

| Analiz Edilen Genler | İlişkili Tümörler                                                                                       |
|----------------------|---------------------------------------------------------------------------------------------------------|
| <b>AKT1</b>          | Meme, Akciğer, Kolorektal                                                                               |
| <b>ALK</b>           | Akciğer, Nöroblastoma, Rhabdomyosarcoma                                                                 |
| <b>AR</b>            | Prostat                                                                                                 |
| <b>BRAF</b>          | Melanoma, Kolorektal, Akciğer, Over, Gastrik, Glioma, Tiroid, Pankreas, Prostat                         |
| <b>CTNNB1</b>        | Melanoma                                                                                                |
| <b>EGFR</b>          | Akciğer, Baş & Boyun, Prostat                                                                           |
| <b>ERBB2</b>         | Akciğer, Meme                                                                                           |
| <b>ESR1</b>          | Meme                                                                                                    |
| <b>FOXL2</b>         | Over                                                                                                    |
| <b>GNA11</b>         | Melanoma                                                                                                |
| <b>GNAQ</b>          | Melanoma                                                                                                |
| <b>KIT</b>           | Gastrik, Melanoma, Timik Karsinoma                                                                      |
| <b>KRAS</b>          | Kolorektal, Gastrik, Akciğer, Over, Tiroid, Endometriyal, Pankreas, Prostat                             |
| <b>MEK (MAP2K1)</b>  | Melanoma, Akciğer, Over, Kolorektal                                                                     |
| <b>MET</b>           | Akciğer, Kolorektal, Gastrik,                                                                           |
| <b>NRAS</b>          | Kolorektal, Akciğer, Melanoma, Tiroid                                                                   |
| <b>PDGFRA</b>        | Melanoma, Gastrik                                                                                       |
| <b>PIK3CA</b>        | Akciğer, Meme, Prostat, Kolorektal, Over, Baş & Boyun, Prostat, Tiroid                                  |
| <b>PTEN</b>          | Akciğer, Meme                                                                                           |
| <b>RET</b>           | Akciğer, Tiroid                                                                                         |
| <b>ROS1</b>          | Akciğer                                                                                                 |
| <b>SMAD4</b>         | Kolorektal                                                                                              |
| <b>TP53</b>          | Akciğer, Melanoma, Over, Kolorektal, Meme, Endometriyal, Baş & Boyun, Böbrek, Pankreas, Prostat, Tiroid |

## 23 Gende Analiz Edilen Hotspot Mutasyonlar

| Gene | Mutation               | Exon | Nucleotide changes                    |
|------|------------------------|------|---------------------------------------|
| AKT1 | <a href="#">E17K</a>   | 3    | <a href="#">c.49 G&gt;A</a>           |
| ALK  | <a href="#">D1091N</a> | 20   | <a href="#">c.3271G&gt;A</a>          |
| ALK  | <a href="#">I1171N</a> | 22   | <a href="#">c.3512T&gt;A</a>          |
| ALK  | <a href="#">T1151M</a> | 22   | <a href="#">c.3452C&gt;T</a>          |
| ALK  | <a href="#">F1174C</a> | 23   | <a href="#">c.3521T&gt;G</a>          |
| ALK  | <a href="#">F1174I</a> | 23   | <a href="#">c.3520T&gt;A</a>          |
| ALK  | <a href="#">F1174L</a> | 23   | <a href="#">c.3522C&gt;A</a>          |
| ALK  | <a href="#">F1174V</a> | 23   | <a href="#">c.3520T&gt;G</a>          |
| ALK  | <a href="#">D1225N</a> | 24   | <a href="#">c.3673G&gt;A</a>          |
| ALK  | <a href="#">F1245C</a> | 24   | <a href="#">c.3734T&gt;G</a>          |
| ALK  | <a href="#">F1245L</a> | 24   | <a href="#">c.3735C&gt;G</a>          |
| ALK  | <a href="#">F1245V</a> | 24   | <a href="#">c.3733T&gt;G</a>          |
| ALK  | <a href="#">R1275Q</a> | 25   | <a href="#">c.3824G&gt;A</a>          |
| ALK  | <a href="#">Y1278S</a> | 25   | <a href="#">c.3833A&gt;C</a>          |
| ALK  | 1151Tins               |      |                                       |
| ALK  | C1156Y                 |      |                                       |
| ALK  | G1202R                 |      |                                       |
| ALK  | G1269A                 |      |                                       |
| ALK  | L1152R                 |      |                                       |
| ALK  | L1196M                 |      |                                       |
| ALK  | L1198F                 |      |                                       |
| ALK  | S1206Y                 |      |                                       |
| AR   | <a href="#">L702H</a>  | 4    | <a href="#">c.2105T&gt;A</a>          |
| AR   | <a href="#">W742C</a>  | 5    | <a href="#">c.2226G&gt;T</a>          |
| AR   | <a href="#">H875Y</a>  | 8    | <a href="#">c.2623C&gt;T</a>          |
| AR   | <a href="#">F877L</a>  | 8    | <a href="#">c.2631C&gt;A</a>          |
| AR   | <a href="#">T878A</a>  | 8    | <a href="#">c.2632A&gt;G</a>          |
| BRAF | <a href="#">G466V</a>  | 11   | <a href="#">c.1397G&gt;T</a>          |
| BRAF | <a href="#">G469A</a>  | 11   | <a href="#">c.1406G&gt;C</a>          |
| BRAF | <a href="#">G469E</a>  | 11   | <a href="#">c.1406G&gt;A</a>          |
| BRAF | <a href="#">G469L</a>  | 11   | <a href="#">c.1405_1406delTGinsTT</a> |
| BRAF | <a href="#">G469V</a>  | 11   | <a href="#">c.1406G&gt;T</a>          |
| BRAF | <a href="#">Y472C</a>  | 11   | <a href="#">c.1415A&gt;G</a>          |
| BRAF | <a href="#">D594E</a>  | 15   | <a href="#">c.1782T&gt;A</a>          |
| BRAF | <a href="#">D594E</a>  | 15   | <a href="#">c.1782T&gt;G</a>          |
| BRAF | <a href="#">D594G</a>  | 15   | <a href="#">c.1781A&gt;G</a>          |
| BRAF | <a href="#">D594H</a>  | 15   | <a href="#">c.1780G&gt;C</a>          |
| BRAF | <a href="#">D594N</a>  | 15   | <a href="#">c.1779_1780delTGinsGA</a> |
| BRAF | <a href="#">D594N</a>  | 15   | <a href="#">c.1780G&gt;A</a>          |
| BRAF | <a href="#">D594V</a>  | 15   | <a href="#">c.1781A&gt;T</a>          |
| BRAF | <a href="#">G596R</a>  | 15   | <a href="#">c.1786G&gt;C</a>          |
| BRAF | <a href="#">K601E</a>  | 15   | <a href="#">c.1801A&gt;G</a>          |
| BRAF | <a href="#">L597Q</a>  | 15   | <a href="#">c.1790T&gt;A</a>          |
| BRAF | <a href="#">L597R</a>  | 15   | <a href="#">c.1790T&gt;G</a>          |
| BRAF | <a href="#">L597S</a>  | 15   | <a href="#">c.1789_1790delCTinsTC</a> |
| BRAF | <a href="#">L597V</a>  | 15   | <a href="#">c.1789C&gt;G</a>          |
| BRAF | <a href="#">V600D</a>  | 15   | <a href="#">c.1799_1800delTGinsAT</a> |
| BRAF | <a href="#">V600E</a>  | 15   | <a href="#">c.1799T&gt;A</a>          |
| BRAF | <a href="#">V600E</a>  | 15   | <a href="#">c.1799_1800delTGinsAA</a> |
| BRAF | <a href="#">V600G</a>  | 15   | <a href="#">c.1799T&gt;G</a>          |
| BRAF | <a href="#">V600K</a>  | 15   | <a href="#">c.1798_1799delGTinsAA</a> |
| BRAF | <a href="#">V600M</a>  | 15   | <a href="#">c.1798G&gt;A</a>          |
| BRAF | <a href="#">V600R</a>  | 15   | <a href="#">c.1798_1799delGTinsAG</a> |

|             |                                    |    |                                          |
|-------------|------------------------------------|----|------------------------------------------|
| CTNNB1      | <a href="#">S37F</a>               | 3  | c.110C>T                                 |
| CTNNB1      | <a href="#">S37Y</a>               | 3  | c.110C>A                                 |
| CTNNB1      | <a href="#">S45P</a>               | 3  | c.133T>C                                 |
| CTNNB1      | <a href="#">S45F</a>               | 3  | c.134C>T                                 |
| CTNNB1      | <a href="#">S45Y</a>               | 3  | c.134C>A                                 |
| EGFR        | <a href="#">G719A</a>              | 18 | c.2156G>C                                |
| EGFR        | <a href="#">G719C</a>              | 18 | c.2155G>T                                |
| EGFR        | <a href="#">G719S</a>              | 18 | c.2155G>A                                |
| EGFR        | <a href="#">Exon 19 Deletions</a>  | 19 |                                          |
| EGFR        | <a href="#">Exon 19 Insertions</a> | 19 |                                          |
| EGFR        | <a href="#">A763_Y764insFQEA</a>   | 20 | c.2290_2291ins                           |
| EGFR        | <a href="#">Exon 20 Insertions</a> | 20 |                                          |
| EGFR        | <a href="#">S768I</a>              | 20 | c.2303G>T                                |
| EGFR        | <a href="#">T790M</a>              | 20 | c.2369C>T                                |
| EGFR        | <a href="#">L858R</a>              | 21 | c.2573T>G                                |
| EGFR        | <a href="#">L861Q</a>              | 21 | c.2582T>A                                |
| EGFR        | E746_A750>IP                       |    | c.2235_2248delGGAATTAAGAGAAG<br>insAATTC |
| EGFR        | E746_A750del                       |    | c.2235_2249delGGAATTAAGAGAAG<br>C        |
| EGFR        | E746_A750del                       |    | c.2236_2250delGAATTAAGAGAAGC<br>A        |
| EGFR        | E746_P753>VS                       |    | c.2237_2257del21insTCT                   |
| EGFR        | E746_S752>A                        |    | c.2237_2254del18                         |
| EGFR        | E746_S752>D                        |    | c.2238_2255del18                         |
| EGFR        | E746_S752>I                        |    | c.2235_2255delinsAAT                     |
| EGFR        | E746_S752>V                        |    | c.2237_2255delinsT                       |
| EGFR        | E746_T751>A                        |    | c.2237_2251del15                         |
| EGFR        | E746_T751>I                        |    | c.2235_2252delinsAAT                     |
| EGFR        | E746_T751>IP                       |    | c.2235_2251delinsAATTC                   |
| EGFR        | E746_T751>V                        |    | c.2237_2252delinsT                       |
| EGFR        | E746_T751>VA                       |    | c.2237_2253delinsTTGCT                   |
| EGFR        | E746_T751del                       |    | c.2236_2253del18                         |
| EGFR        | K745_E749del                       |    | c.2233_2247del15)                        |
| EGFR        | L747_A750>P                        |    | c.2238_2248delATTAAGAGAAGinsG<br>C       |
| EGFR        | L747_A750>P                        |    | c.2239_2248delTTAAGAGAAGinsC             |
| EGFR        | L747_E749del                       |    | c.2239_2247delTTAAGAGAA                  |
| EGFR        | L747_P753>Q                        |    | c.2239_2258delinsCA                      |
| EGFR        | L747_S752>Q                        |    | c.2239_2256delinsCAA                     |
| EGFR        | L747_S752del                       |    | c.2239_2256del18                         |
| EGFR        | L747_T751>Q                        |    | c.2238_2252delinsGCA                     |
| EGFR        | L747_T751>S                        |    | c.2240_2251del                           |
| EGFR        | L747_T751del                       |    | c.2238_2252del                           |
| ERBB2(HER2) | <a href="#">G309A</a>              | 8  | c.926G>C                                 |
| ERBB2(HER2) | <a href="#">D769H</a>              | 19 | c.2305G>C                                |
| ERBB2(HER2) | <a href="#">D769Y</a>              | 19 | c.2305G>T                                |
| ERBB2(HER2) | G776S                              | 19 | c.2326 G>A                               |
| ERBB2(HER2) | <a href="#">L755_T759del</a>       | 19 | c.2264_2278del                           |
| ERBB2(HER2) | <a href="#">L755S</a>              | 19 | c.2264T>C                                |
| ERBB2(HER2) | <a href="#">Exon 20 Insertions</a> | 20 |                                          |
| ERBB2(HER2) | <a href="#">G778_P780dup</a>       | 20 | c.2339_2340ins                           |
| ERBB2(HER2) | <a href="#">V777L</a>              | 20 | c.2329G>T                                |
| ERBB2(HER2) | <a href="#">V842I</a>              | 21 | c.2524G>A                                |
| ERBB2(HER2) | <a href="#">R896C</a>              | 22 | c.2686C>T                                |
| ERBB2(HER2) | c.2263_2264delTTinsCC              |    | c.2263_2264delTTinsCC                    |

|             |                                  |    |                            |
|-------------|----------------------------------|----|----------------------------|
| ERBB2(HER2) | c.2322_2334dupATACGTGATGGC       |    | c.2322_2334dupATACGTGATGGC |
| ERBB2(HER2) | c.2328_2336dupTGTGGGCTC          |    | c.2328_2336dupTGTGGGCTC    |
| ESR1        | S463P                            |    |                            |
| ESR1        | V534E                            |    |                            |
| ESR1        | P535H                            |    |                            |
| ESR1        | L536Q                            |    |                            |
| ESR1        | L536R                            |    |                            |
| ESR1        | Y537C                            |    |                            |
| ESR1        | Y537S                            |    |                            |
| ESR1        | Y537N                            |    |                            |
| ESR1        | D538G                            |    |                            |
| FOXL2       | C134W                            | 1  | c.402 C>G                  |
| GNA11       | <a href="#">R183C</a>            | 4  | c.546_547delCCinsTT        |
| GNA11       | <a href="#">R183C</a>            | 4  | c.547C>T                   |
| GNA11       | <a href="#">Q209L</a>            | 5  | c.626A>T                   |
| GNA11       | <a href="#">Q209P</a>            | 5  | c.626A>C                   |
| GNAQ        | <a href="#">R183Q</a>            | 4  | c.548G>A                   |
| GNAQ        | <a href="#">Q209L</a>            | 5  | c.626A>T                   |
| GNAQ        | <a href="#">Q209P</a>            | 5  | c.626A>C                   |
| GNAQ        | <a href="#">Q209R</a>            | 5  | c.626A>G                   |
| KIT         | A502-Y503insFA                   | 9  | c.1507_1508insTTGCCT       |
| KIT         | <a href="#">E490K</a>            | 9  | c.1468G>A                  |
| KIT         | <a href="#">Exon 9 Mutation</a>  | 9  |                            |
| KIT         | F504L                            | 9  | c.1510T>C                  |
| KIT         | 556 ins L                        | 11 |                            |
| KIT         | 575 ins PE                       | 11 |                            |
| KIT         | Del 554-558                      | 11 |                            |
| KIT         | Del 554-559                      | 11 |                            |
| KIT         | Del 566-572                      | 11 |                            |
| KIT         | Del 566-574                      | 11 |                            |
| KIT         | Del 579                          | 11 |                            |
| KIT         | Del V559                         | 11 |                            |
| KIT         | E583_E589dupPYDHKWE              | 11 |                            |
| KIT         | <a href="#">Exon 11 Mutation</a> | 11 |                            |
| KIT         | G565V                            | 11 |                            |
| KIT         | K550N                            | 11 |                            |
| KIT         | K558N                            | 11 |                            |
| KIT         | <a href="#">L576P</a>            | 11 | c.1727T>C                  |
| KIT         | N566D                            | 11 |                            |
| KIT         | <a href="#">P577_D579del</a>     | 11 | c.1730_1738del             |
| KIT         | <a href="#">V559A</a>            | 11 | c.1676T>C                  |
| KIT         | <a href="#">V559D</a>            | 11 | c.1676T>A                  |
| KIT         | V559G                            | 11 |                            |
| KIT         | V560A                            | 11 |                            |
| KIT         | V560D                            | 11 | c.1727T>C (V560D)          |
| KIT         | <a href="#">V560del</a>          | 11 | c.1679_1681del             |
| KIT         | V560G                            | 11 |                            |
| KIT         | V569G                            | 11 |                            |
| KIT         | <a href="#">W557R</a>            | 11 | c.1669T>A                  |
| KIT         | <a href="#">W557R</a>            | 11 | c.1669T>C                  |
| KIT         | <a href="#">Y553N</a>            | 11 | c.1657T>A                  |
| KIT         | <a href="#">Exon 13 Mutation</a> | 13 |                            |
| KIT         | <a href="#">K642E</a>            | 13 | c.1924A>G                  |
| KIT         | N655                             | 13 |                            |
| KIT         | N655S                            | 13 |                            |
| KIT         | R634W                            | 13 |                            |

|                  |                                     |    |           |
|------------------|-------------------------------------|----|-----------|
| KIT              | V654A                               | 13 |           |
| KIT              | <a href="#">Exon 14 Mutation</a>    | 14 |           |
| KIT              | <a href="#">H697Y</a>               | 14 | c.2089C>T |
| KIT              | <a href="#">D816H</a>               | 17 | c.2446G>C |
| KIT              | D816V                               | 17 |           |
| KIT              | <a href="#">D820E</a>               | 17 | c.2460T>A |
| KIT              | D820V                               | 17 |           |
| KIT              | D820Y                               | 17 |           |
| KIT              | <a href="#">Exon 17 Mutation</a>    | 17 |           |
| KIT              | N822I                               | 17 |           |
| KIT              | N822K                               | 17 |           |
| KIT              | N822Y                               | 17 |           |
| KIT              | Y823D                               | 17 |           |
| KIT              | A829P                               | 18 |           |
| KIT              | I841V                               | 18 |           |
| KIT              | S864F                               | 18 |           |
| KIT              | <a href="#">Other KIT mutations</a> |    |           |
| KRAS             | <a href="#">G12A</a>                | 2  | c.35G>C   |
| KRAS             | <a href="#">G12C</a>                | 2  | c.34G>T   |
| KRAS             | <a href="#">G12D</a>                | 2  | c.35G>A   |
| KRAS             | <a href="#">G12R</a>                | 2  | c.34G>C   |
| KRAS             | <a href="#">G12S</a>                | 2  | c.34G>A   |
| KRAS             | <a href="#">G12V</a>                | 2  | c.35G>T   |
| KRAS             | <a href="#">G13A</a>                | 2  | c.38G>C   |
| KRAS             | <a href="#">G13C</a>                | 2  | c.37G>T   |
| KRAS             | <a href="#">G13D</a>                | 2  | c.38G>A   |
| KRAS             | <a href="#">G13R</a>                | 2  | c.37G>C   |
| KRAS             | <a href="#">G13S</a>                | 2  | c.37G>A   |
| KRAS             | <a href="#">G13V</a>                | 2  | c.38G>T   |
| KRAS             | <a href="#">Q22K</a>                | 2  | c.64C>A   |
| KRAS             | <a href="#">Q61H</a>                | 3  | c.183A>C  |
| KRAS             | <a href="#">Q61H</a>                | 3  | c.183A>T  |
| KRAS             | <a href="#">Q61H</a>                | 3  | c.183A>C  |
| KRAS             | <a href="#">Q61K</a>                | 3  | c.181C>A  |
| KRAS             | <a href="#">Q61L</a>                | 3  | c.182A>T  |
| KRAS             | <a href="#">Q61P</a>                | 3  | c.182A>C  |
| KRAS             | <a href="#">Q61R</a>                | 3  | c.182A>G  |
| KRAS             | <a href="#">A146P</a>               | 4  | c.436G>C  |
| KRAS             | <a href="#">A146T</a>               | 4  | c.436G>A  |
| KRAS             | <a href="#">A146V</a>               | 4  | c.437C>T  |
| KRAS             | <a href="#">K117N</a>               | 4  | c.351A>C  |
| KRAS             | <a href="#">K117N</a>               | 4  | c.351A>T  |
| MEK1<br>(MAP2K1) | <a href="#">D67N</a>                | 2  | c.199G>A  |
| MEK1<br>(MAP2K1) | <a href="#">F53L</a>                | 2  | c.157T>C  |
| MEK1<br>(MAP2K1) | <a href="#">K57N</a>                | 2  | c.171G>T  |
| MEK1<br>(MAP2K1) | <a href="#">Q56P</a>                | 2  | c.167A>C  |
| MEK1<br>(MAP2K1) | <a href="#">C121S</a>               | 3  | c.362G>C  |
| MEK1<br>(MAP2K1) | <a href="#">E203K</a>               | 3  | c.607G>A  |
| MEK1<br>(MAP2K1) | <a href="#">I111S</a>               | 3  | c.332T>G  |

|                  |                                         |    |                                         |
|------------------|-----------------------------------------|----|-----------------------------------------|
| MEK1<br>(MAP2K1) | <a href="#">N382H</a>                   | 3  | c.1144A>C                               |
| MEK1<br>(MAP2K1) | <a href="#">P124L</a>                   | 3  | c.371C>T                                |
| MEK1<br>(MAP2K1) | <a href="#">P124S</a>                   | 3  | c.370C>T                                |
| MEK1<br>(MAP2K1) | <a href="#">P264S</a>                   | 3  | c.790C>T                                |
| MET              | c.2888-6_29del                          | 14 | c.2888-6_29del                          |
| MET              | c.3028G>C                               | 14 | c.3028G>C                               |
| MET              | c.2887-18_2887-7del12                   | 14 | c.2887-18_2887-7del12                   |
| MET              | c.2888delA                              | 14 | c.2888delA                              |
| MET              | c.3001_3021delGTAGACTACCGAG<br>CTACTTTT | 14 | c.3001_3021delGTAGACTACCGAG<br>CTACTTTT |
| MET              | c.3024_3028+7delAGAAGGTATATT            | 14 | c.3024_3028+7delAGAAGGTATATT            |
| MET              | c.3028+1G>T                             | 14 | c.3028+1G>T                             |
| MET              | c.3028G>A                               | 14 | c.3028G>A                               |
| MET              | c.3028G>T                               | 14 | c.3028G>T                               |
| MET              | L1213V                                  | 18 | c.3637 C>G                              |
| MET              | V1206L                                  | 18 | c.3616 G>T                              |
| NRAS             | <a href="#">G12A</a>                    | 2  | c.35G>C                                 |
| NRAS             | <a href="#">G12C</a>                    | 2  | c.34G>T                                 |
| NRAS             | <a href="#">G12D</a>                    | 2  | c.35G>A                                 |
| NRAS             | <a href="#">G12R</a>                    | 2  | c.34G>C                                 |
| NRAS             | <a href="#">G12S</a>                    | 2  | c.34G>A                                 |
| NRAS             | <a href="#">G12V</a>                    | 2  | c.35G>T                                 |
| NRAS             | <a href="#">G13A</a>                    | 2  | c.38G>C                                 |
| NRAS             | <a href="#">G13C</a>                    | 2  | c.37G>T                                 |
| NRAS             | <a href="#">G13D</a>                    | 2  | c.38G>A                                 |
| NRAS             | <a href="#">G13R</a>                    | 2  | c.37G>C                                 |
| NRAS             | <a href="#">G13V</a>                    | 2  | c.38G>T                                 |
| NRAS             | <a href="#">Q61E</a>                    | 3  | c.181C>G                                |
| NRAS             | <a href="#">Q61H</a>                    | 3  | c.183A>C                                |
| NRAS             | <a href="#">Q61H</a>                    | 3  | c.183A>T                                |
| NRAS             | <a href="#">Q61H</a>                    | 3  | c.183A>T                                |
| NRAS             | <a href="#">Q61K</a>                    | 3  | c.181C>A                                |
| NRAS             | <a href="#">Q61L</a>                    | 3  | c.182A>T                                |
| NRAS             | <a href="#">Q61L</a>                    | 3  | c.182_183delAAinsTG                     |
| NRAS             | <a href="#">Q61P</a>                    | 3  | c.182A>C                                |
| NRAS             | <a href="#">Q61R</a>                    | 3  | c.182A>G                                |
| NRAS             | <a href="#">Q61R</a>                    | 3  | c.182_183delAAinsGG                     |
| PDGFRA           | c.1679_1693delGGGTCATTGAATCA<br>A       |    |                                         |
| PDGFRA           | c.1681_1682insAGAGGG                    |    |                                         |
| PDGFRA           | c.1696_1713del18                        |    |                                         |
| PDGFRA           | c.2526_2537delCATCATGCATGA              |    |                                         |
| PDGFRA           | c.2533_2544delCATGATTCGAAC              |    |                                         |
| PDGFRA           | <a href="#">D842V</a>                   | 18 | c.2525 A>T                              |
| PDGFRA           | D846Y (c.2536 G>T)                      | 18 |                                         |
| PDGFRA           | <a href="#">Exon 12 Mutation</a>        | 12 |                                         |
| PDGFRA           | <a href="#">Exon 14 Mutation</a>        | 14 |                                         |
| PDGFRA           | <a href="#">Exon 18 Mutation</a>        | 18 |                                         |
| PDGFRA           | V561D (c.1682 T>A)                      |    |                                         |
| PDGFRA           | Y555C (c.1664 A>G)                      |    |                                         |
| PIK3CA           | <a href="#">D549N</a>                   | 9  | c.1645G>A                               |
| PIK3CA           | <a href="#">E542K</a>                   | 9  | c.1624G>A                               |

|        |                                |            |           |
|--------|--------------------------------|------------|-----------|
| PIK3CA | <a href="#">E545G</a>          | 9          | c.1634A>G |
| PIK3CA | <a href="#">E545K</a>          | 9          | c.1633G>A |
| PIK3CA | <a href="#">E545Q</a>          | 9          | c.1633G>C |
| PIK3CA | <a href="#">E545V</a>          | 9          | c.1634A>T |
| PIK3CA | <a href="#">Q546E</a>          | 9          | c.1636C>G |
| PIK3CA | <a href="#">Q546K</a>          | 9          | c.1636C>A |
| PIK3CA | <a href="#">Q546L</a>          | 9          | c.1637A>T |
| PIK3CA | <a href="#">Q546P</a>          | 9          | c.1637A>C |
| PIK3CA | <a href="#">Q546R</a>          | 9          | c.1637A>G |
| PIK3CA | <a href="#">H1047R</a>         | 20         | c.3140A>G |
| PIK3CA | <a href="#">H1047L</a>         | 20         | c.3140A>T |
| PIK3CA | H1047Y                         | 20         | c.3139C>T |
| PIK3CA | M1043I                         | 20         | c.3129G>A |
| PTEN   | <a href="#">R130*</a>          | 5          | c.388C>T  |
| PTEN   | <a href="#">R130fs*4</a>       | 5          | c.389delG |
| PTEN   | <a href="#">R130G</a>          | 5          | c.388C>G  |
| PTEN   | <a href="#">R130Q</a>          | 5          | c.389G>A  |
| PTEN   | <a href="#">R159S</a>          | 6          | c.477G>T  |
| PTEN   | <a href="#">K267fs*9</a>       | 7          | c.800delA |
| PTEN   | <a href="#">P248fs*5</a>       | 7          | c.741dupA |
| PTEN   | <a href="#">R233*</a>          | 7          | c.697C>T  |
| PTEN   | <a href="#">N323fs*2</a>       | 8          | c.968supA |
| PTEN   | <a href="#">N323fs*21</a>      | 8          | c.968delA |
| RET    | <a href="#">C634 Mutations</a> | 11         |           |
| RET    | <a href="#">M918T</a>          | 16         |           |
| ROS1   | G2032R                         |            |           |
| ROS1   | D2033N                         |            |           |
| ROS1   | L2155S                         |            |           |
| SMAD4  | <a href="#">E330A</a>          |            | c.989A>C  |
| SMAD4  | <a href="#">D351H</a>          |            | c.1051G>C |
| SMAD4  | <a href="#">D351N</a>          |            | c.1051G>A |
| SMAD4  | <a href="#">D355E</a>          |            | c.1065C>A |
| SMAD4  | <a href="#">R361C</a>          |            | c.1081C>T |
| SMAD4  | <a href="#">R361S</a>          |            | c.1081C>A |
| SMAD4  | <a href="#">R361H</a>          |            | c.1082G>A |
| SMAD4  | <a href="#">D537Y</a>          |            | c.1609G>T |
| TP53   | Whole coding region            | Exons 2-11 |           |