

薬剤耐性マラリアに対抗できる新規抗マラリア薬の創製研究

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Emerging and re-emerging infectious diseases have recently been considered to be worldwide problems, and malarial infection, which is a re-emerging infectious disease, has been attracted attention. Three hundred million or more people are infected with malaria and 1.5-2.7 million people die every year, and malarial infection is a major cause of death in developing countries (WHO report). Malaria parasite (*Plasmodium falciparum*, which contributed most of the death) has been acquiring resistance to various antimalarial drugs. For malaria control, the development of a novel drug, that overcomes the drug-resistance malaria parasite, is most important. We are screening about 5,500 samples containing natural products, organic compounds, microorganism-derived products, combinatorial compounds and marine products that are supposed to have antimalarial activity. As the results, several compounds with high selective antimalarial activity were obtained using the *in vitro* and *in vivo* assay against *P. falciparum in vitro* and *P. berghei in vivo*. In this conference, the current status of the development of novel antimalarial drugs is introduced.

Antimalarial drug development research against drug-resistant *P. falciparum*

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