**Table 2** Characteristics of included studies in the systematic review and meta-analysis

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| **Sr. No** | **Study** | **Country** | **Trial conducted** | **N\*** | **Sample size** | **Characteristics of participants** | **Endemicity \*\*** | **Diagnostic criteria** | **Diagnosis at POC?** | **Trace as positive** | **Cost of test** | **Acceptability of test** | **Time for CCA preparation** |
| 1 | Adriko 2014 | Uganda | Not reported | 5 | 500 | Schoolchildren 7–13 yrs | 8%, 23% & 36% for the low, moderate and high endemicity settings, respectively | Index test: POC-CCA (single urine)  Alternative version CCA2  Reference standard: Kato-Katz thick (one, two, three stools, each 41.7 mg duplicate) | Yes | Both trace as +ve and trace as -ve | 1.75 USD, cited from Colley 2013 | Yes | 60 min, Kato-Katz; POC CCA 5–20 min |
| 2 | Ayele 2008 | Ethiopia | Not reported | 1 | 206 | School children 4 - 21yrs | 47.6% | Index test: POC-CCA reagent strip  Reference standard: Urine filtration technique (10 mL urine) | Yes | Not reported | CCA strip test, UD$4.95 | Yes | CCA 25 min |
| 3 | Colley 2013 | Cameroon, Cote d’Ivoire,  Ethiopia, Kenya, Uganda | 2010 | 5 | 4305 | School children, 9-12 yrs | 15.1%, 25%, 38.4%, 43%, 47.9 for the different settings in the five countries | Index test: POC-CCA (single urine)  Reference standard: Kato-Katz (one stool, 41.7 mg duplicate) | No, laboratory | Yes | Not reported | Yes | Not reported |
| 4 | Coulibaly 2013 | Cote d’Ivoire | 2011 | 2 | 242 (156 children dropout) | Preschool children <6 yrs | 23.1% | Index test: POC-CCA (two urines)  Reference standard: Kato-Katz (two stools, 41.7 mg duplicate) | No, laboratory | Both trace as +ve and trace as -ve | Single  POC-CCA (US$ 1.75)  Single Kato-Katz (US$ 1.7) | Yes | POC-CCA test: 25 min  Kato-Katz: several hours |
| 5 | Coulibaly 2011-study 1 | Cote d’Ivoire | 2010 | 1 | 146 | Children 8-12 yrs | 32.91%, | Index test: POC-CCA (one, two, three urines)  Reference standard: Kato-Katz (one, two, three stools, 41.7 mg triplicate) | No, laboratory | Yes | Not reported | Yes | POC-CCA (20 min)  Kato-Katz (30 min) |
| 6 | Coulibaly 2011-study 2 | Cote d’Ivoire | 2010 | 1 | 130 | Children 8-12 yrs | 53.1% | Index test: POC-CCA (one, two, three urines)  Reference standard: Kato-Katz (one, two, three stools, 41.7 mg triplicate) | No, laboratory | Yes | Not reported | Yes | POC-CCA (20 min)  Kato-Katz (30 min) |
| 7 | Coulibaly 2011-study 3 | Cote d’Ivoire | 2010 | 1 | 170 | Children 8-12 yrs | 91.8% | Index test: POC-CCA (one, two, three urines)  Reference standard: Kato-Katz (one, two, three stools, 41.7 mg triplicate) | No, laboratory | Yes | Not reported | Yes | POC-CCA (20 min)  Kato-Katz (30 min) |
| **Sr. No** | **Study** | **Country** | **Trial conducted** | **N\*** | **Sample size** | **Characteristics of participants** | **Endemicity\*\*** | **Diagnostic criteria** | **Diagnosis at POC?** | **Trace as positive** | **Cost of test** | **Acceptability of test** | **Time for CCA preparation** |
| 8 | Dawson. 2013 | Uganda | 2011 | Not reported | 82 | Preschool children < 6 yrs  46 children were aged <3yrs and 42 children 3-5yrs | 45% | Index test: POC-CCA (one urine)  Reference standard: Kato-Katz (two stools, 41.7 mg duplicate) | Yes | Yes | Not reported | Not reported | Kato-Katz (30 min) |
| 9 | De Clercq 1997a | Mali | Not reported | 2 | Not stated (337 urine, 352 serum and 134 stool) | Whole population (adults and children) in irrigation area | 99% | Index test: CAA- ELISA; CCA-ELISA (5 ml of blood); 2-fold dilution series of urine (1 ml)  Reference standard: Kato-Katz (two stools, 41.6 mg duplicate) | No, laboratory | Not reported | Not reported | Yes | Not reported |
| 10 | De Clercq 1997b | Mali | 1993 | 4 | Not stated (431 urine, 324 stool; 348 blood) | Whole population of adults and children | Not reported | Index test: CAA- ELISA (1 ml urine and 5 ml of blood); CCA-ELISA (1 ml urine and 5 ml of blood); urine filtration (10 ml); one Kato-Katz slide (41.6 mg)  Reference standard: combined Kato-Katz slides (41.6 mg) and CAA-ELISA (1 ml urine and 5 ml of blood) | No, laboratory | Not reported | Not reported | Yes | Not reported |
| 11 | Erko 2013 | Ethiopia | 2010/2011 | 2 | 620 | School children: 8-12 yrs old | 34% | Index test: POC-CCA cassette (one, two, three urines)  Reference standard: Kato-Katz (one, two, three stools, 41.7 mg duplicate)  Gold standard: Combined POC-CCA (three urines) and Kato-Katz (three stools, 41.7 mg duplicate) | No, laboratory | Yes | Not reported | Yes | Not reported |
| 12 | Koukounari 2013 | Uganda | 2005 | 1 | 446 | Children 7-16 yrs and adults 17-76yr | Not reported | Index test: CCA urine assays (25 mL of urine).  Reference standard: Kato-Katz (three stools, duplicate) | No, laboratory | Yes | Not reported | Yes | Not reported |
| 14 | Kremsner 1994 | Cameroon | Not reported | 1 | 148 | School children 4–13 yrs | Not reported | Index test: CAA- EIA (urine and serum); CCA-EIA (urine and serum); thick blood smear (malarial parasites); combined reagent strip index (RSI)  Reference standard: Kato-Katz thick smear, three (3) urine filtrations (10-50 ml) | No, laboratory | Not reported | Not reported | Yes | Not reported |
| **Sr. No** | **Study** | **Country** | **Trial conducted** | **N\*** | **Sample size** | **Characteristics of participants** | **Endemicity\*\*** | **Diagnostic criteria** | **Diagnosis at POC?** | **Trace as positive** | **Cost of test** | **Acceptability of test** | **Time for CCA preparation** |
| 15 | Legesse 2008 | Ethiopia | 2007 | 1 | 184 | School children 5-22 yrs | 36.4% | Index test: CCA reagent strip, Kato-Katz (one stool, duplicate slides) and Formol-ether concentration  Reference standard: Kato technique (template-41.7 mg) | Yes | CCA scored as weak +ve or strong +ve | Not reported | Yes | Not reported |
| 16 | Legesse 2007 | Ethiopia | 2007 | 1 | 251 | Whole population (adults and children >5 yrs) | 90% in school children | Index test: CCA urine assays (25 mL of urine), Kato-Katz (one stool, duplicate slides) and Formol-ether concentration  Reference standard: Kato-Katz (one stool, duplicate slides) | No, laboratory | CCA scored as weak +ve or strong +ve | Not reported | Not reported | Not reported |
| 17 | Midzi 2009 | Zimbabwe | 2006 | 1 | 265 | Pre- and school children 2-19 yrs | 40.4% | Index test: Urine CCA strips (25 mL of urine), Kato-Katz (one stool) and standard urine filtration (two consecutive days)  Reference standard (gold standard): combined CCA and urine filtration | Yes, plus laboratory later | CCA scored as weak +ve or strong +ve | Not reported | Yes | CCA strips 30 mn |
| 18 | Shane 2011 | Kenya | 2007 | 1 | 484 | Children 1-15 yrs | 38.8% | Index test: Cassette CCA (one urine), SWAP-specific IgG ELISA, Carbon CCA (25 mL of urine)  Reference standard: Kato-Katz (three stool, duplicate) | No, laboratory |  | Not reported | Yes | CCA strips 40 min |
| 19 | Sousa-Figueiredo 2013-study 1 | Uganda | 2009 | Not reported | 333 | Preschool children ≤6 yrs | 7.2% | Index test: CCA dipstick test (50 μl)  Reference standard: Kato-Katz (one stool, 41.7 duplicate)    Gold standard: SEA-ELISA (commercially available ELISA test), 75 ml of finger-prick blood | No, laboratory | Both trace as +ve and trace as –ve were reported | Not reported | Yes | Not reported |
| 20 | Sousa-Figueiredo 2013-study 2 | Uganda | 2009 | Not reported | 337 | Preschool children ≤6 yrs | 16.9% | Index test: CCA dipstick test (50 μl)  Reference standard: Kato-Katz (one stool, 41.7 duplicate)    Gold standard: SEA-ELISA, 75 ml of finger-prick blood | No, laboratory | Both trace as +ve and trace as –ve were reported | Not reported | Yes | Not reported |
| **Sr. No** | **Study** | **Country** | **Trial conducted** | **N\*** | **Sample size** | **Characteristics of participants** | **Endemicity\*\*** | **Diagnostic criteria** | **Diagnosis at POC?** | **Trace as positive** | **Cost of test** | **Acceptability of test** | **Time for CCA preparation** |
| 21 | Sousa-Figueiredo 2013-study 3 | Uganda | 2009 | Not reported | 255 | Preschool children ≤6 yrs | 38.8% | Index test: CCA dipstick test (50 μl)  Reference standard: Kato-Katz (one stool, 41.7 duplicate)    Gold standard: SEA-ELISA (commercially available ELISA test), 75 ml of finger-prick blood | No, laboratory | Both trace as +ve and trace as –ve were reported | Not reported | Yes | Not reported |
| 22 | Sousa-Figueiredo 2010 | Uganda | Survey in Lake Albert area 2007 and Lake Victoria 2009 | Not reported | 608 (245 mothers and 363 children) | Preschool children  ≤6 yrs, mothers | In mothers (29.2% in Lake Victoria and 60% in Lake Albert)  In children (16% in Lake Victoria and 43.3% in Lake Albert) | Index test: POC-CCA cassette (one urine)  Single SEA-ELISA [fingerprick blood (∼50 μl)], four slides Kato-Katz thick smears  Reference standard: Kato-Katz thick (tow stools, duplicate)  Gold standard: Combined CCA (one urine 50μl aliquot) and Kato–Katz (two stools, 41.7 mg duplicate). | No, laboratory | Yes | £1.60 for CCA | Yes | 20 min |
| 23 | Speich 2010 | Tanzania | 2009 | 2 | 1,066 | School children 6-20 years |  | Kato-Katz (one stool, 41.7 mg duplicate) | No, laboratory | N/A | Single Kato-Katz US$1.73 and duplicate US$2.06 | Not reported | Kato-Katz 20-  40 min |
| 24 | Standley 2010 | Kenya, Tanzania | 2009 | 11 | 171 | School children 6-17 yrs | 68.6%? | Index test: CCA urine-dipstick  Reference standard: Kato-Katz (one stool, 41.7 mg duplicate) | Yes | Yes | $ 2.3-2.8 USD  per dipstick | Yes | Not reported |
| 25 | Stothard 2009 | Uganda | 2009 | 1 | 242 | Infants and preschool children (≤5 years of age) | >50% | Index test: urine-based CCA reagent strip; 75 μl for IEDM-ELISA (indirect egg detection method)  Reference standard: Kato-Katz (two stools, 41.7 mg duplicate) | Yes | Not reported | Cost prediction | Yes | Not reported |
| 26 | Tchuem Tchuente 2012-study 1 | Cameroon | 2010/2011 | 1 | 765 | Schoolchildren; age 8–12 yrs | 21% | Index test: POC-CCA assay (one urine), CCA dipstick (designated CCA-L)  Reference standard: Kato-Katz (three stools, 41.7 mg triplicate) | No, laboratory | Yes | Not reported | Yes | Not reported |
| **Sr. No** | **Study** | **Country** | **Trial conducted** | **N\*** | **Sample size** | **Characteristics of participants** | **Endemicity\*\*** | **Diagnostic criteria** | **Diagnosis at POC?** | **Trace as positive** | **Cost of test** | **Acceptability of test** | **Time for CCA preparation** |
| 27 | Tchuem Tchuente 2012-study 3 | Cameroon | 2010/2011 | 1 | ?? | Schoolchildren; age 8–12 yrs | 41.8% | Index test: POC-CCA assay (one urine), CCA dipstick (designated CCA-L)  Reference standard: Kato-Katz (three stools, 41.7 mg triplicate) | No, laboratory | Yes | Not reported | Yes | Not reported |
| 28 | Tchuem Tchuente 2012-study 2 | Cameroon | 2010/2011 | 1 | ?? | Schoolchildren; age 8–12 yrs | 31.4% | Index test: POC-CCA assay (one urine), CCA dipstick (designated CCA-L)  Reference standard: Kato-Katz (three stools, 41.7 mg triplicate) | No, laboratory | Yes | Not reported | Yes | Not reported |

\*N= number of communities involved in the study

\*\*Baseline prevalence of the infection according reference standard test