

## IN THIS ISSUE

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**Cover**  
See Masahiro Goto *et al.*,  
pp. 1078–1086.

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**Inside cover**  
See Padma V. Devarajan  
*et al.*, pp. 1087–1095.

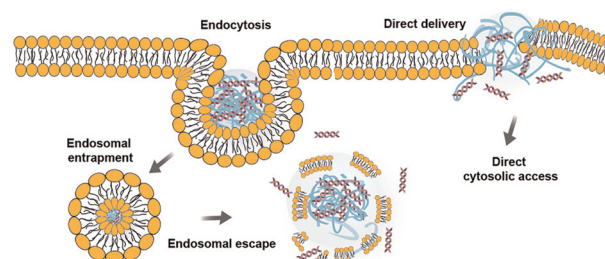
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## REVIEWS

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### Breaking the cellular delivery bottleneck: recent developments in direct cytosolic delivery of biologics

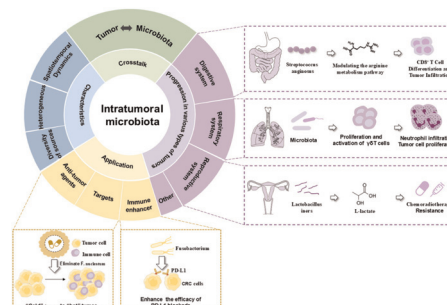
Harini Nagaraj, Victor Lehot, Nourina Nasim, Yagiz Anil Cicek, Ritabrita Goswami, Taewon Jeon and Vincent M. Rotello\*



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### Intratumoral microbiota: a new perspective in cancer initiation, development, and therapy

Huiling Liu, Zhonghui Luo, Fangzhen Luo,\* Xilian Wang, Hua Wei\* and Cui-Yun Yu\*



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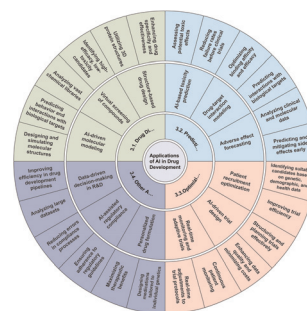
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## REVIEWS

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## Artificial intelligence in smart drug delivery systems: a step toward personalized medicine

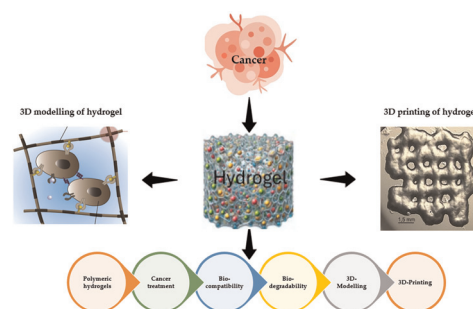
Mitali Panchpuri, Ritu Painuli and Chetan Kumar\*



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## Introduction, classification and applications of 3D bioprinted hydrogels for cancer treatment: a review

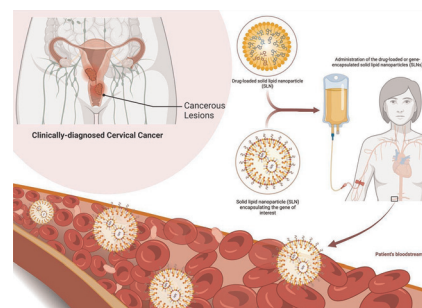
Anusha Thumma



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## Solid lipid nanoparticles in cervical cancer: a comprehensive review of a decade of progress and prospects

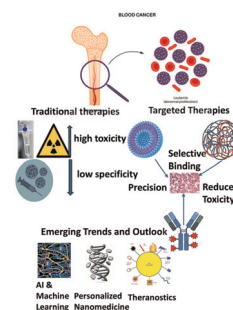
Pooja Tiwary, Krishil Oswal, Ryan Varghese,\* Ravi Vamsi Peri and Pardeep Gupta\*



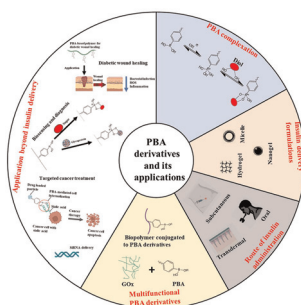
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## Advances in targeted therapies and emerging strategies for blood cancer treatment

Samson A. Adeyemi,\* Lindokuhle M. Ngema and Yahya E. Choonara\*



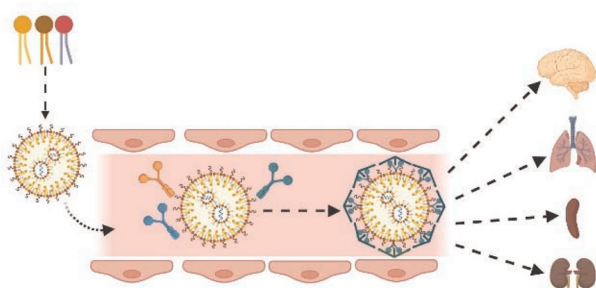
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## Phenylboronic acid derivatives: advancing glucose-responsive insulin delivery and multifunctional biomedical applications

Kofi Oti Boakye-Yiadom, Debmalya Roy, Hajra Zafar and Faisal Raza\*

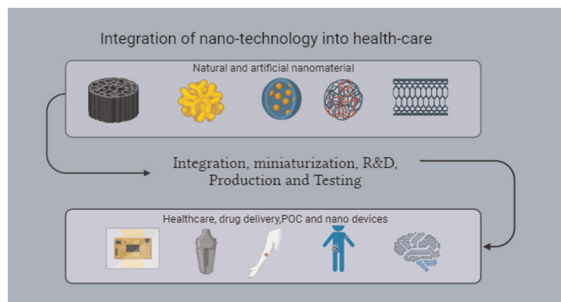
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## A new strategy for the extrahepatic delivery of lipid-based nanomedicines: a protein corona-mediated selective targeting system based on an ionizable cationic lipid library

Mahmoud A. Younis, Yusuke Sato, Seigo Kimura and Hideyoshi Harashima\*

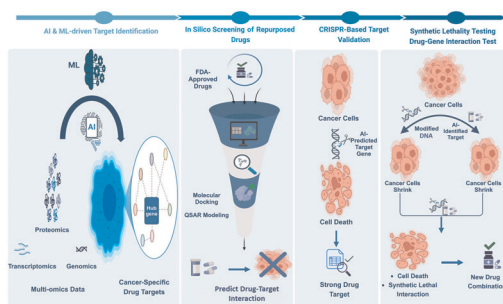
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## Nanosensors in healthcare: transforming real-time monitoring and disease management with cutting-edge nanotechnology

Shikha Gulati,\* Rakshita Yadav, Varsha Kumari, Shivangi Nair, Chetna Gupta and Meenal Aishwari

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## Incorporating AI, *in silico*, and CRISPR technologies to uncover the potential of repurposed drugs in cancer therapy

Hend Gamal,\* Eman Mostafa Shoeib, Areej Hajjaj, Heba Elsafy Abdelaziz Abdullah, Esmail H. Elramy, Doaa Ahmed Abd Ellah, Shorouk Mahmoud El-Sayed and Mohammad Fadl Khder

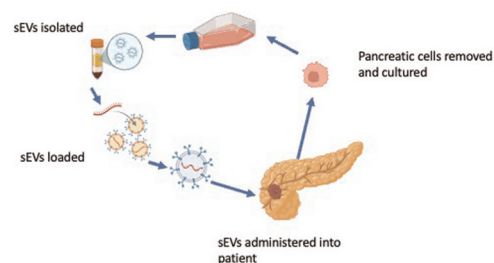


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## The potential of small extracellular vesicles for pancreatic cancer therapy

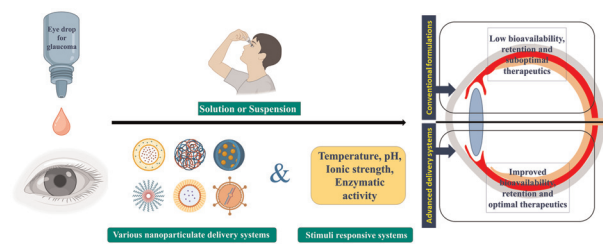
Richard Crow, Oksana Kehoe and Clare Hoskins\*

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## Emerging drug delivery strategies for glaucoma therapy: focus on nanoparticles and stimuli-responsive systems

Sourabh Kundu, Gitika Kumari and Dadi A. Srinivasarao\*

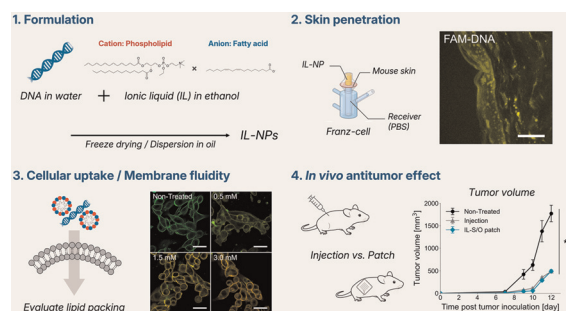


## PAPERS

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## Biocompatible ionic liquid-based nanoparticles for effective skin penetration and intracellular uptake of antisense oligonucleotides

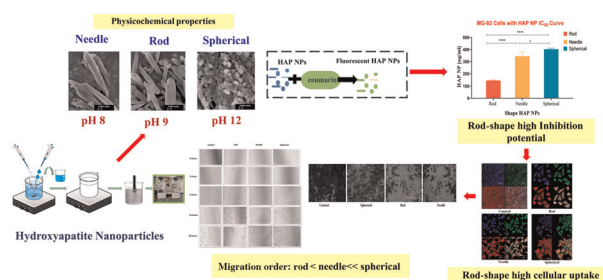
Kiyohiro Toyofuku, Rie Wakabayashi, Yoshiro Kawaguchi, Noriho Kamiya and Masahiro Goto\*



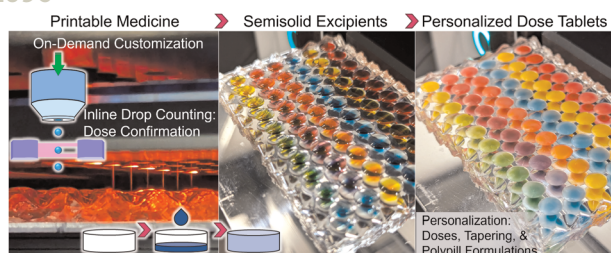
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## Effect of shape on cellular internalization and anti-cancer efficacy of hydroxyapatite nanoparticles in an osteosarcoma cell line

Simmi Gupta, Esha S. Attar, Vishvesh Joshi and Padma V. Devarajan\*



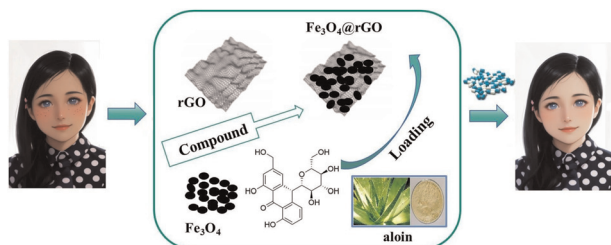
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### Personalized medicine: a quality by design approach to printable tablet production

Thomas P. Forbes,\* Olivia Agolini, Zainab Altamimi and Jeffrey Lawrence

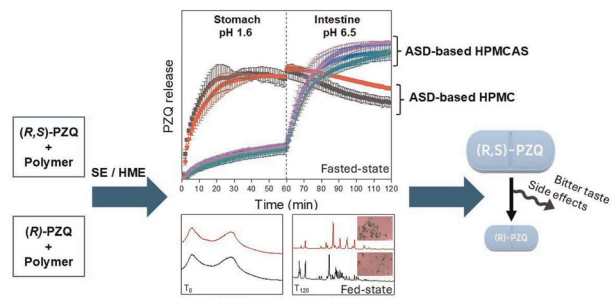
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### Comparative analysis of the inhibitory effects of aloin on tyrosinase supported by $\text{Fe}_3\text{O}_4@\text{rGO}$ : investigation of interaction mechanisms, inhibitory activity, and conformational changes

Zhu Wang, Lu Chen, Jing Yuan, Qiulan Zhang\* and Yongnian Ni

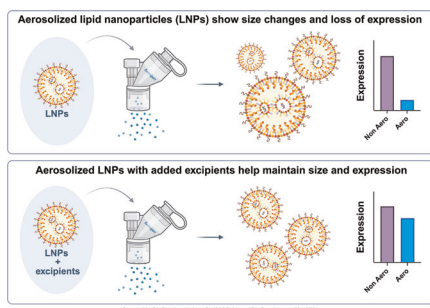
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### Release performance and crystallization of racemic and enantiopure praziquantel amorphous solid dispersion in various media

Benedito Roberto de Alvarenga Junior and Lynne S. Taylor\*

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### Systematic screening of excipients to stabilize aerosolized lipid nanoparticles for enhanced mRNA delivery

Brittany J. Heiser, Mae M. Lewis, Meysam Mohammadi Zerankeshi, Emily K. Netemeyer, Ashlee M. Hernandez, Alexander E. Marras and Debadyuti Ghosh\*

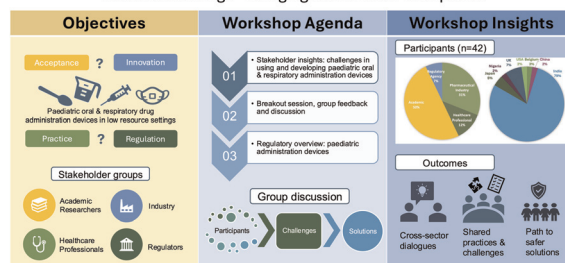


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## Accelerating safer administration of medicines to children in low resource settings – bridging stakeholder viewpoints

Sifan Hu, Alka Mukne, Vandana Patravale, Pradeep Behera, Krishnarajan Bangarurajan, Esmerald Hermans, Jennifer Walsh and Smita Salunke\*

### Accelerating Safer Administration of Medicines to Children in Low Resource Settings – Bridging Stakeholder Viewpoints

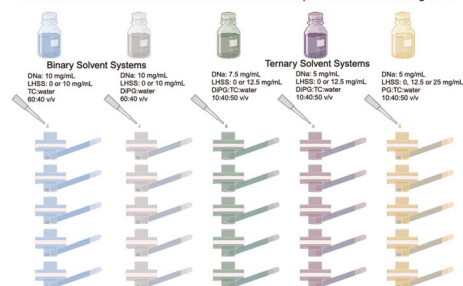


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## Ion pairing as a strategy to enhance the delivery of diclofenac

Mignon Cristofoli,\* Jonathan Hadgraft, Majella E. Lane and Bruno C. Sil

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## Clobetasol propionate and pramoxine hydrochloride loaded nanolipid carrier gel for the treatment of atopic dermatitis

Akhil Suresh, K. V. Navyasree, M. S. Sreelakshmi and Vidya Viswanad\*

