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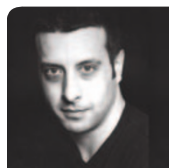
► **COVER:** 'Drug targets' inspired by the Perspective on p993.



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Knowledge of the number and nature of molecular targets for approved drugs is important for the development of predictive methods to identify potential new drug targets, and for estimating the future potential for innovation.

So it is unsurprising that the question of how many drug targets exist has been the subject of considerable debate and research since the first efforts to systematically provide an answer were published 10 years ago. This month, we are pleased to present a poster (produced with support from Pfizer and Inpharmatica) alongside an article by Overington and colleagues that together provide a comprehensive survey of current drug targets, and also a wealth of information on the characteristics of target families and the drugs that modulate them. Two further articles focus on potential drug targets presented by signalling pathways that have essential roles in embryonic development, but which are also aberrantly reactivated in certain types of cancer. Barker and Clevers consider the challenges and pitfalls of modulating components of the Wnt signalling pathway, and Rubin and de Sauvage discuss the latest efforts to develop anticancer drugs that interfere with 'Hedgehog' signalling. Ion channels on cardiac cells are the key targets for therapies for two particularly important cardiac arrhythmias — atrial fibrillation and ventricular fibrillation — and in their review, Nattel and Carlson describe emerging findings that offer the potential for the development of new types of safer and more effective anti-arrhythmic drugs. Finally, turning to viral drug targets, with the continuing threat of an influenza pandemic in mind, De Clercq summarizes agents that have been shown to be active against influenza A viruses and discusses their therapeutic potential, and also describes emerging strategies for targeting these viruses.

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