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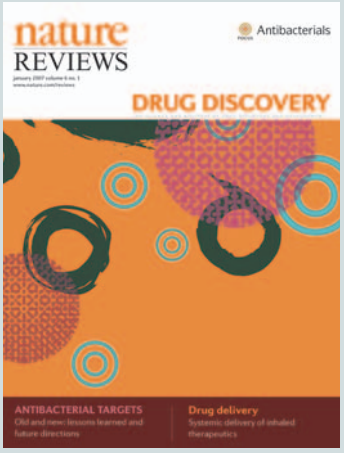

► **COVER:** 'Antibacterial drug targets' by Susanne Harris, inspired by the reviews on p29 and 41.


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Forty years ago, the US Surgeon General is famously believed to have said: "The time has come to close the book on infectious diseases." Such optimism has regrettably proved unfounded, not least in the ongoing battle against bacterial infections. Resistance to all major classes of antibiotics is now commonplace, and the pipeline of potential replacement drugs is far from full. A concerted effort by academic institutions, industry and governmental organizations will be crucial in tackling this problem; with this in mind, this month, together with *Nature Biotechnology*, we present a special focus on antibacterials. As part of the focus, this issue includes a news feature in which leaders representing the key stakeholders in the field provide their thoughts on the major challenges, an analysis of the antibacterials market, and three reviews on aspects of antibacterial drug discovery. Payne and colleagues use their experience with genomics-based antibacterial discovery at GlaxoSmithKline to consider why genomic targets have so far proved far less tractable than hoped, while Silver examines the possibility that 'good old targets' might be qualitatively different from novel targets and what can be learned from existing targets that might help the quest for new antibacterials. Finally, Lomovskaya and colleagues discuss the structure and mechanisms of the multidrug-resistance (MDR) efflux pumps that have a key role in antibiotic resistance, and the various approaches to target them. The full focus can be found at http://www.nature.com/focus/antibacterials and, thanks to the support of AstraZeneca and Wyeth, will be freely available for 6 months. Completing this issue, Patton and Byron highlight the challenges and opportunities for delivering drugs systemically through the lungs, and Isaacs and colleagues describe how lessons learned from the use of biological therapies for rheumatological diseases could aid the development of better drugs.

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