

# RSC Medicinal Chemistry

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**Cover**  
See Minami Fujita and Yosuke Demizu, pp. 984–999.  
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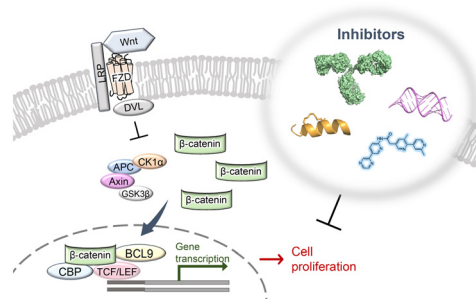
**Inside cover**  
See Mohammad Abrar Alam *et al.*, pp. 1105–1130.  
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## REVIEWS

984

### Advances in the development of Wnt/ $\beta$ -catenin signaling inhibitors

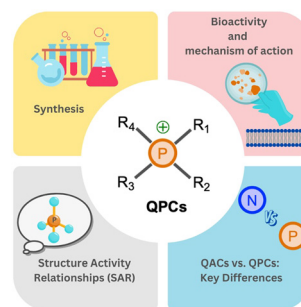
Minami Fujita and Yosuke Demizu\*



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### Recent developments in antimicrobial small molecule quaternary phosphonium compounds (QPCs) – synthesis and biological insights

Diana McDonough, Christian A. Sanchez, William M. Wuest\* and Kevin P. C. Minbiole\*





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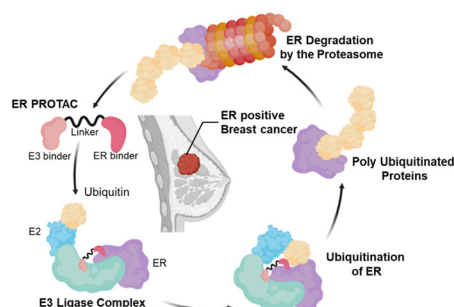


## REVIEWS

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## Development of PROTACs targeting estrogen receptor: an emerging technique for combating endocrine resistance

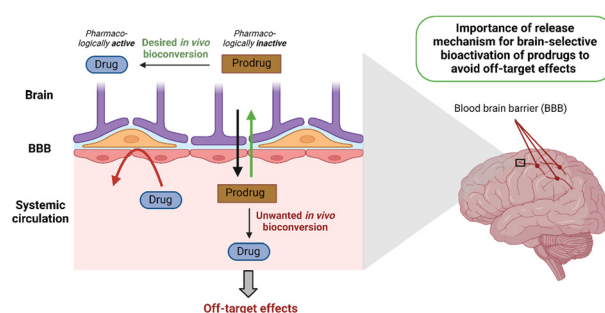
Rouming Peng, Xin Liu, Chun-Chi Chen, Rey-Ting Guo\* and Jian Min\*



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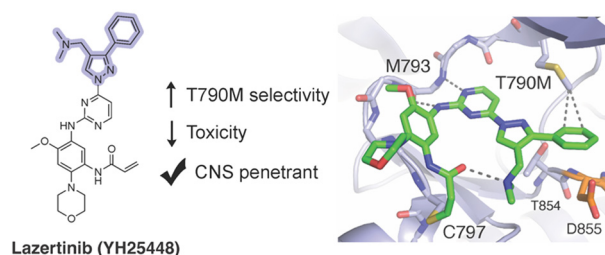
Ida Aaberg Lillethorup, Andreas Victor Hemmingsen and Katrine Qvortrup\*



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## Lazertinib: breaking the mold of third-generation EGFR inhibitors

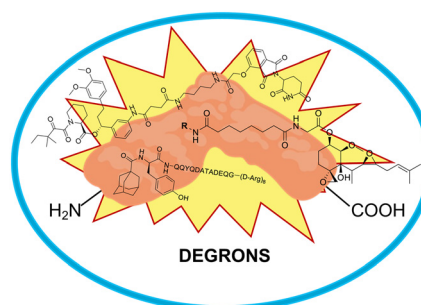
Kishan B. Patel and David E. Heppner\*



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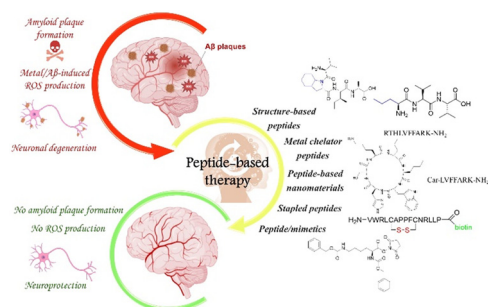
## Exploration of degrons and their ability to mediate targeted protein degradation

Timothy J. Harris Jr. and Darci J. Trader\*



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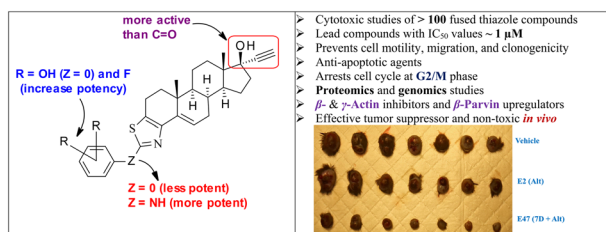


## Peptide-based amyloid-beta aggregation inhibitors

Naina Sehra, Rajesh Parmar and Rahul Jain\*

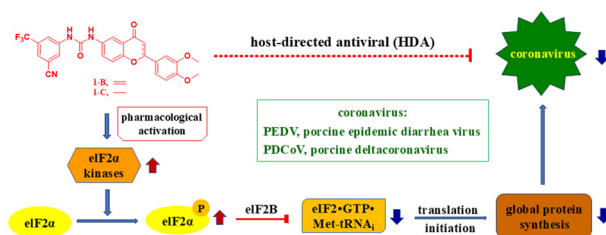
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Thiazole-fused androstenone and ethisterone derivatives: potent  $\beta$ - and  $\gamma$ -actin cytoskeleton inhibitors to treat melanoma tumors

Sanjay Adhikary, Subrata Roy, Shailesh Budhathoki, Siam Chowdhury, Abbey Stillwell, Alexei G. Basnakian, Alan Tackett, Nathan Avaritt, Mohamed Milad and Mohammad Abrar Alam\*

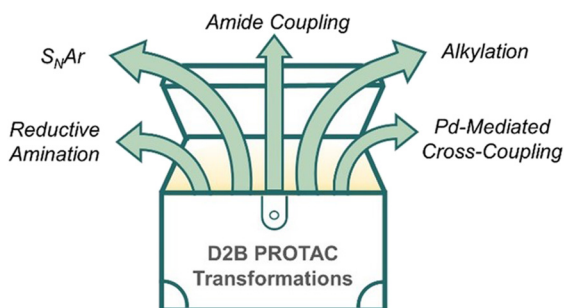
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## Targeting host integrated stress response: lead discovery of flavonoid compounds active against coronaviruses PEDV and PDCoV

Liang Yi, Yishuai Wang, Jiehuang Wang, Yihan Chen, Weixue Huang, Ying Liao\* and Qingwen Zhang\*

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## Expanding the reaction toolbox for nanoscale direct-to-biology PROTAC synthesis and biological evaluation

Rebecca Stevens, Harry J. Shrivs, Jenni Cryan, Diana Klimaszewska, Peter Stacey, Glenn A. Burley, John D. Harling, David J. Battersby\* and Afjal H. Miah\*

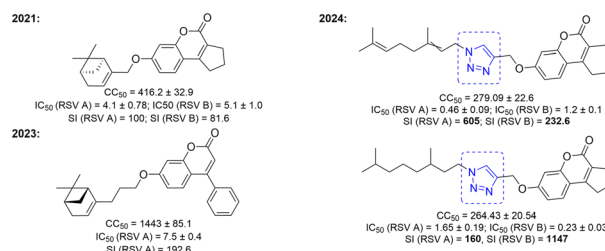


## RESEARCH ARTICLES

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### Design, synthesis and antiviral evaluation of triazole-linked 7-hydroxycoumarin-monoterpene conjugates as inhibitors of RSV replication

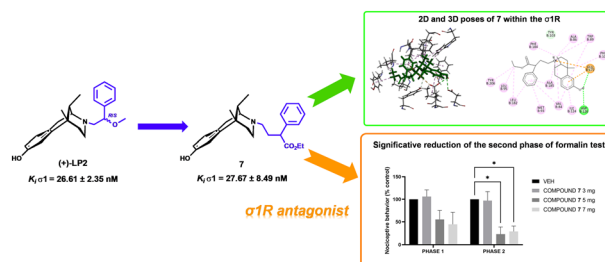
Dmitry O. Tsypyshev, Artem M. Klabukov, Daria N. Razgulaeva, Anastasia V. Galochkina, Anna A. Shtro, Sophia S. Borisevich, Tatyana M. Khomenko, Konstantin P. Volcho,\* Nina I. Komarova and Nariman F. Salakhutdinov



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### Novel sigma 1-antagonists with *cis*-(+)-normetazocine scaffold: synthesis, molecular modeling, and antinociceptive effect

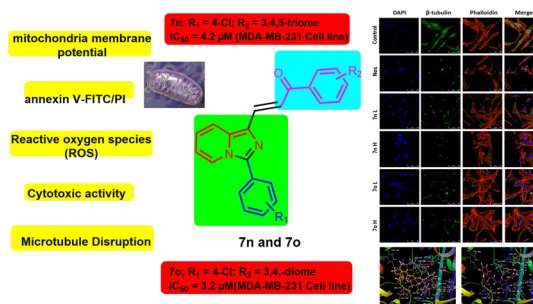
Giuliana Costanzo, Giuseppe Cosentino, Margherita Grasso, Vincenzo Patamia, Sara Zuccalà, Alessandro Coco, Elisabetta Novello, Mahmoud Al-Khrasani, Raffaele Morrone, Giovanni Mario Pitari, Emanuele Amata, Agostino Marrazzo, Antonio Rescifina, Lorella Pasquinucci\* and Carmela Parenti



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### Exploration of the cytotoxic and microtubule disruption potential of novel imidazo[1,5-a]pyridine-based chalcones

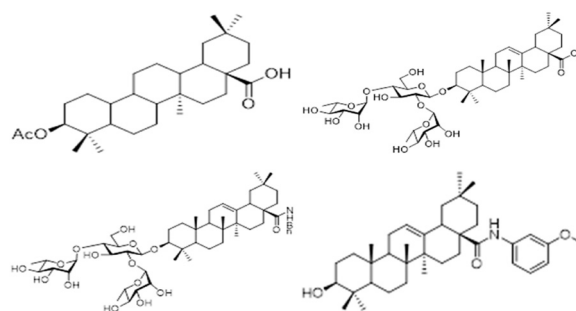
Ramu Gopathi, Mommuleti Pradeep Kumar, Gangasani Jagadeesh Kumar, Syamprasad N. P., Bheeshma Geetanjali Kodiripaka, V. G. M. Naidu\* and Bathini Nagendra Babu\*



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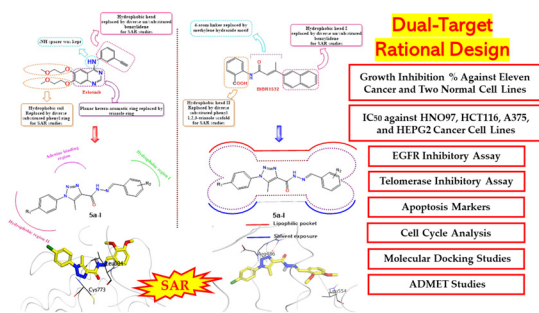
### Saponin components exhibit antiviral properties against porcine epidemic diarrhea virus *in vitro*

Yiyi Hu, Yunchuan Li, Haodan Zhu, Dandan Wang, Junming Zhou and Bin Li\*





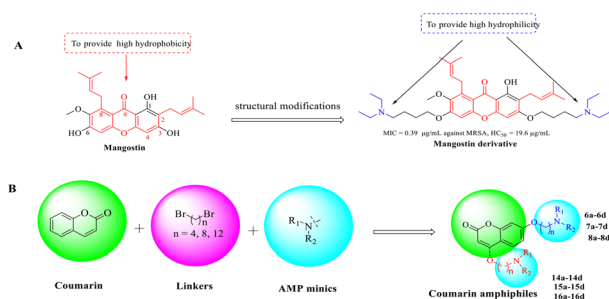
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## Dual EGFR and telomerase inhibitory potential of new triazole tethered Schiff bases endowed with apoptosis: design, synthesis, and biological assessments

Mohamed A. Zeidan, Heba F. Ashour, Asmaa S. A. Yassen, Ayman Abo Elmaaty, Ayman B. Farag, Marwa Sharaky, Abdullah Yahya Abdullah Alzahrani, Mohammed H. AL Mughram and Ahmed A. Al-Karmalawy\*

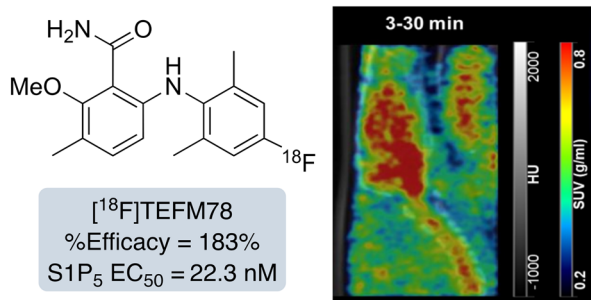
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## Design and synthesis of coumarin-based amphoteric antimicrobials with biofilm interference and immunoregulation effects

Qun Tang, Haiyang Zhang, Kasemsiri Chandarajoti, Zirui Jiao, Lianhua Nie, Sai Lv, Jiakun Zuo, Wen Zhou\* and Xiangnan Han\*

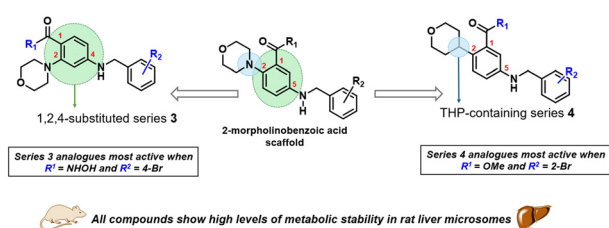
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## Synthesis and evaluation of 6-arylaminobenzamides as positron emission tomography imaging ligands for the sphingosine-1-phosphate-5 receptor

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## Structure-activity relationship expansion and microsomal stability assessment of the 2-morpholinobenzoic acid scaffold as antiproliferative phosphatidylcholine-specific phospholipase C inhibitors

Shaun W. P. Rees, Tayla A. Rees, Emily K. Paulin, Olivia R. Arnerich, Euphemia Leung, Christopher S. Walker, David Barker\* and Lisa I. Pilkington\*

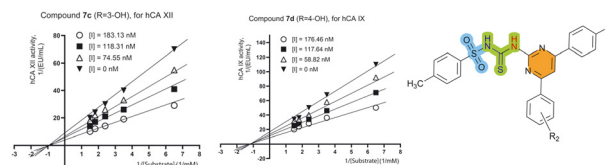


## RESEARCH ARTICLES

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## Sulphonyl thiourea compounds containing pyrimidine as dual inhibitors of I, II, IX, and XII carbonic anhydrases and cancer cell lines: synthesis, characterization and *in silico* studies

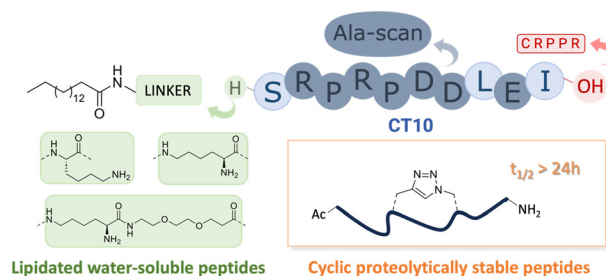
Nguyen Dinh Thanh,\* Vu Ngoc Toan and Vu Minh Trang



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## Design and synthesis of cyclic lipidated peptides derived from the C-terminus of Cx43 for hemichannel inhibition and cardiac endothelium targeting

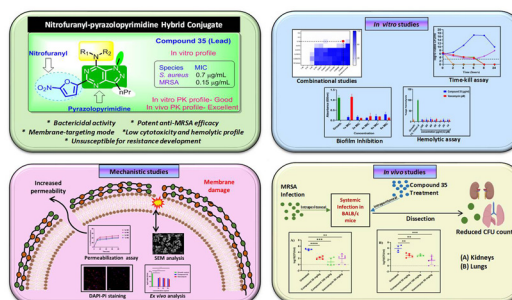
Debora Iaculli, Jade Montgomery, Arthur Lamouroux, Anne Caufriez, Rafael Gozalbes, Mathieu Vinken, Filippo Molica, Brenda R. Kwak and Steven Ballet\*



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## Discovery and biological evaluation of nitrofuranyl-pyrazolopyrimidine hybrid conjugates as potent antimicrobial agents targeting *Staphylococcus aureus* and methicillin-resistant *S. aureus*

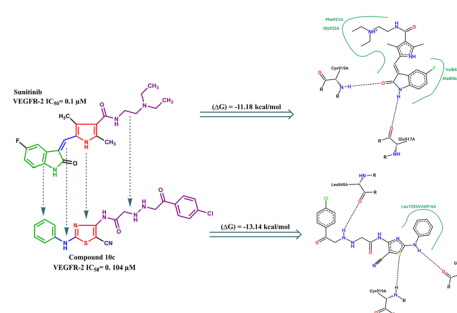
Sapna Saini, G. Lakshma Reddy, Anjali Gangwar, Harpreet Kour, Gajanan G. Nadre, Ramajayan Pandian, Sunny Pal, Utpal Nandi, Rashmi Sharma\* and Sanghapal D. Sawant\*



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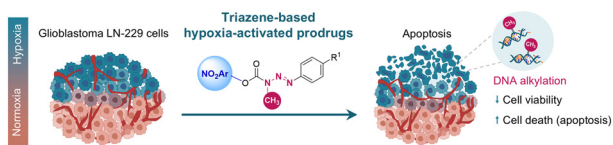
## Probing structural requirements for thiazole-based mimetics of sunitinib as potent VEGFR-2 inhibitors

Alaa A. Abd Elhameed,\* Ahmed R. Ali,\* Hazem A. Ghabbour, Said M. Bayomi and Nadia S. El-Gohary\*



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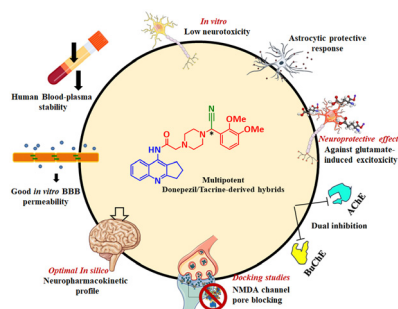
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### Nitroaromatic-based triazene prodrugs to target the hypoxic microenvironment in glioblastoma

Cláudia Braga,\* Margarida Ferreira-Silva, M. Luísa Corvo, Rui Moreira, Alexandra R. Fernandes,\* João Vaz and Maria J. Perry

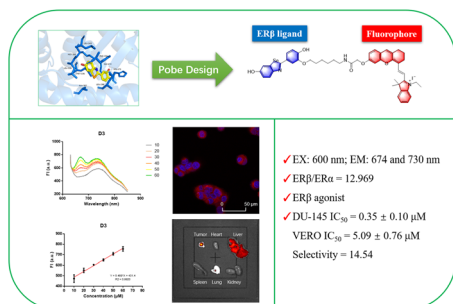
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### Novel multipotent conjugate bearing tacrine and donepezil motifs with dual cholinergic inhibition and neuroprotective properties targeting Alzheimer's disease

Andrés F. Yepes,\* Wilson Cardona-Galeano, Angie Herrera-Ramírez, Marlyn S. Rada, Edison Osorio, Luis Alfonso Gonzalez-Molina, Yaneth Miranda-Brand and Rafael Posada-Duque\*

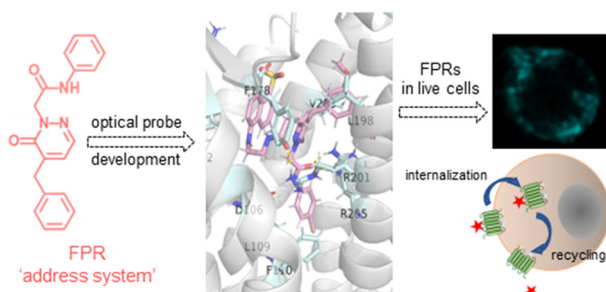
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### An estrogen receptor β-targeted near-infrared probe for theranostic imaging of prostate cancer

Junhong Dai, Yihe Wu, Xiaofei Deng, Hai-Bing Zhou\* and Chune Dong\*

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### Development of small-molecule fluorescent probes targeting neutrophils via *N*-formyl peptide receptors

Qi Xu, Kalwant S. Authi, Liliya N. Kirpotina, Igor A. Schepetkin, Mark T. Quinn and Agostino Cilibrizzi\*



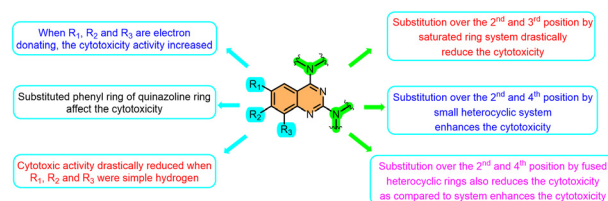


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## Synthesis and screening of novel 2,4-bis substituted quinazolines as tubulin polymerization promoters and antiproliferative agents

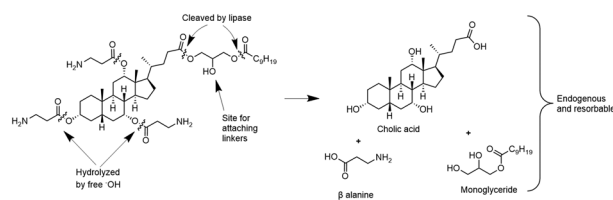
Ashish Ranjan Dwivedi, Vijay Kumar, Vikash Prashar, Kailash Jangid, Naveen Kumar, Bharti Devi, Jyoti Parkash and Vinod Kumar\*



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## Design, synthesis, antimicrobial activity, stability, and mechanism of action of bioresorbable ceragenins

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## Discovery of a novel pyrimidine derivative for treatment of acute lung injury through reducing oxidative stress and inflammatory response

Yu Jie Jian, Qi Lv, Leran Du, Cen Cen Lei, Li Ping Zhi\* and Xin Hua Liu\*

