HEMATOLOGY REQUISITION FORM

GENOMED
Está nos genes.

Identification (Mandatory):	***GenoMed use only***
Name:	Label
Gender: F ☐ M ☐	Referring doctor:
Date of birth:	Hospital/Service:
Identification number:	Telephone or email:

Do you authorize the report to be sent by email? Yes ☐ No ☐ If yes, please indicate the **institutional e-mail adress**: _____

Clinical Data and Diagnosis:

Leucocyte count .....
Blast infiltration (%).....

Clinical Situation: Inicial Diagnosis ☐ Relapse ☐ Monitoring ☐ **Therapy:** No ☐ Yes ☐ Which? .....

Bone Marrow Transplant (BMT): No ☐ Yes ☐ Date: **Recipient**: Pre-BMT ☐ Post-BMT ☐

Donor: Gender F ☐ M ☐ Relative ☐ ..... Panel ☐ .....

Sample: Peripheral Blood ☐ Bone Marrow ☐ Lymph Node ☐ Other ☐ ..... **Collection:** Date: ...../...../..... Time.....

TEST DIRECTORY:

COLLECTION IN HEPARIN TUBE

CONVENTIONAL CYTOGENETIC

34100	Karyotype (cell culture + analysis)	☐
34025	Cell Culture without analysis	☐

COLLECTION IN HEPARIN OR EDTA TUBE

34900	Processing for FISH studies	☐

FISH:
*Paraffin embedded tissue sections (*3x50 µm*): 31710

Chronic Lymphocytic Leukemia

5x34156*	**Panel 1** - 11q-, 17p-, +12, IgH, 13q-	☐
7x34156*	**Panel 2** - 11q-, 17p-, +12, IgH, 13q- (D13S319 e D13S25), 6q-	☐

Myelodysplastic Syndrome

3x34156	**Panel 1** - 5q-, 7q-, 20q-	☐
5x34156	**Panel 2** - 5q-, 7q-, 20q-, +8, 17p-	☐
36301	**Panel 3** - 5q- (5q31 and 5q33-34), 7q-, 20q-	☐

Multiple Myeloma

36229	**Panel 1** - clg-FISH: 13q-, 17p-, t(4;14), t(11;14), t(14;16)	☐
7x34156	**Panel 2** - clg-FISH: 13q-, 17p-, t(4;14), t(11;14), t(14;16), 1q+, aneuploidias 5, 9 e 15	☐
4x34156	**Panel 3** - clg-FISH: 17p-, t(4;14), t(14;16), 1q+	☐

Diffuse Large Cell Lymphoma

3x34156*	t(14;18), *MYC* and *BCL6*	☐

Follicular Lymphoma

34156*	t(14;18)	☐

Burkitt Lymphoma

34156*	t(8;14)	☐

Malt Lymphoma

2x34156*	t(11;18) and t(14;18) *IgH/Malt1*	☐

Mantle Cell Lymphoma

34156*	t(11;14)	☐

Neoplasms with eosinophilia

34156	*PDGFR β*	☐
34156	*FGFR1*	☐

Acute Myeloid Leukemia (AML)

4x34156	t(15;17), t(8;21), *MLL*, inv(16)	☐

Chronic Myeloid Leukemia (CML)

34156	t(9;22)	☐

COLLECTION IN EDTA TUBE- MOLECULAR

34201	DNA Extraction	☐
34205	RNA Extraction	☐
34201 +34205	Processing for Molecular Biology Tests	☐
34425	**Post-transplant Chimerism Analysis**	☐

Fusion gene transcripts

34412	t(8;21) *AML1-ETO*	☐
34409	t(15;17) *PML-RARA*	☐
34584	inv(16) *CBFB-MYH11*	☐
34209	t(4;11) *MLL-AF4*	☐
34403	t(9;22) *BCR-ABL*	☐
34418	t(1;19) *E2A-PBX1*	☐
34210	del(1) *SIL-TAL1*	☐
34622	t(12;21) *TEL-AML1*	☐
36300	del(4)(q12;q12) *FIP1L1-PDGFR* α	☐

Quantification of fusion gene transcripts

36219	t(9;22) *BCR-ABL:* p190	☐
36219	t(9;22) *BCR-ABL:* p210	☐

Mutation Assays

36220	*BCR-ABL* Resistant Mutation Assay	☐
36214	*FLT3* Mutation Assay(ITD e TDK)	☐
36215	*NPM1* Mutation Assay	☐
34900	*CEBPA* Mutation Assay	☐
34900	*IDH1* Mutation Assay – exon 4	☐
34900	*IDH2* Mutation Assay – exon 4	☐
34847	*c-Kit* D816V Mutation Assay	☐
34900	*ASXL1* Mutation Assay – exon 12	☐
36250	*JAK2* V617F Mutation Assay	☐
34900	*CALR* Mutation Assay - exon 9	☐
36245	*MPL* W515L/K Mutation Assay	☐
36251	*JAK2* Mutation Assay- exon 12	☐
36168	Mutational Status of IGHv genes	☐
34900	*TP53* Mutation Assay	☐
34900	*MYD88* L265P Mutation Assay	☐
34900	*CXCR4* (c-terminal) Mutation Assay	☐
36314	*BRAF* V600E Mutation Assay	☐
34900	*PTPN11* Mutation Assay (3, 8, 13)	☐

Lymphomas – Fusion gene

34610	t(14;18) *BCL2-IgH*	☐
34610	t(11;14) *BCL1-IgH*	☐

Clonality Assays

36166	B Clonality Assay – IgH	☐
36166	B Clonality Assay – IgK	☐
36167	T Clonality Assay - TCRB	☐
36167	T Clonality Assay - TCRG	☐

COLLECTION IN EDTA TUBE- MOLECULAR BIOLOGY

NGS – Myeloid Panel:

34900	*ABL1, ASXL1, BRAF, CALR, CBL, CEBPA, CSF3R, DNMT3A, ETV6, EZH2, FLT3, HRAS, IDH1, IDH2, JAK2, KIT, KRAS, MPL, NPM1, NRAS, PTPN11, RUNX1, SETBP1, SF3B1, SRSF2, TET2, TP53, U2AF1, WT1, ZRSR2*	☐

NGS – Specific Panels:

Acute Myeloid Leukemia (AML)

34900	*ASXL1, BRAF, CEBPA, DNMT3A, EZH2, FLT3, IDH1, IDH2, KIT, KRAS, NPM1, NRAS, RUNX1, SRSF2, TET2, TP53, U2AF1, WT1*	☐

Myelodysplastic Syndrome (MDS)

34900	**Panel 1** - *ASXL1, BRAF, CBL, CEBPA, CSF3R, DNMT3A, EZH2, FLT3, HRAS, IDH1, IDH2, KRAS, MPL, NPM1, NRAS, RUNX1, SF3B1, SRSF2, TET2, TP53, U2AF1, WT1, ZRSR2*	☐
34900	**Panel 2 –** *ASXL1, ETV6, RUNX1, SF3B1, TP53*	☐

Myeloproliferative Neoplasms (MPNs)

34900	**Panel 1** - *ASXL1, EZH2, IDH1, IDH2, JAK2, SRSF2, TP53, U2AF1*	☐
34900	**Panel 2** - *ASXL1, CALR, EZH2, JAK2, MPL, SRSF2*	☐

Juvenile Myelomonocytic Leukemia (JMML)

34900	*CBL, KRAS, NRAS, PTPN11, RUNX1, SETBP1, ZRSR2*	☐

Chronic Lymphocytic Leukemia (CLL)

34900	*TP53*	☐

Other Panels

34900	.....	☐

Other Studies

34900	.....	☐

Signature of the Referring Doctor: **Date:**..... /...../.....

CONTACT PERSONS: Dra(s) Sónia Matos/Sónia Santos (smatos@medicina.ulisboa.pt/soniasantos@medicina.ulisboa.pt) Ext. 47301 / 47310 / 47322

GenoMed, Diagnósticos de Medicina Molecular SA
Instituto de Medicina Molecular
Faculdade de Medicina da Universidade de Lisboa

Edifício Egas Moniz
Av. Prof. Egas Moniz
1649-028 LISBOA
PORTUGAL

Tel: (351) 21 799 95 01
Fax: (351) 21 799 95 00
E-mail: genomed@genomed.pt
www.genomed.pt

HEMATOLOGY REQUISITION FORM

GENOMED
Está nos genes.

COLLECTION IN HEPARIN OR EDTA TUBE

FISH: *Paraffin embedded tissue sections (*3x50 µm*): 31710

34156*	t(14q32) *IgH*	☐
34156*	t(2p23) *ALK*	☐
34156*	t(8q24) *MYC*	☐
34156*	t(3q27) *BCL6*	☐
34156*	t (8;14)(q24;q32) *IgH/MYC*	☐
34156*	t (11;14)(q13;q32)*IgH/CCND1*	☐
34156*	t(14;18)(q32;q21) *IgH/BCL2*	☐
34156*	t(14;18)(q32;q21) *IgH/Malt1*	☐
34156*	t(11;18)(q21;q21) *API2/Malt1*	☐
34156	t(14;16)(q32;q23) *IgH/MAF*	☐
34156	t(4;14)(p16;q32) *IgH/FGFR3*	☐
34156	Aneuploidy of 5, 9 and 15	☐
34156	1q+	☐
34156*	17p- [del(17p13) *TP53*]	☐
34156*	6q- [del(6q21)]	☐
34156*	cenX/cenY	☐
34156*	t(17q12-q21) *RARA*	☐
34156	t(15;17)(q22;q21) *PML/RARA*	☐
34156	inv(16)/t(16;16))(p13;q22)	☐
34156	t(9;22)(q34;q11.2) *BCR/ABL*	☐
34156	t(8;21)(q22;q22) *ETO/AML1*	☐
34156	t(11q23) *MLL*	☐
34156	*PDGFR β*	☐
34156	*FGFR1*	☐
34156*	11q- [del(11q22.3) *ATM*]	☐
34156*	13q- [del(13q14.3) D13S319]	☐
34156*	13q- [del(13q14.3) D13S25]	☐
34156	-5 ou 5q- [del(5q31)]	☐
34156	-5 ou 5q- [del(5q33-34)]	☐
34156	-7 ou 7q- [del(7q31)]	☐
34156	20q- [del(20q12)]	☐
34156	cen 8	☐
34156*	+12 [cen12]	☐
	……	☐
	……	☐

COLLECTION IN EDTA TUBE

OTHER TESTS

Hematology

34301	Antithrombin III deficiency: *SERPINC1* gene	☐
34497	Thrombophilias panel: Factor II, Factor V, *MTHFR*, and *PAI1*	☐
34370	Factor II deficiency (Prothrombin): G20210A	☐
34361	Factor V deficiency: Leiden mutation	☐
34367	Hyperhomocysteinemia: *MTHFR* gene (C677T and A1298C)	☐
34364	Plasminogen activator inhibitor 1 (PAI-1) (4G mutation)	☐
34310	Factor VII Deficiency: *F7* gene - index case	☐
34311	Factor VII Deficiency: *F7* gene - familial case	☐
34900	Factor XII deficiency: *F12* gene (C46T mutation)	☐
34900	Factor XIII deficiency: *F13A1* gene	☐
34900	Factor XIII deficiency: *F13B* gene	☐
34305	Protein S deficiency: *PROS1* gene - index case	☐
34306	Protein S deficiency: *PROS1* gene - familial case	☐
34900	Osler-Weber-Rendu disease: *ACVRL1* gene	☐
34900	Osler-Weber-Rendu disease: *ENG* gene	☐
34900	Osler-Weber-Rendu disease: *ACVRL1* and *ENG* genes (MLPA)	☐
34900	von Willebrand disease type 1, 2, 3: *VWF* gene	☐
34900	von Willebrand disease type 2A, 2B, or 2M: *VWF* gene (exon 28)	☐
34325	Sickle-cell anemia: *HBB* gene	☐
34900	Glanzmann thrombasthenia: *ITGA2B* gene	☐
34900	Glanzmann Thrombasthenia: *ITGB3* gene	☐
34900	Glanzmann thrombasthenia: *ITGA2B* and *ITGB3* genes	☐
34900	Blackfan-Diamond anemia – panel of 20 genes by NGS: *GATA1, RPL5, RPL11, RPL15, RPL26, RPL27, RPL31, RPL35A, RPL36, RPS7, RPS10, RPS15, RPS19, RPS24, RPS26, RPS27, RPS27A, RPS28, RPS29, TSR2*	☐
34900	Fanconi anemia – panel of 3 genes by NGS: *FANCA, FANCC, FANCG*	☐
34900	Hemophagocytic syndrome - panel of 7 genes by NGS: *DCLRE1C, PRF1, STX11, STXBP2, RAG1, RAG2, UNC13D*	☐
34900	Osler-Weber-Rendu disease – panel of 5 genes by NGS: *ACVRL1, ENG, GDF2, RASA1, SMAD4*	☐
34900	Glanzmann Thrombasthenia – panel of 2 genes by NGS: *ITGA2B* e *ITGB3*	☐

Other Studies

34900	……	☐

Informed Consent (to be filled by the patient):

Hereby I……..…..[name], ……[born], give my consent that my/my child´s blood/ DNA sample will be examined for genetic changes (mutations) in the gene(s) specified below 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 doctors only with my permission, but not to third parties. I'm entitled to revoke this consent at any time. I agree that my / my child´s tests results/ clinical data may be used in scientific publications in anonymized form in case of approval of the Ethics Committee.

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

Patient´s Signature: ..... **Place and Date:** ……., ……/……/…….

Informed Consent (to be filled by the referring doctor):

Patient Informed consent for diagnosis and/or investigation in attachment	YES ☐	NO ☐
I hereby declare that patient informed consent for diagnosis and/or investigation was obtained	YES ☐	NO ☐

Signature of the Referring doctor: …… **Date**: ……../……../……

CONTACT PERSONS: Dra. Diana Antunes, MD (dianaantunes@medicina.ulisboa.pt) / Dra. Ana Coutinho, PhD (anacoutinho@medicina.ulisboa.pt), Ext.: 47301 / 47308

GenoMed, Diagnósticos de Medicina Molecular SA
Instituto de Medicina Molecular
Faculdade de Medicina da Universidade de Lisboa

Edifício Egas Moniz
Av. Prof. Egas Moniz
1649-028 LISBOA
PORTUGAL

Tel: (351) 21 799 95 01
Fax: (351) 21 799 95 00
E-mail: genomed@genomed.pt
www.genomed.pt