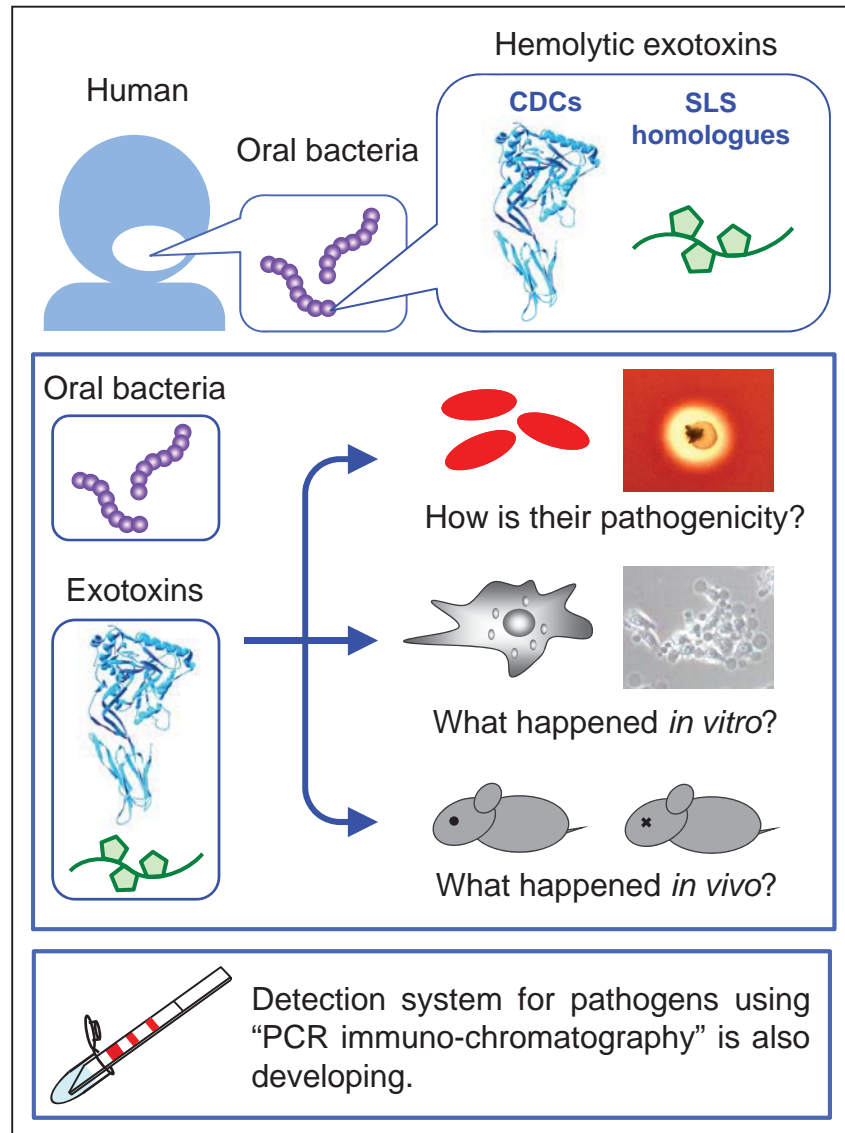


Mechanism for Action of Bacterial Toxin and Host Response

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Content:

Background: Various bacteria including streptococci are persistent in oral cavity of human. In general, an oral streptococci had been accepted with low- or non-pathogenic potential except for *Streptococcus mutans*, responsible for the oral disorders such as dental caries. However, the non-oral disorders caused by other oral streptococci is also reported recently. In addition, some clinical oral streptococci is known to produce a hemolytic toxin. From these situations, the importance of the appropriate oral care is received increasing attention, and it is needed to be re-evaluated to maintenance and enhance our health.

Overview and feature of study: We are investigating about the function of streptococcal exotoxins [cholesterol-dependent cytolysins (CDCs) and streptolysin S (SLS) homologue] produced from Anginosus group streptococci (AGS). The mode of action of these exotoxins and the pathogenic potential of exotoxin-producing AGS are also investigated both *in vitro* and *in vivo*. Furthermore, the system to detect the various pathogenic bacteria is also developing using the method of "PCR immune-chromatography".

Keywords: Bacterial toxin, Mechanism of action
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