## high throughput screening

| | NCT Number | Title | Authors | Description | Identifier | Dates |
|---|---|---|---|---|---|---|
| 1 | pubmed:36113557 | Development of multiplex S-gene-targeted RT-PCR for rapid identification of SARS-CoV-2 variants by extended S-gene target failure | Yuri Imaizumi<br>Takayuki Ishige<br>Tatsuki Fujikawa<br>Akiko Miyabe<br>Shota Murata<br>Kenji Kawasaki<br>Motoi Nishimura<br>Toshibumi Taniguchi<br>Hidetoshi Igari<br>Kazuyuki Matsushita | CONCLUSIONS: Multiplex RT-PCR and eSGTF patterns enable high-throughput screening of VOCs. It will be useful for the rapid determination of VOCs in clinical laboratories. | pmid:36113557<br>pmc:PMC9472704<br>doi:10.1016/j.cca.2022.08.031 | Fri, 16 Sep 2022 06:00:00 -0400 |
| 2 | pubmed:36113566 | Repositioning of Tubocurarine as Analgesic and Anti-Inflammatory Agent: Exploring beyond Myorelaxant activity | Saraswati Patel<br>Jyoti Shukla<br>Smita Jain<br>Vartika Paliwal<br>Neetika Tripathi<br>Sarvesh Paliwal<br>Swapnil Sharma | Tubocurarine (d-TC), a non-depolarizing competitive blocker of nicotinic acetylcholine receptors is extensively utilized for the relaxation of skeletal muscles. Drug repositioning is a forthright approach to reduce the cost and speed up drug development process. Herein, we have attempted to evaluate the analgesic and anti-inflammatory activity of d-TC for its possible repurposing in pain and inflammation-related issues. Experimental Approach We examined the soluble epoxide hydrolase inhibitory... | pmid:36113566<br>doi:10.1016/j.bcp.2022.115248 | Fri, 16 Sep 2022 06:00:00 -0400 |
| 3 | pubmed:36113668 | Fragment-based discovery of novel phenyltriazolyl derivatives as allosteric type-I $^{1/2}$ALK inhibitors with promising antitumor effects | Youbao Cui<br>Zehui Tan<br>Shuyu Liu<br>Zhi Cao<br>Bin Shao<br>Mengrao Guo<br>Nan Jiang<br>Xin Zhai | Based on the high-throughput screening hit BY-1, a series of phenyltriazolyl derivatives were developed. Satisfyingly, most compounds were detected moderate to excellent antitumor effects against Karpas299 and H2228 cells. Among them, 12k bearing 4-hydroxypiperidinyl group exhibited the optimal activities against tested cells with IC(50) values of 51 nM and 175 nM, as well as promising inhibitory effects on ALK^(WT) (3.7 nM) and ALK^(L1196M) (6.8 nM). Unlike the conventional type-I ALK... | pmid:36113668<br>doi:10.1016/j.bmcl.2022.128990 | Fri, 16 Sep 2022 06:00:00 -0400 |
| 4 | pubmed:36113751 | Enzyme activity engineering based on sequence co-evolution analysis | Donghyo Kim<br>Myung Hyun Noh<br>Minhyuk Park<br>Inhae Kim<br>Hyunsoo Ahn<br>Dae-Yeol Ye<br>Gyoo Yeol Jung<br>Sanguk Kim | The utility of engineering enzyme activity is expanding with the development of biotechnology. Conventional methods have limited applicability as they require high-throughput screening or three-dimensional structures to direct target residues of activity control. An alternative method uses sequence evolution of natural selection. A repertoire of mutations was selected for fine-tuning enzyme activities to adapt to varying environments during the evolution. Here, we devised a strategy called... | pmid:36113751<br>doi:10.1016/j.ymben.2022.09.001 | Fri, 16 Sep 2022 06:00:00 -0400 |
| 5 | pubmed:36114250 | Population-based screening to detect benzodiazepine drug-drug-drug interaction signals associated with unintentional traumatic injury | Cheng Chen<br>Sean Hennessy<br>Colleen M Brensinger<br>Emily K Acton<br>Warren B Bilker<br>Sophie P Chung<br>Ghadeer K Dawwas<br>John R Horn<br>Todd A Miano<br>Thanh Phuong Pham Nguyen<br>Charles E Leonard | Drug interactions involving benzodiazepines and related drugs (BZDs) are increasingly recognized as a contributor to increased risk of unintentional traumatic injury. Yet, it remains unknown to what extent drug interaction triads (3DIs) may amplify BZDs' inherent injury risk. We identified BZD 3DI signals associated with increased injury rates by conducting high-throughput pharmacoepidemiologic screening of 2000-2019 Optum's health insurance data. Using self-controlled case series design, we... | pmid:36114250<br>doi:10.1038/s41598-022-19551-4 | Fri, 16 Sep 2022 06:00:00 -0400 |

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|---|---|---|---|---|---|---|
| 6 | pubmed:36114272 | A high-throughput screening campaign against PFKFB3 identified potential inhibitors with novel scaffolds | Jie Li<br>Yan Zhou<br>Guy Eelen<br>Qing-Tong Zhou<br>Wen-Bo Feng<br>Viktorija Labroska<br>Fen-Fen Ma<br>Hui-Ping Lu<br>Mieke Dewerchin<br>Peter Carmeliet<br>Ming-Wei Wang<br>De-Hua Yang | The growth of solid tumors depends on tumor vascularization and the endothelial cells (ECs) that line the lumen of blood vessels. ECs generate a large fraction of ATP through glycolysis, and elevation of their glycolytic activity is associated with angiogenic behavior in solid tumors. 6-Phosphofructo-2-kinase/fructose-2,6-bisphosphatase 3 (PFKFB3) positively regulates glycolysis via fructose-2/6-bisphosphate, the product of its kinase activity. Partial inhibition of glycolysis in tumor ECs by... | pmid:36114272<br>doi:10.1038/s41401-022-00989-1 | Fri, 16 Sep 2022 06:00:00 -0400 |
| 7 | pubmed:36114850 | Cephalosporin C biosynthesis and fermentation in Acremonium chrysogenum | Ling Liu<br>Zhen Chen<br>Wuyi Liu<br>Xiang Ke<br>Xiwei Tian<br>Ju Chu | Cephalosporins are currently the most widely used antibiotics in clinical practice. The main strain used for the industrial production cephalosporin C (CPC) is Acremonium chrysogenum. CPC has the advantages of possessing a broad antibacterial spectrum and strong antibacterial activity. However, the yield and titer of cephalosporins obtained from A. chrysogenum are much lower than penicillin, which is also a -lactam antibiotic produced by Penicillium chrysogenum. Molecular biology research into... | pmid:36114850<br>doi:10.1007/s00253-022-12181-w | Sat, 17 Sep 2022 06:00:00 -0400 |