Laboratory Shipment Form for Neuroblastoma (Samples and requested testings)

* *Form must be sent as soon as you identify a patient with suspected neuroblastoma to* [*dfme.recherche\_clinique.hop@chuv.ch*](mailto:dfme.recherche_clinique.hop@chuv.ch) *and* [*maja.beck-popovic@chuv.ch*](mailto:maja.beck-popovic@chuv.ch)
* *Shipment must be announced by sending an email to* [*dmcp.laboratoire.hop@chuv.ch*](mailto:dmcp.laboratoire.hop@chuv.ch)

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| **PATIENT**  Last Name: Cliquez ou appuyez ici pour entrer du texte.  First name: Cliquez ou appuyez ici pour entrer du texte.  DOB : Cliquez ou appuyez ici pour entrer une date.  (dd/mm/yyyy)  Gender :  male  female  Address :  Line 1: Cliquez ou appuyez ici pour entrer du texte.  Line 2: Cliquez ou appuyez ici pour entrer du texte.  Insurance:Cliquez ou appuyez ici pour entrer du texte. | **REQUESTING PHYSICIAN**  Last Name: Cliquez ou appuyez ici pour entrer du texte.  First name: Cliquez ou appuyez ici pour entrer du texte.  Address :  Line 1: Cliquez ou appuyez ici pour entrer du texte.  Line 2: Cliquez ou appuyez ici pour entrer du texte.  Phone: Cliquez ou appuyez ici pour entrer du texte.  Email: Cliquez ou appuyez ici pour entrer du texte. |

**PATIENT CLINICAL INFORMATION AT DIAGNOSIS** (tick all that apply)

* **Age at diagnosis :** ≤ 12 mo  > 12 mo - ≤ 18 mo  > 18 mo
* **Sign or symptoms:**  Yes, **which one(s):** Cliquez ou appuyez ici pour entrer du texte.

**If yes**, are they life-threatening symptoms (LTS)?  Yes  No

No symptoms

* **Site of primary tumo**r: Cliquez ou appuyez ici pour entrer du texte.
* **Metastasis:**  Yes, **which one(s):** Cliquez ou appuyez ici pour entrer du texte.

No  Not yet evaluated

* **Bone marrow infiltration:**   Yes  No  Not yet evaluated
* **Disease staging (if known):** L1  L2  M  Ms

**STUDY PROTOCOL** (if applicable, tick all that apply)

LINES Date of initial diagnosis: Cliquez ou appuyez ici pour entrer une date.

HR-NBL2 Study code: Cliquez ou appuyez ici pour entrer du texte.

Metanephrines (research project) On treatment:  yes  no

Not yet defined Day1 of treatment: Cliquez ou appuyez ici pour entrer une date.

Therapy timepoint:

At diagnosis

On treatment, Time point: Cliquez ou appuyez ici pour entrer du texte.

At relapse

**BIOBANKING CONSENTS** (if applicable, tick all that apply)

General consent for research (according to local institution)

SPHO biobank consent

**DATE OF SAMPLING** (tick all that apply)

* **Planned date of tumor biopsy (=Diagnosis date):** Cliquez ou appuyez ici pour entrer une date.
* Specify:  Primary tumor  Metastasis
* **Planned date of bone marrow aspiration/biopsy:** Cliquez ou appuyez ici pour entrer une date.
* Please take both sites (left and right). If it’s not possible, choose one site, and specify:

left  right

**Please analyze locally the tumor histopathology and the bone marrow smears.**

**Comments**

**MATERIAL TO BE SENT TO CHUV** Tick all that apply and please refer to the detailed study-specific tables (page 5-11).

Please do not forget to enclose this form with the material.

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|  | **LINES patients** | **HR-NBL2 patients** | | | |
|  | **LINES**  At Diagnosis or surgery (see page 10) | **HR-NBL2**  At Diagnosis or relapse  (see page 5-8) | **Metane-phrines**  At Diagnosis and end of induction  (see page 11) | **HR-NBL2**  During on-treatment timepoints (see page 5-8) | **HR-NBL2**  At time of PBSC harvest  (see page 9) |
| **Tumor sample**  - TCC, SNParray and also NGS-ALK for HR2 patients | Fresh-frozen | |  |  |  |
| - Histopathlogy review, NMYC status | FFPE-block  or  FFPE-slides (unstained, n=10, 2-3 m) | |  |  |  |
| **Bone marrow trephines**  - Histopathlogy review |  | 10 unstained FFPE-sections (2-3 m)  of **left** BM trephines  10 unstained FFPE-sections (2-3 m)  of **right** BM trephines |  | 10 unstained FFPE-sections (2-3 m)  of **left** BM trephines  10 unstained FFPE-sections (2-3 m)  of **right** BM trephines |  |
| **Bone marrow aspiration**  - GD2-IHC, plasma preparation, cell isolation  - RTqPCR |  | EDTA-tubes (5ml) of **left** BMA  EDTA-tubes (5ml) of **right** BMA  PAX tube**[[1]](#footnote-1)** (0.5ml)  of **left** BM  PAX tube (0.5ml)  of **right** BM |  | EDTA-tubes (5ml)  of **left** BMA  EDTA-tubes (5ml)  of **right** BMA  PAX tube3 (0.5ml)  of **left** BM  PAX tube (0.5ml)  of **right** BM |  |
| **Peripheral blood**  - plasma preparation, cell isolation  - HACA analysis  - RTqPCR |  | EDTA (4-6 ml)      PAX tube3 (2ml) |  | EDTA (4-6 ml)    Serum (2-3 ml)  PAX tube3 (2ml) |  |
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| **Peripheral blood**  - plasma catecholamines |  |  | Li-Heparin (2.6 ml) |  |  |
| **Urine**  - urine catecholamines |  |  | Spot (2.5 ml) |  |  |
| **Aphaeretic product (PBSC)**  - GD2-IHC, plasma preparation, cell isolation  - RTqPCR |  |  |  |  | EDTA  (1.5 ml)  PAX tube (0.5 ml) |

**MATERIAL TO BE SENT TO GERMANY**

Please do not forget to enclose the specific form from the lab manual corresponding to the study with the material.

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|  | HR-NBL2  At Diagnosis | Address |
| **Peripheral blood**  - FCGR/KIR polymorphism, pharmacogenomics | 2 EDTA tubes  (2 ml) | Prof. Dr. med. Holger Lode  University of Greifswald  Children’s Hospital  Sauerbruchstrasse 1  17475 Greifswald  Germany  **Please use Form 2c adapted from the lab manual** |

**SHIPMENT ADDRESSES FOR CHUV (Biology Reference Laboratory)**

If possible, please send all the requested material at the appropriate temperature to the specific contact (IPA, HOP or Peptide & Catecholamine Laboratory) as rapidly as possible post collection with the present “Laboratory Shipment Form for Neuroblastoma” (<https://wp.unil.ch/lhop/diagnostics/>).

**Please always inform us by email prior to shipping (**[**dmcp.laboratoire.hop@chuv.ch)**](mailto:dmcp.laboratoire.hop@chuv.ch))

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| IPA | **Dr. Carole Gengler**  Centre Hospitalier Universitaire Vaudois  Institut Universitaire de Pathologie (IPA)  Section de Pathologie clinique  Rue du Bugnon 25  CH-1011 Lausanne |
| HOP | **Equipe de recherche clinique HOP (E. Lemmel / S. Blanc / M. Flahaut)**  Centre Hospitalier Universitaire Vaudois  Service de pédiatrie  Unité d’Hématologie-Oncologie Pédiatrique (HOP)  BH11/614  Rue du Bugnon 46  CH-1011 Lausanne |
| Peptide & Catecholamine Laboratory | **Dr Eric Grouzmann**  Centre Hospitalier Universitaire Vaudois  Peptide & Catecholamine Laboratoire  Hôpital Nestlé, 6ème étage, Laboratoire 6019  Avenue Pierre Decker 5  CH-1011 Lausanne |

**SPOG SITE:** ……………………………………………………….**DATE:** ……………………………

**PHYSICIAN, NAME and SIGNATURE:** ………………………………………………………………

***CENTRAL LAB USE ONLY (to be filled manually)***

Sample received on date: \_\_\_\_ /\_\_\_\_ /\_\_\_\_ (dd/mm/yyyy) and time: \_\_\_\_ : \_\_\_\_ (HH:MM)

Samples received as listed above?

Yes

No, comments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Samples received intact?

Yes

No, comments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Received by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**SIOPEN HR-NBL2**: Sample preparation and sending flow to the Biology Reference Laboratories (BRL, CHUV)

Lab Manual - Study protocol SIOPEN HR-NBL2. Please refer to lab manual for detailed procedures of sample preparation.

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| **Biological samples** | **Timepoint** | **Local tasks** | **#Send to…** |
| 1 piece sterile  (or 2 pieces in case of tumoral heterogeneity and sufficient material) |  | *Local pathologist does sample preparation in parallel to the standard preparation for histo-pathological examination* |  |
| * Study entry * Relapse | **Snap-frozen tissue** | **On dry ice (-80°C) to BRL (IPA address)**  *TCC*  *SNParray*  *NGS panel-ALK alterations*  *Biobanking* |
| * Study entry * Relapse | **10 unstained sections (2-3 m) of the FFPE block or a FFPE block** | **At room temp to BRL (IPA address)**  *Histo-pathological review*  *NMYCN status by FISH* |
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| **Biological samples** | **Timepoint** | **Local tasks** | **#Send to…** |
|  |  | *Local pathologist does sample preparation in parallel to the standard preparation for histological examination* |  |
| * Study entry * At end of induction * Pre-maintenance * End of treatment * Relapse | **10 unstained sections (2-3 m) of the FFPE block** | **At room temp to BRL (IPA address)**  *Unstained slides kept at BRL and then send to Oslo, or Genova for central review and entry of review data in the Siopen-R-Net database (once a year)* |

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| **Biological samples** |  | **Local tasks** | **#Send to…** |
|  |  | *BM smears according to standard procedures* |  |
| * Study entry * During induction * At end of induction * Post Bu-Mel, pre RTX * Pre-maintenance * End of treatment * Relapse | **2 EDTA-tubes**  **(2x5 ml BM L+R;**  **do not pool)** | **At +4°C within 24h to BRL (HOP address)**  *Cytospins preparation for anti-GD2 IHC*  *Plasma preparation*  *Cell isolation*  *Samples kept at -80°C at the BRL* |
| * Study entry * During induction * At end of induction * Post Bu-Mel, pre RTX * Pre-maintenance * End of treatment * Relapse | **2 PAX tubes**  **(2x0.5 ml BM L+R;**  **do not pool)** | **At +4°C\* within 24h to BRL (HOP address)**  *RTqPCR*  *PAX tubes kept at -80°C at BRL and then send to Leeds (Siopen Molecular Monitoring Group) for RTqPCR (once a year)* |

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| **Biological samples** | **Timepoint** | **Local tasks** | **#Send to…** |
|  | * Study entry * During induction * At end of induction * Post-surgery * Post Thio * Post Bu-Mel, pre RTX * Pre-maintenance * End of treatment * Relapse | **1 EDTA-tube**  **(4-6 ml PB)** | **At +4°C within 24h to BRL (HOP address)**  *Plasma preparation*  *Cell isolation*  *Samples kept at -80°C at the BRL* |
| * Study entry * During induction * At end of induction * Post-surgery * Post Thio * Post Bu-Mel, pre RTX * Pre-maintenance * End of treatment * Relapse | **1 PAX tube**  **(2 ml PB)** | **At +4°C\* within 24h to BRL (HOP address)**  *RTqPCR*  *PAX tubes kept at -80°C at BRL and then send to Leeds (Siopen MMG) for qRT-PCR (once a year)* |
| * Study entry | **2 EDTA-tubes (2 x 2 ml PB)** | **At +4°C within 24h to Prof. Holger Lode, Greifswald, Germany (use the specific form 2c)**  *FCGR/KIR polymorphism analysis*  *Pharmacogenomics future studies according to local decisions* |
| * During maintenance (at each cycle: before each antibody application and at the end of antibody infusion) | **1 serum tube**  **(2-3 ml PB)** | **At room temp within 24h to BRL (HOP address)**  *HACA analysis*  *Serum samples kept at -80°C at BRL and then send to Greifswald (Siopen Immunology Group) for HACA analysis (once a year)* |
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| **Biological samples** | **Timepoint** | **Local tasks** | **#Send to…** |
|  | * At time of harvest | **1 EDTA-tube**  **(1.5 ml PBSC)** | **At +4°C to BRL (HOP address)**  *Cytospins preparation for anti-GD2 IHC*  *Plasma preparation*  *Cell isolation*  *Samples kept at -80°C at the BRL* |
| * At time of harvest | **1 PAX tube**  **(0.5 ml PBSC)** | **At +4°C\* to BRL (HOP address)**  *RTqPCR*  *PAX tubes kept at -80°C at BRL and then send to Leeds (Siopen MMG) for qRT-PCR (once a year)* |

\*According to the PAX tubes processing (#762165 from PreAnalytix, Qiagen/BD company), it is recommended to store the PAX collected samples (BM or PB) upright at room temperature (18−25˚C) for a min of 2 hours to max 72 hours before transferring them in the freezer at −80˚C. For that reason, two options for sending PAX tubes to the BRL are possible:

* + After sampling, keep the PAX tubes upright at room temperature (18−25˚C) for a minimum of 2 hours and then send them at +4°C to the BRL with the BM- or PB-EDTA samples.
  + If it is not possible to keep samples at room temperature for 2 hours, send them at room temperature to the BRL in a separate package.

**LINES**: Sample preparation and sending flow to the Biology Reference Laboratories (BRL, CHUV)

Study protocol LINES. Please refer to the protocol for detailed procedures of sample preparation.

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| **Biological samples** | **Timepoint** | **Local tasks** | **#Send to…** |
| 1 piece sterile  (or 2 pieces in case of tumoral heterogeneity and sufficient material) |  | *Local pathologist does sample preparation in parallel to the standard preparation for histological examination* |  |
| * Study entry | **Snap-frozen tissue** | **On dry ice (-80°C) to BRL (IPA address)**  *TCC*  *SNParray*  *Biobanking* |
| * Study entry | **10 unstained sections (2-3 m) of the FFPE block or a FFPE block** | **At room temp to BRL (IPA address)**  *Histo-patholgical review*  *NMYC status by FISH* |

**#** TCC, MYCN/FISH status, histo-pathological review, and biobanking will be provided by IPA (Institut Universitaire de Pathologie, CHUV)

SNParray and NGS panel-ALK alterations will be provided by LOG (Oncogenomic Laboratory CHUV)

BM cytospins preparation and anti-GD2 immunocytology will be provided by LHOP (Laboratoire Hématologie Oncologie Pédiatrique, CHUV)

Plasma preparation and cell isolation from BM and PB will be provided by LHOP (CHUV)

RTqPCR on PAX tubes will be provided by the Siopen Molecular Monitoring Group (Leeds, UK)

FCGR/KIR polymorphism analysis and/or Pharmacogenomics future studies according to local decisions will be provided by the Siopen Immunology Group (Greifswald, D)

HACA analysis (serum) will be provided by the Siopen Immunology Group (Greifswald, D)

**METANEPHRINE (research project)**: Sample preparation and sending flow to the Peptide & Catecholamine Laboratory (CHUV)

Research project Plasma Metanephrines. Please refer to the lab manual for detailed procedures of sample preparation.

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| **Biological samples** | **Timepoint** | **Local tasks** | **Send to…** | **Forms** (from Metanephrine lab manual) |
|  | * Study entry * End of induction | **1 Lithium-Heparine tube (2.6 ml PB)**  Prepare plasma according to the specific lab manual and store at -80°C until sending. | **On dry ice (-80°C) to Dr Grouzman (Peptide & Catecholamine Laboratory address)**  via Swiss Post (Swiss-Express «Innight»)  Plasma metanephrines analysis | Form for catecholamines and metabolites in blood |
| C:\Users\elemmel\AppData\Local\Microsoft\Windows\INetCache\Content.Word\Sans titre2.png | * Study entry * End of induction | **1 Urine spot**  **(2.5 ml urine with pH 3.8-5.2)**    Prepare urine according to the specific lab manual and store at -80°C until sending. | **On dry ice (-80°C) to Dr Grouzman (Peptide & Catecholamine Laboratory address)**  via Swiss Post (Swiss-Express «Innight»)  *The center in Lausanne will then send the urine of all patients from all Swiss centers to The Netherlands for analysis of urinary catecholamines and metabolites.* | Form for catecholamines and metabolites in urine |

1. PAX tubes can be ordered by sending an email to [dfme.recherche\_clinique-hop@chuv.ch](mailto:dfme.recherche_clinique-hop@chuv.ch) [↑](#footnote-ref-1)