

Order Form

1A Ordering the FoundationOne® Tests

The FoundationOne®CDx test is used for the genomic analysis of tumor tissue, the FoundationOne®Liquid CDx test is used for the genomic analysis of the tumor DNA (ctDNA) circulating in the blood, and the FoundationOne®Heme test is used for the genomic analysis of tumor tissue, blood, and bone marrow. The FoundationOne®CDx test, the FoundationOne®Liquid CDx test, and the FoundationOne®Heme test (hereinafter referred to as FoundationOne® tests) provide a detailed report of the genomic changes that are specific to the tumor being tested and have been found according to the respective gene list.

The FoundationOne® tests are offered by the University Hospital Zurich (USZ) and F. Hoffmann-La Roche Ltd., Roche Diagnostics International Ltd. and other companies of the Roche Group (Roche) and performed by the USZ in Switzerland and Foundation Medicine®, Inc., (FMI) in Boston, MA, USA, another Roche affiliate, as described in this Order Form.

Please select the test you would like to order:

-  **FOUNDATIONONE®CDx Solid tumour test using a tissue sample**

FFPE sample: Please follow the instructions in the "FoundationOne®CDx Sample Guide". Please send the completed order form by email to fmi.pathologie@usz.ch. USZ contacts the assigned pathologist to request the biopsy (FFPE sample).

-  **FOUNDATIONONE®LIQUID CDx Test for solid tumor using a blood sample**

Peripheral whole blood: Before ordering the service, please request a "liquid biopsy shipping box" from USZ and use **only** the blood tubes provided for sampling. Please follow the instructions in the "FoundationOne®Liquid CDx Sample Guide" and attach the completed order form to the shipping box. USZ covers the shipping costs of the samples within Switzerland.

The first blood analysis of a patient to determine the genomic alterations present in the blood is a FoundationOne® Liquid CDx test. For all subsequent tests, a USZ Liquid Monitoring Report (see 1B, next page) is created. At the request of the physician, a FoundationOne® Liquid CDx test can be performed again.

-  **FOUNDATIONONE®HEME Test for malignant haematological disease and sarcoma**

Blood or bone marrow aspirate (for malignant haematological diseases): Before ordering the service, please request a shipping box from the USZ and use **only** the blood tubes contained for sampling. Please follow the instructions in the "FoundationOne®Heme Sample Guide" and attach the completed order form to the shipping box. USZ covers the shipping costs of the samples within Switzerland.

FFPE sample (for sarcomas): Please send the completed order form by email to fmi.pathologie@usz.ch. USZ contacts the assigned pathologist to request the biopsy (FFPE sample).

For questions please contact the Customer Care Service:

University Hospital Zurich, Department of Pathology and Molecular Pathology
Tel.: +41 (43) 253 1818 E-Mail: fmi.pathologie@usz.ch

Questions and information regarding the test results should be addressed directly by the patient to the attending physician.

Please send material submissions to:

University Hospital Zurich, Department of Pathology and Molecular Pathology
Wagistrasse 2, CH-8952 Schlieren, Switzerland

1B Additional services provided by the USZ

The USZ Liquid Monitoring (USZ LM) test is used to monitor the tumor fraction and genomic alterations of circulating tumor DNA (ctDNA) in the blood. The test analyzes the same genomic segments as the FoundationOne®Liquid CDx test. The USZ LM test is offered as a research use only (RUO) test by the University Hospital of Zurich.

Please select the service you would like to order:

- USZ Liquid Monitoring** Test for solid tumor using a blood sample (Research Use Only, RUO)

Peripheral whole blood: Before ordering the service, please request a "liquid biopsy shipping box" from USZ and use **only** the blood tubes provided for sampling. Please follow the instructions in the "FoundationOne®Liquid CDx Sample Guide" and attach the completed order form to the shipping box. USZ covers the shipping costs of the samples within Switzerland.

The USZ LM gene panel covers the same genes as the FoundationOne® Liquid CDx test. The first liquid biopsy analysis of a patient to determine the genomic alterations present in the blood **must be** a FoundationOne® Liquid CDx test; all subsequent liquid biopsy tests will be performed as USZ Liquid Monitoring test. At the physician's request, a FoundationOne® Liquid CDx test can be performed again.

- Registration of the patient for consultation at the Tumour Boards of the USZ**

Molecular Tumour Board for solid tumours and sarcomas:	every Thursday	14.00–15.00
Tumour Board for malignant haematological diseases:	every Wednesday	16.30–17.30

If you wish, we can have a discussion about the patient at the Molecular Tumour Board. You are welcome to attend in person or by telephone. Please send us the relevant clinical documents for the Tumour Board. We will get in touch with you in advance to arrange an exact date.

- Additional IHC/FISH testing on tumour tissue**

Please indicate whether you would like to have further immunohistochemical (e.g. PD-1/PD-L1) or FISH testing performed on the FFPE biopsy.

2 Requesting Physician	
Surname, first name	
Hospital/Practice/Clinic	
Address	
Email (HIN secured)	
<p>I confirm with my order that I am explicitly requesting potential off-label information specific to the detected genomic alterations as part of the FoundationOne® test. Genetic testing may reveal additional information about hereditary characteristics. In accordance with the <i>Bundesgesetz / Verordnung über genetische Untersuchungen beim Menschen (GUMG / GUMV)</i>, the person concerned must be informed in an understandable manner. For data analysis and generation of the report, we send the data to FMI in Boston, USA. By placing this order, the client confirms that they have informed the patient accordingly and confirmed this with their signature. In other countries, the ordering physician must inform the patient in accordance with local laws.</p> <p>Date: _____ Signature of the attending physician: _____</p> <p>An additional copy of the FoundationOne® report will be sent to the following physician:</p> <p>Surname, first name: _____</p> <p>Email (HIN secured): _____</p>	

3 Referring Pathology, if not from the University Hospital Zurich (FFPE sample only)	
Surname, first name of the primary results pathologist	
Hospital/Institute	
Address	
Email (HIN secured)	

4 Patient Data and Invoice Details			
Surname, first name			
Date of birth		Gender	male <input type="checkbox"/> female <input type="checkbox"/>
Address (Street, Place)			
Invoice sent to:	<input type="checkbox"/> Health insurance: _____ <input type="checkbox"/> Patient <input type="checkbox"/> Referring physician <input type="checkbox"/> Others: _____		

5 Details of the Specimen	
Diagnosis (mandatory)	Specimen No. (only for FFPE samples)
Location of specimen (organ)	Date of specimen collection (mandatory for blood samples)
Has the patient received a transplant? No <input type="checkbox"/> Yes <input type="checkbox"/> Please specify _____	
For blood samples only: Has the patient received a blood transfusion in the last 6 weeks? No <input type="checkbox"/> Yes <input type="checkbox"/> Please specify date _____	
Comments/Questions: _____ _____	

6 Terms of Contract and Information

Please read the following instructions carefully before ordering our product:

The FoundationOne®CDx, FoundationOne®Liquid CDx and FoundationOne®Heme tests (referred to below as FoundationOne® tests): FMI has developed the FoundationOne® test and set its performance characteristics. The FoundationOne® tests can be used for clinical purposes and are not intended solely for research purposes. The clinical reference laboratory at FMI has been certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA) as qualified to perform highly complex clinical investigations. The FoundationOne®CDx test and the FoundationOne®Liquid CDx test have been approved by the United States Food and Drug Administration (FDA).

Diagnostic significance: the FoundationOne® tests detect changes in cancer-associated genes or gene components (biomarkers). In some cases, where clinically relevant, the report also mentions selected biomarkers that have tested negative.

Qualified presentation of results (equivocal and subclonal): when a change is referred to as “amplification – equivocal”, it means that the FoundationOne® tests provide some indication, but no clear evidence, that the copy number of a gene exceeds the threshold for identifying amplification. The limits used in FoundationOne® tests to identify the copy number amplification depend on the median copy number and tumor content. The limit used in the FoundationOne®CDx test to identify copy number amplification is four (4) for ERBB2 and six (6) for all other genes. For the FoundationOne®Liquid CDx test, the minimum copy number (diploid sample, at least 30% tumor content) is five (5) for ERBB2 and six (6) for all other genes. If the tumor content is < 30%, amplifications can be added manually under certain conditions (data quality, ratio). The limit used in the FoundationOne®Heme test to identify copy number amplification is five (5) for ERBB2 and six (6) for all other genes. Conversely, a change known as “loss – equivocal” means that the FoundationOne® test provides some evidence, but no clear proof, of homozygous deletion of the gene in question. A change classed as “subclonal” was measured using the FoundationOne® CDx and Heme tests analytical methods as a change present in <10% of the tumour DNA examined.

Additional information: additional information (e.g. short nucleotide variants (SNVs), the sequencing depth at the modified site, allele frequency, number of DNA copies) is generated during the preparation of each report and can be provided in a table upon request by the oncologist ordering the test. These data are intended for scientific purposes only in pseudonymous form and may not be used for diagnostic interpretations beyond the FoundationOne®CDx, FoundationOne®Liquid CDx or FoundationOne®Heme report. This additional use can be objected to at any time. Neither USZ nor FMI bear liability for such uses.

The report contains analyses of peer-reviewed studies and other publicly available information compiled by FMI; this compilation and the information contained therein may represent molecular change (or lack of change) in the context of one or more drugs with potential clinical benefit (or lack of potential clinical benefit), including drug candidates subject to clinical research. The report contains information on drugs approved for the patient's tumour indication as well as information on drugs approved for other indications.

NOTE: a change in a biomarker does not necessarily indicate pharmacological efficacy (or lack thereof) of a drug or therapeutic regimen; no change in a biomarker does not necessarily indicate a lack of pharmacological efficacy (or presence thereof) of a drug or therapeutic regimen.

Changes and drug substances are not listed according to any rank or weighting: in the report, neither changes to the relevant biomarkers nor active substances associated with a potential clinical benefit (or lack thereof) are sorted or weighted according to possible or predicted efficacy.

Clinical benefit is not guaranteed: the report makes no promises and gives no guarantee that a particular drug will be effective in treating the disease in a patient or that a substance with no potential clinical benefit will actually have no clinical benefit.

Reimbursement is not guaranteed: USZ, FMI, and Roche make no promises and give no guarantee that a healthcare provider, health insurance company or third party, whether private or public, will reimburse the patient for the costs of the FoundationOne® test.

Therapeutic decisions are the responsibility of the physician: the drugs mentioned in the report may not be suitable for certain patients. The selection of one, all or none of the medicinal products with a potential clinical benefit (or lack thereof) is entirely at the discretion and responsibility of the attending physician. In addition, the information in this report must be considered in conjunction with all other relevant information relating to the individual patient before the attending physician recommends a particular treatment. Information on treatment recommendations of the FoundationOne®CDx test refers to approval of drugs by Swissmedic. Information on treatment recommendations of the FoundationOne®Liquid CDx test and the FoundationOne®Heme test refers to the approval of drugs by the FDA in the US. It is the responsibility of the attending physician to select an appropriate therapy option based on locally approved therapies and according to the local label of the drug.

Decisions on a patient's care and treatment must be based on the independent medical assessment of the attending physician, taking into account all available information about the patient's condition. This information includes, for example, the patient's medical history, family history, physical examinations, data from other diagnostic tests and the patient's preferences, in each case in accordance with the local standard of care. The decision of the attending physician should not be based solely on a single test – such as this service – or the information contained in the report.

Certain sample or variant characteristics can lead to reduced sensitivity. These include: subclonal changes in heterogeneous samples, poor sample quality or samples with homozygous gene losses of <3 exons and deletions and insertions >40 bp, or in repetitive / highly homologous sequences. The FoundationOne® tests are designed to identify variants that play a role in cancer formation and development. This also includes microbial changes in the regions investigated. However, since the tests are based on tumor material or cell-free DNA, a clear distinction between somatic and germ line variants is not possible, which is why in the case of relevant variants a human genetic examination is indicated in all cases. The TP53 Exon 1 (UTR) generally has low coverage, which leads to reduced sensitivity.

Disclaimer: All liability of the USZ, FMI and Roche is excluded to the extent permitted by law.

Applicable law and place of jurisdiction: Swiss law shall apply exclusively to this order. The place of jurisdiction is Zurich.

7 Order and Patient Consent Declaration (optional)

I agree that my attending physician may pass on my patient data and my biological tumour tissue to University Hospital Zurich (USZ), Institute of Pathology and Molecular Pathology, Wagistrasse 2, CH-8952 Schlieren, Switzerland for the purpose of executing and invoicing the treatment order.

The Department of Pathology and Molecular Pathology, USZ, will perform genomic sequencing and forward the sequenced data along with the required patient information listed below (collectively, the "FoundationOne® Order Data") to the FMI located at 400 Summer Street, Boston, MA 02210, USA.

The data concerned are as follows:

- Order-ID
- Genomic sequencing data
- Date of birth
- Gender
- Diagnosis
- Place of sampling
- USZ Pathology sample number
- Date of sample collection
- Transplant received (yes/no), blood transfusion received (yes/no)

FMI has committed itself to the same standards of data security as specified in the Swiss Data Protection Act.

This consent applies only to the request to process the FoundationOne® Order Data to perform the FoundationOne® test and to permit delivery of the report, as described in this Order Form for the purposes of your treatment. Any other uses of your data are governed by the optional consent described in the next section (Section 8).

I have been advised by my oncologist that indications of possible hereditary germline mutations can be detected by the FoundationOne® test.

I have taken note of the terms and conditions and information included in this Order Form and wish to order the FoundationOne® test.

Place, Date:

Patient Surname, first name :

(in block letters)

Patient signature :

(for minors a legal guardian)

In the absence of the patient's signature, the ordering party confirms with the order that the patient has been informed in an understandable manner and has confirmed this with their signature in accordance with the *Bundesgesetz / Verordnung über genetische Untersuchungen beim Menschen* (GUMG / GUMV) and has been informed about the transfer of data to FMI, Boston.

Please send the completed form to the University Hospital Zurich.

Email: fmi.pathologie@usz.ch

Thank you very much for your order.

8 Patient Consent for Further Use of Genomic Data and the Biological Material (optional)

Dear Patient,

You have the choice to allow USZ to share your data (including any data received and/or generated as part of providing the FoundationOne® test, including your FoundationOne® Order Data, additional information and report) with Roche and FMI for research and scientific purposes. We ask for your consent to use, and for FMI and Roche to use, your data to help advance the study of cancer and the improvement and the development of new ways to detect, treat and prevent genetic diseases. If you agree, USZ guarantees that no personal data that could be used to identify you (e.g., name, address or birthday) will be transferred to third parties. Data that are stripped of these identifiers are known as “encoded” or “pseudonymised” data.

Your consent to use your encoded data in this way is voluntary. If you agree, then USZ will share your encoded data (identified only by Order-ID) with, and permit the use by, Roche and FMI for activities intended to improve patient outcomes and medical research, which may include sharing such data with further academic and collaboration partners. Your encoded data will not be used for any other purposes. For clarity, your encoded data may be further processed so that all the identifying details have either been rendered unrecognisable or deleted so that it is no longer possible to trace them back to your person, whether directly or indirectly. When processed in this way, the data are now “anonymised” and no longer encoded.

Your genomic data, together with the data of thousands of other patients, helps researchers to get a more complete picture of cancer diseases. Furthermore, your data are important to develop new generations of oncological diagnostics and therapies and to make them available to patients who could benefit from such advances. Since comprehensive research and development projects of this kind cannot be done solely by USZ, we collaborate with diagnostic test manufacturers and the pharmaceutical drug manufacturers to achieve these goals.

We thank you very much for your consideration to permit the use of your encoded genomic data for research and scientific purposes. If you choose not to consent to the use of your encoded data, we respect your decision. In such a case, you and your treatment team will receive the results of your testing, and none of your data will be shared with other third parties.

Use of your encoded data and samples

Genomic data can contribute to internal and external research projects of USZ and your consent allows USZ to share your encoded data with Roche and FMI for research and scientific purposes, as described above.

Protection of your data and samples

The use of your encoded data and samples, as well as their transfer to researchers in Switzerland and abroad are subject to strict regulations. No personally identifiable data are ever transferred outside of USZ.

Data used for other purposes must be encoded (pseudonymised) as swiftly as possible, meaning that all identifying details – such as your name, date of birth, insurance number, etc. – are replaced by a code. Only people with access to the key (a document matching codes and names) can thus associate them with your person. The key will stay always at USZ and can never be shared with collaborators outside of USZ.

The samples (biological material) are stored securely in a biobank. A biobank is a systematic collection of samples and associable data stored under clearly stipulated conditions. Samples and genetic data may only be passed on to researchers if they are encoded or anonymised.

Research results

The findings from research projects involving data and samples usually contribute to improved medical care only for future patients. If, however, certain results should prove relevant for your own health, you will be informed of this as far as possible (this is not feasible in research with anonymised samples). However, such situations occur very rarely. By volunteering your data and samples for research purposes, you waive the right to any share in possible profits that could arise from the results. Neither you nor your health insurer will incur any costs resulting from the research projects.

Your rights

Your consent is voluntary and generally has no expiration. However, you are entitled at any time to withdraw your consent without stating the reasons (revocation). To do so, please contact your physician or the laboratory of Molecular Tumour Profiling in the Department of Pathology and Molecular Pathology at USZ. In the event of revocation, your data and samples will no longer be made available for research projects. Deciding for or against granting your consent and withdrawing your consent has no effect on your medical care.

Should you have any other questions about the further use of your data and samples for research and other purposes, please contact Martin Zoche, email: martin.zoche@usz.ch, phone +41 79 788 9157.

Declaration of Consent for Further Use of Genomic Data and the Biological Material

I consent to the further use and sharing of my encoded (pseudonymised) health-related data (including genomic data) and biological material, as described above, by Roche and FMI for research and scientific purposes. If I do not provide consent, or if I withdraw my consent at a later time, such withdrawal will not affect the provision of the requested FoundationOne® test.

I understand

- that my decision is voluntary and has no effect on my treatment.
- that my personal data are protected as described above in Section 8.
- that I may be recontacted in case of individually significant findings, if any.
- that my decision is not limited in time.
- the explanations about the further use of my encoded data and samples for scientific and research purposes that are detailed above in Section 8.
- that I may withdraw my consent at any time without having to justify my decision, however this withdrawal does not affect the lawfulness of any processing based on my consent before its withdrawal.
- that if I withdraw my consent, Roche and FMI may continue to use any data and/or samples already fully anonymised before my withdrawal.

Yes

No

Place, Date: _____

Patient Surname, first name:
(in block letters) _____

Patient signature: _____

(for minors or without legal capacity:
a signature of an authorised representative)