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Sommario/riassunto	Members of the genus Staphylococcus and Streptococcus are the causative agnets of many human and animal diseases. Over the past decade the complete sequencing of many staphylococcal and streptococcal genomes has promoted a significant advance in our knowledge of these important pathogens. The pathogenicity of these bacteria is due to the expression of a large variety of virulence factors. Such determinants, which are cell wall-associated and secreted proteins, include adhesins that confer to the pathogen the ability to attach to extracellular matrix/plasma and host cell surfaces, proteins that contribute to host cell invasion and intracellular survival and soluble factors that decrease phagocytosis and modulate the immune response. Furthermore, these Gram-positive cocci in many natural environments (heart valve, lung, oral cavity, throat) and infections on implanted devices live in matrix-encased groups known as biofilms. Biofilms are specialized bacterial communities with high order organization analogous to that of a tissue in multicellular organism that adhere to abiotic or biological substrata and produce an

exopolymeric matrix composed of polysaccarides, proteins, DNA or combination thereof. Bacteria within a biofilm persist in adverse conditions, show resistance to killing by antibiotics and to host immune defences and are difficult to eradicate and treat clinically. Therefore, understanding the mechanisms of biofilm development will allow us to effectively combat staphylococcal/streptococcal biofilm-based infections. This Research Topic will focus on the molecular components involved in biofilm formation by staphylococci and streptococci, the role they play in the development, maturation and dispersal of biofilm and on the regulatory aspects of such complex processes. The implication for the pathogenesis of infective diseases and potential therapeutic strategies against biofilm-based infections will be also discussed. The articles will highlight both the recent advances and future challenges inherent in this rapidly evolving area.