

Methodology

A literature search was conducted in Pubmed.gov on 23rd Sept 2020 using the search terms (((LAMP) OR (Loop mediated isothermal amplification)) AND ((Malaria) OR (Plasmodium))).

There were in total 214 results. All 214 results were transferred to EndNote where the preliminary grouping of the publications took place. Out of the 214 results, in total 70 were excluded (27 were not about Loop-mediated isothermal amplification, 25 were not related to the detection of malaria in humans, 12 were not in English, 3 had no full text available; 3 case reports were also excluded). The remaining 144 publications were grouped based on commonly occurring key words and/or relevance (see below).

The list was continuously updated with new search results identified through weekly automatic Pubmed.gov search reports (using the same search terms as above) until the submission of the manuscript, together with any other articles of relevance identified during the writing process.

List of malaria LAMP publications, grouped by theme

Numbers in hard brackets = number of articles under each subheading.

Highlighted text = Which LAMP method was used in the publication, if not specified in the subheading

Malaria LAMP Reviews [12]

1. Abdul-Ghani R, Al-Mekhlafi AM, Karanis P. Loop-mediated isothermal amplification (LAMP) for malarial parasites of humans: would it come to clinical reality as a point-of-care test? *Acta Trop* 2012, 122:233-40.
2. Han ET. Loop-mediated isothermal amplification test for the molecular diagnosis of malaria. *Expert Rev Mol Diagn* 2013, 13:205-18.
3. Oriero EC, Jacobs J, Van Geertruyden JP, Nwakanma D, D'Alessandro U. Molecular-based isothermal tests for field diagnosis of malaria and their potential contribution to malaria elimination. *J Antimicrob Chemother* 2015, 70:2-13.
4. Oriero EC, Van Geertruyden JP, Nwakanma DC, D'Alessandro U, Jacobs J. Novel techniques and future directions in molecular diagnosis of malaria in resource-limited settings. *Expert Rev Mol Diagn* 2015, 15:1419-26.
5. Britton S, Cheng Q, McCarthy JS. Novel molecular diagnostic tools for malaria elimination: a review of options from the point of view of high-throughput and applicability in resource limited settings. *Malar J* 2016, 15:88.
6. Amir A, Cheong FW, De Silva JR, Lau YL. Diagnostic tools in childhood malaria. *Parasit Vectors* 2018, 11:53.
7. Gruenberg M, Moniz CA, Hofmann NE, Wampfler R, Koepfli C, Mueller I, et al. Plasmodium vivax molecular diagnostics in community surveys: pitfalls and solutions. *Malar J* 2018, 17:55.
8. Lucchi NW, Ndiaye D, Britton S, Udhayakumar V. Expanding the malaria molecular diagnostic options: opportunities and challenges for loop-mediated isothermal amplification tests for malaria control and elimination. *Expert Rev Mol Diagn* 2018, 18:195-203.
9. Mukkala AN, Kwan J, Lau R, Harris D, Kain D, Boggild AK. An Update on Malaria Rapid Diagnostic Tests. *Curr Infect Dis Rep* 2018, 20:49.
10. Mbanefo A, Kumar N. Evaluation of Malaria Diagnostic Methods as a Key for Successful Control and Elimination Programs. *Trop Med Infect Dis* 2020, 5.

11. Varo R, Balanza N, Mayor A, Bassat Q. Diagnosis of clinical malaria in endemic settings. *Expert Rev Anti Infect Ther* 2020;1-14.
12. Zainabadi K: Ultrasensitive diagnostics for low density asymptomatic *Plasmodium falciparum* infections in low transmission settings. *J Clin Microbiol* 2020.

Systematic reviews and meta-analysis [3]

13. Roth JM, Korevaar DA, Leeflang MM, Mens PF. Molecular malaria diagnostics: A systematic review and meta-analysis. *Crit Rev Clin Lab Sci* 2016, 53:87-105.
14. Picot S, Cucherat M, Bienvenu AL. Systematic review and meta-analysis of diagnostic accuracy of loop-mediated isothermal amplification (LAMP) methods compared with microscopy, polymerase chain reaction and rapid diagnostic tests for malaria diagnosis. *Int J Infect Dis* 2020, 98:408-19.
15. Selvarajah D, Naing C, Htet NH, Mak JW. Loop-mediated isothermal amplification (LAMP) test for diagnosis of uncomplicated malaria in endemic areas: a meta-analysis of diagnostic test accuracy. *Malar J* 2020, 19:211.

Malaria LAMP Editorials and correspondences [3]

16. Hsiang MS, Greenhouse B, Rosenthal PJ. Point of care testing for malaria using LAMP, loop mediated isothermal amplification. *J Infect Dis* 2014, 210:1167-9.
17. Chiodini PL. LAMP in the context of travellers' malaria: a shining light? *Travel Med Infect Dis* 2015, 13:126-7.
18. Goyal K, Kaur H, Sehgal A, Sehgal R. RealAmp Loop-Mediated Isothermal Amplification as a Point-of-Care Test for Diagnosis of Malaria: Neither Too Close nor Too Far. *J Infect Dis* 2015, 211:1686.

Non-commercialised LAMP methods

Early malaria LAMP development [5]

19. Poon LL, Wong BW, Ma EH, Chan KH, Chow LM, Abeyewickreme W, et al. Sensitive and inexpensive molecular test for falciparum malaria: detecting *Plasmodium falciparum* DNA directly from heat-treated blood by loop-mediated isothermal amplification. *Clin Chem* 2006, 52:303-6.
20. Han ET, Watanabe R, Sattabongkot J, Khuntirat B, Sirichaisinthop J, Iriko H, et al. Detection of four *Plasmodium* species by genus- and species-specific loop-mediated isothermal amplification for clinical diagnosis. *J Clin Microbiol* 2007, 45:2521-8.
21. Paris DH, Imwong M, Faiz AM, Hasan M, Yunus EB, Silamut K, et al. Loop-mediated isothermal PCR (LAMP) for the diagnosis of falciparum malaria. *Am J Trop Med Hyg* 2007, 77:972-6.
22. Yamamura M, Makimura K, Ota Y. Evaluation of a new rapid molecular diagnostic system for *Plasmodium falciparum* combined with DNA filter paper, loop-mediated isothermal amplification, and melting curve analysis. *Jpn J Infect Dis* 2009, 62:20-5.
23. Polley SD, Mori Y, Watson J, Perkins MD, González IJ, Notomi T, et al. Mitochondrial DNA targets increase sensitivity of malaria detection using loop-mediated isothermal amplification. *J Clin Microbiol* 2010, 48:2866-71.

Real-time detection platforms [2]

24. Lucchi NW, Demas A, Narayanan J, Sumari D, Kabanywany A, Kachur SP, et al. Real-time fluorescence loop mediated isothermal amplification for the diagnosis of malaria. *PLoS One* 2010, 5:e13733.
25. Surabattula R, Vejandla MP, Mallepaddi PC, Faulstich K, Polavarapu R. Simple, rapid, inexpensive platform for the diagnosis of malaria by loop mediated isothermal amplification (LAMP). *Exp Parasitol* 2013, 134:333-40.

Alternative extraction and extraction-free methods [4]

26. Port JR, Nguetse C, Adukpo S, Velavan TP. A reliable and rapid method for molecular detection of malarial parasites using microwave irradiation and loop mediated isothermal amplification. *Malar J* 2014, 13:454.
27. Modak SS, Barber CA, Geva E, Abrams WR, Malamud D, Ongagna YS. Rapid Point-of-Care Isothermal Amplification Assay for the Detection of Malaria without Nucleic Acid Purification. *Infect Dis (Auckl)* 2016, 9:1-9.
28. Xu G, Nolder D, Reboud J, Oguike MC, van Schalkwyk DA, Sutherland CJ, et al. Paper-Origami-Based Multiplexed Malaria Diagnostics from Whole Blood. *Angew Chem Int Ed Engl* 2016, 55:15250-3.
29. Hayashida K, Kajino K, Simukoko H, Simuunza M, Ndebe J, Chota A, et al. Direct detection of falciparum and non-falciparum malaria DNA from a drop of blood with high sensitivity by the dried-LAMP system. *Parasit Vectors* 2017, 10:26.

Alternative dyes for improved visualization of results [5]

30. Mohon AN, Elahi R, Khan WA, Haque R, Sullivan DJ, Jr., Alam MS. A new visually improved and sensitive loop mediated isothermal amplification (LAMP) for diagnosis of symptomatic falciparum malaria. *Acta Trop* 2014, 134:52-7.
31. Lucchi NW, Ljolje D, Silva-Flannery L, Udhayakumar V. Use of Malachite Green-Loop Mediated Isothermal Amplification for Detection of Plasmodium spp. *Parasites. PLoS One* 2016, 11:e0151437.
32. Singh R, Singh DP, Savargaonkar D, Singh OP, Bhatt RM, Valecha N. Evaluation of SYBR green I based visual loop-mediated isothermal amplification (LAMP) assay for genus and species-specific diagnosis of malaria in *P. vivax* and *P. falciparum* endemic regions. *J Vector Borne Dis* 2017, 54:54-60.
33. Barazorda KA, Salas CJ, Bishop DK, Lucchi N, Valdivia HO. Comparison of real time and malachite-green based loop-mediated isothermal amplification assays for the detection of *Plasmodium vivax* and *P. falciparum*. *PLoS One* 2020, 15:e0234263.
34. Lai MY, Ooi CH, Jaimin JJ, Lau YL. Evaluation of WarmStart Colorimetric Loop-Mediated Isothermal Amplification Assay for Diagnosis of Malaria. *Am J Trop Med Hyg* 2020, 102:1370-2.

Lateral flow dipstick [3]

35. Yongkiettrakul S, Jaroenram W, Arunrut N, Chareanchim W, Pannengpetch S, Suebsing R, et al. Application of loop-mediated isothermal amplification assay combined with lateral flow dipstick for detection of *Plasmodium falciparum* and *Plasmodium vivax*. *Parasitol Int* 2014, 63:777-84.
36. Kongkasuriyachai D, Yongkiettrakul S, Kiatpathomchai W, Arunrut N. Loop-Mediated Isothermal Amplification and LFD Combination for Detection of *Plasmodium falciparum* and *Plasmodium vivax*. *Methods Mol Biol* 2017, 1572:431-43.

37. Mallepaddi PC, Lai MY, Podha S, Ooi CH, Liew JW, Polavarapu R, et al. Development of Loop-Mediated Isothermal Amplification-Based Lateral Flow Device Method for the Detection of Malaria. *Am J Trop Med Hyg* 2018, 99:704-8.

High-throughput platforms [1; see also Loopamp MALARIA kit (Eiken)]

38. Britton S, Cheng Q, Sutherland CJ, McCarthy JS. A simple, high-throughput, colourimetric, field applicable loop-mediated isothermal amplification (HtLAMP) assay for malaria elimination. *Malar J* 2015, 14:335.

Ultrasensitive LAMP method [1]

39. Mohon AN, Getie S, Jahan N, Alam MS, Pillai DR. Ultrasensitive loop mediated isothermal amplification (US-LAMP) to detect malaria for elimination. *Malar J* 2019, 18:350.

Alternative biological materials [2]

40. Ghayour Najafabadi Z, Oormazdi H, Akhlaghi L, Meamar AR, Nateghpour M, Farivar L, et al. Detection of Plasmodium vivax and Plasmodium falciparum DNA in human saliva and urine: loop-mediated isothermal amplification for malaria diagnosis. *Acta Trop* 2014, 136:44-9.
41. Hashimoto M, Sakamoto H, Ido Y, Tanaka M, Yatsushiro S, Kajimoto K, et al. In situ loop-mediated isothermal amplification (LAMP) for identification of Plasmodium species in wide-range thin blood smears. *Malar J* 2018, 17:235.

Other non-commercial LAMP methods [10]

42. Oriero CE, van Geertruyden JP, Jacobs J, D'Alessandro U, Nwakanma D. Validation of an apicoplast genome target for the detection of Plasmodium species using polymerase chain reaction and loop mediated isothermal amplification. *Clin Microbiol Infect* 2015, 21:686.e1-7.
43. Choi G, Song D, Shrestha S, Miao J, Cui L, Guan W. A field-deployable mobile molecular diagnostic system for malaria at the point of need. *Lab Chip* 2016, 16:4341-9.
44. Kemleu S, Guelig D, Eboumbou Moukoko C, Essangui E, Diesburg S, Mouliom A, et al. A Field-Tailored Reverse Transcription Loop-Mediated Isothermal Assay for High Sensitivity Detection of Plasmodium falciparum Infections. *PLoS One* 2016, 11:e0165506.
45. Imai K, Tarumoto N, Misawa K, Runtuwene LR, Sakai J, Hayashida K, et al. A novel diagnostic method for malaria using loop-mediated isothermal amplification (LAMP) and MinION™ nanopore sequencer. *BMC Infect Dis* 2017, 17:621.
46. Zhang Y, Yao Y, Du W, Wu K, Xu W, Lin M, et al. Development of loop-mediated isothermal amplification with Plasmodium falciparum unique genes for molecular diagnosis of human malaria. *Pathog Glob Health* 2017, 111:247-55.
47. Choi G, Prince T, Miao J, Cui L, Guan W. Sample-to-answer palm-sized nucleic acid testing device towards low-cost malaria mass screening. *Biosens Bioelectron* 2018, 115:83-90.
48. Kadimisetty K, Song J, Doto AM, Hwang Y, Peng J, Mauk MG, et al. Fully 3D printed integrated reactor array for point-of-care molecular diagnostics. *Biosens Bioelectron* 2018, 109:156-63.
49. Mao R, Ge G, Wang Z, Hao R, Zhang G, Yang Z, et al. A multiplex microfluidic loop-mediated isothermal amplification array for detection of malaria-related parasites and vectors. *Acta Trop* 2018, 178:86-92.
50. Aninagyei E, Smith-Graham S, Boye A, Egyir-Yawson A, Acheampong DO. Evaluating 18s-rRNA LAMP and selective whole genome amplification (sWGA) assay in detecting asymptomatic Plasmodium falciparum infections in blood donors. *Malar J* 2019, 18:214.

51. Tang Z, Choi G, Nouri R, Guan W. Loop-Mediated Isothermal Amplification-Coupled Glass Nanopore Counting Toward Sensitive and Specific Nucleic Acid Testing. *Nano Lett* 2019, 19:7927-34.

Species specific LAMP methods

***P. vivax* LAMP [9]**

52. Chen JH, Lu F, Lim CS, Kim JY, Ahn HJ, Suh IB, et al. Detection of Plasmodium vivax infection in the Republic of Korea by loop-mediated isothermal amplification (LAMP). *Acta Trop* 2010, 113:61-5.
53. Tao ZY, Zhou HY, Xia H, Xu S, Zhu HW, Culleton RL, et al. Adaptation of a visualized loop-mediated isothermal amplification technique for field detection of Plasmodium vivax infection. *Parasit Vectors* 2011, 4:115.
54. Lu F, Gao Q, Zhou H, Cao J, Wang W, Lim CS, et al. Molecular test for vivax malaria with loop-mediated isothermal amplification method in central China. *Parasitol Res* 2012, 110:2439-44.
55. Patel JC, Oberstaller J, Xayavong M, Narayanan J, DeBarry JD, Srinivasamoorthy G, et al. Real-time loop-mediated isothermal amplification (RealAmp) for the species-specific identification of Plasmodium vivax. *PLoS One* 2013, 8:e54986.
56. Singh R, Savargaonkar D, Bhatt R, Valecha N. Rapid detection of Plasmodium vivax in saliva and blood using loop mediated isothermal amplification (LAMP) assay. *J Infect* 2013, 67:245-7.
57. Dinzouna-Boutamba SD, Yang HW, Joo SY, Jeong S, Na BK, Inoue N, et al. The development of loop-mediated isothermal amplification targeting alpha-tubulin DNA for the rapid detection of Plasmodium vivax. *Malar J* 2014, 13:248.
58. Kim JY, Goo YK, Ji SY, Shin HI, Han ET, Hong Y, et al. Development and efficacy of real-time PCR in the diagnosis of vivax malaria using field samples in the Republic of Korea. *PLoS One* 2014, 9:e105871.
59. Britton S, Cheng Q, Grigg MJ, Poole CB, Pasay C, William T, et al. Sensitive Detection of Plasmodium vivax Using a High-Throughput, Colourimetric Loop Mediated Isothermal Amplification (HtLAMP) Platform: A Potential Novel Tool for Malaria Elimination. *PLoS Negl Trop Dis* 2016, 10:e0004443.
60. Kaur H, Sehgal R, Bansal D, Sultan AA, Bhalla A, Singhi SC. Development of Visually Improved Loop Mediated Isothermal Amplification for the Diagnosis of Plasmodium vivax Malaria in a Tertiary Hospital in Chandigarh, North India. *Am J Trop Med Hyg* 2018, 98:1374-81.

***P. knowlesi* LAMP [3]**

61. Iseki H, Kawai S, Takahashi N, Hirai M, Tanabe K, Yokoyama N, et al. Evaluation of a loop-mediated isothermal amplification method as a tool for diagnosis of infection by the zoonotic simian malaria parasite Plasmodium knowlesi. *J Clin Microbiol* 2010, 48:2509-14.
62. Lau YL, Fong MY, Mahmud R, Chang PY, Palaeya V, Cheong FW, et al. Specific, sensitive and rapid detection of human plasmodium knowlesi infection by loop-mediated isothermal amplification (LAMP) in blood samples. *Malar J* 2011, 10:197.
63. Britton S, Cheng Q, Grigg MJ, William T, Anstey NM, McCarthy JS. A Sensitive, Colorimetric, High-Throughput Loop-Mediated Isothermal Amplification Assay for the Detection of Plasmodium knowlesi. *Am J Trop Med Hyg* 2016, 95:120-2.

Other species-specific LAMP methods [2]

64. Kollenda H, Hagen RM, Hanke M, Rojak S, Hinz R, Wassill L, et al. Poor Diagnostic Performance of a Species-Specific Loop-Mediated Isothermal Amplification (LAMP) Platform for Malaria. *Eur J Microbiol Immunol (Bp)* 2018, 8:112-8.
65. Kristan M, Thorburn SG, Hafalla JC, Sutherland CJ, Oguike MC. Mosquito and human hepatocyte infections with *Plasmodium ovale curtisi* and *Plasmodium ovale wallikeri*. *Trans R Soc Trop Med Hyg* 2019, 113:617-22.

Evaluation of non-commercial LAMP methods in field settings [12]

66. Pöschl B, Waneesorn J, Thekisoe O, Chutipongvivate S, Karanis P. Comparative diagnosis of malaria infections by microscopy, nested PCR, and LAMP in northern Thailand. *Am J Trop Med Hyg* 2010, 83:56-60.
67. Sirichaisinthop J, Buates S, Watanabe R, Han ET, Suktawonjaroenpon W, Krassaesub S, et al. Evaluation of loop-mediated isothermal amplification (LAMP) for malaria diagnosis in a field setting. *Am J Trop Med Hyg* 2011, 85:594-6.
68. Lee PW, Ji DD, Liu CT, Rampao HS, do Rosario VE, Lin IF, et al. Application of loop-mediated isothermal amplification for malaria diagnosis during a follow-up study in São Tomé. *Malar J* 2012, 11:408.
69. Patel JC, Lucchi NW, Srivastava P, Lin JT, Sug-Aram R, Aruncharus S, et al. Field evaluation of a real-time fluorescence loop-mediated isothermal amplification assay, RealAmp, for the diagnosis of malaria in Thailand and India. *J Infect Dis* 2014, 210:1180-7.
70. Sattabongkot J, Tsuboi T, Han ET, Bantuchai S, Buates S. Loop-mediated isothermal amplification assay for rapid diagnosis of malaria infections in an area of endemicity in Thailand. *J Clin Microbiol* 2014, 52:1471-7.
71. Oriero EC, Okebe J, Jacobs J, Van Geertruyden JP, Nwakanma D, D'Alessandro U. Diagnostic performance of a novel loop-mediated isothermal amplification (LAMP) assay targeting the apicoplast genome for malaria diagnosis in a field setting in sub-Saharan Africa. *Malar J* 2015, 14:396.
72. Lau YL, Lai MY, Fong MY, Jelip J, Mahmud R. Loop-Mediated Isothermal Amplification Assay for Identification of Five Human *Plasmodium* Species in Malaysia. *Am J Trop Med Hyg* 2016, 94:336-9.
73. Ocker R, Prompunjai Y, Chutipongvivate S, Karanis P. MALARIA DIAGNOSIS BY LOOP-MEDIATED ISOTHERMAL AMPLIFICATION (LAMP) IN THAILAND. *Rev Inst Med Trop Sao Paulo* 2016, 58:27.
74. Viana GMR, Silva-Flannery L, Lima Barbosa DR, Lucchi N, do Valle SCN, Farias S, et al. Field evaluation of a real time loop-mediated isothermal amplification assay (RealAmp) for malaria diagnosis in Cruzeiro do Sul, Acre, Brazil. *PLoS One* 2018, 13:e0200492.
75. Girma S, Cheaveau J, Mohon AN, Marasinghe D, Legese R, Balasingam N, et al. Prevalence and Epidemiological Characteristics of Asymptomatic Malaria Based on Ultrasensitive Diagnostics: A Cross-sectional Study. *Clin Infect Dis* 2019, 69:1003-10.
76. Kudyba HM, Louzada J, Ljolje D, Kudyba KA, Muralidharan V, Oliveira-Ferreira J, et al. Field evaluation of malaria malachite green loop-mediated isothermal amplification in health posts in Roraima state, Brazil. *Malar J* 2019, 18:98.
77. Gachugia J, Chebore W, Otieno K, Ngugi CW, Godana A, Kariuki S. Evaluation of the colorimetric malachite green loop-mediated isothermal amplification (MG-LAMP) assay for the detection of malaria species at two different health facilities in a malaria endemic area of western Kenya. *Malar J* 2020, 19:329.

Commercial LAMP kits

Evaluation of Illumina platform [1; See also LAMP in malaria and LAMP in travellers]

78. Lucchi NW, Gaye M, Diallo MA, Goldman IF, Ljolje D, Deme AB, et al. Evaluation of the Illumigene Malaria LAMP: A Robust Molecular Diagnostic Tool for Malaria Parasites. *Sci Rep* 2016, 6:36808.

Loopamp MALARIA kit (Eiken Chemical Co)

Evaluation of Eiken Loopamp MALARIA kit in laboratory settings [4; see also “High through put extraction..” and “...detection of non-falciparum spp”]

79. Aydin-Schmidt B, Xu W, González IJ, Polley SD, Bell D, Shakely D, et al. Loop mediated isothermal amplification (LAMP) accurately detects malaria DNA from filter paper blood samples of low density parasitaemias. *PLoS One* 2014, 9:e103905.
80. Polley SD, Bell D, Oliver J, Tully F, Perkins MD, Chiodini PL, et al. The design and evaluation of a shaped filter collection device to sample and store defined volume dried blood spots from finger pricks. *Malar J* 2015, 14:45.
81. Vincent JP, Komaki-Yasuda K, Iwagami M, Kawai S, Kano S. Combination of PURE-DNA extraction and LAMP-DNA amplification methods for accurate malaria diagnosis on dried blood spots. *Malar J* 2018, 17:373.
82. Serra-Casas E, Guetens P, Chiheb D, Gamboa D, Rosanas-Urgell A. A pilot evaluation of alternative procedures to simplify LAMP-based malaria diagnosis in field conditions. *Acta Trop* 2019, 200:105125.

Evaluation of Eiken Loopamp MALARIA kit in field settings [10; see also “High through put extraction..”, “...detection of non-falciparum spp” and “LAMP in Pregnancy”]

83. Hopkins H, González IJ, Polley SD, Angutoko P, Ategeka J, Asimwe C, et al. Highly sensitive detection of malaria parasitemia in a malaria-endemic setting: performance of a new loop-mediated isothermal amplification kit in a remote clinic in Uganda. *J Infect Dis* 2013, 208:645-52.
84. Cook J, Aydin-Schmidt B, González IJ, Bell D, Edlund E, Nassor MH, et al. Loop-mediated isothermal amplification (LAMP) for point-of-care detection of asymptomatic low-density malaria parasite carriers in Zanzibar. *Malar J* 2015, 14:43.
85. Cuadros J, Pérez-Tanoira R, Prieto-Pérez L, Martin-Martin I, Berzosa P, González V, et al. Field Evaluation of Malaria Microscopy, Rapid Malaria Tests and Loop-Mediated Isothermal Amplification in a Rural Hospital in South Western Ethiopia. *PLoS One* 2015, 10:e0142842.
86. Morris U, Khamis M, Aydin-Schmidt B, Abass AK, Msellem MI, Nassor MH, et al. Field deployment of loop-mediated isothermal amplification for centralized mass-screening of asymptomatic malaria in Zanzibar: a pre-elimination setting. *Malar J* 2015, 14:205.
87. Sema M, Alemu A, Bayih AG, Getie S, Getnet G, Guelig D, et al. Evaluation of non-instrumented nucleic acid amplification by loop-mediated isothermal amplification (NINA-LAMP) for the diagnosis of malaria in Northwest Ethiopia. *Malar J* 2015, 14:44.
88. Katrak S, Murphy M, Nayebar P, Rek J, Smith M, Arinaitwe E, et al. Performance of Loop-Mediated Isothermal Amplification for the Identification of Submicroscopic Plasmodium falciparum Infection in Uganda. *Am J Trop Med Hyg* 2017, 97:1777-81.
89. Serra-Casas E, Manrique P, Ding XC, Carrasco-Escobar G, Alava F, Gave A, et al. Loop-mediated isothermal DNA amplification for asymptomatic malaria detection in challenging field settings:

- Technical performance and pilot implementation in the Peruvian Amazon. PLoS One 2017, 12:e0185742.
90. Tambo M, Auala JR, Sturrock HJ, Kleinschmidt I, Bock R, Smith JL, et al. Evaluation of loop-mediated isothermal amplification as a surveillance tool for malaria in reactive case detection moving towards elimination. Malar J 2018, 17:255.
 91. Mhamilawa LE, Aydin-Schmidt B, Mmbando BP, Ngasala B, Morris U. Detection of Plasmodium falciparum by Light Microscopy, Loop-Mediated Isothermal Amplification, and Polymerase Chain Reaction on Day 3 after Initiation of Artemether-Lumefantrine Treatment for Uncomplicated Malaria in Bagamoyo District, Tanzania: A Comparative Trial. Am J Trop Med Hyg 2019, 101:1144-7.
 92. Hsiang MS, Ntshalintshali N, Kang Dufour MS, Dlamini N, Nhlabathi N, Vilakati S, et al. Active Case Finding for Malaria: A 3-Year National Evaluation of Optimal Approaches to Detect Infections and Hotspots Through Reactive Case Detection in the Low-transmission Setting of Eswatini. Clin Infect Dis 2020, 70:1316-25.

High through put extraction coupled with Eiken Loopamp MALARIA kit [2]

93. Aydin-Schmidt B, Morris U, Ding XC, Jovel I, Msellem MI, Bergman D, et al. Field Evaluation of a High Throughput Loop Mediated Isothermal Amplification Test for the Detection of Asymptomatic Plasmodium Infections in Zanzibar. PLoS One 2017, 12:e0169037.
94. Perera RS, Ding XC, Tully F, Oliver J, Bright N, Bell D, et al. Development and clinical performance of high throughput loop-mediated isothermal amplification for detection of malaria. PLoS One 2017, 12:e0171126.

Eiken Loopamp MALARIA kit for detection of non-falciparum spp. [5]

95. Vallejo AF, Martínez NL, González IJ, Arévalo-Herrera M, Herrera S. Evaluation of the loop mediated isothermal DNA amplification (LAMP) kit for malaria diagnosis in P. vivax endemic settings of Colombia. PLoS Negl Trop Dis 2015, 9:e3453.
96. Cuadros J, Martín Ramírez A, González IJ, Ding XC, Perez Tanoira R, Rojo-Marcos G, et al. LAMP kit for diagnosis of non-falciparum malaria in Plasmodium ovale infected patients. Malar J 2017, 16:20.
97. Piera KA, Aziz A, William T, Bell D, González IJ, Barber BE, et al. Detection of Plasmodium knowlesi, Plasmodium falciparum and Plasmodium vivax using loop-mediated isothermal amplification (LAMP) in a co-endemic area in Malaysia. Malar J 2017, 16:29.
98. Coutrier FN, Tirta YK, Cotter C, Zarlinda I, González IJ, Schwartz A, et al. Laboratory challenges of Plasmodium species identification in Aceh Province, Indonesia, a malaria elimination setting with newly discovered P. knowlesi. PLoS Negl Trop Dis 2018, 12:e0006924.
99. Nolasco O, Infante B, Contreras-Mancilla J, Incardona S, Ding XC, Gamboa D, et al. Diagnosis of Plasmodium vivax by Loop-Mediated Isothermal Amplification in Febrile Patient Samples from Loreto, Perú. Am J Trop Med Hyg 2020.

Evaluation of cost effectiveness [1]

100. Zelman BW, Baral R, Zarlinda I, Coutrier FN, Sanders KC, Cotter C, et al. Costs and cost-effectiveness of malaria reactive case detection using loop-mediated isothermal amplification compared to microscopy in the low transmission setting of Aceh Province, Indonesia. Malar J 2018, 17:220.

LAMP application

Prevalence surveys [9]

101. Katrak S, Day N, Ssemmondo E, Kwarisiima D, Midekisa A, Greenhouse B, et al. Community-wide Prevalence of Malaria Parasitemia in HIV-Infected and Uninfected Populations in a High-Transmission Setting in Uganda. *J Infect Dis* 2016, 213:1971-8. (Loopamp™)
102. Rek J, Katrak S, Obasi H, Nayebara P, Katureebe A, Kakande E, et al. Characterizing microscopic and submicroscopic malaria parasitaemia at three sites with varied transmission intensity in Uganda. *Malar J* 2016, 15:470. (Loopamp™)
103. Dlamini N, Hsiang MS, Ntshalintshali N, Pindolia D, Allen R, Nhlabathi N, et al. Low-Quality Housing Is Associated With Increased Risk of Malaria Infection: A National Population-Based Study From the Low Transmission Setting of Swaziland. *Open Forum Infect Dis* 2017, 4:ofx071. (Loopamp™)
104. Smith JL, Auala J, Tambo M, Haindongo E, Katokele S, Uusiku P, et al. Spatial clustering of patent and sub-patent malaria infections in northern Namibia: Implications for surveillance and response strategies for elimination. *PLoS One* 2017, 12:e0180845. (Loopamp™)
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LAMP in pregnancy [12]

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LAMP in Travelers [11]

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Other areas of LAMP application

LAMP for molecular markers of drug resistance [9]

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LAMP for Pf gametocyte detection [2]

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LAMP in the evaluation of new diagnostic tools [2]

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LAMP in hrp2/3 deletion assessments [2]

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