

PROPOSITIONS

TO THE THESIS

Facing the resurgence of rotavirus: Development of novel antiviral agents

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1. Direct cytopathogenesis in human liver organoids caused by rotavirus infection may partially recapitulate the development of biliary atresia. (This thesis)
2. The antiviral effect of the eIF4F complex on rotavirus replication operates by regulating the expression of certain antiviral proteins, including IRF1 and IRF7, which exert remarkable antiviral effect against rotavirus. (This thesis)
3. Both brequinar and leflunomide, inhibitors of DHODH enzyme, have potent antiviral activity against rotavirus infection through targeting DHODH to deplete pyrimidine nucleotide pool. (This thesis)
4. 6-Thioguanine is an effective inhibitor of rotavirus replication via the inhibition of Rac1 activation. (This thesis)
5. Gemcitabine, identified as a potent inhibitor against rotavirus infection through screening of a broad-spectrum antiviral agents library, functions largely through the pyrimidine biosynthesis pathway. (This thesis)
6. Rotavirus infection is a systemic disease with clinical and pathophysiological implications beyond the gut. (Gómez-Rial, José, et al. Infection and drug resistance 2019)
7. The best way to discover a new drug is to start with an old one. (James Black)
8. Wherever the art of medicine is loved, there is also a love of humanity. (Hippocrates)
9. There is no medicine that cures what happiness does not cure. (García Márquez.)
10. 老子《道德经》：三十辐，共一毂，当其无，有车之用。埴埴以为器，当其无，有器之用。凿户牖以为室，当其无，有室之用。故有之以为利，无之以为用。 [the thirty spokes unite in the one nave; but it is on the empty space (for the axle), that the use of the wheel depends. clay is fashioned into vessels; but it is on their empty hollowness, that their use depends. the door and windows are cut out (from the walls) to form an apartment; but it is on the empty space (within), that its use depends. therefore, what has a (positive) existence serves for profitable adaptation, and what has not that for (actual) usefulness.]
11. 《荀子·儒效》：千举万变，其道一也。(While the appearances may vary, the essence remains unchanged.)