

## ONCOLOGY REQUEST FORM

### SOLID TUMORS

Please Post label(s) and/or FILL:

#### PATIENT IDENTIFICATION:

|            |                                                                |
|------------|----------------------------------------------------------------|
| *Name:     | *Gender: F <input type="checkbox"/> M <input type="checkbox"/> |
| *D.B.: / / | Identification number:                                         |
| Address:   |                                                                |
| E-mail:    | Telephone:                                                     |

REFERING DOCTOR

|                                                                                                         |                                                          |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| *Name:                                                                                                  | *ID number:                                              |
| *Hospital / Service:                                                                                    | Telephone:                                               |
| Do you authorize the report to sent by e-mail? Yes <input type="checkbox"/> No <input type="checkbox"/> |                                                          |
| If yes, please write your institutional email address :                                                 |                                                          |
| *Informed Consent (to be filled by the referring doctor):                                               |                                                          |
| I hereby declare that the patient informed consent for diagnosis was obtained.                          | Yes <input type="checkbox"/> No <input type="checkbox"/> |
| I hereby declare that the patient informed consent for investigation was obtained.                      | Yes <input type="checkbox"/> No <input type="checkbox"/> |

\*Mandatory

\*CLINICAL DATA

|                                                                             |                                                                                                   |
|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| Diagnosis:                                                                  | Initial Diagnosis <input type="checkbox"/> Relapse / Progressive Disease <input type="checkbox"/> |
| Therapy: Yes <input type="checkbox"/> No <input type="checkbox"/> Describe: |                                                                                                   |

SPECIMEN DETAILS

|                                                                                                                                                                                      |                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| Blood – Clection Date:                                                                                                                                                               | Collection Time:            |
| FFPE – *Exam n.º:                                                                                                                                                                    | **Resection / Biopsy Date : |
| Surgical resection <input type="checkbox"/> Biopsy <input type="checkbox"/> Fine Needle Biopsy <input type="checkbox"/> Cell-block <input type="checkbox"/>                          | Other:                      |
| Paraffin Block <input type="checkbox"/> Paraffin Sections <input type="checkbox"/> Macrodissection <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> | *% Células Neoplásicas:     |
| Any other relevant information (main contaminants, blood, necrosis or other):                                                                                                        |                             |
| * Pathologist:                                                                                                                                                                       | ID number:                  |
| *E-mail/Telephone:                                                                                                                                                                   | Hospital / Service:         |

SNS code in blue

#### NGS Panels

##### ☐ 34900 Biomarkers Panel for Solid Tumours

**Hotspots - 35 genes:** AKT1; ALK; AR; BRAF; CDK4; CTNNB1; DDR2; EGFR; ERBB2 (HER2); ERBB3 (HER3); ERBB4 (HER4); ESR1; FGFR2; FGFR3; GNA11; GNAQ; HRAS; IDH1; IDH2; JAK1; JAK2; JAK3; KIT; KRAS; MAP2K1 (MEK1); MAP2K2 (MEK2); MET; MTOR; NRAS; PDGFRA; PIK3CA; RAF1; RET; ROS1; SMO  
**Fusions (23 genes):** ABL1; AKT3; ALK; AXL; BRAF; EGFR; ERBB2 (HER2); ERG; ETV1; ETV4; ETV5; FGFR1; FGFR2; FGFR3; MET; NTRK1; NTRK2; NTRK3; PDGFRA; PPARG; RAF1; RET; ROS1  
**CNVs (19 genes):** ALK; AR; BRAF; CCND1; CDK4; CDK6; EGFR; ERBB2 (HER2); FGFR1; FGFR2; FGFR3; FGFR4; KIT; KRAS; MET; MYC; MYCN; PDGFRA; PIK3CA

##### ☐ 34900 Bladder Panel

**Hotspots:** AKT1; ALK; BRAF; DDR2; EGFR; FGFR2; FGFR3; ERBB2 (HER2); ERBB3 (HER3); ERBB4 (HER4); KRAS; MAP2K1; MET; NRAS; PIK3CA; RET; ROS1  
**Fusions:** ALK; FGFR1; FGFR2; FGFR3; MET (skipping exon 14); NTRK1; NTRK2; NTRK3; ROS1; RET  
**CNVs:** EGFR; FGFR1; FGFR2; ERBB2 (HER2); KRAS; MET

##### ☐ 34900 BRCA Panel– Pack 1

**Genes:** BRCA1 and BRCA2  
 insAlu (blood) + NGS (blood or FFPE) + MLPA (blood) \*

##### ☐ 34900 BRCA – Pack 2

**Genes:** BRCA1 and BRCA2  
 insAlu (blood) + NGS (blood or FFPE) \*

##### ☐ 34900 CCR Panel

**Hotspots:** BRAF; EGFR; ERBB2 (HER2); ERBB3 (HER3); KRAS; NRAS; PIK3CA  
**Fusions:** NTRK1; NTRK2; NTRK3  
**CNVs:** ERBB2 (HER2); MET

##### ☐ 34900 Breast Panel

**Hotspots:** AKT1; ERBB2 (HER2); ESR1; PIK3CA  
**Fusions:** FGFR1; NTRK1; NTRK2; NTRK3  
**CNVs:** ERBB2 (HER2); FGFR1; FGFR2

##### ☐ 34900 Lung Panel

**Hotspots:** AKT1; ALK; BRAF; DDR2; EGFR; FGFR2; FGFR3; ERBB2 (HER2); ERBB3 (HER3); ERBB4 (HER4); KRAS; MAP2K1; MET; NRAS; PIK3CA; RET; ROS1  
**Fusions:** ALK; FGFR1; FGFR2; FGFR3; MET (skipping exon 14); NTRK1; NTRK2; NTRK3; ROS1; RET  
**CNVs:** EGFR; FGFR1; FGFR2; ERBB2 (HER2); KRAS; MET

##### ☐ 34900 Thyroid Panel

**Hotspots:** BRAF; HRAS; KRAS; NRAS; PIK3CA; RET  
**Fusions:** ALK; BRAF; NTRK1; NTRK2; NTRK3; PPARG; RET

\*For the somatic study request we recommend sending both blood and FFPE samplesangue juntamente com o pedido. It includes testing for mutation origin (germline or somatic).

## Tests by Cancer Type

### Colorectal Cancer

- ☐ 34900 **KRAS**, with **NRAS** and **BRAF** (V600) reflex testing
- ☐ 34650 **MSI** - Microsatellite instability (1)
- ☐ 34900 **MLH1** promoter hypermethylation

### Endometrial Cancer

- ☐ 34900 **POLE** (exons 9, 11, 13, 14)
- ☐ 34650 **MSI** - Microsatellite instability (1)
- ☐ 34900 **MLH1** promoter hypermethylation
- ☐ 34900 **TP53**

### Melanoma

- ☐ 34900 **Panel: BRAF** (V600); **KIT** (exon 11); **NRAS** (codons 12, 13, 61)

### GIST

- ☐ 34900 **Panel: KIT** (exons 9, 11, 13, 14, 17); **PDGFRA** (exons 12, 14, 18)

### Brain Cancer

- ☐ 36314 **BRAF** (V600)
- ☐ 34900 **H3F3A** (K27M and G34R/V)
- ☐ 34900 **HIST1H3B** (K27M)
- ☐ 34900 **IDH1** (exon 4)
- ☐ 34900 **IDH2** (exon 4)
- ☐ 34900 **TERT** promoter mutations (C228T and C250T)
- ☐ 36312 **MGMT** Promotor methylation
- ☐ 2x31710 **1p36 e 19q13** - co-deletion (FISH)
- ☐ 31710 **RELA** (11q13) - rearrangement (FISH)
- ☐ 31710 **EGFR** (7p12) - amplification (FISH)
- ☐ 31710 **PTEN** (10q23.31) - deletion (FISH)
- ☐ 31710 **BRAF** (7q34) - rearrangement (**BRAF::KIAA1549** and variants) (FISH)
- ☐ 31710 **CDKN2A** (9p21) - deletion (FISH)

## Individual Tests

### Molecular Genetics

- ☐ 36314 **BRAF** (V600)
- ☐ 34900 **H3F3A** (K27M and G34R/V)
- ☐ 34900 **HIST1H3B** (K27M)
- ☐ 34900 **IDH1** (exon 4)
- ☐ 34900 **IDH2** (exon 4)
- ☐ 5x34847 **KIT** (exons 9, 11, 13, 14, 17)
- ☐ 34650 **MSI** - Microsatellite instability (1)
- ☐ 34900 **MLH1** promoter hypermethylation
- ☐ 36312 **MGMT** Promotor methylation
- ☐ 34900 **NRAS** (codons 12, 13, 61)
- ☐ 34900 **PDGFRA** (exons 12, 14, 18)
- ☐ 34900 **POLE** (exons 9, 11, 13, 14)
- ☐ 34900 **TERT** promoter mutations (C228T and C250T)
- ☐ 34900 **TP53**

### Molecular Cytogenetics (FISH)

- ☐ 2x 31710 **1p36 e 19q13** - co-deletion
- ☐ 31710 **ALK** (2p23) - rearrangement
- ☐ 31710 **BRAF** (7q34) - rearrangement (**BRAF::KIAA1549** and variants)
- ☐ 31710 **CDKN2A** (9p21) - deletion
- ☐ 31710 **EGFR** (7p12) - amplification
- ☐ 31710 **ERBB2 (HER2)** - amplification
- ☐ 2x31710 **FGFR1** (8p12) and **FGFR2** (10q26) - amplification
- ☐ 31710 **PTEN** (10q23.31) - deletion
- ☐ 31710 **RELA** (11q13) - rearrangement
- ☐ 31710 **ROS1** (6q22) - rearrangement

☐ 34900 **Others:** \_\_\_\_\_

### Referring doctor signature:

Date: / /

### Specimen and shipment information:

- **Sample Rejection Conditions:** Decalcified specimens. Specimens without tumorous tissue.
- We ask a pathology report where possible, for correctly interpret test results.
- When sending sections macrodissection is recommended if tumour cell percentage is lower than 20-30%.
- To perform a correct CNV analysis, the percentage of neoplastic cells in the sample should be higher than a 50%.

| Sample type                   | Volume / Concentration / FFPE conditions                                                                                                                                         | Stability and transport conditions                                                                                                         |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Peripheral blood in EDTA tube | 3 to 6 mL                                                                                                                                                                        | Up to 48h / Room temperature<br>Up to 72h / Refrigerated                                                                                   |
| DNA                           | >5µg with concentration >20ng/µL                                                                                                                                                 | Up to 48h / Room temperature<br>> 48h / Refrigerated                                                                                       |
| FFPE                          | <div> <div> <div>NGS</div> <div>Other Molecular tests</div> <div>FISH</div> </div> <div> <div>Paraffin block+ 1 H&amp;E slide with tumour tissue defined (1)</div> </div> </div> | <div> <div>6 sections of 20 µm</div> <div>10 sections of 10 µm (1)</div> <div>3 sections of 50 µm</div> </div> <div>Room temperature</div> |

(1) – For Microsatellite Instability Testing send Tumor AND Normal epithelial tissue

### Informed Consent (mandatory - to be filled by the patient )

I hereby declare that I have read the Privacy Policy of GenoMed® - Diagnósticos de Medicina Molecular, S.A., available at <https://genomed.pt/politica-de-privacidade-e-de-cookies/> and I give my consent to the processing of the personal data.

☐ Agree ☐ Not agree

Hereby I \_\_\_\_\_ [name], \_\_\_\_/\_\_\_\_/\_\_\_\_ [date of birth], give my consent that my / my child's biological sample will be examined for genetic changes (mutations) in the specified gene(s), related to the diseases / clinical features described above. Herewith I declare that I have been informed about the chances and limitations of the requested testing procedure. I was informed in detail about the consequences resulting from the test results. I agree that the sample may be stored in order to allow repetition of the tests or further related tests in the future. All data about me / my child are subject to medical confidentiality. They can be disclosed to family members or their physicians only with my permission, but not to third parties. I am entitled to revoke this consent at any time.

☐ Agree ☐ Not agree

I agree that my / my child's tests results and/or clinical data may be used in scientific publications in anonymized form in case of approval of the Ethics Committee .

☐ Agree ☐ Not agree

(According to the Direction of General Health updated standard 015/2013)

### Patient's Signature:

Date: / /