



| ردیف | Test                                                                  | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ID       | روش انجام<br>method | نوع نمونه<br>sample  | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 1    | _(1q25), ABL2<br>rearrangement,<br>BMH, BMSH,<br>PBH, FISH,<br>cancer | ABL Proto-Oncogene 2,<br>Non-Receptor Tyrosine<br>Kinase 2, ARG 2, V-Abl<br>Abelson Murine<br>Leukemia Viral<br>Oncogene Homolog 2, C-<br>Abl Oncogene 2, Non-<br>Receptor Tyrosine<br>Kinase 2, Abelson<br>Tyrosine-Protein Kinase<br>2, Tyrosine-Protein<br>Kinase ABL2, Abelson-<br>Related Gene Protein,<br>Tyrosine-Protein Kinase<br>ARG, EC 2.7.10.2,<br>ABLL, V-Abl Abelson<br>Murine Leukemia Viral<br>Oncogene Homolog 2,<br>(Arg, Abelson-Related<br>Gene), Abelson Murine<br>Leukemia Viral<br>Oncogene Homolog 2,<br>Abelson-Related Gene,<br>EC 2.7.10, ABL2,<br>translocation, t(1;12),<br>acute non lymphocytic<br>leukemia, ANLL,<br>ABL2/ETV6<br>rearrangement | Cyto-Mol | FISH                | BMH,BM<br>SH,<br>PBH | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



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| 2    | _(9p24), JAK2<br>rearrangement,<br>BMH, BMSH,<br>PBH, FISH,<br>cancer | Janus Kinase 2, Tyrosine-<br>Protein Kinase JAK2, EC<br>2.7.10.2, JTK10 2, JAK-<br>2, Janus Kinase 2 (A<br>Protein Tyrosine<br>Kinase), EC 2.7.10,<br>THCYT2, JAK2, (9p24) | Cyto-Mol | FISH                | BMH,BM<br>SH,PBH    | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                  | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 3    | _(9q34), ABL1<br>rearrangement,<br>BMH, BMSH,<br>PBH, FISH,<br>cancer | ABL Proto-Oncogene 1,<br>Non-Receptor Tyrosine<br>Kinase, JTK7, P150, V-<br>Abl Abelson Murine<br>Leukemia Viral<br>Oncogene Homolog 1, C-<br>Abl Oncogene 1,<br>Receptor Tyrosine<br>Kinase, Abelson<br>Tyrosine-Protein Kinase<br>1, Tyrosine-Protein<br>Kinase ABL1, Proto-<br>Oncogene C-Abl, EC<br>2.7.10.2, C-ABL, ABL,<br>Truncated ABL<br>Protooncogene 1<br>Nonreceptor Tyrosine<br>Kinase, Abelson Murine<br>Leukemia Viral<br>Oncogene Homolog 1,<br>ABL Protooncogene 1,<br>Nonreceptor Tyrosine<br>Kinase, C-Abl Oncogene<br>1, Non-Receptor<br>Tyrosine Kinase, Proto-<br>Oncogene Tyrosine-<br>Protein Kinase ABL1,<br>Bcr/C-Abl Oncogene<br>Protein, Tyrosine-Protein<br>Kinase, EC 2.7.10, BCR-<br>ABL, Bcr/Abl,<br>CHDSKM, C-ABL1, V- | Cyto-Mol | FISH                | BMH, BM<br>SH, PBH  | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



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| 4    | _(Xp22), CRLF2<br>rearrangement,<br>BMH, BMSH,<br>PBH, FISH,<br>cancer | cytokine receptor cml2,<br>cytokine receptor like<br>factor 2, TSLPR, thymic<br>stromal derived<br>lymphopoietin<br>receptor,Burkitt,<br>lumphoma, ALL L3,<br>acute, lymphocytic,<br>lymphoblastic, lymphoid,<br>leukemia,acute<br>lymphoblastic leukemia,<br>philadelphia like, ph-like,<br>ALL | Cyto-Mol | FISH                | BMH,BM<br>SH,PBH    | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 5    | _(Xp22), P2RY8<br>rearrangement,<br>BMH, BMSH,<br>PBH, FISH,<br>cancer | purinergic receptor p2y8,<br>p2y purinoreceptor 8,<br>P2Y receptor family<br>member 8,Burkitt,<br>lumphoma, ALL L3,<br>acute, lymphocytic,<br>lymphoblastic, lymphoid,<br>leukemia,acute<br>lymphocytic/lymphoblasti<br>c leukemia, Philadelphia<br>like, ph-like, ALL                           | Cyto-Mol | FISH                | BMH,BM<br>SH,PBH    | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                  | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                            | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 6    | _11q13, CCND1<br>BCL1<br>rearrangement,<br>FFPE, FISH,<br>cancer      | Cyclin D1, B-Cell<br>Lymphoma 1 Protein,<br>G1/S-Specific Cyclin-<br>D1, B-Cell<br>CLL/Lymphoma, BCL-1<br>Oncogene, PRAD1<br>Oncogene, U21B31,<br>PRAD1, BCL1, Cyclin<br>D1 (PRAD1: Parathyroid<br>Adenomatosis 1),<br>Parathyroid<br>Adenomatosis 1, G1/S-<br>Specific Cyclin D1,<br>D11S287E, CCND1,<br>BCL-1, mantle cell<br>lymphoma, multiple<br>myeloma, chronic<br>lymphocytic leukemia | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C<br>24 hours      | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 7    | _11q13,<br>CCND1/BCL1<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer | Cyclin D1, B-Cell<br>Lymphoma 1 Protein,<br>G1/S-Specific Cyclin-<br>D1, B-Cell<br>CLL/Lymphoma, BCL-1<br>Oncogene, PRAD1<br>Oncogene, U21B31,<br>PRAD1, BCL1, mantle<br>cell lymphoma, multiple<br>myeloma, chronic<br>lymphocytic leukemia                                                                                                                                                   | Cyto-Mol | FISH                | BMH, BM<br>SH       | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 8    | _11q22, ATM<br>deletion/loss,<br>BMH, BMSH,<br>FISH, cancer           | T1, ATA, ATC, ATD,<br>ATDC, ATE, TEL1,<br>TELO1, chronic<br>lymphocytic leukemia                                                                                                                                                                                                                                                                                                               | Cyto-Mol | FISH                | BMH, BM<br>SH       | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                                     | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                 | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 9    | _11q23,<br>KMT2A, MLL<br>rearrangement,<br>loss, deletion,<br>BMH, BMSH,<br>FISH, cancer | mixed lineage leukemia,<br>HRX; MLL; MLL1;<br>TRX1; ALL-1; CXXC7;<br>HTRX1; MLL1A;<br>WDSTS, acute, myeloid,<br>lymphoid, lymphocytic,<br>myelocytic,<br>lymphoblastic, leukemia,<br>myeloid sarcoma, B-cell<br>acute lymphoblastic<br>leukemia (B-ALL),<br>Philadelphia<br>chromosome-like acute<br>lymphoblastic leukemia<br>(Ph-like ALL), T-ALL | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 10   | _12q13, CDK4<br>gain/amplificatio<br>n, FFPE, FISH,<br>cancer                            | CMM3, PSK-J3, Cyclin<br>dependent kinase 4,<br>protein serine<br>kinase,melanoma                                                                                                                                                                                                                                                                    | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 11   | _12q13, DDIT3,<br>CHOP<br>rearrangement,<br>FFPE, FISH,<br>cancer                        | CHOP; CEBPZ;<br>CHOP10; CHOP-10;<br>GADD153; AltDDIT3;<br>C/EBPzeta, DNA<br>damage inducible<br>transcript 3,<br>rearrangement, myxoid<br>liposarcoma                                                                                                                                                                                               | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 12   | _12q13, GLI<br>gain, trisomy 12,<br>BMH, BMSH,<br>PBH, FISH,<br>cancer                   | CLL, chronic<br>lymphocytic leukemia,<br>+12,                                                                                                                                                                                                                                                                                                       | Cyto-Mol | FISH                | BMH,BM<br>SH,PBH    | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                           | کلیدواژه<br>keyword                                                                                                                                                                                | ID       | روش انجام<br>method | نوع نمونه<br>sample        | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 13   | _12q15, MDM2,<br>FFPE, FISH,<br>cancer                         | ACTFS, HDMX, LSKB,<br>hdm2, MDM2 proto<br>oncogene                                                                                                                                                 | Cyto-Mol | FISH                | FFPE                       | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 14   | _13/21<br>enumeration,<br>slides, PBH, AF,<br>CVS, FISH        | trisomy, 13, 21, Down,<br>Patau, aneuploidy, +21,<br>+13, Down syndrome,<br>Patau syndrome,                                                                                                        | Cyto-Mol | FISH                | PBH, AF,<br>CVS            | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 15   | _13q14,<br>Deletion/loss<br>13q, BMH,<br>BMSH, FISH,<br>cancer | DLeu1, 13q-,<br>del13, myeloid,<br>myelocytic, lymphoid,<br>lymphocytic,<br>myeloblastic,<br>lymphoblastic, chronic,<br>leukemia, acute, deletion,<br>loss, multiple myeloma,<br>AML, CLL, ALL, MM | Cyto-Mol | FISH                | BM-hep,<br>BM sub-<br>hep, | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 16   | _13q14,<br>Deletion/loss<br>13q, FFPE,<br>FISH, cancer         | DLeu1, 13q-, del<br>13, myeloid, myelocytic,<br>lymphoid, lymphocytic,<br>myeloblastic,<br>lymphoblastic, chronic                                                                                  | Cyto-Mol | FISH                | FFPE                       | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                               | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 18   | _14q32, IGH rearrangement, BMH, BMSH, FISH, cancer | Immunoglobulin Heavy Locus, Immunoglobulin Heavy Polypeptide, Joining Region, Immunglobulin Heavy Chain Variable Region, Immunoglobulin Heavy Diversity Cluster, Immunoglobulin Heavy Variable Cluster, D (Diversity) Region Of Heavy Chains, Immunoglobulin Heavy Diversity Group, Immunoglobulin Heavy Diversity Locus, Immunoglobulin Heavy Joining Cluster, Immunoglobulin Heavy Variable Group, J (Joining) Region Of Heavy Chains, Immunoglobulin Heavy Joining Group, Immunoglobulin Heavy Chain, IGH.1, IGHDY, IGHD, IGHJ, IGHV, IGD1, IGH, IGHJ, IGHV, | Cyto-Mol | FISH                | BMH,BM SH           | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



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| 19   | _14q32, IGH rearrangement, FFPE, FISH, cancer                | Immunoglobulin Heavy Locus, Immunoglobulin Heavy Polypeptide, Joining Region, Immunoglobulin Heavy Chain Variable Region, Immunoglobulin Heavy Diversity Cluster, Immunoglobulin Heavy Variable Cluster, D (Diversity) Region Of Heavy Chains, Immunoglobulin Heavy Diversity Group, Immunoglobulin Heavy Diversity Locus, Immunoglobulin Heavy Joining Cluster, Immunoglobulin Heavy Variable Group, J (Joining) Region Of Heavy Chains, Immunoglobulin Heavy Joining Group, Immunoglobulin Heavy Chain, IGH.1, IGHDY, IGHD, IGHI, IGHV, IGD1, IGH, IGHI, IGHV, | Cyto-Mol | FISH                | FFPE                | sufficient tumoral load | 4-24 °C                  | -                               | 14                                             | medical impression/ reports- Pathology reports |                                                                       | Y                                                                      | N                       |
| 20   | _15q22 deletion/loss, gain/amplification, FFPE, FISH, cancer | hyperdiploidy,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Cyto-Mol | FISH                | FFPE                | sufficient tumoral load | 4-24 °C                  | -                               | 14                                             | medical impression/ reports- Pathology reports |                                                                       | Y                                                                      | N                       |



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| 21   | _16p11, FUS<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer                | FUS RNA Binding<br>Protein, TLS,<br>Heterogeneous Nuclear<br>Ribonucleoprotein,<br>Translocated In<br>Liposarcoma Protein, 75<br>KDa DNA-Pairing<br>Protein, RNA-Binding<br>Protein FUS, Fused In<br>Sarcoma, Oncogene<br>FUS, Oncogene TLS,<br>HNRNPP2, FUS1 2 3                                                                      | Cyto-Mol | FISH                | BMH,BM<br>SH                                            | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 14                                             | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 22   | _17p13, 17p,<br>TP53, p53,<br>Deletion/loss,<br>BMH, BMSH,<br>FISH, cancer | Tumor Protein P53, P53,<br>Cellular Tumor Antigen<br>P53, Phosphoprotein<br>P53, Antigen NY-CO-13,<br>LFS1, Transformation-<br>Related Protein 53,<br>Mutant Tumor Protein<br>53, Li-Fraumeni<br>Syndrome, P53 Tumor<br>Suppressor, Tumor<br>Suppressor P53, Tumor<br>Suppressor P53, Tumor<br>Protein 53, BMFS5,<br>TRP53, BCC7, TP53 | Cyto-Mol | FISH                | bone<br>marrow<br>involveme<br>nt: BM-<br>hep ,<br>BMSH | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                  | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                    | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 23   | _17p13, 17p,<br>TP53, p53,<br>Deletion/loss,<br>FFPE, FISH,<br>cancer | Tumor Protein P53, P53,<br>Cellular Tumor Antigen<br>P53, Phosphoprotein<br>P53, Antigen NY-CO-13,<br>LFS1, Transformation-<br>Related Protein 53,<br>Mutant Tumor Protein<br>53, Li-Fraumeni<br>Syndrome, P53 Tumor<br>Suppressor, Tumor<br>Suppressor P53, Tumor<br>Suppressor P53, Tumor<br>Protein 53, BMFS5,<br>TRP53, BCC7, TP53 | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 24   | _18/X/Y<br>enumeration,<br>slides, PBH, AF,<br>CVS, FISH              |                                                                                                                                                                                                                                                                                                                                        | Cyto-Mol | FISH                | PBH,AF,<br>CVS      | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                         | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                          | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 25   | _18q11, SS18<br>rearrangement,<br>FFPE, FISH,<br>cancer      | 18q11.2, SSXT, SS18<br>Subunit Of BAF<br>Chromatin Remodeling<br>Complex, SYT, Synovial<br>Sarcoma Translocated To<br>X Chromosome Protein,<br>SS18, NBAF Chromatin<br>Remodeling Complex<br>Subunit, Synovial<br>Sarcoma Translocation,<br>Chromosome 18, Protein<br>SSXT, SSXT, Synovial<br>Sarcoma, Translocated<br>To X Chromosome,<br>Protein SYT, SS18 | Cyto-Mol | FISH                | FFPE                | 2-5 ml              | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 26   | _18q21, BCL2<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer | BCL2 Apoptosis<br>Regulator, Protein<br>Phosphatase 1,<br>Regulatory Subunit 50,<br>Apoptosis Regulator Bcl-<br>2, B-Cell<br>CLL/Lymphoma 2,<br>PPP1R50, Bcl-2, BCL2,<br>Apoptosis Regulator,<br>BCL2                                                                                                                                                        | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                    | کلیدواژه<br>keyword                                                                                                                                                                                   | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی (روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 27   | _18q21, BCL2<br>rearrangement,<br>FFPE, FISH,<br>cancer | BCL2 Apoptosis<br>Regulator, Protein<br>Phosphatase 1,<br>Regulatory Subunit 50,<br>Apoptosis Regulator Bcl-<br>2, B-Cell<br>CLL/Lymphoma 2,<br>PPP1R50, Bcl-2, BCL2,<br>Apoptosis Regulator,<br>BCL2 | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                              | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                    | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 28   | _18q21, MALT1<br>rearrangement,<br>BMH, FISH,<br>cancer | MALT1 Paracaspase,<br>Mucosa-Associated<br>Lymphoid Tissue<br>Lymphoma<br>Translocation Protein,<br>Mucosa Associated<br>Lymphoid Tissue<br>Lymphoma<br>Translocation Gene,<br>MALT1 Protease,<br>PCASP1, MLT, MALT<br>Lymphoma-Associated<br>Translocation, Caspase-<br>Like Protein,<br>Paracaspase 1,<br>Paracaspase-1,<br>Paracaspase, EC 3.4.22.,<br>IMD12, MALT1, MLT1,<br>Mucosa associated<br>lymphoid tissue, B-cell<br>lymphoma, non Hodgkin<br>lymphoma, Marginal zone<br>lymphoma, gastic<br>MALT, non gastric<br>MALT, | Cyto-Mol | FISH                | BMH                 | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                     | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی (روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 29   | _18q21, MALT1<br>rearrangement,<br>FFPE, FISH,<br>cancer | MALT1 Paracaspase,<br>Mucosa-Associated<br>Lymphoid Tissue<br>Lymphoma<br>Translocation Protein,<br>Mucosa Associated<br>Lymphoid Tissue<br>Lymphoma<br>Translocation Gene,<br>MALT1 Protease,<br>PCASP1, MLT, MALT<br>Lymphoma-Associated<br>Translocation, Caspase-<br>Like Protein,<br>Paracaspase 1,<br>Paracaspase-1,<br>Paracaspase, EC 3.4.22.,<br>IMD12, MALT1, MLT1,<br>Mucosa associated<br>lymphoid tissue, B-cell<br>lymphoma, non Hodgkin<br>lymphoma, Marginal zone<br>lymphoma, gastic<br>MALT, non gastric<br>MALT, | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                              | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                  | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 30   | _19p13, TCF3<br>(E2A)<br>rearrangement,B<br>MH, BMSH,<br>FISH, cancer | Transcription Factor 3,<br>Immunoglobulin<br>Transcription Factor,<br>Transcription Factor E2-<br>Alpha, Kappa-E2-<br>Binding Factor,<br>BHLHb21, ITF1, E2A,<br>Class B Basic Helix-<br>Loop-Helix Protein 21,<br>Transcription Factor ITF-<br>1, VDR Interacting<br>Repressor, TCF-3,<br>VDIR, E47, P75,<br>Transcription Factor 3,<br>(E2A Immunoglobulin<br>Enhancer Binding<br>Factors E12/E47),<br>Negative Vitamin D<br>Response Element-<br>Binding Protein, E2A<br>Immunoglobulin<br>Enhancer-Binding Factor<br>E12/E47,<br>Immunoglobulin<br>Enhancer-Binding Factor<br>E12/E47, Vitamin D<br>Receptor-Interacting<br>Repressor, Transcription<br>Factor 3 Variant, Helix-<br>Loop-Helix Protein<br>HE47, NOL1-TCF3<br>Fusion, MGC129647 | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                                | کلیدواژه<br>keyword                                                                                                                                                             | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 31   | _19q13<br>deletion/loss,<br>gain/amplificatio<br>n, BMH, BMSH,<br>FISH, cancer      | long arm of 19,<br>chromosome 19,                                                                                                                                               | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 32   | _19q13<br>deletion/loss,<br>gain/amplificatio<br>n, FFPE, FISH,<br>cancer           | long arm of 19,<br>chromosogain,<br>loss,glioma,<br>oligodendroglioma,<br>glioblastoma,<br>gastrointestinal tumor,<br>ovarian carcinoma,<br>megakaryoblastic<br>leukemia.me 19, | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 33   | _1p/19q Co-<br>Deletion, FFPE,<br>FISH, cancer                                      | loss, gain, co deletion,<br>double<br>hit,oligodendroma,<br>glioma, low grade,                                                                                                  | Cyto-Mol | Oligo array<br>CGH  | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 34   | _1p36 deletion/<br>loss, 1q21<br>gain/amplificatio<br>n, BMH, BMSH,<br>FISH, cancer | gain, loss, loss, gain, co<br>deletion, double<br>hit,oligodendroma,<br>glioma, low grade,                                                                                      | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 35   | _1p36<br>deletion/loss,<br>1q21<br>gain/amplificatio<br>n, FFPE, FISH,<br>cancer    | gain, loss                                                                                                                                                                      | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                        | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 36   | _1q32, MDM4<br>amplification,<br>BMH, BMSH,<br>FISH, cancer | MDM4 Regulator Of<br>P53, MDMX, Mdm2-<br>Like P53-Binding<br>Protein 3, MDM4, P53<br>Regulator, Protein<br>Mdm4, Protein Mdmx,<br>HDMX, Mdm4,<br>Transformed 3T3 Cell<br>Double Minute 4, P53<br>Binding Protein (Mouse),<br>Mouse Double Minute 4,<br>Human Homolog Of;<br>P53-Binding Protein,<br>Double Minute 4, Human<br>Homolog Of; P53-<br>Binding Protein, Mdm4<br>P53 Binding Protein<br>Homolog (Mouse),<br>Mdm4 P53 Binding<br>Protein Homolog, P53-<br>Binding Protein Mdm4,<br>Double Minute 4 Protein,<br>MDM4 Protein Variant<br>G, MDM4 Protein<br>Variant Y, MDM4-<br>Related Protein, BMFS6,<br>MRP1, MDM4 | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                   | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 37   | _1q32, MDM4<br>amplification,<br>FFPE, FISH,<br>cancer | MDM4 Regulator Of<br>P53, MDMX, Mdm2-<br>Like P53-Binding<br>Protein 3, MDM4, P53<br>Regulator, Protein<br>Mdm4, Protein Mdmx,<br>HDMX, Mdm4,<br>Transformed 3T3 Cell<br>Double Minute 4, P53<br>Binding Protein (Mouse),<br>Mouse Double Minute 4,<br>Human Homolog Of;<br>P53-Binding Protein,<br>Double Minute 4, Human<br>Homolog Of; P53-<br>Binding Protein, Mdm4<br>P53 Binding Protein<br>Homolog (Mouse),<br>Mdm4 P53 Binding<br>Protein Homolog, P53-<br>Binding Protein Mdm4,<br>Double Minute 4 Protein,<br>MDM4 Protein Variant<br>G, MDM4 Protein<br>Variant Y, MDM4-<br>Related Protein, BMFS6,<br>MRP1, MDM4 | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                 | کلیدواژه<br>keyword                                                                                                                                                                                                                                    | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume     | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                             | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 38   | _22q12, EWSR1, EWS rearrangement, FFPE, FISH, cancer | EWS RNA Binding Protein, EWS, Ewing Sarcoma Breakpoint Region, RNA-Binding Protein EWS, Ewings Sarcoma EWS-Flt1 (Type 1) Oncogene, Ewing Sarcoma Breakpoint Region 1 Protein, EWS RNA-Binding Protein Variant, EWS Oncogene, BK984G1., EWS-FLI1, EWSR1 | Cyto-Mol | FISH                | FFPE                | sufficient tumoral load | 4-24 °C<br>24 hours      | -                               | 14                                             | medical impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 39   | _2p24, NMYC amplification, FFPE, FISH, cancer        |                                                                                                                                                                                                                                                        | Cyto-Mol | FISH                | FFPE                | sufficient tumoral load | 4-24 °C                  | -                               | 14                                             | medical impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 40   | _3q26, TERC gain, FFPE, FISH, cancer                 |                                                                                                                                                                                                                                                        | Cyto-Mol | FISH                | FFPE                | sufficient tumoral load | 4-24 °C                  | -                               | 14                                             | medical impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 41   | _3q27, BCL6 rearrangement, BMH, BMSH, FISH, cancer   |                                                                                                                                                                                                                                                        | Cyto-Mol | FISH                | BMH, BM SH          | 2-5 ml                  | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 42   | _3q27, BCL6 rearrangement, FFPE, FISH, cancer        |                                                                                                                                                                                                                                                        | Cyto-Mol | FISH                | FFPE                | sufficient tumoral load | 4-24 °C                  | -                               | 14                                             | medical impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                                                 | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 43   | _4q12,<br>PDGFRA,<br>FIP1L1-CHIC2-<br>PDGFRA<br>rearrangement,<br>PBH, BMH,<br>BMSH, FISH,<br>cancer | Platelet Derived Growth<br>Factor Receptor Alpha,<br>PDGFR2, Platelet-<br>Derived Growth Factor<br>Receptor, Alpha<br>Polypeptide, Alpha-Type<br>Platelet-Derived Growth<br>Factor Receptor, Platelet-<br>Derived Growth Factor<br>Receptor Alpha, Platelet-<br>Derived Growth Factor<br>Receptor, CD140<br>Antigen-Like Family<br>Member A, CD140a<br>Antigen, PDGF-R-Alpha,<br>EC 2.7.10.1, PDGFR-2,<br>Alpha Platelet-Derived<br>Growth Factor Receptor,<br>Platelet-Derived Growth<br>Factor Alpha Receptor,<br>PDGFR-Alpha,<br>RHEPDGFRA, EC<br>2.7.10, CD140A,<br>PDGFRA, CD140a,<br>GAS9 | Cyto-Mol | FISH                | PBH,BM<br>H,BMSH    | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                  | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 44   | _5q32, PDGFRB<br>rearrangement,<br>BMH, BMSH,<br>PBH, FISH,<br>cancer | Platelet Derived Growth<br>Factor Receptor Beta,<br>PDGFR1, Platelet-<br>Derived Growth Factor<br>Receptor, Beta<br>Polypeptide, Beta-Type<br>Platelet-Derived Growth<br>Factor Receptor, Platelet-<br>Derived Growth Factor<br>Receptor Beta, Platelet-<br>Derived Growth Factor<br>Receptor, CD140<br>Antigen-Like Family<br>Member B, PDGF-R-<br>Beta, EC 2.7.10.1,<br>PDGFR-Beta, PDGFR-1,<br>JTK12, PDGFR, Beta<br>Platelet-Derived Growth<br>Factor Receptor,<br>Activated Tyrosine<br>Kinase PDGFRB,<br>CD140b Antigen,<br>NDEL1-PDGFRB, EC<br>2.7.10, CD140B,<br>PDGFRB, CD140b,<br>IBGC, PENTT, IMF1,<br>KOGS | Cyto-Mol | FISH                | BMH,BM<br>SH,PBH    | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                    | کلیدواژه<br>keyword                                                                                                                                                                              | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume     | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                  | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 45   | _6q21 MYB deletion/loss, BMH, BMSH, FISH, cancer        | MYB Proto-Oncogene, Transcription Factor, V-Myb Avian Myeloblastosis Viral Oncogene Homolog, Transcriptional Activator Myb, Proto-Oncogene C-Myb, C-Myb, Oncogene AMV, C-Myb_CDS, Cmyb, Efg, MYB | Cyto-Mol | FISH                | BMH,BM SH           | 2-5 ml                  | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/reports                   |                                                                       | Y                                                                      | N                       |
| 46   | _7p11, EGFR/amplification, FFPE, FISH, cancer           |                                                                                                                                                                                                  | Cyto-Mol | FISH                | FFPE                | sufficient tumoral load | 4-24 °C                  | -                               | 14                                             | medical impression/reports-Pathology reports |                                                                       | Y                                                                      | N                       |
| 47   | _8+, gain, trisomy 8, BMH, BMSH, PBH, FISH, cancer      |                                                                                                                                                                                                  | Cyto-Mol | FISH                | BMH,BM SH,PBH       | 2-5 ml                  | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/reports                   |                                                                       | Y                                                                      | N                       |
| 48   | _8p12, FGFR1 rearrangement, BMH,BMSH, FISH, cancer      |                                                                                                                                                                                                  | Cyto-Mol | FISH                | BMH,BM SH           | 2-5 ml                  | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/reports                   |                                                                       | Y                                                                      | N                       |
| 49   | _8q24, MYC rearrangement, gain, BMH, BMSH, FISH, cancer | C MYC, MYCC, BHLH transcription factor,lymphoma                                                                                                                                                  | Cyto-Mol | FISH                | BMH,BM SH           | 2-5 ml                  | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/reports                   |                                                                       | Y                                                                      | N                       |
| 50   | _8q24, MYC rearrangement, gain, FFPE, FISH, cancer      | C MYC, MYCC, BHLH transcription factor,lymphoma                                                                                                                                                  | Cyto-Mol | FISH                | FFPE                | sufficient tumoral load | 4-24 °C                  | -                               | 14                                             | medical impression/reports-Pathology reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                                                                                      | کلیدواژه<br>keyword                                                                    | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 51   | _9p21,<br>CDKN2A, P16<br>deletion/loss,<br>gain/amplification, BMH, BMSH,<br>FISH, cancer                                                 | CDK4 inhibitor P16-<br>INK4, cyclin dependent<br>kinase inhibitor<br>2A,melanoma       | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 52   | _9p21,<br>CDKN2A, P16<br>deletion/loss,<br>gain/amplification, FFPE, FISH,<br>cancer                                                      | CDK4 inhibitor P16-<br>INK4, cyclin dependent<br>kinase inhibitor<br>2A,melanoma       | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 53   | _ALK-EML4<br>rearrangement<br>inv(2p32.1p21),<br>FFPE, FISH,<br>cancer                                                                    | non small cell lung<br>cancer, nsclc, lung<br>cancer,<br>adenocarcinoma,lung<br>cancer | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 54   | _ALL adult FISH<br>panel, MYC,<br>IGH, BCR-ABL,<br>MLL, TCF3<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer                              |                                                                                        | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 55   | _ALL pediatric<br>FISH panel, +4,<br>+10, del9p, BCR-<br>ABL, MLL, TEL-<br>AML<br>rearrangement,<br>iAMP21, BMH,<br>BMSH, FISH,<br>cancer |                                                                                        | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                                           | کلیدواژه<br>keyword                                                                                                                                   | ID       | روش انجام<br>method | نوع نمونه<br>sample                   | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی (روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 56   | _ALL Ph-like<br>FISH panel,<br>BMH, BMSH,<br>FISH, cancer                                      |                                                                                                                                                       | Cyto-Mol | FISH                | BMH,BM<br>SH                          | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                               | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 57   | _alveolar<br>rhabdomyosarco<br>ma, FFPE, FISH,<br>cancer                                       | RHABDOMYOSARCO<br>MA 2; RMS2, 1p36.13,<br>2q36.1, 13q14.11,<br>268220, PAX7, PAX3,<br>FOXO1A,                                                         | Cyto-Mol | FISH                | FFPE                                  | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                              | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 58   | _AML Panel,<br>t(15;17), t(8;21),<br>t(9;22), inv(16),<br>11q23, BMH,<br>BMSH, FISH,<br>cancer | Acute, myeloid,<br>leukemia, PML, RARA,<br>promyelocytic, AML M3,<br>APL, retinoic acid<br>receptor alpha, Acute<br>promyelocytic leukemia,<br>AML M3 | Cyto-Mol | FISH                | BMH,BM<br>SH,PBH                      | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                               | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 59   | _Aneuploidy<br>Screening<br>(13.21.18.X.Y),<br>AF, CVS,<br>cytogenetic slide,<br>PND-FISH      |                                                                                                                                                       | Cyto-Mol | FISH                | AF, CVS                               | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                               | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 60   | _Angelman<br>Syndrome, 15q12<br>deletion, PBH,<br>AF, CVS, FISH                                |                                                                                                                                                       | Cyto-Mol | FISH                | PBH, AF,<br>CVS,<br>FFPE,<br>POC, Tis | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                               | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                                                           | کلیدواژه<br>keyword                                                                                                      | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document    | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 61   | _Chronic lymphocytic Leukemia FISH panel, trisomy 12, deletion 6q, 11q, 13q, 17p, BMH, BMSH, PBH, FISH, cancer |                                                                                                                          | Cyto-Mol | FISH                | BMH,BM SH,PBH       | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 62   | _Deletion/monosomy 20q/20, BMH, BMSH, FISH, cancer                                                             | MDS, myelodysplastic syndrome, PTPRT, 20q12, MPD, myeloproliferative disorder, loss, deletion, monosomy, 20q-, 20q, -20  | Cyto-Mol | FISH                | BMH,BM SH           | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 63   | _Deletion/monosomy 5q/5, BMH, BMSH, FISH, cancer                                                               | MDS, myelodysplastic syndrome, AML, acute myeloid myelocytic leukemia, 5q31, 5q33, loss, deletion, monosomy 5q-, 5q, -5, | Cyto-Mol | FISH                | BM, BMSH, PBH       | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 64   | _Deletion/monosomy 6q/6, BMH, BMSH, FISH, cancer                                                               |                                                                                                                          | Cyto-Mol | FISH                | BMH,BM SH           | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 65   | _Deletion/monosomy 7q/7, BMH, BMSH, FISH, cancer                                                               |                                                                                                                          | Cyto-Mol | FISH                | BMH,BM SH           | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                           | کلیدواژه<br>keyword                                                                                                            | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume     | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                    | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 66   | _Di George syndrome, 22q11 deletion, PBH, AF, CVS, FISH                        | di George, Tuple, Catch 22, Velo cardo facial syndrome, cardiovascular defect, 22q, deletion, microdeletion, duplication, 22q- | Cyto-Mol | FISH                | PBH,AF, CVS         | 2-5 ml                  | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |
| 67   | _eosinophilia panel, FISH                                                      |                                                                                                                                | Cyto-Mol | FISH                | PBH, BMH, BMSH      | 2-5 ml                  | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |
| 68   | _Her2-Neu amplification, FFPE, FISH, cancer                                    | Her2, Neu, c-erbb2, breast, gastrointestinal, amplification, breast, gastorintestinal, cancer                                  | Cyto-Mol | FISH                | FFPE                | sufficient tumoral load | 4-24 °C                  | -                               | 14                                             | medical impression/ reports- Pathology reports |                                                                       | Y                                                                      | N                       |
| 69   | _inversion 16, t(16;16), CBFb/MYH11, BMH, BMSH, FISH, cancer                   | Acute myeloid leukemia, M4, M2, M0, AML, myelocytic, myeloblastic, eosinophilis, refractory anemia with eosinophilia,          | Cyto-Mol | FISH                | BMH,BM SH           | 2-5 ml                  | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |
| 70   | _inversion 3, t(3;3), RPN1/MECOM( EVL1) rearrangement, BMH, BMSH, FISH, cancer |                                                                                                                                | Cyto-Mol | FISH                | BMH,BM SH           | 2-5 ml                  | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |
| 71   | _lymphoma panel (aggressive), FFPE, FISH, cancer                               |                                                                                                                                | Cyto-Mol | FISH                | FFPE                | sufficient tumoral load | 4-24 °C                  | -                               | 14                                             | medical impression/ reports- Pathology reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                          | کلیدواژه<br>keyword                                          | ID       | روش انجام<br>method | نوع نمونه<br>sample                              | حجم نمونه<br>volume               | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                    | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 72   | _lymphoma panel (aggressive), FISH            |                                                              | Cyto-Mol | FISH                | BMH,BM SH                                        | 2-5 ml                            | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |
| 73   | _lymphoma panel, FFPE, FISH, cancer           |                                                              | Cyto-Mol | FISH                | FFPE                                             | sufficient tumoral load           | 4-24 °C                  | -                               | 14                                             | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |
| 74   | _lymphoma, FISH                               |                                                              | Cyto-Mol | FISH                | BMH,BM SH, FFPE                                  | 2-5 ml<br>sufficient tumoral load | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |
| 75   | _Magnetic cells separation                    |                                                              | Cyto-Mol | FISH                | CLL:<br>BMH,<br>BMSH,<br>PBH,<br>MM:<br>only BMH | 2-5 ml                            | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |
| 76   | _MDM2 DDIT3 rearrangement, FFPE, FISH, cancer | lipomatous tumor                                             | Cyto-Mol | FISH                | FFPE                                             | sufficient tumoral load           | 4-24 °C                  | -                               | 14                                             | medical impression/ reports- Pathology reports |                                                                       | Y                                                                      | N                       |
| 77   | _Microdeletion syndrome, PBH, AF, CVS, FISH   | microdeletion, syndrome,                                     | Cyto-Mol | FISH                | PBH                                              | 2-5 ml                            | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |
| 78   | _Multiple Myeloma panel 1, BM, FISH 8 PROBE,  | MM, multiple myeloma, hypderdiploidy, odd number chromosomes | Cyto-Mol | FISH                | BMH,BM SH                                        | 2-5 ml                            | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                                                                                                         | کلیدواژه<br>keyword                                                                                                                                                                   | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 79   | _Multiple<br>Myeloma panel<br>1, t(11;14), IGH<br>rearrangement,<br>deletion p53,<br>deletion 13q,<br>BMH, BMSH,<br>FISH, cancer                             |                                                                                                                                                                                       | Cyto-Mol | FISH                | BMH                 | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 80   | _Multiple<br>Myeloma panel<br>2, hyperdiploidy,<br>BMH, BMSH,<br>FISH, cancer                                                                                | MM, multiple myeloma,<br>p53, TP53, 17p, deletion,<br>LOH, loss of<br>heterozygosity, t(11;14),<br>CCND1, IGH,<br>rearrangement, fusion,<br>BCL1, 13q, gain, 1q21,                    | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 81   | _Multiple<br>Myeloma panel,<br>1q gain, t(11;14),<br>IGH<br>rearrangement,<br>deletion p53,<br>deletion 13q,<br>hyperdiploidy,<br>BMH, BMSH,<br>FISH, cancer | MM, multiple myeloma,<br>p53, TP53, 17p, deletion,<br>LOH, loss of<br>heterozygosity, t(11;14),<br>CCND1, IGH,<br>rearrangement, fusion,<br>BCL1, 13q, gain, 1q21,<br>hypderdiploidy, | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 82   | _Myelodysplastic<br>syndrome FISH<br>Panel 1<br>(common), del<br>5q/-5, del7q.-7.<br>del 20q, trisomy<br>8, BMH, BMSH,<br>FISH, cancer                       |                                                                                                                                                                                       | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                                            | کلیدواژه<br>keyword                                                                                                  | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume     | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                    | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 83   | _Myelodysplastic syndrome FISH Panel 2 (rare), rearrangement of 3, 11q, BMH, BMSH, FISH, cancer | MYELODYSPLASTIC SYNDROME, SUSCEPTIBILITY TO, INCLUDED2q33.1, SF3B1, 3q21.3, GATA2, 4q24, TET2, 20q11.21, ASXL1, MDS, | Cyto-Mol | FISH                | BMH,BM SH           | 2-5 ml                  | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |
| 84   | _Myeloproliferative Neoplasm FISH panel, PDGFRA PDGFRB, FGFR3, BMH, MBSH, PBH, cancer,          |                                                                                                                      | Cyto-Mol | FISH                | BMH,BM SH,PBH       | 2-5 ml                  | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |
| 85   | _Myxoid Liposarcoma FISH panel, FFPE, cancer FISH                                               | sarcoma, CEBPZ, CHOP, CHOP10, GADD153, 12q13, cell myxoid liposarcoma, t(12;22), t(12;16)                            | Cyto-Mol | FISH                | FFPE                |                         | 4-24 °C                  | -                               | 14                                             | medical impression/ reports- Pathology reports |                                                                       | Y                                                                      | N                       |
| 86   | _Prader Will syndrome, 15q11 deletion, PBH, AF, CVS, FISH                                       | PWS, 15q, deletion, microdeletion, duplication, 22q-                                                                 | Cyto-Mol | FISH                | PBH,AF, CVS         | 2-5 ml                  | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/ reports                    |                                                                       | Y                                                                      | N                       |
| 87   | _ROS1 Rearrangement, FFPE, FISH, cancer                                                         |                                                                                                                      | Cyto-Mol | FISH                | FFPE                | sufficient tumoral load | 4-24 °C<br>24 hours      | -                               | 14                                             | medical impression/ reports- Pathology reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                                | کلیدواژه<br>keyword                                                                                             | ID       | روش انجام<br>method | نوع نمونه<br>sample         | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 88   | _RUNX1<br>amplification,<br>(Iamp21), BMH,<br>BMSH, FISH,<br>cancer                 |                                                                                                                 | Cyto-Mol | FISH                | BMH,BM<br>SH                | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 89   | _Sex<br>chromosome XY<br>enumeration,<br>PBH, AF, CVS,<br>FISH                      | sex chromosomes, X, Y,<br>mosaicism, Turner,<br>Klinefelter, Triple,<br>chimera, maternal cell<br>contamination | Cyto-Mol | FISH                | PBH,AF,<br>CVS              | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 90   | _Slide<br>preparation for<br>FISH study,<br>PBH, BMH,<br>BMSH, AF CVS,<br>TIS, FISH |                                                                                                                 | Cyto-Mol | FISH                | PBH,BM<br>H,BMSH,<br>AF,CVS | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 91   | _Subtelomeric<br>probes, slides,<br>PBH, AF, CVS,<br>FISH                           | subtelomeric, autosomes,<br>microdeletion,<br>rearrangement,                                                    | Cyto-Mol | FISH                | PBH,AF,<br>CVS              | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 92   | _t(1;13), PAX7-<br>FKHR<br>rearrangement,<br>FFPE, FISH,<br>cancer                  |                                                                                                                 | Cyto-Mol | FISH                | FFPE                        | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                                | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 93   | t(11;14),<br>CCND1/IGH,<br>BCL1/IGH<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer | Immunoglobulin Heavy<br>Locus, Immunoglobulin<br>Heavy Polypeptide,<br>Joining Region,<br>Immunoglobulin Heavy<br>Chain Variable Region,<br>Cyclin D1, B-Cell<br>Lymphoma 1 Protein,<br>G1/S-Specific Cyclin-<br>D1, B-Cell<br>CLL/Lymphoma, BCL-1<br>Oncogene, PRAD1<br>Oncogene, U21B31,<br>PRAD1, BCL1, Cyclin<br>D1 (PRAD1: Parathyroid<br>Adenomatosis 1),<br>Parathyroid<br>Adenomatosis 1, G1/S-<br>Specific Cyclin D1,<br>D11S287E, CCND1,<br>BCL-1Immunoglobulin<br>Heavy Diversity Cluster,<br>Immunoglobulin Heavy<br>Variable Cluster, D<br>(Diversity) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Diversity Group,<br>Immunoglobulin Heavy<br>Diversity Locus,<br>Immunoglobulin Heavy<br>Joining Cluster | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                  | کلیدواژه<br>keyword | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 94   | _t(12;21),<br>TEL/AML<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer |                     | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                 | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 95   | t(14;16),<br>IGH/MAF<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer | Immunoglobulin Heavy<br>Locus, Immunoglobulin<br>Heavy Polypeptide,<br>Joining Region,<br>Immunoglobulin Heavy<br>Chain Variable<br>Region, Immunoglobulin<br>Heavy Diversity Cluster,<br>Immunoglobulin Heavy<br>Variable Cluster, D<br>(Diversity) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Diversity Group,<br>Immunoglobulin Heavy<br>Diversity Locus,<br>Immunoglobulin Heavy<br>Joining Cluster,<br>Immunoglobulin Heavy<br>Variable Group, J<br>(Joining) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Joining Group,<br>Immunoglobulin Heavy<br>Chain, IGH.1, IGHDY,<br>IGHD, IGHJ, IGHV,<br>IGD1, IGH, IGHJ, IGHV, | Cyto-Mol | FISH                | BMH, BM<br>SH       | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                  | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 96   | t(14;18),<br>IGH/BCL2<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer | Immunoglobulin Heavy<br>Locus, Immunoglobulin<br>Heavy Polypeptide,<br>Joining Region,<br>Immunoglobulin Heavy<br>Chain Variable<br>Region, Immunoglobulin<br>Heavy Diversity Cluster,<br>Immunoglobulin Heavy<br>Variable Cluster, D<br>(Diversity) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Diversity Group,<br>Immunoglobulin Heavy<br>Diversity Locus,<br>Immunoglobulin Heavy<br>Joining Cluster,<br>Immunoglobulin Heavy<br>Variable Group, J<br>(Joining) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Joining Group,<br>Immunoglobulin Heavy<br>Chain, IGH.1, IGHDY,<br>IGHD, IGHJ, IGHV,<br>IGD1, IGH, IGHJ, IGHV, | Cyto-Mol | FISH                | BMH, BM<br>SH       | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                                 | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 97   | t(14;18),<br>IGH/BIRC3,<br>IGH/MALT1<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer | Immunoglobulin Heavy<br>Locus, Immunoglobulin<br>Heavy Polypeptide,<br>Joining Region,<br>Immunoglobulin Heavy<br>Chain Variable<br>Region, Immunoglobulin<br>Heavy Diversity Cluster,<br>Immunoglobulin Heavy<br>Variable Cluster, D<br>(Diversity) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Diversity Group,<br>Immunoglobulin Heavy<br>Diversity Locus,<br>Immunoglobulin Heavy<br>Joining Cluster,<br>Immunoglobulin Heavy<br>Variable Group, J<br>(Joining) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Joining Group,<br>Immunoglobulin Heavy<br>Chain, IGH.1, IGHDY,<br>IGHD, IGHJ, IGHV,<br>IGD1, IGH, IGHJ, IGHV, | Cyto-Mol | FISH                | BMH, BM<br>SH       | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                   | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 98   | _t(14;20),<br>IGH/MAFB<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer | Immunoglobulin Heavy<br>Locus, Immunoglobulin<br>Heavy Polypeptide,<br>Joining Region,<br>Immunoglobulin Heavy<br>Chain Variable<br>Region, Immunoglobulin<br>Heavy Diversity Cluster,<br>Immunoglobulin Heavy<br>Variable Cluster, D<br>(Diversity) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Diversity Group,<br>Immunoglobulin Heavy<br>Diversity Locus,<br>Immunoglobulin Heavy<br>Joining Cluster,<br>Immunoglobulin Heavy<br>Variable Group, J<br>(Joining) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Joining Group,<br>Immunoglobulin Heavy<br>Chain, IGH.1, IGHDY,<br>IGHD, IGHJ, IGHV,<br>IGD1, IGH, IGHJ,<br>IGHV, multiple myeloma,<br>plasma cell leukemia,<br>MM | Cyto-Mol | FISH                | BMH, BM<br>SH       | 2-5 ml              | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                            | کلیدواژه<br>keyword                                                      | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 99   | _t(15;17),<br>PML/RARA<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer          | Acute, myeloid,<br>leukemia, PML, RARA,<br>promyelocytic, AML M3,<br>APL | Cyto-Mol | FISH                | BMH,BM<br>SH        | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 100  | _t(17;22),<br>PDGFB,<br>PDGFB/COL1A1<br>rearrangement,<br>FFPE, FISH,<br>cancer |                                                                          | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 101  | _t(2;13), PAX3-<br>FKHR<br>rearrangement,<br>FFPE, FISH,<br>cancer              |                                                                          | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                   | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 102  | _t(4;14),<br>FGFR3/IGH<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer | Immunoglobulin Heavy<br>Locus, Immunoglobulin<br>Heavy Polypeptide,<br>Joining Region,<br>Immunoglobulin Heavy<br>Chain Variable<br>Region, Immunoglobulin<br>Heavy Diversity Cluster,<br>Immunoglobulin Heavy<br>Variable Cluster, D<br>(Diversity) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Diversity Group,<br>Immunoglobulin Heavy<br>Diversity Locus,<br>Immunoglobulin Heavy<br>Joining Cluster,<br>Immunoglobulin Heavy<br>Variable Group, J<br>(Joining) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Joining Group,<br>Immunoglobulin Heavy<br>Chain, IGH.1, IGHDY,<br>IGHD, IGHJ, IGHV,<br>IGD1, IGH, IGHJ,<br>IGHV, multiple myeloma,<br>plasma cell leukemia,<br>MM | Cyto-Mol | FISH                | BMH, BM<br>SH       |                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                 | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 103  | _t(8;14),<br>MYC/IGH<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer | Immunoglobulin Heavy<br>Locus, Immunoglobulin<br>Heavy Polypeptide,<br>Joining Region,<br>Immunoglobulin Heavy<br>Chain Variable<br>Region, Immunoglobulin<br>Heavy Diversity Cluster,<br>Immunoglobulin Heavy<br>Variable Cluster, D<br>(Diversity) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Diversity Group,<br>Immunoglobulin Heavy<br>Diversity Locus,<br>Immunoglobulin Heavy<br>Joining Cluster,<br>Immunoglobulin Heavy<br>Variable Group, J<br>(Joining) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Joining Group,<br>Immunoglobulin Heavy<br>Chain, IGH.1, IGHDY,<br>IGHD, IGHJ, IGHV,<br>IGD1, IGH, IGHJ,<br>IGHV, Burkitt,<br>lymphoma, ALL L3,<br>acute, lymphocytic,<br>lymphoblastic, lymphoid | Cyto-Mol | FISH                | BMH, BM<br>SH       |                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                            | کلیدواژه<br>keyword                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 104  | _t(8;14),<br>MYC/IGH<br>rearrangement,<br>FFPE, FISH,<br>cancer | immunoglobulin Heavy<br>Locus, Immunoglobulin<br>Heavy Polypeptide,<br>Joining Region,<br>Immunoglobulin Heavy<br>Chain Variable<br>Region, Immunoglobulin<br>Heavy Diversity Cluster,<br>Immunoglobulin Heavy<br>Variable Cluster, D<br>(Diversity) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Diversity Group,<br>Immunoglobulin Heavy<br>Diversity Locus,<br>Immunoglobulin Heavy<br>Joining Cluster,<br>Immunoglobulin Heavy<br>Variable Group, J<br>(Joining) Region Of<br>Heavy Chains,<br>Immunoglobulin Heavy<br>Joining Group,<br>Immunoglobulin Heavy<br>Chain, IGH.1, IGHDY,<br>IGHD, IGHJ, IGHV,<br>IGD1, IGH, IGHJ,<br>IGHV, Burkitt,<br>lymphoma, ALL L3,<br>acute, lymphocytic,<br>lymphoblastic, lymphoid | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                                                                | کلیدواژه<br>keyword                                      | ID       | روش انجام<br>method | نوع نمونه<br>sample | حجم نمونه<br>volume        | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document                                | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 105  | _t(8;21)<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer                                            |                                                          | Cyto-Mol | FISH                | BMH,BM<br>SH        |                            | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 106  | _t(9;22),<br>BCR/ABL1 ,<br>FFPE, FISH,<br>cancer                                                    |                                                          | Cyto-Mol | FISH                | FFPE                |                            | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 107  | _t(9;22),<br>BCR/ABL1<br>rearrangement,<br>BMH, BMSH,<br>FISH, cancer                               |                                                          | Cyto-Mol | FISH                | BMH,BM<br>SH        |                            | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 108  | _Well<br>differentiated,<br>dedifferentiated<br>Liposarcoma<br>FISH panel,<br>FFPE, FISH,<br>cancer |                                                          | Cyto-Mol | FISH                | FFPE                | sufficient<br>tumoral load | 4-24 °C                  | -                               | 14                                             | medical<br>impression/<br>reports-<br>Pathology<br>reports |                                                                       | Y                                                                      | N                       |
| 109  | _Williams<br>syndrome, 7q11<br>deletion, PBH,<br>AF, CVS, FISH                                      |                                                          | Cyto-Mol | FISH                | PBH, AF,<br>CVS     | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |
| 110  | _Wolf-<br>Hirschhorn<br>syndrome, 4p<br>microdeletion,<br>PBH, AF, CVS,<br>FISH                     | Wolf Hirschhorn,<br>microdeletion, 4p-,<br>deletion, 4p, | Cyto-Mol | FISH                | PBH,AF,<br>CVS      | 2-5 ml                     | 4-24 °C<br>24 hours      | -                               | 5                                              | medical<br>impression/<br>reports                          |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                             | کلیدواژه<br>keyword                                                                                                              | ID       | روش انجام<br>method                | نوع نمونه<br>sample | حجم نمونه<br>volume           | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document    | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 111  | A-CGH BAC                                        | Chromosomal Miroarray, microdeletion, microduplication, copy number variant                                                      | Cyto-Mol | 24Sure                             | POC                 | Tissue: 15mg<br>DNA: 4µg      | 4-24 °C<br>24 hours      | -                               | 21                                             | medical impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 112  | A-CGH Oligo                                      | Chromosomal Miroarray, microdeletion, microduplication, copy number variant                                                      | Cyto-Mol | Oligo array<br>CGH 8*60            | POC                 | Tissue: 15mg<br>DNA: 4µg      | 4-24 °C                  | -                               | 21                                             | medical impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 113  | Am-Cytogenetics<br>(آمینوسنتز)                   |                                                                                                                                  | Cyto     | cell culture,<br>karyotype         | AF                  | 10 ml                         | 2-24 °C<br>/24-48h       | -                               | 14                                             | medical impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 114  | BM-Cytogenetics                                  | neoplasm, cell culture, bone marrow, bone marrow substitute, blast, chromosomal study, rearrangement, fusion product, inversion, | Cyto     | cell culture,<br>karyotype         | BMH/<br>BMSH        | 2-5 ml                        | 4-24 °C<br>24 hours      | -                               | 14                                             | medical impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 115  | C-Band                                           | centromer banding, heteromorphism, polymorphism,                                                                                 | Cyto     | chromosome<br>banding,<br>analysis | PBH,AF,<br>CVS      | 5-10 ml                       | 4-24 °C<br>24 hours      | -                               | 5                                              | medical impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 116  | CVS-Direct                                       | trophoectoderm, direct culture, chromosomal study, prenatal                                                                      | Cyto     | cell culture,<br>karyotype         | CVS                 |                               | 2-24<br>°C/24-48h        | -                               | 5                                              | medical impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 117  | Facio-Scapulo-<br>Humeral<br>Dystrophy<br>(FSHD) | FSHD type I                                                                                                                      | Cyto-Mol | Southern blot                      | PBE/<br>DNA         | 10 cc/ 30<br>microgram<br>DNA | 4-24 °C                  | -                               | 3-5 months                                     | medical impression/<br>reports |                                                                       | جواب غیر<br>طبیعی                                                      | N                       |
| 118  | FA-Cytogenetics                                  | fanconi anemia, FancA, chromosome break, DEB,                                                                                    | Cyto     | cell culture,<br>karyotype         | PBH                 | 5-10 ml                       | 4-24 °C<br>24 hours      | WBC<br>count<br>>2000           | 21                                             | medical impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                | کلیدواژه<br>keyword               | ID       | روش انجام<br>method | نوع نمونه<br>sample                     | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی (روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 119  | FISH 1 Probe        | Fluorescent in situ hybridization | Cyto-Mol | FISH                | BMH, BMSH, PBH, AF, CVS, FFPE, POC, Tis | 2-5 ml              | 4-24 °C                  | -                               | 5, FFPE 14                                      | medical impression/ reports |                                                                       | Y                                                                      | N                       |
| 120  | Fish 10 Probe-Panel | Fluorescent in situ hybridization | Cyto-Mol | FISH                | BMH, BMSH, PBH, AF, CVS, FFPE, POC, Tis | 2-5 ml              | 4-24 °C                  | -                               | 5, FFPE 14                                      | medical impression/ reports |                                                                       | Y                                                                      | N                       |
| 121  | FISH 2 Probe        | Fluorescent in situ hybridization | Cyto-Mol | FISH                | BMH, BMSH, PBH, AF, CVS, FFPE, POC, Tis | 2-5 ml              | 4-24 °C                  | -                               | 5, FFPE 14                                      | medical impression/ reports |                                                                       | Y                                                                      | N                       |
| 122  | Fish 3 Probe-Panel  | Fluorescent in situ hybridization | Cyto-Mol | FISH                | BMH, BMSH, PBH, AF, CVS, FFPE, POC, Tis | 2-5 ml              | 4-24 °C                  | -                               | 5<br>FFPE 14                                    | medical impression/ reports |                                                                       | Y                                                                      | N                       |
| 123  | Fish 4 Probe-Panel  | Fluorescent in situ hybridization | Cyto-Mol | FISH                | BMH, BMSH, PBH, AF, CVS, FFPE, POC, Tis | 2-5 ml              | 4-24 °C                  | -                               | 5<br>FFPE 14                                    | medical impression/ reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                   | کلیدواژه<br>keyword                  | ID       | روش انجام<br>method | نوع نمونه<br>sample                                    | حجم نمونه<br>volume | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
|------|------------------------|--------------------------------------|----------|---------------------|--------------------------------------------------------|---------------------|--------------------------|---------------------------------|------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------|
| 124  | Fish 5 Probe-<br>Panel | Fluorescent in situ<br>hybridization | Cyto-Mol | FISH                | BMH,<br>BMSH,<br>PBH, AF,<br>CVS,<br>FFPE,<br>POC, Tis | 2-5 ml              | 4-24 °C                  | -                               | 5<br>FFPE 14                                   | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 125  | Fish 6 Probe-<br>Panel | Fluorescent in situ<br>hybridization | Cyto-Mol | FISH                | BMH,<br>BMSH,<br>PBH, AF,<br>CVS,<br>FFPE,<br>POC, Tis | 2-5 ml              | 4-24 °C                  | -                               | 5<br>FFPE 14                                   | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 126  | Fish 7 Probe-<br>Panel | Fluorescent in situ<br>hybridization | Cyto-Mol | FISH                | BMH,<br>BMSH,<br>PBH, AF,<br>CVS,<br>FFPE,<br>POC, Tis | 2-5 ml              | 4-24 °C                  | -                               | 5<br>FFPE 14                                   | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 127  | Fish 8 Probe-<br>Panel | Fluorescent in situ<br>hybridization | Cyto-Mol | FISH                | BMH,<br>BMSH,<br>PBH, AF,<br>CVS,<br>FFPE,<br>POC, Tis | 2-5 ml              | 4-24 °C                  | -                               | 5<br>FFPE 14                                   | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 128  | Fish 9 Probe-<br>Panel | Fluorescent in situ<br>hybridization | Cyto-Mol | FISH                | BMH,<br>BMSH,<br>PBH, AF,<br>CVS,<br>FFPE,<br>POC, Tis | 2-5 ml              | 4-24 °C                  | -                               | 5<br>FFPE 14                                   | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |



| ردیف | Test                                                         | کلیدواژه<br>keyword                                                          | ID       | روش انجام<br>method                | نوع نمونه<br>sample                                    | حجم نمونه<br>volume           | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
|------|--------------------------------------------------------------|------------------------------------------------------------------------------|----------|------------------------------------|--------------------------------------------------------|-------------------------------|--------------------------|---------------------------------|------------------------------------------------|-----------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------|-------------------------|
| 129  | FraX-<br>Cytogenetics                                        | fragile X, premature<br>ovarian failure, mental<br>retardation,              | Cyto     | cell culture,<br>karyotype         | PBH                                                    | 5-10 ml                       | 4-24 °C<br>24 hours      | -                               | 14                                             | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 130  | Hereditary<br>Diffuse Gastric<br>Cancer (HDGC);<br>CDH1 gene | CDH1 germline mutatin,<br>Gastric Cancer,<br>Diagnosis, Carrier<br>Detection | Cyto-Mol | Sanger<br>Sequencing               | PBE or<br>DNA                                          | 5-10 ml                       | 4 °C                     | -                               | 60                                             | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 131  | Mosaicism                                                    | cell line, mosaicism,                                                        | Cyto     | karyotype<br>analysis              | PBH,AF,<br>CVS                                         | 2-5 ml                        | 4-24 °C<br>24 hours      | -                               | 14                                             | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 132  | NOR-Band                                                     | satellite, polymorphism,<br>acrocentric                                      | Cyto     | chromosome<br>banding,<br>analysis | BMH,<br>BMSH,<br>PBH, AF,<br>CVS,<br>FFPE,<br>POC, Tis | 2-5 ml                        | 4-24 °C                  | -                               | 5<br>FFPE 14                                   | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 133  | OA-CGH                                                       | oligo-array comparative<br>genomic hybridization,<br>chromosomal micro-array | Cyto     | Oligo array<br>CGH 8*60            | Blood<br>EDTA/<br>DNA                                  | DNA: 4µg<br>Blood: 5-10<br>cc | 4-24 °C                  | -                               | 21                                             | medical<br>impression/<br>reports |                                                                       | Y                                                                      | Y                       |
| 134  | PB-Cytogenetics                                              |                                                                              | Cyto     | cell culture,<br>karyotype         | PBH                                                    | 2-5 ml                        | 4-24 °C<br>24 hours      | -                               | 14                                             | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 135  | PGS                                                          |                                                                              | Cyto     |                                    |                                                        |                               |                          |                                 |                                                |                                   |                                                                       |                                                                        |                         |
| 136  | PGS I                                                        |                                                                              | Cyto     | Genetisure<br>array CGH<br>8*60    | Blastomer<br>e/<br>blastocyst                          | 1-4<br>Blastomeres            | -(15-20)<br>°C           | -                               | 1                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | Y                       |



| ردیف | Test                      | کلیدواژه<br>keyword                                                               | ID   | روش انجام<br>method             | نوع نمونه<br>sample           | حجم نمونه<br>volume      | شرایط نگهداری<br>storage | آمادگی قبل<br>آزمایش<br>patient | زمان جوابدهی(روز)<br>Turn Around<br>Time (day) | مدارک مورد نیاز<br>document       | نیاز به مشاوره قبل از<br>انجام آزمایش دارد؟<br>Pre test<br>counseling | نیاز به مشاوره بعد از<br>انجام آزمایش دارد؟<br>Post test<br>counseling | قابلیت اورژانس<br>دارد؟ |
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| 137  | PGS I +                   |                                                                                   | Cyto | Genetisure<br>array CGH<br>8*60 | Blastomer<br>e/<br>blastocyst | 1-4<br>Blastomeres       | -(15-20)<br>°C           | -                               | 1                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | Y                       |
| 138  | PGS II                    |                                                                                   | Cyto | Genetisure<br>array CGH<br>8*60 | Blastomer<br>e/<br>blastocyst | At least 1<br>Blastomere | -(15-20)<br>°C           | -                               | 1                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | Y                       |
| 139  | PGS II +                  |                                                                                   | Cyto | Genetisure<br>array CGH<br>8*60 | Blastomer<br>e/<br>blastocyst | At least 1<br>Blastomere | -(15-20)<br>°C           | -                               | 1                                              | medical<br>impression/<br>reports |                                                                       | Y                                                                      | Y                       |
| 140  | PND-Array                 |                                                                                   | Cyto | Oligo array<br>CGH 8*60         | AF/ CVS                       | 10 ml, 10<br>mg          | 4-24 °C                  | -                               | 21                                             | medical<br>impression/<br>reports |                                                                       | Y                                                                      | Y                       |
| 141  | PND-CVS-<br>Cytogenetics  | prenatal diagnosis,<br>culture, chromosomal<br>study, karyotype                   | Cyto | cell culture,<br>karyotype      | CVS                           | 2-5 ml                   | 2-24 °C<br>/24-48h       | -                               | 21                                             | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |
| 142  | TC-Tissue<br>Cytogenetics | tissue cell culture,<br>product of conception,<br>chromosomal study,<br>abortion, | Cyto | cell culture,<br>karyotype      | POC, TIS                      | 10 mg                    | 2-24 °C<br>/24-48h       | -                               | 21                                             | medical<br>impression/<br>reports |                                                                       | Y                                                                      | N                       |