IN THIS ISSUE

nature REVIEWS



COVER: 'Cancer genomics: a pathway perspective' by Susanne Harris, inspired by the News story on p875









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wealth of genomic data for pathogens that cause diseases such as malaria is now available, but translating this knowledge into much-needed new drugs represents a major challenge. In their Perspective, authors from a global network of public and private partners discuss the development of the open-access TDR Targets database, which integrates genetic, biochemical, structural and pharmacological data to help identify and prioritize promising novel drug targets for tropical disease pathogens. Chronic kidney diseases represent another area in which improved pharmacotherapies are required. Perico and colleagues summarize current treatments and highlight novel therapies targeting the inflammatory and profibrotic processes now known to be involved in disease pathogenesis. Progress in the understanding of the pathogenesis of multiple sclerosis has aided dramatic advances in treatment in the past 15 years, but inhibiting disease progression remains a key challenge. In their Review, Lopez-Diego and Weiner discuss the translation of increasing knowledge of the complex role of immune system dysfunction in disease maintenance and progression into novel therapeutics, such as monoclonal antibodies targeting specific aspects of T-cell and B-cell function. Although there is now considerable experience of regulatory issues for the development of monoclonal antibodies, the failure rate of marketing authorization applications for such products is still high. In our second perspective this month, Schneider and Schäffner-Dallmann highlight common regulatory issues with biotechnology products in Europe, and consider approaches that may aid future success. Finally, Prassas and Diamandis focus on cardiac glycosides — traditionally used in the treatment of heart failure on the basis of their inhibitory action

on the sodium pump — discussing their emerging potential for treating cancer, cystic fibrosis, stroke and neurodegenerative diseases.

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