

Liste der wissenschaftlichen Veröffentlichungen

I Originalarbeiten

1. Hirsch R, **Wiesner J**, Bauer A, Marker A, Vogel H, Hammann PE, Vilcinskas A. Antimicrobial peptides from rat-tailed maggots of the drone fly *Eristalis tenax* show potent activity against multidrug-resistant Gram-negative bacteria. *Microorganisms*. 2020 Apr 25;8(5):626.
2. Hirsch R, **Wiesner J**, Marker A, Pfeifer Y, Bauer A, Hammann PE, Vilcinskas A. Profiling antimicrobial peptides from the medical maggot *Lucilia sericata* as potential antibiotics for MDR Gram-negative bacteria. *J Antimicrob Chemother*. 2019 Jan 1;74(1):96-107.
3. Hirsch R, **Wiesner J**, Marker A, Bauer A, Hammann PE, Vilcinskas A. Biological profiling of coleopterins and coleopterin-like antimicrobial peptides from the invasive harlequin ladybird *Harmonia axyridis*. *Adv Exp Med Biol*. 2019;1214:43-59.
4. Talmann L, **Wiesner J**, Vilcinskas A. Strategies for the construction of insect P450 fusion enzymes. *Z Naturforsch C*. 2017 Sep 26;72(9-10):405-415.
5. Waryah CB, Wells K, Ulluwishewa D, Chen-Tan N, Gogoi-Tiwari J, Ravensdale J, Costantino P, Gökçen A, Vilcinskas A, **Wiesner J**, Mukkur T. Antimicrobial efficacy of tobramycin in vitro against *Staphylococcus aureus* biofilms in combination with or without DNase I and/or Dispersin B: A preliminary investigation. *Microb Drug Resist*. 2017 Apr;23(3):384-390.
6. **Wiesner J**, Ziemann C, Hintz M, Reichenberg A, Ortmann R, Schlitzer M, Fuhst R, Timmesfeld N, Vilcinskas A, Jomaa H. FR-900098, an antimalarial development candidate that inhibits the non-mevalonate isoprenoid biosynthesis pathway, shows no evidence of acute toxicity and genotoxicity. *Virulence*. 2016 Aug 17;7(6):718-28.
7. Beckert A, **Wiesner J**, Schmidtberg H, Lehmann R, Baumann A, Vogel H, Vilcinskas A. Expression and characterization of a recombinant i-type lysozyme from the harlequin ladybird beetle *Harmonia axyridis*. *Insect Mol Biol*. 2016 Jun;25(3):202-15.
8. Pöppel AK, Kahl M, Baumann A, **Wiesner J**, Gökçen A, Beckert A, Preissner KT, Vilcinskas A, Franta Z. A Jonah-like chymotrypsin from the therapeutic maggot *Lucilia sericata* plays a role in wound debridement and coagulation. *Insect Biochem Mol Biol*. 2016 Mar;70:138-47.
9. Kahl M, Gökçen A, Fischer S, Bäumer M, **Wiesner J**, Lochnit G, Wygrecka M, Vilcinskas A, Preissner KT. Maggot excretion products from the blowfly *Lucilia sericata* contain contact phase/intrinsic pathway-like proteases with procoagulant functions. *Thromb Haemost*. 2015 Aug;114(2):277-88.
10. Rahnamaeian M, Cytryńska M, Zdybicka-Barabas A, Dobszlaff K, **Wiesner J**, Twyman RM, Zuchner T, Sadd BM, Regoes RR, Schmid-Hempel P, Vilcinskas A. Insect antimicrobial peptides show potentiating functional interactions against Gram-negative bacteria. *Proc Biol Sci*. 2015 May 7;282(1806):20150293.

11. Pöppel AK, Vogel H, **Wiesner J**, Vilcinskis A. Antimicrobial peptides expressed in medicinal maggots of the blow fly *Lucilia sericata* show combinatorial activity against bacteria. *Antimicrob Agents Chemother*. 2015 May;59(5):2508-14.
12. Beckert A, **Wiesner J**, Baumann A, Pöppel AK, Vogel H, Vilcinskis A. Two c-type lysozymes boost the innate immune system of the invasive ladybird *Harmonia axyridis*. *Dev Comp Immunol*. 2015 Apr;49(2):303-12.
13. Pöppel AK, Koch A, Kogel KH, Vogel H, Kollwe C, **Wiesner J**, Vilcinskis A. Lucimycin, an antifungal peptide from the therapeutic maggot of the common green bottle fly *Lucilia sericata*. *Biol Chem*. 2014 Jun;395(6):649-56.
14. Gökçen A, Vilcinskis A, **Wiesner J**. Biofilm-degrading enzymes from *Lysobacter gummosus*. *Virulence*. 2014 Apr 1;5(3):378-87.
15. Rekitke I, Olkhova E, **Wiesner J**, Demmer U, Warkentin E, Jomaa H, Ermler U. Structure of the (E)-4-hydroxy-3-methyl-but-2-enyl-diphosphate reductase from *Plasmodium falciparum*. *FEBS Lett*. 2013 Dec 11;587(24):3968-72.
16. Ngwa CJ, Scheuermayer M, Mair GR, Kern S, Brühl T, Wirth CC, Aminake MN, **Wiesner J**, Fischer R, Vilcinskis A, Pradel G. Changes in the transcriptome of the malaria parasite *Plasmodium falciparum* during the initial phase of transmission from the human to the mosquito. *BMC Genomics*. 2013 Apr 15;14:256.
17. Gökçen A, Vilcinskis A, **Wiesner J**. Methods to identify enzymes that degrade the main extracellular polysaccharide component of *Staphylococcus epidermidis* biofilms. *Virulence*. 2013 Apr 1;4(3):260-70.
18. Röhrich CR, Ngwa CJ, **Wiesner J**, Schmidtberg H, Degenkolb T, Kollwe C, Fischer R, Pradel G, Vilcinskis A. Harmonine, a defence compound from the harlequin ladybird, inhibits mycobacterial growth and demonstrates multi-stage antimalarial activity. *Biol Lett*. 2012 Apr 23;8(2):308-11.
19. Baumeister S, **Wiesner J**, Reichenberg A, Hintz M, Bietz S, Harb OS, Roos DS, Kordes M, Friesen J, Matuschewski K, Lingelbach K, Jomaa H, Seeber F. Fosmidomycin uptake into *Plasmodium* and *Babesia*-infected erythrocytes is facilitated by parasite-induced new permeability pathways. *PLoS One*. 2011 May 4;6(5):e19334.
20. Englert NE, Richter C, **Wiesner J**, Hintz M, Jomaa H, Schwalbe H. NMR studies of DOXP reductoisomerase and its inhibitor complex. *Chembiochem*. 2011 Feb 11;12(3):468-76.
21. Rekitke I, Nonaka T, **Wiesner J**, Demmer U, Warkentin E, Jomaa H, Ermler U. Structure of the E-1-hydroxy-2-methyl-but-2-enyl-4-diphosphate synthase (GcpE) from *Thermus thermophilus*. *FEBS Lett*. 2011 Feb 4;585(3):447-51.
22. Xu W, Lees NS, Adedeji D, **Wiesner J**, Jomaa H, Hoffman BM, Duin EC. Paramagnetic intermediates of (E)-4-hydroxy-3-methylbut-2-enyl diphosphate synthase (GcpE/IspG) under steady-state and pre-steady-state conditions. *J Am Chem Soc*. 2010 Oct 20;132(41):14509-20.

23. Yan F, LaMarre JM, Röhrich R, **Wiesner J**, Jomaa H, Mankin AS, Fujimori DG. RlmN and Cfr are radical SAM enzymes involved in methylation of ribosomal RNA. *J Am Chem Soc.* 2010 Mar 24;132(11):3953-64.
24. Rekitke I, **Wiesner J**, Röhrich R, Demmer U, Warkentin E, Xu W, Troschke K, Hintz M, No JH, Duin EC, Oldfield E, Jomaa H, Ermler U. Structure of (E)-4-hydroxy-3-methyl-but-2-enyl diphosphate reductase, the terminal enzyme of the non-mevalonate pathway. *J Am Chem Soc.* 2008 Dec 24;130(51):17206-7.
25. Begley M, Bron PA, Heuston S, Casey PG, Englert N, **Wiesner J**, Jomaa H, Gahan CG, Hill C. Analysis of the isoprenoid biosynthesis pathways in *Listeria monocytogenes* reveals a role for the alternative 2-C-methyl-D-erythritol 4-phosphate pathway in murine infection. *Infect Immun.* 2008 Nov;76(11):5392-401.
26. Kohring K, **Wiesner J**, Altenkämper M, Sakowski J, Silber K, Hillebrecht A, Haebel P, Dahse HM, Ortmann R, Jomaa H, Klebe G, Schlitzer M. Development of Benzophenone-Based Farnesyltransferase Inhibitors as Novel Antimalarials. *ChemMedChem.* 2008 Aug;3(8):1217-31.
27. Perruchon J, Ortmann R, Altenkämper M, Silber K, **Wiesner J**, Jomaa H, Klebe G, Schlitzer M. Studies addressing the importance of charge in the binding of fosmidomycin-like molecules to deoxyxylulosephosphate reductoisomerase. *ChemMedChem.* 2008 Aug;3(8):1232-41.
28. Giessmann D, Heidler P, Haemers T, Van Calenbergh S, Reichenberg A, Jomaa H, Weidemeyer C, Sanderbrand S, **Wiesner J**, Link A. Towards new antimalarial drugs: synthesis of non-hydrolyzable phosphate mimics as feed for a predictive QSAR study on 1-deoxy-D-xylulose-5-phosphate reductoisomerase inhibitors. *Chem Biodivers.* 2008 Apr;5(4):643-56.
29. Haemers T, **Wiesner J**, Giessmann D, Verbrugghen T, Hillaert U, Ortmann R, Jomaa H, Link A, Schlitzer M, Van Calenbergh S. Synthesis of beta- and gamma-oxa isosteres of fosmidomycin and FR900098 as antimalarial candidates. *Bioorg Med Chem.* 2008 Mar 15;16(6):3361-71.
30. Van Hoof S, Lacey CJ, Röhrich RC, **Wiesner J**, Jomaa H, Van Calenbergh S. Synthesis of analogues of (E)-1-hydroxy-2-methylbut-2-enyl 4-diphosphate, an isoprenoid precursor and human gamma delta T cell activator. *J Org Chem.* 2008 Feb 15;73(4):1365-70
31. **Wiesner J**, Ortmann R, Jomaa H, Schlitzer M. Double ester prodrugs of FR900098 display enhanced in-vitro antimalarial activity. *Arch Pharm (Weinheim).* 2007 Dec;340(12):667-9.
32. Fokin AA, Yurchenko AG, Rodionov VN, Gunchenko PA, Yurchenko RI, Reichenberg A, **Wiesner J**, Hintz M, Jomaa H, Schreiner PR. Synthesis of the antimalarial drug FR900098 utilizing the nitroso-ene reaction. *Org Lett.* 2007 Oct 11;9(21):4379-82.
33. Ortmann R, **Wiesner J**, Silber K, Klebe G, Jomaa H, Schlitzer M. Novel deoxyxylulosephosphate-reductoisomerase inhibitors: fosmidomycin derivatives with spacious acyl residues. *Arch Pharm (Weinheim).* 2007 Sep;340(9):483-90.

34. Devreux V, **Wiesner J**, Jomaa H, Van der Eycken J, Van Calenbergh S. Synthesis and evaluation of alpha,beta-unsaturated alpha-aryl-substituted fosmidomycin analogues as DXR inhibitors. *Bioorg Med Chem Lett*. 2007 Sep 1;17(17):4920-3.
35. Burkhardt D, **Wiesner J**, Stoesser N, Ramharter M, Uhlemann AC, Issifou S, Jomaa H, Krishna S, Kremsner PG, Borrmann S. Delayed parasite elimination in human infections treated with clindamycin parallels 'delayed death' of *Plasmodium falciparum* in vitro. *Int J Parasitol*. 2007 Jun;37(7):777-85.
36. Devreux V, **Wiesner J**, Jomaa H, Rozenski J, Van der Eycken J, Van Calenbergh S. Divergent strategy for the synthesis of alpha-aryl-substituted fosmidomycin analogues. *J Org Chem*. 2007 May 11;72(10):3783-9.
37. Goncharenko AV, Ershov IuV, Salina EG, **Wiesner J**, Vostroknutova GN, Sandanov AA, Kapel'iants AS, Ostrovskii DN. [The role of 2-C-methylerythritol-2,4-cyclopyrophosphate in the resuscitation of the "nonculturable" forms of *Mycobacterium smegmatis*] *Mikrobiologiya*. 2007 Mar-Apr;76(2):172-8.
38. Görlitzer K, Enge C, Jones PG, Jomaa H, **Wiesner J**. [Benzo[c][2,7]naphthyridine-5-yl-arylamines-phenol Mannich bases of the amodiaquine-, cycloquine- and pyronaridine-type] *Pharmazie*. 2007 Feb;62(2):89-93.
39. Görlitzer K, Bode M, Jones PG, Jomaa H, **Wiesner J**. [Benzo[c][2,7]naphthyridine-5-yl-amines and benzo[h][1,6]naphthyridine-5-yl-amines--potential antimalarials] *Pharmazie*. 2007 Jan;62(1):15-26.
40. Adedeji D, Hernandez H, **Wiesner J**, Kohler U, Jomaa H, Duin EC. Possible direct involvement of the active-site [4Fe-4S] cluster of the GcpE enzyme from *Thermus thermophilus* in the conversion of MEcPP. *FEBS Lett*. 2007 Jan 23;581(2):279-83
41. Görlitzer K, Enge CH, Jones PG, Jomaa H, **Wiesner J**. [Benzo[c][2,7]naphthyridine-2-yl-, 5-yl- and 2,5-diyl novaldiamines--synthesis and investigation of anti-malarial activity] *Pharmazie*. 2006 Dec;61(12):975-80.
42. Görlitzer K, Gabriel B, Jomaa H, **Wiesner J**. [Thieno[3,4-c]quinoline-4-yl-amines--synthesis and investigation of activity against malaria] *Pharmazie*. 2006 Nov;61(11):901-7.
43. Haemers T, Wiesner J, Busson R, Jomaa H, Van Calenbergh S. Synthesis of α -aryl-substituted and conformationally restricted fosmidomycin analogues as promising antimalarials. *Eur J Org Chem*. 2006 Sep;2006(17):3856-63.
44. Borrmann S, Lundgren I, Oyakhirome S, Impouma B, Matsiegui PB, Adegnika AA, Issifou S, Kun JF, Hutchinson D, **Wiesner J**, Jomaa H, Kremsner PG. Fosmidomycin plus clindamycin for treatment of pediatric patients aged 1 to 14 years with *Plasmodium falciparum* malaria. *Antimicrob Agents Chemother*. 2006 Aug;50(8):2713-8.
45. Görlitzer K, Gabriel B, Jomaa H, **Wiesner J**. [Thieno[3,2-c]quinoline-4-yl-amines--synthesis and investigation of activity against malaria] *Pharmazie*. 2006 Apr;61(4):278-84.

46. Devreux V, **Wiesner J**, Goeman JL, Van der Eycken J, Jomaa H, Van Calenbergh S. Synthesis and biological evaluation of cyclopropyl analogues of fosmidomycin as potent *Plasmodium falciparum* growth inhibitors. *J Med Chem*. 2006 Apr 20;49(8):2656-60.
47. Haemers T, **Wiesner J**, Van Poecke S, Goeman J, Henschker D, Beck E, Jomaa H, Van Calenbergh S. Synthesis of alpha-substituted fosmidomycin analogues as highly potent *Plasmodium falciparum* growth inhibitors. *Bioorg Med Chem Lett*. 2006 Apr 1;16(7):1888-91.
48. Kettler K, **Wiesner J**, Ortmann R, Dahse HM, Jomaa H, Schlitzer M. Antimalarial activity of methylpiperazinyl-substituted benzophenone-based farnesyltransferase inhibitors. *Pharmazie*. 2006 Jan;61(1):63-5.
49. Röhrich RC, Englert N, Troschke K, Reichenberg A, Hintz M, Seeber F, Balconi E, Aliverti A, Zanetti G, Kohler U, Pfeiffer M, Beck E, Jomaa H, **Wiesner J**. Reconstitution of an apicoplast-localised electron transfer pathway involved in the isoprenoid biosynthesis of *Plasmodium falciparum*. *FEBS Lett*. 2005 Nov 21;579(28):6433-8.
50. Kettler K, **Wiesner J**, Fucik K, Sakowski J, Ortmann R, Dahse HM, Jomaa H, Schlitzer M. 2-(aminoacylamino)benzophenones: farnesyltransferase inhibition and antimalarial activity. *Pharmazie*. 2005 Sep;60(9):677-82.
51. Borrmann S, Adegnika AA, Moussavou F, Oyakhirome S, Esser G, Matsiegui PB, Ramharter M, Lundgren I, Kombila M, Issifou S, Hutchinson D, **Wiesner J**, Jomaa H, Kremsner PG. Short-course regimens of artesunate-fosmidomycin in treatment of uncomplicated *Plasmodium falciparum* malaria. *Antimicrob Agents Chemother*. 2005 Sep;49(9):3749-54.
52. Ortmann R, **Wiesner J**, Reichenberg A, Henschker D, Beck E, Jomaa H, Schlitzer M. Alkoxy-carbonyloxyethyl ester prodrugs of FR900098 with improved in vivo antimalarial activity. *Arch Pharm (Weinheim)*. 2005 Jul;338(7):305-14.
53. Trutko SM, Dorofeeva LV, Evtushenko LI, Ostrovskii DN, Hintz M, **Wiesner J**, Jomaa H, Baskunov BP, Akimenko VK. Isoprenoid pigments in representatives of the family Microbacteriaceae. *Mikrobiologiya*. 2005 May-Jun;74(3):335-41.
54. Kettler K, Sakowski J, **Wiesner J**, Ortmann R, Jomaa H, Schlitzer M. Novel lead structures for antimalarial farnesyltransferase inhibitors. *Pharmazie*. 2005 May;60(5):323-7.
55. Trutko SM, Dorofeeva LV, Shcherbakova VA, Chuvil'skaia NA, Laurinavichus KS, Biniukov VI, Ostrovskii DN, Hintz M, **Wiesner J**, Jomaa H, Akimenko VK. [Prevalence of nonmevalonate and mevalonate pathways for isoprenoid biosynthesis among bacteria of different systematic groups] *Mikrobiologiya*. 2005 Mar-Apr;74(2):185-90.
56. Kettler K, **Wiesner J**, Silber K, Haebel P, Ortmann R, Sattler I, Dahse HM, Jomaa H, Klebe G, Schlitzer M. Non-thiol farnesyltransferase inhibitors: N-(4-aminoacylamino-

- 3-benzoylphenyl)-3-[5-(4-nitrophenyl)-2 furyl]acrylic acid amides and their antimalarial activity. *Eur J Med Chem.* 2005 Jan;40(1):93-101.
57. Cassera MB, Gozzo FC, D'Alexandri FL, Merino EF, Del Portillo HA, Peres VJ, Almeida IC, Eberlin MN, Wunderlich G, **Wiesner J**, Jomaa H, Kimura EA, Katzin AM. The methylerythritol phosphate pathway is functionally active in all intraerythrocytic stages of *Plasmodium falciparum*. *J Biol Chem.* 2004 Dec 10;279(50):51749-59.
58. Fucik K, Kettler K, **Wiesner J**, Ortmann R, Unterreitmeier D, Krauss J, Bracher F, Jomaa H, Schlitzer M. 2-(Arylpropionylamino)- and 2-(arylacryloylamino)benzophenones: farnesyltransferase inhibition and antimalarial activity. *Pharmazie.* 2004 Oct;59(10):744-52.
59. Yajima S, Hara K, Sanders JM, Yin F, Ohsawa K, **Wiesner J**, Jomaa H, Oldfield E. Crystallographic Structures of Two Bisphosphonate:1-Deoxyxylulose-5-Phosphate Reductoisomerase Complexes. *J Am Chem Soc.* 2004 Sep 8;126(35):10824-10825.
60. Görlitzer K, Meyer H, Jomaa H, **Wiesner J**. [Chloroquine analogues from benzofuro- and benzothieno[3,2-b]-4-pyridone-2-carboxylic acid esters] *Pharmazie.* 2004 Aug;59(8):590-2.
61. Bronner S, Renault C, Hintz M, **Wiesner J**, Jomaa H, Monteil H, Jehl F. Determination of fosmidomycin in human serum and urine by capillary electrophoresis. *J Chromatogr B Analyt Technol Biomed Life Sci.* 2004 Jul 5;806(2):255-61.
62. Görlitzer K, Meyer H, Walter RD, Jomaa H, **Wiesner J**. Benzothieno[3,2-b]pyridin-4-yl-amine – Synthese und Prüfung auf Wirksamkeit gegen Malaria. *Pharmazie* 2004 Jul;59(7):506-12.
63. Görlitzer K, Gabriel B, Froberg P, Wobst I, Drutkowski G, **Wiesner J**, Jomaa H. Thieno[2,3-c]chinoline – Synthese und biologische Prüfung. *Pharmazie* 2004 Jun;59(6):439-42.
64. Görlitzer K, Meyer H, Jomaa H, **Wiesner J**. Benzofuro[3,2-b]pyridin-4-yl-amine – Synthese und Prüfung auf Wirksamkeit gegen Malaria. *Pharmazie* 2004 Jun;59(6):443-5.
65. Görlitzer K, Kramer C, Meyer H, Walter RD, Jomaa H, **Wiesner J**. Pyrido[3,2-b]indol-4-yl-amine – Synthese und Prüfung auf Wirksamkeit gegen Malaria. *Pharmazie* 2004 Apr;59(4):243-50.
66. Beha E, Jung A, **Wiesner J**, Rimpler H, Lanzer M, Heinrich M. Antimalarial activity of extracts of *Abutilon grandiflorum* G. Don - a traditional Tanzanian medicinal plant. *Phytother Res.* 2004 Mar;18(3):236-40.
67. Borrmann S, Adegnika AA, Matsiegui PB, Issifou S, Schindler A, Mawili-Mboumba DP, Baranek T, **Wiesner J**, Jomaa H, Kreamsner PG. Fosmidomycin-clindamycin for *Plasmodium falciparum* infections in African children. *J Infect Dis.* 2004 Mar 1;189(5):901-8.

68. Herforth C, **Wiesner J**, Heidler P, Sanderbrand S, Van Calenbergh S, Jomaa H, Link A. Antimalarial activity of N(6)-substituted adenosine derivatives. Part 3. *Bioorg Med Chem*. 2004 Feb 15;12(4):755-62.
69. **Wiesner J**, Kettler K, Sakowski J, Ortmann R, Katzin AM, Kimura EA, Silber K, Klebe G, Jomaa H, Schlitzer M. Farnesyltransferase inhibitors inhibit the growth of malaria parasites in vitro and in vivo. *Angew Chem Int Ed Engl*. 2004 Jan;43(2):251-4.
70. **Wiesner J**, Mitsch A, Altenkamper M, Ortmann R, Jomaa H, Schlitzer M. Structure-activity relationships of novel anti-malarial agents part 8. Effect of different central aryls in biarylacryloylaminobenzophenones on antimalarial activity. *Pharmazie*. 2003 Dec;58(12):854-6.
71. Ortmann R, **Wiesner J**, Henschker D, Beck E, Jomaa H, Schlitzer M. Acyloxyalkyl ester prodrugs of FR900098 with improved in vivo antimalarial activity. *Bioorg Med Chem Lett*. 2003 Jul 7;13(13):2163-6.
72. **Wiesner J**, Mitsch A, Jomaa H, Schlitzer M. Structure-activity relationships of novel anti-malarial agents. Part 7: N-(3-Benzoyl-4-tolylacetylaminophenyl)-3-(5-aryl-2-furyl)acrylic acid amides with polar moieties. *Bioorg Med Chem Lett*. 2003 Jul 7;13(13):2159-61.
73. **Wiesner J**, Fucik K, Kettler K, Sakowski J, Ortmann R, Jomaa H, Schlitzer M. Structure-activity relationships of novel anti-malarial agents. Part 6: N-(4-Arylpropionylamino-3-benzoylphenyl)-[5-(4-nitrophenyl)-2-furyl]acrylic acid amides. *Bioorg Med Chem Lett*. 2003 May 5;13(9):1539-41.
74. **Wiesner J**, Ortmann R, Mitsch A, Wissner P, Sattler I, Jomaa H, Schlitzer M. Inhibitors of farnesyltransferase: 5-arylacryloylaminobenzophenones show antimalarial activity. *Pharmazie*. 2003 Apr;58(4):289-90.
75. **Wiesner J**, Kettler K, Sakowski J, Ortmann R, Jomaa H, Schlitzer M. Structure-activity relationships of novel anti-malarial agents: Part 5. N-(4-acylamino-3-benzoylphenyl)-[5-(4-nitrophenyl)-2-furyl]acrylic acid amides. *Bioorg Med Chem Lett*. 2003 Feb;13(3):361-3.
76. Lell B, Ruangweerayut R, **Wiesner J**, Missinou MA, Schindler A, Baranek T, Hintz M, Hutchinson D, Jomaa H, Kreamsner PG. Fosmidomycin, a novel chemotherapeutic agent for malaria. *Antimicrob Agents Chemother*. 2003 Feb;47(2):735-8.
77. Potapov VD, Bakhteeva IV, Borzenkov VN, Titareva GM, **Wiesner J**, Biniukov VI, Ostrovskii DN, Biketov SF. [Effect of fosmidomycin on development of various infections in mice] *Antibiot Khimioter*. 2003;48(2):9-12.
78. Missinou MA, Borrmann S, Schindler A, Issifou S, Adegnika AA, Matsiegui PB, Binder R, Lell B, **Wiesner J**, Baranek T, Jomaa H, G Kreamsner P. Fosmidomycin for malaria. *Lancet*. 2002 Dec 14;360(9349):1941-2.
79. Kollas AK, Duin EC, Eberl M, Altincicek B, Hintz M, Reichenberg A, Henschker D, Henne A, Steinbrecher I, Ostrovsky DN, Hedderich R, Beck E, Jomaa H, **Wiesner J**.

- Functional characterization of GcpE, an essential enzyme of the non-mevalonate pathway of isoprenoid biosynthesis. FEBS Lett. 2002 Dec 18;532(3):432-6.
80. Altincicek B, Duin EC, Reichenberg A, Hedderich R, Kollas AK, Hintz M, Wagner S, **Wiesner J**, Beck E, Jomaa H. LytB protein catalyzes the terminal step of the 2-C-methyl-D-erythritol-4-phosphate pathway of isoprenoid biosynthesis. FEBS Lett. 2002 Dec 18;532(3):437-40.
81. **Wiesner J**, Mitsch A, Wissner P, Kramer O, Jomaa H, Schlitzer M. Structure-activity relationships of novel anti-malarial agents. Part 4: N-(3-benzoyl-4-tolylacetylaminophenyl)-3-(5-aryl-2-furyl)acrylic acid amides. Bioorg Med Chem Lett. 2002 Oct 7;12(19):2681-2683.
82. **Wiesner J**, Henschker D, Hutchinson DB, Beck E, Jomaa H. In vitro and in vivo synergy of fosmidomycin, a novel antimalarial drug, with clindamycin. Antimicrob Agents Chemother. 2002 Sep;46(9):2889-94.
83. Herforth C, **Wiesner J**, Franke S, Golisade A, Jomaa H, Link A. Antimalarial activity of N(6)-substituted adenosine derivatives (Part 2). J Comb Chem. 2002 Jul 8;4(4):302-314.
84. Eberl M, Altincicek B, Kollas AK, Sanderbrand S, Bahr U, Reichenberg A, Beck E, Foster D, **Wiesner J**, Hintz M, Jomaa H. Accumulation of a potent $\gamma\delta$ T cell stimulator after deletion of the lytB gene in *Escherichia coli*. Immunology. 2002 Jun;106(2):200-11.
85. Golisade A, **Wiesner J**, Herforth C, Jomaa H, Link A. Anti-malarial activity of N(6)-substituted adenosine derivatives. Part I. Bioorg Med Chem. 2002 Mar;10(3):769-77.
86. **Wiesner J**, Kettler K, Jomaa H, Schlitzer M. Structure-activity relationships of novel anti-malarial agents. Part 3: N-(4-Acylamino-3-benzoylphenyl)-4-propoxycinnamic acid amides. Bioorg Med Chem Lett. 2002 Feb 25;12(4):543-545.
87. Reuter K, Sanderbrand S, Jomaa H, **Wiesner J**, Steinbrecher I, Beck E, Hintz M, Klebe G, Stubbs MT. Crystal structure of 1-deoxy-D-xylulose-5-phosphate reductoisomerase, a crucial enzyme in the non-mevalonate pathway of isoprenoid biosynthesis. J Biol Chem. 2002 Feb 15;277(7):5378-5384.
88. Hintz M, Reichenberg A, Altincicek B, Bahr U, Gschwind RM, Kollas AK, Beck E, **Wiesner J**, Eberl M, Jomaa H. Identification of (E)-4-hydroxy-3-methyl-but-2-enyl pyrophosphate as a major activator for human $\gamma\delta$ T cells in *Escherichia coli*. FEBS Lett. 2001 Dec 7;509:317-22.
89. **Wiesner J**, Mitsch A, Wissner P, Jomaa H, Schlitzer M. Structure-activity relationships of novel anti-malarial agents: 1. arylacyl and cyclohexylacyl derivatives of 5-amino-2-tolylacetylaminobenzophenone. Pharmazie 2001 Jun;56(6):443-444.
90. Altincicek B, Kollas A, Eberl M, **Wiesner J**, Sanderbrand S, Hintz M, Beck E, Jomaa H. LytB, a novel gene of the 2-C-methyl-D-erythritol 4-phosphate pathway of isoprenoid biosynthesis in *Escherichia coli*. FEBS Lett. 2001 Jun 15;499(1-2):37-40.

91. Altincicek B, Kollas AK, Sanderbrand S, **Wiesner J**, Hintz M, Beck E, Jomaa H. GcpE is involved in the 2-C-methyl-D-erythritol 4-phosphate pathway of isoprenoid biosynthesis in *Escherichia coli*. *J Bacteriol.* 2001 Apr;183(8):2411-6.
92. **Wiesner J**, Wissner P, Dahse HM, Jomaa H, Schlitzer M. Discovery of a novel lead structure for anti-malarials. *Bioorg Med Chem.* 2001 Mar;9(3):785-792.
93. Reichenberg A, **Wiesner J**, Weidemeyer C, Dreiseidler E, Sanderbrand S, Altincicek B, Beck E, Schlitzer M, Jomaa H. Diaryl ester prodrugs of FR900098 with improved in vivo antimalarial activity. *Bioorg. Med. Chem. Lett.* 2001 Mar 26;11(6):833-835.
94. **Wiesner J**, Mitsch A, Wissner P, Jomaa H, Schlitzer M. Structure-activity relationships of novel anti-malarial agents. Part 2: cinnamic acid derivatives. *Bioorg. Med. Chem. Lett.* 2001 Feb 12;11(3):423-424.
95. **Wiesner J**, Sanderbrand S, Altincicek B, Beck E, Jomaa H. Seeking new targets for antiparasitic agents. *Trends Parasitol.* 2001 Jan; 17(1):7-8.
96. **Wiesner J**, Hintz M, Altincicek B, Sanderbrand S, Weidemeyer C, Beck E, Jomaa H. *Plasmodium falciparum*: Detection of the deoxyxylulose 5-phosphate reductoisomerase activity. *Exp Parasitol.* 2000 Nov; 96(3):182-186.
97. Altincicek B, Hintz M, Sanderbrand S, Sanderbrand S, **Wiesner J**, Beck E, Jomaa H. Tools for discovery of inhibitors of the 1-deoxy-D-xylulose 5-phosphate (DXP) synthase and DXP reductoisomerase: an approach with enzymes from the pathogenic bacterium *Pseudomonas aeruginosa*. *FEMS Microbiol Lett.* 2000 Sep; 190(2):329-333.
98. Jomaa H, **Wiesner J**, Sanderbrand S, Altincicek B, Weidemeyer C, Hintz M, Turbachova I, Eberl M, Zeidler J, Lichtenthaler HK, Soldati D, Beck E. Inhibitors of the nonmevalonate pathway of isoprenoid biosynthesis as antimalarial drugs. *Science.* 1999 Sep 3;285(5433):1573-1576.
99. Zeidler J, Schwender J, Müller C, **Wiesner J**, Weidemeyer C, Beck E, Jomaa H, Lichtenthaler HK. Inhibition of the non-mevalonate 1-deoxy-D-xylulose-5-phosphate pathway of plant isoprenoid biosynthesis by fosmidomycin. *Z Naturforsch C* 1998 Nov-Dec; 53(11-12):980-986.
100. **Wiesner J**, Mattei D, Scherf A, Lanzer M. Biology of giant proteins of *Plasmodium*: resolution on polyacrylamide-agarose composite gels. *Parasitol Today.* 1998 Jan;14(1):38-40.
101. Wünsch S, Sanchez CP, Gekle M, Grosse-Wortmann L, **Wiesner J**, Lanzer M. Differential stimulation of the Na⁺/H⁺ exchanger determines chloroquine uptake in *Plasmodium falciparum*. *J Cell Biol.* 1998 Jan 26;140(2):335-45.
102. **Wiesner J**, Jomaa H, Wilhelm M, Tony HP, Kremsner PG, Horrocks P, Lanzer M. Host cell factor CD59 restricts complement lysis of *Plasmodium falciparum*-infected erythrocytes. *Eur J Immunol.* 1997 Oct; 27(10):2708-2713.

103. Fischer K, Horrocks P, Preuss M, **Wiesner J**, Wunsch S, Camargo AA, Lanzer M. Expression of var genes located within polymorphic subtelomeric domains of *Plasmodium falciparum* chromosomes. *Mol Cell Biol.* 1997 Jul;17(7):3679-86.
104. **Wiesner J**. Kulturversuche mit Schleimpilzen. *Mikrokosmos* 1994, 83:73-80.
105. **Wiesner J**. Das Experiment: Beobachtungen an Schleimpilzen. *Biologie in unserer Zeit* 1992, 22:226-9.

II Übersichtsarbeiten in Zeitschriften

1. **Wiesner J**, Vilcinskis A. Antimicrobial peptides: the ancient arm of the human immune system. *Virulence.* 2010 Sep-Oct;1(5):440-64.
2. **Wiesner J**, Reichenberg A, Heinrich S, Schlitzer M, Jomaa H. The plastid-like organelle of apicomplexan parasites as drug target. *Curr Pharm Des.* 2008;14(9):855-71.
3. **Wiesner J**, Jomaa H. Isoprenoid biosynthesis of the apicoplast as drug target. *Curr Drug Targets.* 2007 Jan;8(1):3-13.
4. **Wiesner J**, Seeber F. The plastid-derived organelle of protozoan human parasites as a target of established and emerging drugs. *Expert Opin Ther Targets.* 2005 Feb;9(1):23-44.
5. **Wiesner J**, Ortmann R, Jomaa H, Schlitzer M. New antimalarial drugs. *Angew Chem Int Ed Engl.* 2003 Nov 10;42(43):5274-93.
6. Eberl M, Hintz M, Reichenberg A, Kollas AK, **Wiesner J**, Jomaa H. Microbial isoprenoid biosynthesis and human $\gamma\delta$ T cell activation. *FEBS Lett.* 2003 Jun 5;544(1-3):4-10.
7. **Wiesner J**, Borrmann S, Jomaa H. Fosmidomycin for the treatment of malaria. *Parasitol Res.* 2003 Jun;90 Suppl 2:S71-6.
8. **Wiesner J**, Jomaa H. Fosmidomycin as novel antimalarial drug. *Bioforum Europe.* 2003 Feb; 7(1):40-1
9. **Wiesner J**, Borrmann S, Jomaa H. Fosmidomycin – ein neues Mittel gegen Malaria. *Flug- und Reisemedizin* 2003. 10 (1):21-23

III Buchbeiträge

1. **Wiesner J**, Jomaa H. 1-Deoxy-D-xylulose 5-phosphate pathway. In: Encyclopedia of malaria (ed. Kremsner PG, Krishna S) Springer New York 2023, ISBN 9781461483250
2. **Wiesner J**, Reichenberg A, Hintz M, Ortmann R, Schlitzer M, Van Calenbergh S, Borrmann S, Lell B, Kremsner PG, Hutchinson D, Jomaa H. Fosmidomycin as an antimalarial agent. In: Isoprenoid synthesis in plants and microorganisms: New concepts and experimental approaches (ed. Bach TJ, Rohmer M) Springer New York 2013, p. 119-137. ISBN 978-1-4614-4062-8
3. **Wiesner J**, Vilcinskis A. Therapeutic potential of antimicrobial insect peptides. In: Insect biotechnology (ed. Vilcinskis A) Dordrecht, The Netherlands: Springer, 2010, p. 29-65. ISBN 978-90-481-9640-1
4. **Wiesner J**. Myxomyceten – Wenn die Monster munter werden. In: Wenn Monster munter werden: einfache Experimente aus der Biologie (Hrsg.: Keil M, Kremer BP) Weinheim: Wiley-VCH, 2003, Seite 1-9. ISBN 3-527-30972-1

IV Patentanmeldungen

1. Andreas Vilcinskis, Anne-Kathrin Pöppel, Jochen Wiesner. 21 Aug 2014. Polypeptides against plant pathogenic fungi. WO2014124786
2. Anke Gökçen, Jochen Wiesner, Andreas Vilcinskis, Rainer Fischer. 20 Jun 2013. Process for degrading a biofilm on surfaces of objects. WO2013087764
3. Hassan Jomaa, Matthias Eberl, Boran Altincicek, Martin Hintz, Oliver Wolf, Ann-Kristin Kollas, Armin Reichenberg, Jochen Wiesner. 12 May 2011. Organophosphorous compounds for the activation of gamma/delta T cells. US2011112054
4. Serge van Calenbergh, Timothy Haemers, Vincent Devreux, Hassan Jomaa, Jochen Wiesner. 18 Dec 2008. Organophosphoric derivatives useful as anti-parasitic agents. US2008312190
5. Hassan Jomaa, Jochen Wiesner. 25 Nov 2004. Combination preparations of 3-N-formylhydroxylaminopropyl phosphonic acid derivatives or 3-N-acetylhydroxylaminopropyl phosphonic acid derivatives combined with specific pharmaceutical active agents. US2004235784
6. Boran Altincicek, Martin Hintz, Hassan Jomaa, Ann-Kristin Kollas, Silke Sanderbrand, Jochen Wiesner. 29 Apr 2004. Method for determining enzymatic activity of proteins. WO2004035810
7. Boran Altincicek, Matthias Eberl, Achim Hoerauf, Hassan Jomaa, Jochen Wiesner. 11 Mar 2004. Organophosphorous compounds for the treatment of helminthic infections. WO2004019956

8. Hans Jochen Lang, Michael Lanzer, Jochen Wiesner, Cecilia Sanchez, Stefan Wuensch. 02 Jan 2004. Use of inhibitors of the sodium-hydrogen exchanger for the production of a pharmaceutical for the treatment of disorders which are caused by protozoa. EP0901788
9. Hassan Jomaa, Martin Schlitzer, Jochen Wiesner. 20 Feb 2003. Use of 2-phenylene diamine derivatives for the treatment of infections. US2003036532
10. Boran Altincicek, Matthias Eberl, Martin Hintz, Hassan Jomaa, Ann-Kristin Kollas, Armin Reichenberg, Jochen Wiesner, Oliver Wolf. 06 Feb 2003. New acyclic or cyclic organophosphorus compounds, are gamma-delta-T cell activators useful e.g. as medicaments for treating asthma, chronic bronchitis, ulcerative colitis, autoimmune diseases or allergies. DE10134705
11. Hassan Jomaa, Martin Schlitzer, Jochen Wiesner, Erhard Dreiseidler. 31 Jan 2002. Medicament for oral application, containing aminopropyl phosphonic acid esters as an active ingredient. WO0208235