

1. Record Nr.	UNINA9910136798703321
Autore	Ahmad Ali Othman
Titolo	The Schistosomiasis Vaccine - It Is Time to Stand Up
Pubbl/distr/stampa	Frontiers Media SA, 2015
Descrizione fisica	1 online resource (82 p.)
Collana	Frontiers Research Topics
Soggetti	Medicine and Nursing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Schistosomiasis is a severe parasitic disease, endemic in 74 developing countries with up to 600 million people, including many children, infected and 800 million at risk of contracting the disease following infection with <i>Schistosoma mansoni</i>, <i>S. haematobium</i> or <i>S. japonicum</i>. Disease burden is estimated to exceed 70 million disability-adjusted life-years, and leads to remarkably high YLD (years lived with disability) rates. Even more importantly, people with schistosomiasis are highly susceptible to malaria, tuberculosis and hepatic and acquired immunodeficiency viruses. There is only one drug, praziquantel, currently available for treatment and it has high efficacy, low cost, and limited side effects. However, only 13% of the target population has received the drug, and those treated are at continuous risk of reinfection necessitating repeated drug administration and the emergence of drug resistant parasites is a constant threat. There currently is no vaccine. While the target of &gt;40% protection has been achieved with some molecules such as excretory-secretory proteins including calpain, glyceraldehyde 3-phosphate dehydrogenase, and cysteine peptidases, very recent articles reiterate the findings published during the last 2 decades of the last century, contradicting the established data of the pioneers of schistosome biology. A consensus should be reached without delay, in order to propose collaborative independent experiments and proceed ahead to pre- and clinical trials with efficacious candidate vaccine molecules. The proposed plan aims</p>

to finally reach an objective and fruitful agreement , via inviting established and young researchers from the United States, Brazil, China, Australia, and Europe who are working with different vaccine antigens, adjuvants, and approaches for immunization against *S. mansoni*, *S. haematobium*, and *S. japonicum*. It is hoped that the forum will end with a very few candidate antigens and a consensus approach regarding target immune responses, thus leading to encouraging the World Health Organization and other international foundations to sponsor the development and implementation of the urgently required, yet still elusive, vaccine for preventing and eliminating the transmission of schistosomiasis.

---