

# RSC Medicinal Chemistry

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### Cover

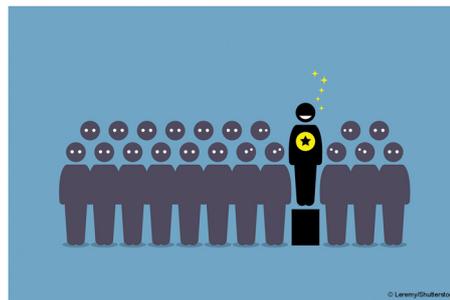
See Jinming Zhou et al.,  
pp. 3038–3047.

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2024, 15, 3038.

## EDITORIAL

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### Outstanding Reviewers for *RSC Medicinal Chemistry* in 2023

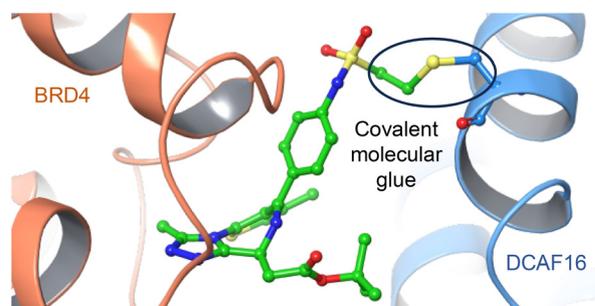


## OPINION

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### Synthetic modification of protein surfaces to mediate induced-proximity pharmacology

Lyn H. Jones\*



# RSC Advances

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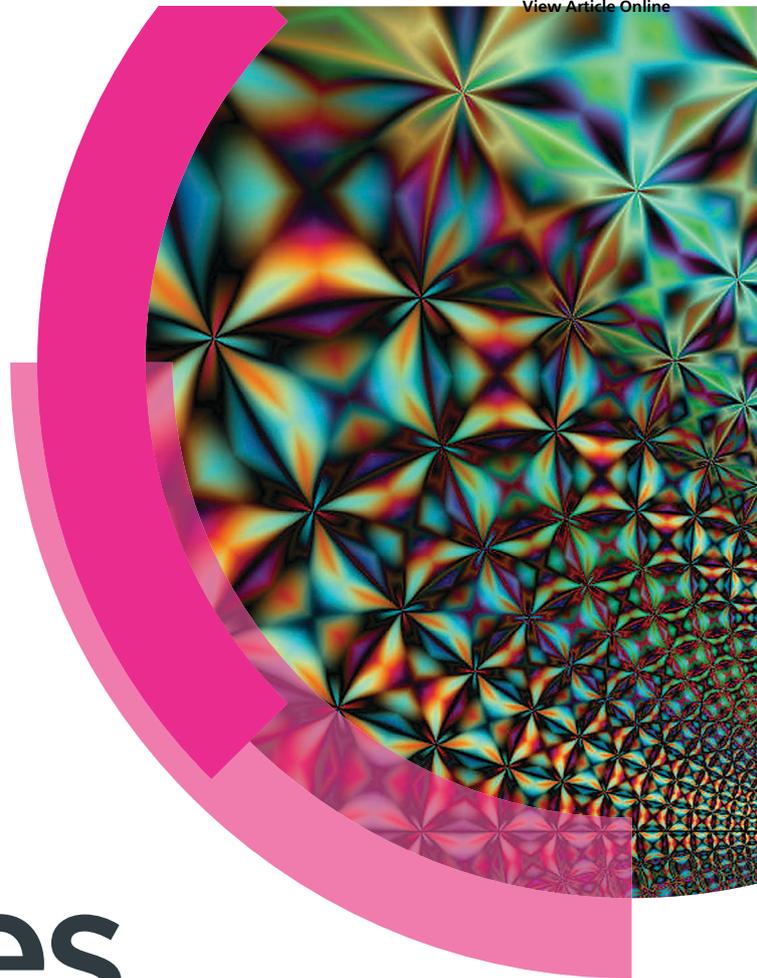


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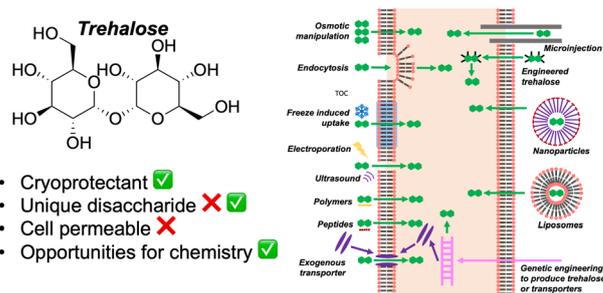


## REVIEWS

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**Trehalose in cryopreservation. Applications, mechanisms and intracellular delivery opportunities**

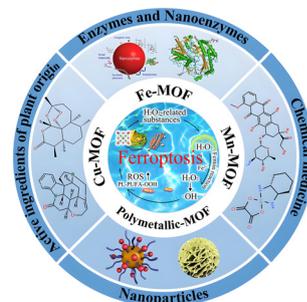
Alex Murray, Peter Kilbride and Matthew I. Gibson\*



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**Current status and prospects of MOFs loaded with H<sub>2</sub>O<sub>2</sub>-related substances for ferroptosis therapy**

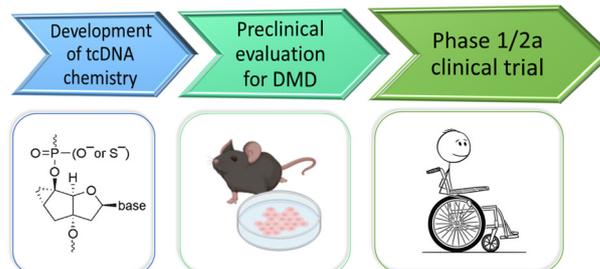
Yu Deng, Sida Huang, Guanming Jiang,\* Luyi Zhou, Alireza Nezamzadeh-Ejhi, Jianqiang Liu\* and Zhikun Zhou\*



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**The bench to bedside journey of tricyclo-DNA antisense oligonucleotides for the treatment of Duchenne muscular dystrophy**

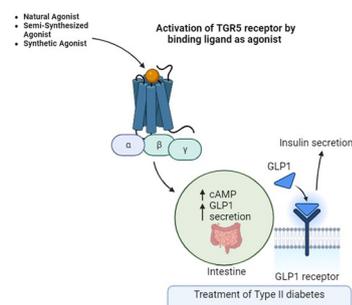
Mathilde Blitek, Xaysongkham Phongsavanh and Aurélie Goyenvalle\*



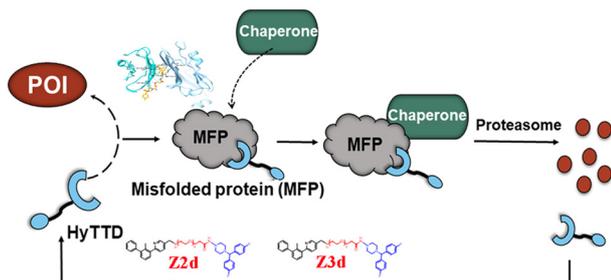
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**Recent advancements in the structural exploration of TGR5 agonists for diabetes treatment**

Rachana S. Bhimanwar, Amit Mittal, Snehal Chaudhari and Vikas Sharma\*



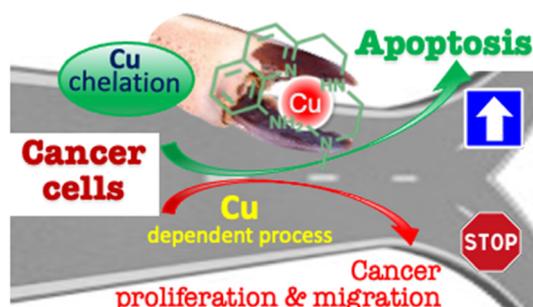
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### A novel hydrophobic tag leads to the efficient degradation of programmed death-ligand 1

Jieke Gao, Yongli Xie, Jiantao Zhang, Huirong Chen, Yan Zou, Shan Cen and Jinming Zhou\*

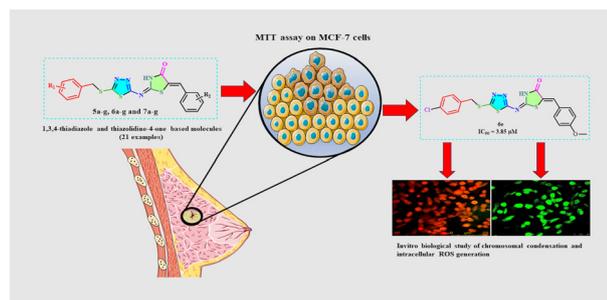
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### Copper selective 8-aminoquinoline based tetradentate chelators as anticancer agents

Yingzhen Guan, Michel Nguyen, Anne Robert, Yan Liu\* and Bernard Meunier\*

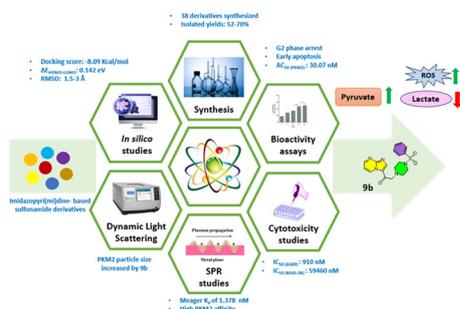
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### Synthesis and antiproliferative potency of 1,3,4-thiadiazole and 1,3-thiazolidine-4-one based new binary heterocyclic molecules: *in vitro* cell-based anticancer studies

Avik Maji, Ambati Himaja, Sripathi Nikhitha, Soumitra Rana, Abhik Paul, Ajeya Samanta, Uday Shee, Chhanda Mukhopadhyay, Balaram Ghosh\* and Tapan Kumar Maity\*

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### Novel sulfonamides unveiled as potent anti-lung cancer agents *via* tumor pyruvate kinase M2 activation

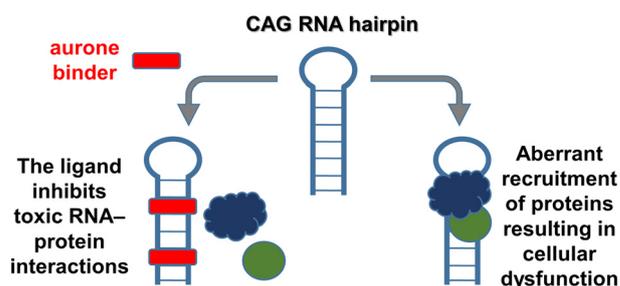
Rudradip Das, Deep Rohan Chatterjee, Saumya Kapoor, Het Vyas and Amit Shard\*



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### A novel aurone RNA CAG binder inhibits the huntingtin RNA–protein interaction

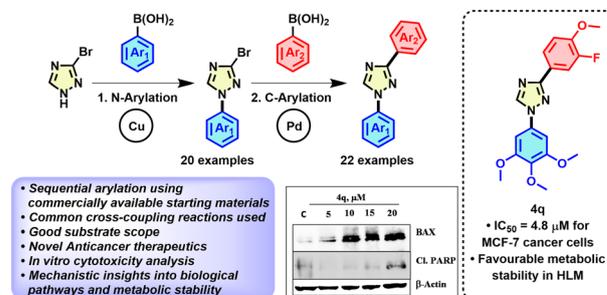
Giovanna Ballarin, Maddalena Biasiotto, Annika Reisbitzer, Marlen Hegels, Michael Bolte, Sybille Krauß and Daria V. Berdnikova\*



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### Development of di-arylated 1,2,4-triazole-based derivatives as therapeutic agents against breast cancer: synthesis and biological evaluation

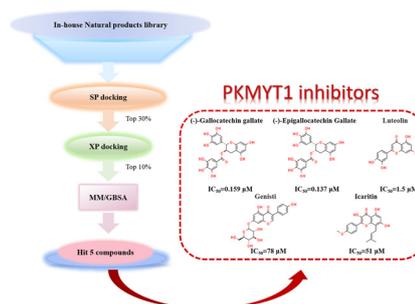
Mousumi Deb, Hoshiyar Singh, Diksha Manhas, Utpal Nandi, Santosh K. Guru\* and Parthasarathi Das\*



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### Structure-based virtual screening discovers novel PKMYT1 inhibitors

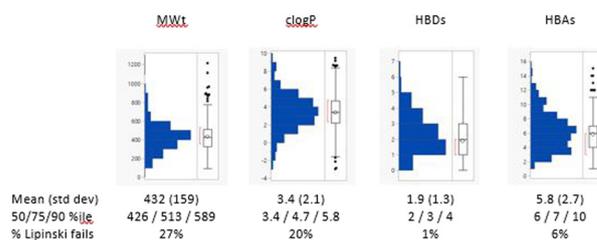
Haoyu Zhang, Jinyu Yu, Ziheng Yang, Zhiqiang Guo, Rui Liu, Qiaohua Qin, Yixiang Sun, Nian Liu, Zixuan Gao, Dongmei Zhao\* and Maosheng Cheng



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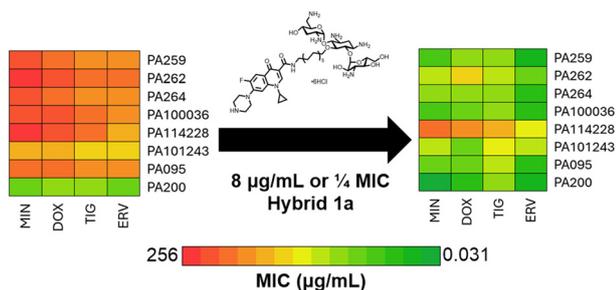
### An analysis of the physicochemical properties of oral drugs from 2000 to 2022

Rachael Pirie, Harriet A. Stanway-Gordon, Hannah L. Stewart, Kirsty L. Wilson, Summer Patton, Jack Tyerman, Daniel J. Cole, Katherine Fowler and Michael J. Waring\*



## RESEARCH ARTICLES

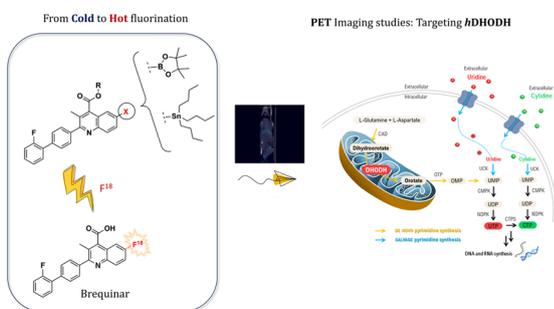
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### Enhancing outer membrane permeability of tetracycline antibiotics in *P. aeruginosa* using TOB–CIP conjugates

Shiv Dhiman, Danyel Ramirez, Rajat Arora, Gilbert Arthur and Frank Schweizer\*

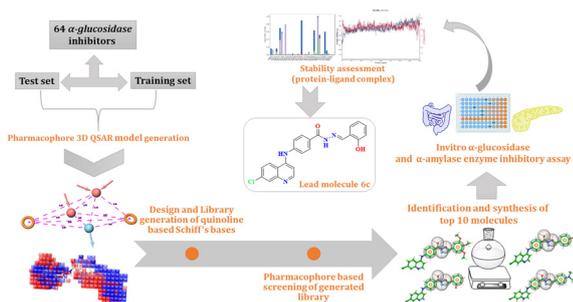
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### Radiosynthesis of $[^{18}\text{F}]$ brequinar for *in vivo* PET imaging of hDHODH for potential studies of acute myeloid leukemia and cancers

Vinay Kumar Banka, Stefano Sainas, Elena Martino, Jiacheng Wang, Marco Lucio Lolli and Yu-Shin Ding\*

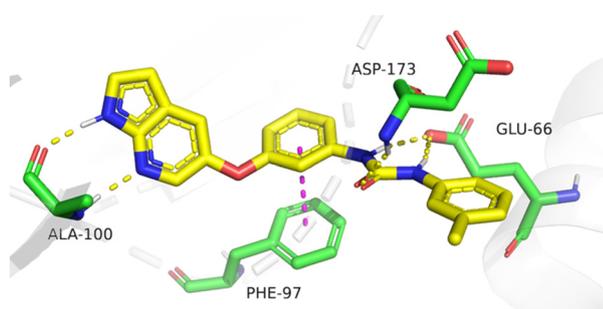
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### Quinoline-based Schiff bases as possible antidiabetic agents: ligand-based pharmacophore modeling, 3D QSAR, docking, and molecular dynamics simulations study

Shriram D. Ranade, Shankar G. Alegaon,\* Nayeem A. Khatib, Shankar Charge and Rohini S. Kavalapure

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### Design and synthesis of 7-azaindole derivatives as potent CDK8 inhibitors for the treatment of acute myeloid leukemia

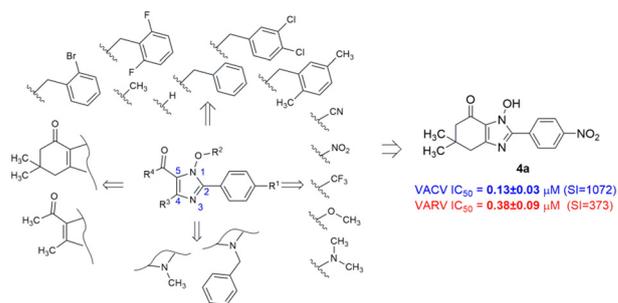
Yumeng Wang, Cencen Lei, Quan Wang, Xingxing Zhang, Liping Zhi\* and Xinhua Liu\*



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## 2-Aryl-1-hydroxyimidazoles possessing antiviral activity against a wide range of orthopoxviruses, including the variola virus

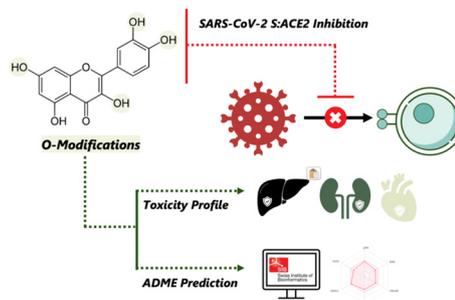
E. I. Basanova,\* E. A. Kulikova, N. I. Bormotov, O. A. Serova, L. N. Shishkina, A. S. Ovchinnikova, D. A. Odnoshevskiy, O. V. Pyankov, A. P. Agafonov, O. I. Yarovaya, S. S. Borisevich, M. G. Ilyina, D. S. Kolybalov, S. G. Arkhipov, N. E. Bogdanov, M. A. Pavlova, N. F. Salakhutdinov, V. P. Perevalov and P. A. Nikitina\*



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## Inhibiting SARS-CoV-2 viral entry by targeting spike: ACE2 interaction with O-modified quercetin derivatives

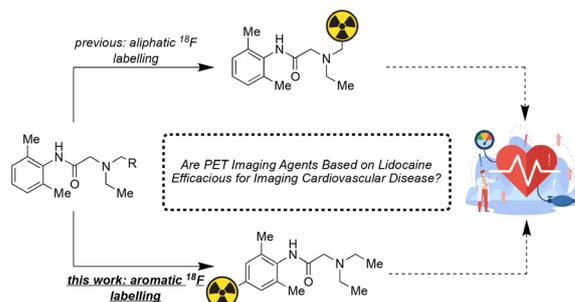
Reuben James Z. Rosal and Monissa C. Paderes\*



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## Automated radiosynthesis and preclinical imaging of a novel [<sup>18</sup>F]fluorolidocaine analogue via sequential C–H radiolabelling

Madison Frazier, Jay S. Wright,\* David M. Raffel, Jenelle Stauff, Wade P. Winton, Peter J. H. Scott\* and Allen F. Brooks\*



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## Cornulacin: a new isoflavone from *Cornulaca monacantha* and its isolation, structure elucidation and cytotoxicity through EGFR-mediated apoptosis

Ahmed M. Badawy, Enas E. Eltamany, Rodina M. Hussien, Osama G. Mohamed, Mayada M. El-Ayouty, Mohamed S. Nafie, Ashoosh Tripathi and Safwat A. Ahmed\*

