

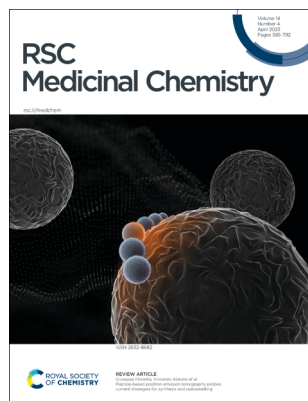
# RSC Medicinal Chemistry

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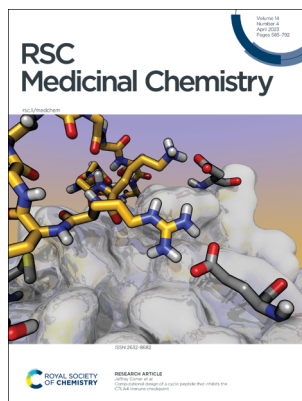
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## IN THIS ISSUE

ISSN 2632-8682 CODEN RMCSCX 14(4) 585-792 (2023)



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See Giuseppe Floresta, Vincenzo Abbate *et al.*, pp. 592-623.  
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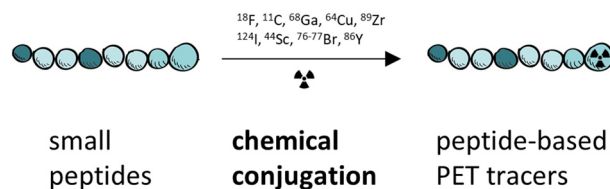
**Inside cover**  
See Jeffrey Comer *et al.*, pp. 658-670.  
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## REVIEWS

592

### Peptide-based positron emission tomography probes: current strategies for synthesis and radiolabelling

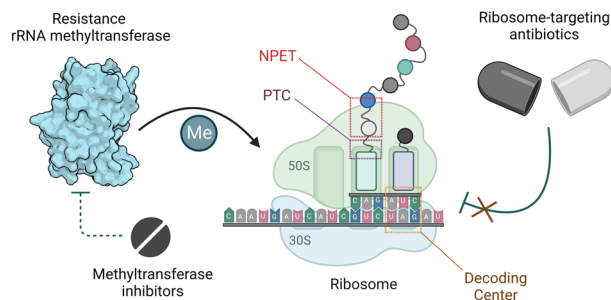
Mariacristina Failla, Giuseppe Floresta\* and Vincenzo Abbate\*



624

### Ribosome-targeting antibiotics and resistance via ribosomal RNA methylation

Learnmore Jeremia, Benjamin E. Deprez, Debayan Dey, Graeme L. Conn\* and William M. Wuest\*



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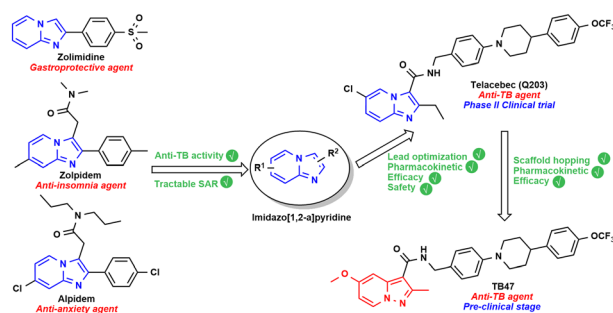


## REVIEWS

644

Recent developments of imidazo[1,2-*a*]pyridine analogues as antituberculosis agents

Sauvik Samanta, Sumit Kumar, Esvar K. Aratikatla, Sandeep R. Ghorpade and Vinayak Singh\*

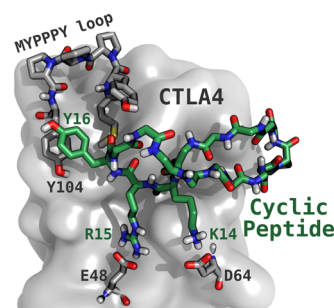


## RESEARCH ARTICLES

658

## Computational design of a cyclic peptide that inhibits the CTLA4 immune checkpoint

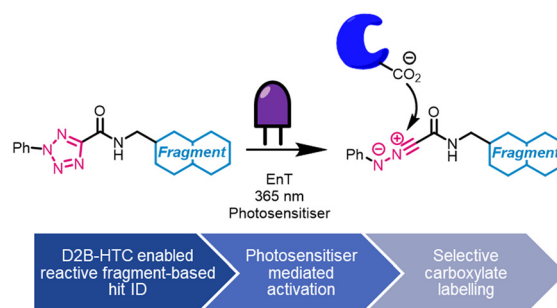
Ravindra Thakkar, Deepa Upreti, Susumu Ishiguro, Masaaki Tamura and Jeffrey Comer\*



671

## Reactive fragments targeting carboxylate residues employing direct to biology, high-throughput chemistry

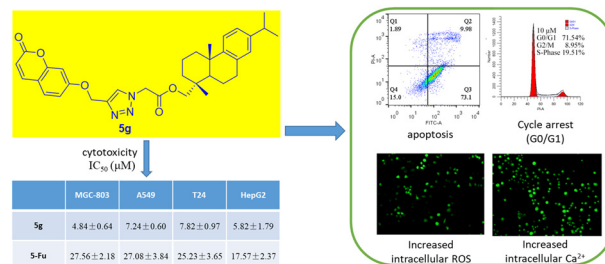
Ross P. Thomas, Emma K. Grant, Eleanor R. Dickinson, Francesca Zappacosta, Lee J. Edwards, Michael M. Hann, David House, Nicholas C. O. Tomkinson\* and Jacob T. Bush\*



680

## Synthesis and anti-proliferative activity of dehydroabietinol derivatives bearing a triazole moiety

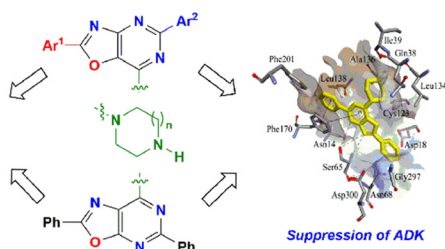
Mingjun Zhu, Jinchuan Sun, Yaju Wu, Xianli Ma, Fuhou Lei, Qian Li,\* Caina Jiang\* and Fangyao Li\*



692

**High anti-breast cancer activities:**  
GI<sub>50</sub> = 0.8 - 7.3 μM  
TGI = 2.04 - 18.18 μM  
IC<sub>50</sub> = 5.10 - 100 μM

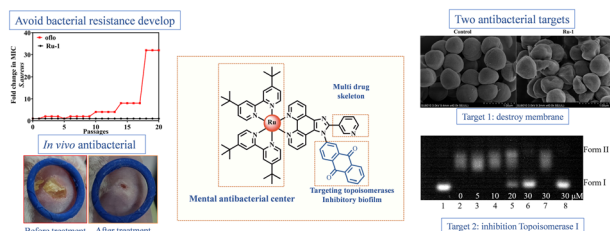
**Very high correlation in the LC<sub>50</sub> vector with tamoxifen; high correlation in the TGI vector with Actacinomycin A.**



## Design, synthesis and evaluation of the anti-breast cancer activity of 1,3-oxazolo[4,5-*d*]pyrimidine and 1,3-oxazolo[5,4-*d*]pyrimidine derivatives

Yevheniia Velihina,\* Raey Gesese, Victor Zhirnov, Oleksandr Kobzar, Benjamin Bui, Stepan Pilyo, Andriy Vovk, Hai-Ying Shen and Volodymyr Brovarets\*

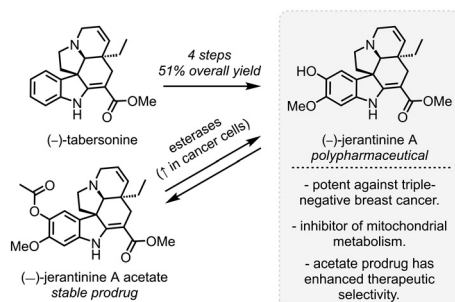
700



## Multi-target antibacterial mechanism of ruthenium polypyridine complexes with anthraquinone groups against *Staphylococcus aureus*

Li Jiang, Yuanyuan Ma, Yiman Chen, Mengcheng Cai, Zhixing Wu, Yanshi Xiong, Xuemin Duan,\* Xiangwen Liao\* and Jintao Wang\*

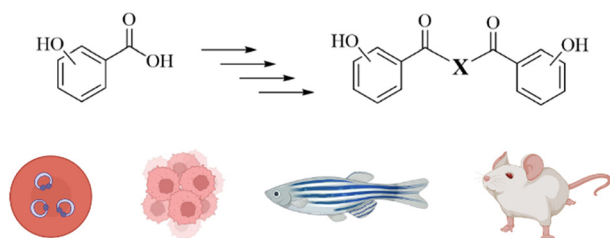
710



## Inhibition of mitochondrial metabolism by (-)-jerantinine A: synthesis and biological studies in triple-negative breast cancer cells

Timothy L. Gialelis, Zifei Wang, Joshua A. Homer, Wen-Hsuan Yang, Taemoon Chung, Qingting Hu, Christopher J. Smedley, Nitin J. Pawar, Nitinkumar S. Upadhyay, David A. Tuveson, Scott K. Lyons, Michael J. Lukey\* and John E. Moses\*

715



## Dimeric polyphenols to pave the way for new antimalarial drugs

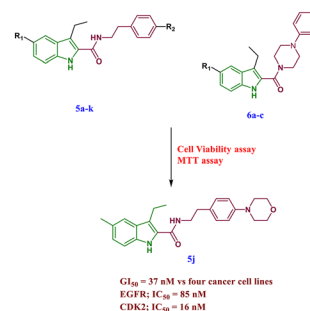
Gilles Degotte,\* Hélène Pendeville, Carla Di Chio, Roberta Ettari, Bernard Piroette, Michel Frédérich and Pierre Francotte



734

### Discovery of new 5-substituted-indole-2-carboxamides as dual epidermal growth factor receptor (EGFR)/cyclin dependent kinase-2 (CDK2) inhibitors with potent antiproliferative action

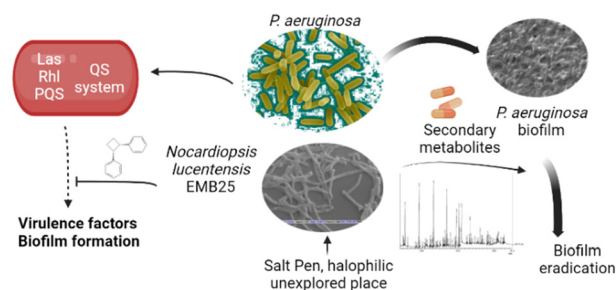
Fatma A. M. Mohamed,\* Saleha Y. M. Alakilli, Eman Fawzy El Azab, Faris A. M. Baawad, Esraa Ibrahim A. Shaaban, Heba Abu Alrub, Omnia Hendawy, Hesham A. M. Gomaa, Adel G. Bakr, Mostafa H. Abdelrahman, Laurent Trembleau, Anber F. Mohammed and Bahaa G. M. Youssif\*



745

### Inhibition and eradication of *Pseudomonas aeruginosa* biofilms by secondary metabolites of *Nocardiosis lucentensis* EMB25

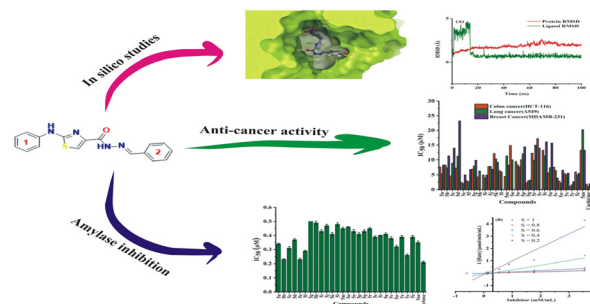
Nikky Goel, Moumita Ghosh, Deepti Jain, Rajeshwari Sinha and Sunil Kumar Khare\*



757

### Development of thiazole-appended novel hydrazones as a new class of $\alpha$ -amylase inhibitors with anticancer assets: an *in silico* and *in vitro* approach

Sandhya Chahal, Jyoti Punia, Payal Rani, Rajvir Singh, Mayank, Parvin Kumar, Ramesh Kataria, Gaurav Joshi\* and Jayant Sindhu\*



782

### Semisynthetic blasticidin S ester derivatives show enhanced antibiotic activity

Cole Gannett, Paige Banks, Christina Chuong, James Weger-Lucarelli, Emily Mevers and Andrew N. Lowell\*

