

Hegde NR, Kaveri SV and Bayry J. (2011). Recent advances in the administration of vaccines for infectious diseases: microneedles as painless delivery devices for mass vaccination. *Drug Discov Today* 16: 1061-1068.

Despite remarkable progress in the control of infectious diseases through vaccination, better delivery systems have been poorly explored. There is renewed interest in the discovery of novel vaccines and adjuvants owing to the burden and complexity of chronic infectious diseases. Conversely, the need for rapid local, regional, mucosal or parenteral bioavailability has led to advances in delivery systems and devices. Here, we present recent developments in the field of non-invasive cutaneous delivery of vaccines for infectious diseases. Transdermal delivery using microneedles could revolutionize the way prophylactic interventions for infectious diseases are carried out in the future.