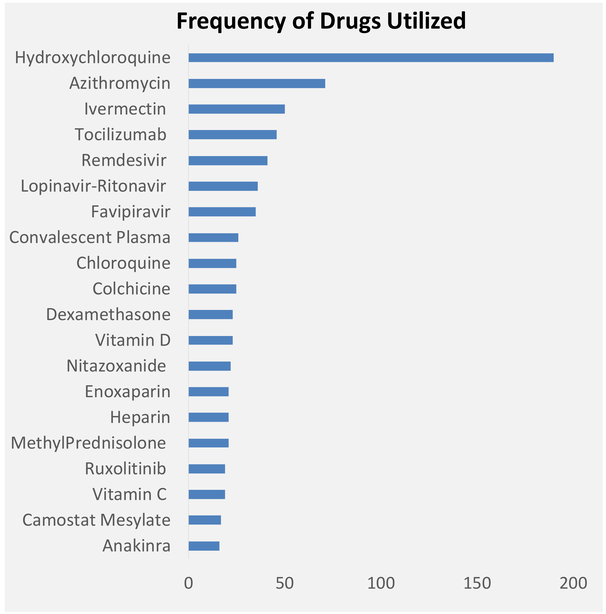

Figure 1. Frequency of drugs utilized in curated clinical trials.

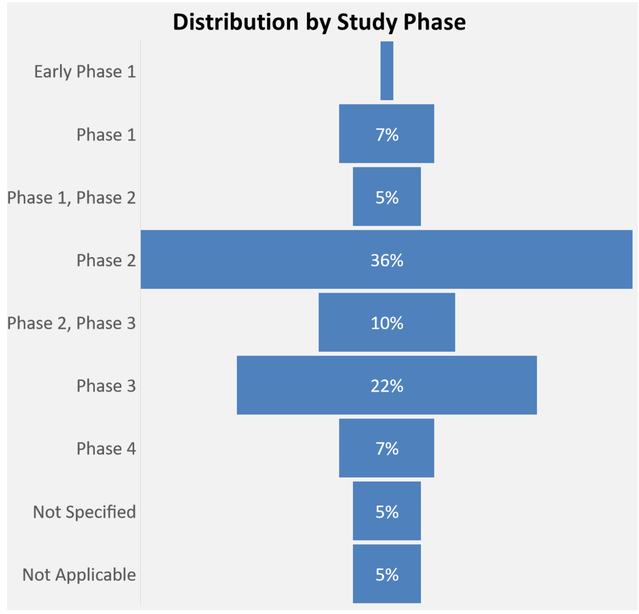

Figure 2. Distribution of clinical trials by study phase.

Materials and Methods

The current study is a descriptive analysis of various therapeutics in clinical trials to treat COVID-19 on the CURE ID platform. Having a panoramic view of the various drugs in clinical trials and the efforts being undertaken will keep the academic community informed and help prevent duplication of efforts amidst the current pandemic.

Using 'clinicaltrials.gov', we selected those trials addressing therapeutics for COVID-19 and reviewed the drugs used, their current status and the phases of development.

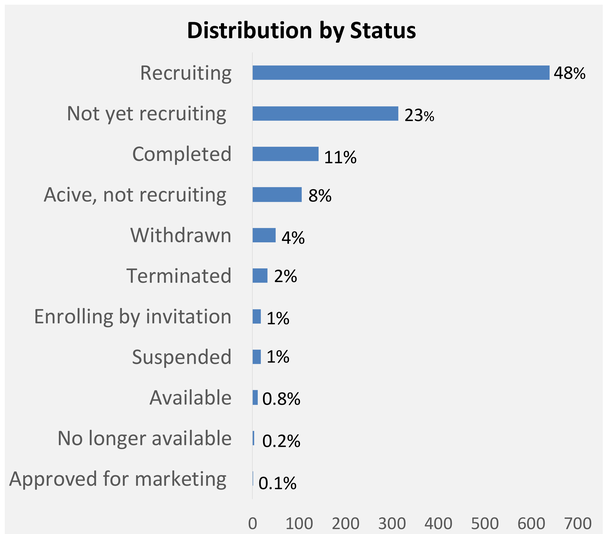

Figure 3. Distribution of clinical trials by status of study

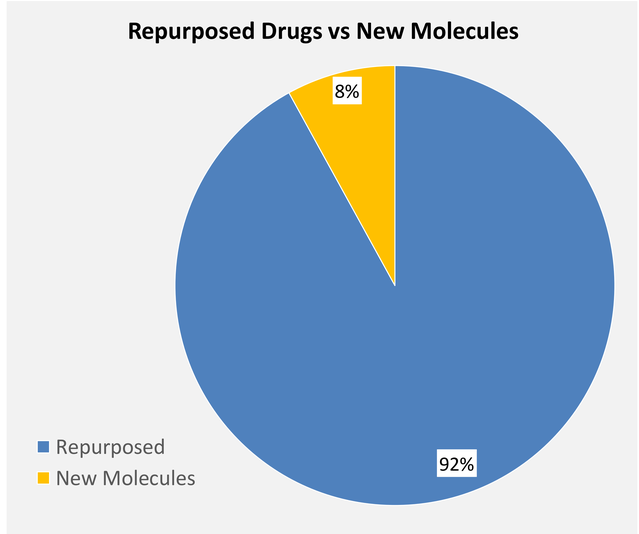

Figure 4. Frequency of repurposed drugs and new molecules.

Results and Discussion

As of February 2021, out of 1,348 clinical trials and 644 drugs, hydroxychloroquine (n=190) was the most investigated drug, followed by azithromycin (n=71), ivermectin (n=50), tocilizumab (n=46), remdesivir (n=41), lopinavir-ritonavir (n=36), favipiravir (n=35), convalescent plasma (n=26), chloroquine (n=25), and colchicine (n=25). Dexamethasone, vitamin D, nitazoxanide, enoxaparin, heparin and methylprednisolone had more than 20 clinical trials each. Thirty-six percent of the drugs were in phase two, 10% were in phase 2/3 and 22% were in phase 3. Eleven percent of the trials were completed and 48% were still recruiting at the time of analysis. Remdesivir was the only drug approved for marketing. Majority of the drugs (92%) were repurposed.

Conclusion

Several repurposed and novel drugs are being investigated to treat COVID-19. Our platform provides a broad view of the various drugs and serves to keep the scientific community informed. This may also help prevent duplication of efforts amidst the current pandemic.

Disclaimer

This poster reflects the views of the authors and should not be construed to represent NIH or FDA's views or policies.