

New insights for vaccine development against *Clostridium difficile* infections

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Increased antibiotic usage is the main risk factor for gut microbiota dysbiosis. In dysbiosis, there is an increased susceptibility to intestinal pathogens, such as *Clostridium difficile* infection, the leading cause of hospital-acquired infection worldwide. High-spectrum antibiotics, such as vancomycin or metronidazole, also increases the risk of developing CDI symptoms after the treatment. An impaired immune response could also be responsible for the high incidence of recurrence of CDI (R-CDI), suggesting that immune system stimulation could help eradicate the infection in patients suffering multiple episodes in CDI or prevent the infective course. Here, we discuss novel immunotherapeutic approaches that aid the immune system to target *C. difficile* and how these can be improved.