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Sommario/riassunto	The group of pattern recognition receptors (PRRs) includes families of Toll-like receptors (TLRs), NOD-like receptors (NLRs), C-type lectin receptors (CLRs), RIG-I-like receptors (RLRs), and AIM-2-like receptors (ALRs). Conceptually, receptors constituting these families are united by two general features. Firstly, they directly recognize common antigen determinants of virtually all classes of pathogens (so-called pathogen-associated molecular patterns, or simply PAMPs) and initiate immune response against them via specific intracellular signaling pathways. Secondly, they recognize endogenous ligands (since they are usually released during cell stress, they are called damage-associated molecular patterns, DAMPs), and, hence, PRR-mediated immune response can be activated without an influence of infectious agents. So, pattern recognition receptors play the key role performing the innate and adaptive immune response. In addition, many PRRs have a number of other vital functions apart from participation in immune response realization. The fundamental character and diversity of PRR functions have led to amazingly rapid research in this field. Such investigations are very promising for medicine as immune system plays a key role in vast majority if not all human diseases, and the process of discovering the new aspects of the immune system functioning is rapidly ongoing. The role of Toll-like receptors in cancer was analyzed in certain reviews but the data are still scattered. This collection of reviews systematizes the key information in the field.