



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 address 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) * NOTIFICATION by phone always NEEDED *****

CAUTION: malaria diagnostic only on workdays (Mo-Fr) from 8:00-17:00 o'clock

NO malaria diagnostic after 5:00pm, on Saturday, Sunday and public holidays

Malaria Notification: Mo-Fr (8:00-17:00): Tel. 061 284 82 61 (laboratory)

The sample must arrive at the lab on workdays before 17:00 in order to be analyzed and validated on the same evening.

Name and telephone of the physician reachable 24/7 (communication of the results): _____

Rapid diagnostic test: Positive Negative **Lamp PCR:** Positive Negative

For medical questions, the patient's attending physician can call our doctor on duty tel: 061 284 81 44 at any time (24/7).

	Microscopy					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
Malaria																	
Plasmodium species, incl. EMERGENCY	<input type="checkbox"/>	<input type="checkbox"/>															
Plasmodium species differentiation							<input type="checkbox"/> ①A, 5x single PCR										
Plasmodium spp.							<input type="checkbox"/> ①B, 1x Lamp PCR									<input type="checkbox"/> \$	
Screening test / Panel																	
Gastro-acute Panel PCR ② with 4 Protozoa, 13 Bacteria & 5 Viruses							<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"/>						
Helminth (intestinale) Panel ④			<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"/> \$	
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"/> \$	
Echinococcus Screening <i>E.granulosus</i> and <i>E.multilocularis</i>																<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), workdays (Mo-Fr)

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

② Gastro-acute Panel PCR: *Cryptosporidium* spp., *Cyclospora cayentanensis*, *Entamoeba histolytica*, *Giardia lamblia*, *Campylobacter* spp. (*C. jejuni/coli/upsalensis*), *Clostridium difficile* A/B, *EAEC*, *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).

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

	Microscopy					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
Helminths																	
Angiostrongylus cantonensis *																	
Anisakis spp.*																	
Echinococcus granulosus																	
Echinococcus multilocularis																	
Enterobius vermicularis																	
Fasciola hepatica (Distomatose)																	
Filariæ spp.																	
- Brugia malayi / B. timori																	
- Wuchereria bancrofti *																	
Gnathostoma spp.* ⑦																	
Paragonimus spp.*																	
- Sputum																	
- Urine ⑧																	
Schistosoma spp. (Bilharziose)																	
- Biopsy																	
Strongyloides spp.																	
Toxocara spp.																	
Trichinella spiralis																	
T. solium (Zystizerkose) - Antibodies																	
- Antigen ⑩																	
Protozoa																	
Bloodparasites (Babesien, Anaplasma, Ehrlichia)																	
Blastocystis hominis																	
Coccidia spp.																	
- Cryptosporidium spp., Cyclospora sp., Cystoisospora belli																	
Dientamoeba fragilis																	
Entamoeba spp. ⑪																	
Giardia lamblia																	
- Mikroskopie																	
- Antigen																	
Leishmania spp. : - visceral ⑫																	
- (muco)-cutan																	
- BM																	
Microsporidia spp.																	
- E. bienersi, Encephalitozoon spp., Vittaforma corneae																	
Trypanosoma brucei																	
- African sleeping sickness																	
Trypanosoma cruzi																	
- Chagas disease (South America)																	
- Eye fluid																	
Bacteria																	
Borrelia spp. (Relapsing fever) ⑬																	
Brucella spp. f																	
Coxiella burnetii (Q-Fever) Phase I u. II f																	
Leptospira spp. ⑭																	
Rickettsia spp. ⑮																	
Virus																	
Arbovirus Panel (Dengue type 1, 2, 3, 4, WNV, YFV, Chikungunya, Zika) ⑯ *																	
Flavivirus Screening Panel (FSME, YFV, JEV, WNV) ⑯																	
Chikungunya Virus																	
Dengue Virus Subtype 1, 2, 3, 4																	
- Dengue RDT (NS-1, IgM, IgG)																	
- Dengue IFAT (Typ 1-4 single)																	
Japanese Encephalitis Virus																	
West Nile Virus																	
Yellow Fever Virus																	
Zirka Virus																	

- 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 eggs (S.m.) in stool: send an apricot-sized amount. Detection of eggs (S.h.) in urine: send urine collected from 10 am – 2 pm. Jump up and down 5 times before collecting the urine. Species differentiation by PCR in stool/urine/tissue: S.mansonii, S.haematobium, Schistosoma spp. Detection of ccfDNA in Serum: S.mansonii, S.haematobium as therapy control suitable. **ATTENTION: 2ml serum is required!**
 - 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 1st week p.i.), urine (detection 2nd-3rd 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 Worm and/or worm tissue (e.g. proglottids) please send in 0.9% sodium chloride, never fix with formalin.
 - ⑱ Arbovirus PCR Multiplex-Panel: Dengue Typ 1, 2, 3, 4, WNV, YFV, Chikungunya, Zika). **ATTENTION: 2ml serum is required!**
- § 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 ⑰ : Material & Origin: _____

PCR: Helminth identification (tissue of the worm needed ⑰)*

