



Referring doctor/ hospital: (Stamp)

Patient: (please complete in BLOCK CAPITALS or printed label)

Name:

First name:  Date of Birth (dd/mm/yyyy):

Street:

Country:  ZIP Code:  City:

- outpatient
- inpatient
- male
- female
- Invoice to patient

Reference number:  Sample date (dd/mm/yyyy):  Time:  Copy of the results to Dr. med. (HIN-sec Email):

AHV number Switzerland:  Telephone number:  Email adress patient:

Clinical details (please complete):

- Not available
- Fever
- Diarrhea
- Skin symptoms: \_\_\_\_\_
- Eosinophilic meningitis
- Eosinophilia: absolut \_\_\_\_\_/µl = \_\_\_\_\_% Leucocytes
- Symptoms since: \_\_\_\_\_
- Stay abroad:
  - Europe
  - Africa
  - Asia
  - Australia
  - North America
  - Central America
  - South America
  - Oceania
- Country/Region: \_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_\_
- Other: \_\_\_\_\_

**MALARIA EMERGENCY (→ Microscopy) \*\*\* ALWAYS NOTIFY by phone \*\*\***

Registration Malaria emergency:

Name of the referring physician (sender): \_\_\_\_\_

Mo-Fr (8-17h): 061 284 82 61 (Laboratory)

Sa-Su & other: 061 284 81 44 (Medical doctor)

Telephone of the physician (sender) reachable 24/7: \_\_\_\_\_ / \_\_\_\_\_

Rapid diagnostic test:  Neg.  Pos: \_\_\_\_\_

	Microscopie					PCR							Serology				
	EDTA-Blood	Slide from sender	SAF-fixed stool	Native stool (size of an apricot)	Other	EDTA-Blood	Native stool	Fecal Swab	Nasopharyngeal Swab	Bone marrow	Tissue / Biopsy	Puncture fluid	CSF (1 ml)	Serum (2 ml)	Method \$	Serum (2 ml)	CSF
<b>Malaria</b>																	
Plasmodium species acute <b>EMERGENCY</b>	<input type="checkbox"/>	<input type="checkbox"/>	→ Registration by telephone (see above)														
Plasmodium species differentiation						<input type="checkbox"/> 1A, 5x single PCR											
Plasmodium spp.						<input type="checkbox"/> 1B, 1x Lamp PCR											
<b>Screening test / Panel</b>																	
Gastro-acute Panel PCR ② with 4 Protozoa, 13 Bacteria & 5 Viruses						<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Protozoa (intestinale) Panel ③			<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helminth (intestinale) Panel ④			<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helminth Screening test (Europe) incl. <i>Fasciola hepatica</i> , <i>Strongyloides</i> spp., <i>Toxocara</i> spp., <i>Trichinella spiralis</i> .														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Helminth Screening test (Tropics) incl. <i>Fasciola hepatica</i> , <i>Strongyloides</i> spp., <i>Toxocara</i> spp., <i>Trichinella spiralis</i> , <i>Filaria</i> spp., <i>Schistosoma</i> spp.														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Echinococcus Screening <i>E. granulosus</i> and <i>E. multilocularis</i>														<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Order number SwissTPH

- Please mark like this:
- correct
  - wrong
  - material not optimal for this analysis
  - ◇ Analysis not accredited & not validated for this material.
  - \$ Detection in serology: ELISA: IgG, IFAT: IgG/IgM/IgA, Western blot: IgG, or as stated
  - \$ Staged diagnostics, see homepage.

① A Malaria species differentiation by PCR: *P. falciparum*, *P. vivax*, *P. malariae*, *P. ovale*, *P. knowlesi*, (5x single PCR)

① B Plasmodium spp. PCR (Result positive/negative), NO species differentiation, (1x LAMP PCR)

② Gastro-acute Panel PCR: *Cryptosporidium* spp., *Cyclospora cayetanensis*, *Entamoeba histolytica*, *Giardia lamblia*, *Campylobacter* spp. (*C. jejuni/coli/upsalensis*), *Clostridium difficile* A/B, *EAE*, *EIEC/Shigella*, *EPEC*, *ETEC* *lt/st*, *Plesiomonas shigelloides*, *Salmonella* spp., *STEC stx1/stx2* (*shigella-like toxin producing E. coli*), *STEC* serovar O157:H7, *Vibrio cholerae*, *Vibrio parahaemolyticus*, *Vibrio vulnificus*, *Yersinia enterocolitica*, *Adenovirus F40/41*, *Astrovirus*, *Norovirus GI/GII*, *Rotavirus A*, *Sapovirus* (GI, GII, GIV, GV).

③ Protozoa microscopy: We recommend to send stool samples from three different days (= 3 stool samples).

Protozoa panel PCR: *Blastocystis hominis*, *Coccidia* spp. (*Cyclospora cayetanensis*, *Cystoisospora belli*, *Cryptosporidium* spp.), *Entamoeba histolytica*, *E. dispar*, *E. polecki*, *E. moshkovski*, *Dientamoeba fragilis*, *Giardia lamblia*, *Microsporidia* spp. (*Enterocytozoon bieneusi*, *Encephalitozoon* spp., *Vittiforma corneae*).

④ Helminth microscopy: We recommend for optimal sensitivity native stool (min. 10g, size of an apricot). SAF-fixed stool has a poor sensitivity for trematodes.

Helminth panel PCR: *Ascaris* spp., *Ancylostoma* spp., *Enterobius vermicularis*, *Hymenolepis* spp., *Necator americanus*, *Strongyloides* spp., *Taenia* spp., *Trichuris trichiura*.





Please mark like this:  correct  wrong  Material not optimal for this analysis

	Mikroskopie					PCR							Serology				
	EDTA-Blood	Slide from sender	SAF-fixed stool	Native stool (size of an apricot)	Other	EDTA-Blood	Native stool	Nasopharyngeal Swab	Urine	Bone marrow	Tissue / Biopsy	Puncture fluid	CSF (1 ml)	Serum (2 ml)	Method§	Serum	CSF
<b>Helminths</b>																	
Angiostrongylus cantonensis *																	
Anisakis spp.*																	
Echinococcus granulosus																	
Echinococcus multilocularis																	
Enterobius vermicularis																	
Fasciola hepatica (Distomatose)																	
Filariæ spp.																	
- Brugia malayi / B. timori																	
- Wuchereria bancrofti *																	
Gnathostoma spp.* <sup>⑦</sup>																	
Paragonimus spp.*																	
Schistosoma spp. (Bilharziose)																	
Strongyloides spp.																	
Toxocara spp.																	
Trichinella spiralis																	
T. solium (Zystizerkose) - Antibodies																	
- Antigen <sup>⑩</sup>																	
<b>Protozoa</b>																	
Bloodparasites (Babesien, Anaplasma, Ehrlichia)																	
Blastocystis hominis																	
Coccidia spp.																	
Cryptosporidium spp., Cyclospora sp., Cystoisospora belli																	
Dientamoeba fragilis																	
Entamoeba spp. <sup>⑪</sup>																	
Giardia lamblia																	
Leishmania spp. : - visceral <sup>⑫</sup>																	
- (muco)-cutan																	
Microsporidia spp.																	
E. bienersi, Encephalitozoon spp., Vittaforma corneae																	
Trypanosoma brucei																	
African sleeping sickness																	
Trypanosoma cruzi																	
Chagas disease (South America)																	
<b>Bacteria</b>																	
Borrelia spp. (Relapsing fever) <sup>⑬</sup>																	
Brucella spp. f																	
Coxiella burnetii (Q-Fever) Phase I u. II f																	
Leptospira spp. <sup>⑭</sup>																	
Rickettsia spp. <sup>⑮</sup>																	
<b>Viral diseases</b>																	
Flavivirus Screening Panel without Dengue <sup>⑯</sup>																	
Chikungunya Virus																	
Dengue Virus																	
- Dengue Schnelltest (NS-1, IgM, IgG)																	
- Dengue IFAT (Typ 1-4 separately)																	
Japanese Encephalitis Virus																	
West Nile Virus																	
Yellow Fever Virus																	
Zika Virus																	
SARS-CoV-2/Flu A/B/RSV Panel <sup>⑰</sup>																	
SARS-CoV-2 (separate order form)																	

- ⑤ Microscopy Enterobius: Anal adhesive tape test (please attach the transparent adhesive tape to a slide and send it to the SwissTPH).
- ⑥ Filariasis: Please be aware of the circadian rhythm of the microfilaria in the blood. Blood collection Loa Loa = midday; Blood collection lymphatic filariasis = around midnight.
- ⑦ Sensitivity can be reduced in infections acquired in Central/South-America (G. binucleatum infection).
- ⑧ Microscopy: species differentiation possible. Detection of Schistosoma eggs in urine: send urine collected from 10 am – 2 pm. Jump up and down 5x times before collecting the urine. Detection of Schistosoma antigen in urine is not recommend as sole diagnostic because of limited sensitivity and specificity. Species differentiation by PCR in stool/urine/tissue: S.mansoni, S.haematobium, Schistosoma spp.. Detection of ccfDNA in Serum (S.mansoni, S.haematobium) please send at least 2ml Serum.
- ⑨ Baermann and culture for Strongyloides spp.: stool should not be cooled (<10°C). We recommend PCR during winter month. Amount of stool: at least the size of an apricot.
- ⑩ T. solium antigen detection (ELISA) for therapy control in case of > 2 vital cysticerci.
- ⑪ Microscopy Entamoeba: no species-differentiation possible. PCR: E. histolytica, E. dispar, E. polecki, E. moshkovskii differentiation. Serology: E. histolytica, recommended if there is suspicion of a liver abscess..
- ⑫ Visceral leishmaniasis: e.g. bone marrow (also spleen biopsy, EDTA-blood, etc.) (Muco-/cutan leishmaniasis: biopsy-cylinder ≥ 3mm in the periphery of the lesion (infected macrophages). PCR species differentiation by HSP70 sequence analysis. Quantification of Leishmania out of blood possible, 1 ml of blood absolutely necessary.
- ⑬ Under the microscope we can only detect Spirochaeta. A detection of the species is only possible by PCR(Hamburg BNI).
- ⑭ Leptospira spp. PCR: blood (detection 1<sup>st</sup> week p.i.), urine (detection 2<sup>nd</sup>-3<sup>rd</sup> week p.i.). Please always send blood & urine together. Serology: indicated earliest one week after onset of disease.
- ⑮ Rickettsia spp. : PCR detects tick bite fever and spotted fever.
- ⑯ Flavivirus Screening Panel serology: West Nile Virus, Yellow Fever Virus, FSME, Japanese Encephalitis Virus.
- ⑰ SARS-CoV-2/Flu A/B/RSV panel PCR: SARS-CoV-2, Influenza A, Influenza B, Respiratory Syncytial Virus.
- ⑱ Worm and/or worm tissue (e.g. proglottids) please send in 0.9% sodium chloride, never fix with formalin.

§ Detection in serology:  
ELISA: IgG, IFAT: IgG/IgM/IgA  
Western blot: IgG, Ab: antibodies  
Rapid diagnostic test: IgM/IgG and antigen, or as stated.

\* Analysis not accredited.  
◇ Analysis not accredited & not validated for this material.  
f Analysis is performed externally.  
§ Staged diagnostics, see homepage.

**Parasite identification:**

Macro-/ Microscopy <sup>⑱</sup> : Material & Origin: \_\_\_\_\_

PCR: Helminth identification (tissue of the worm needed <sup>⑱</sup>)\*

