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#### Cover See Steve P. Rannard et al., pp. 517-526.

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#### **REVIEWS**

#### Al-driven innovations in pharmaceuticals: optimizing drug discovery and industry operations

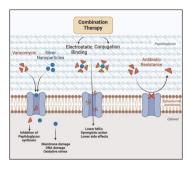
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#### Strategies to overcome antibiotic resistance: silver nanoparticles and vancomycin in pathogen eradication

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# **RSC Advances**

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Elemental answers

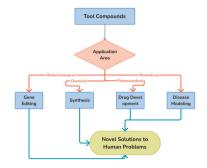
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Comprehensive report on biochemical, pharmacological, and pharmacokinetic properties of tool compounds relevant to human pathologies

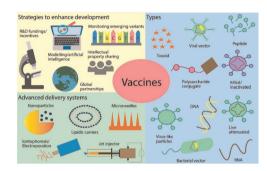
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#### Vaccine formulation design: challenges and opportunities

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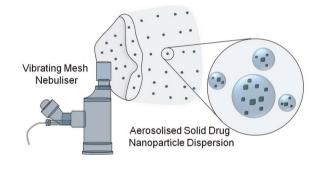


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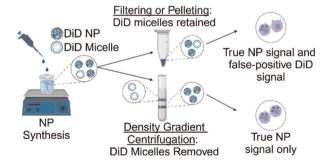
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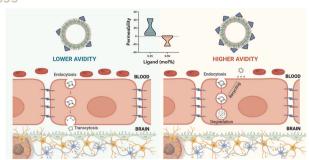
Standard purification methods are not sufficient to remove micellular lipophilic dye from polymer nanoparticle solution

Eric H. Sterin, Laura A. Weinstein, Chitran Roy Chowdhury, Emma C. Guzzetti and Emily S. Day\*



#### **COMMUNICATIONS**

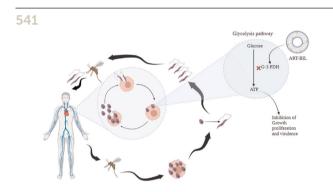
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#### Sometimes less is more: avidity-dependent transport of targeted polymersomes across the blood-brain-barrier

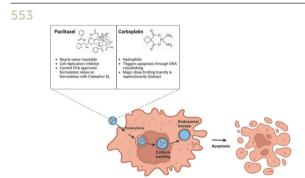
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#### **PAPERS**



#### Artesunate-loaded bilosomes with enhanced oral bioavailability: in silico and in vitro study against Leishmania donovani promastigotes and in vivo pharmacokinetic assessment in rats

Hitesh Wankhede, Sudha Madhavi Penumaka, Debabrata Mandal, Supada Rojatkar, Vinod Gaikwad and Sharvil Patil\*



#### Polybasic nanogels for intracellular co-delivery of paclitaxel and carboplatin: a novel approach to ovarian cancer therapy

Angela M. Wagner, Olivia L. Lanier,\* Ani Savk and Nicholas A. Peppas\*

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#### Polysaccharide-capped silver nanoparticles impregnated cream for the efficient management of wound healing

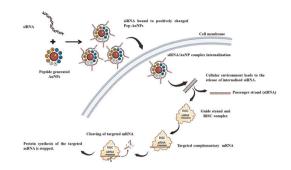
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Peptide-derived gold nanoparticles as a promising delivery system for Src targeting siRNA in breast cancer cells

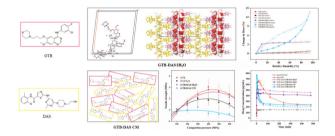
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Comparative evaluation of cocrystalline and coamorphous forms comprised of gefitinib and dasatinib for performance optimization

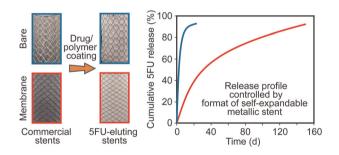
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Comparison of polymer-coated, drug-eluting self-expandable metal stents for the potential treatment of gastrointestinal cancers

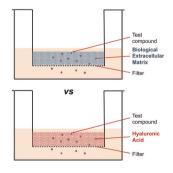
Mohammad Arafat, Anthony Wignall, Kyle Brewer, Yunmei Song, Hugo Albrecht, Clive A. Prestidge, Sanjay Garg\* and Anton Blencowe\*



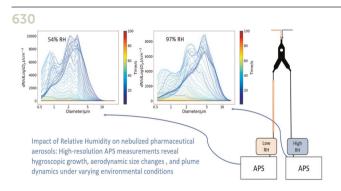
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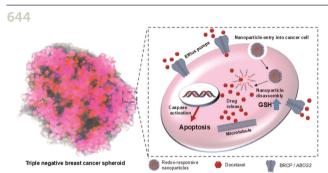


#### **PAPERS**



## Comparative hygroscopic aerosol particle sizing measurements of the hygroscopic growth of inhaled pharmaceutical ingredients

Yiliang Lance Jiang, Josef Kadziola, Jose R. Ruiz, Richard Friend and Jonathan P. Reid\*



Redox-responsive micellar-like nanoparticles can overcome intrinsic multi-drug resistance in tumour spheroids of triple negative breast cancer

Cíntia J. Monteiro, Patrícia F. Monteiro,\* Alessandra Travanut, Muhammad Gulfam, David M. Heery, Anna Grabowska and Cameron Alexander\*