

Chlamydia Vaccine



Novel Chlamydial proteins as suitable candidates for a vaccine formulation to prevent Chlamydia infections in human.

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Inventors

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Patent Status

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Stage of Research

In vitro and *in vivo*
data available.

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Abstract

Chlamydias are major disease-causing agents of infection affecting over 61 million individuals worldwide. Genital tract infection with *Chlamydia trachomatis*, the most common sexually transmitted bacterial disease, is an escalating global public health concern causing considerable morbidity and socioeconomic burden worldwide. Although antibiotics are used to treat symptomatic urogenital infections, chlamydial infection remains asymptomatic in approximately 50% of infected men and 70% of infected women contributing to horizontal transmission between sexual partners. There is no commercially available vaccine for the prevention of Chlamydia infections in human.

McMaster researchers have evaluated novel Chlamydial proteins as immunogens in animal models for their ability to induce a protective immune response. Results indicate that these proteins are suitable candidates for a vaccine formulation.

Applications

- Recombinant proteins may be used alone or in combination with other known Chlamydial proteins in a novel vaccine

Advantages

- Administering an effective amount of a novel recombinant Chlamydia protein, alone or in combination, induce an immune response that is protective against a live Chlamydia challenge
- Definitive infection control of chlamydial infections will likely be achievable through a safe and efficacious vaccine