OMICS Group International through its Open Access Initiative is committed to make genuine and reliable contributions to the scientific community. OMICS Group hosts over 400 leading-edge peer reviewed Open Access Journals and organizes over 300 International Conferences annually all over the world. OMICS Publishing Group journals have over 3 million readers and the fame and success of the same can be attributed to the strong editorial board which contains over 30000 eminent personalities that ensure a rapid, quality and quick review process. OMICS Group signed an agreement with more than 1000 International Societies to make healthcare information Open Access.
OMICS Group welcomes submissions that are original and technically so as to serve both the developing world and developed countries in the best possible way. OMICS Journals are poised in excellence by publishing high quality research. OMICS Group follows an Editorial Manager® System peer review process and boasts of a strong and active editorial board.

Editors and reviewers are experts in their field and provide anonymous, unbiased and detailed reviews of all submissions. The journal gives the options of multiple language translations for all the articles and all archived articles are available in HTML, XML, PDF and audio formats. Also, all the published articles are archived in repositories and indexing services like DOAJ, CAS, Google Scholar, Scientific Commons, Index Copernicus, EBSCO, HINARI and GALE.

For more details please visit our website: http://omicsonline.org/Submitmanuscript.php
Editor’s Biography

• Delenasaw Yewhalaw joined Asmara University, Eritrea in 1981 and graduated in Biology in 1985. He taught Biology for over 8 years in Ethiopian High Schools. In 2002, he joined the graduate program at the Faculty of Natural sciences at Addis Ababa University, Ethiopia and obtained Masters of Science Degree in Entomology. From 2004 to 2009, he worked at the Department of Biology, Faculty of Natural Sciences, Jimma University, Ethiopia at various capacities (Lecturer to Assistant Professor). From 2007 to 2009, he served Jimma University as Director of Continuing and Distance Education (CDE), and from 2011 to present as a Director of the Tropical and Infectious Diseases Research Center (TIDRC). In 2012 he obtained his PhD in Medical Sciences from Université Catholiqué de Louvain, Brussels, Belgium. Currently, He is an Associate Professor of Medical Entomology at the College of Public Health and Medical Sciences, Jimma University, Ethiopia and a member of the Editorial Boards for Annals of Tropical Medicine and Public Health, American Journal of Health Research, Ethiopian Journal of Health Sciences and Journal of Education and Sciences. Reviewer for Malaria Reports, Parasites & Vectors, PLoS ONE, Journal of Tropical Diseases, Ethno biology and Ethno medicine, and Malaria Journal. He is also an Executive Board Member of the Ethiopian Society of Tropical & Infectious Diseases (ESTAIDS).
Research Interest

• Insecticide resistance
• Vector biology and control
• Malaria epidemiology and Assessment of malaria risk
• Vector Surveillance and Monitoring
• Climate Change and Vector Borne Diseases
• Health Impact Assessment
Publications


Drug Resistance - Malaria
INTRODUCTION

• The prevalence of resistance to known anti-malarial drugs has resulted in the expansion of anti-malarial drug discovery efforts.

• Several new anti-malarial agents are undergoing clinical trials, mainly those resurrected from previous anti-malarial drug discovery programs.
A DEADLY CYCLE
Malaria is caused by a parasite called *Plasmodium* transmitted via mosquitoes

1. The malarial sperm cell fertilises an egg cell in the gut of a mosquito. A parasite sporozoite is born. The mosquito passes sporozoites via its saliva into the human victim.

2. Once in the victim's blood stream, the sporozoites penetrate liver cells and start reproducing. The sporozoites multiply until the liver cells begin to rupture.

3. Newly formed sporozoites re-enter the blood stream and attach themselves to blood cells. Infected red blood cells burst, infecting other blood cells.

4. This cycle depletes the body of oxygen and causes fever and chills. A dormant version of the parasite travels through the host's blood stream to be ingested by another mosquito to carry it to a new host.
## Drug Resistance

<table>
<thead>
<tr>
<th>Mechanisms</th>
<th>Spread</th>
</tr>
</thead>
<tbody>
<tr>
<td>mutations in target gene</td>
<td>self treatment</td>
</tr>
<tr>
<td>↑ production of target</td>
<td>poor compliance</td>
</tr>
<tr>
<td>↓ drug accumulation (includes ↑ efflux)</td>
<td>mass administration</td>
</tr>
<tr>
<td>drug inactivation</td>
<td>long drug half-life</td>
</tr>
</tbody>
</table>
OMICS publishing Group Open Access Membership enables academic and research institutions, funders and corporations to actively encourage open access in scholarly communication and the dissemination of research published by their authors. For more details and benefits, click on the link below:
http://omicsonline.org/membership.php