

Hürden und Aussichten neuer antimikrobieller Konzepte in Forschung und Entwicklung. [Obstacles and perspectives of new antimicrobial concepts within research and development].

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Abstract

Antimicrobial resistance (AMR) has developed into a serious problem for the healthcare sector worldwide. Research on fundamentally novel antibiotics has been insufficient for decades and only a few new compounds have reached the market. Thus, the pressure to implement novel and effective concepts for the reduction of infections through problematic pathogens has dramatically increased. This demand has been recognized by politicians and comprehensive national and international funding programs have been launched. A major role of many funding lines is the investigation and development of therapeutics exerting a novel mechanism of action and/or minimizing the frequency of resistance. In addition to the actual clinical pipeline, this article lists

selected examples from research and early development with a special focus on antibiotics. Moreover, alternative approaches like antivirulence and phage therapy as well as immunomodulation are summarized. AMR is no longer solely a healthcare policy, but is of societal significance as a whole. A consolidation of infrastructures and public-private partnerships, a reduction of regulatory obstacles and a continuous pursuit of innovations for antimicrobial therapy are urgently needed.

Beteiligte Forschungseinheiten

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