

# U.O.C. GENETICA MEDICA

## ELENCO DELLE PRESTAZIONI DI GENETICA MOLECOLARE A SCOPO DIAGNOSTICO

| area diagnostica           | patologia /disease                                      | geni testati                                                                                                                                                                                                                                                                                                                                                                                                   | metodo di analisi                       |
|----------------------------|---------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
|                            | carcinoma midollare della tiroide                       | RET                                                                                                                                                                                                                                                                                                                                                                                                            | pannello NGS regione genomica locus RET |
| enteropatie                | Hirschsprung Disease (HSCR)                             |                                                                                                                                                                                                                                                                                                                                                                                                                |                                         |
|                            | Pseudo-ostruzione intestinale (CIPO)                    | ACTG2<br>MYH11                                                                                                                                                                                                                                                                                                                                                                                                 | Sanger Seq<br>pannello ampliconi NGS    |
| reumatologica              | sindromi auto-infiammatorie (SAID) (pannello base)      | IL1RN, LPIN2, MDFIC, MEFV, MVK, NLRP12, NLRP3, NOD2, PSMB8, PSTPIP1, TNFRSF1A                                                                                                                                                                                                                                                                                                                                  | pannello NGS "FP11"                     |
|                            | sindromi auto-infiammatorie (SAID) (pannello avanzato)  | ACP5, ADAR1, AP1S3, C1NH, CARD14, CECR1, DNase1, DNase1L3, DNase2, IFIH1, IL10, IL10RA, IL10RB, IL1RN, IL36RN, ISG15, LPIN2, MEFV, MVK, NLRC4, NLRP12, NLRP3, NLRP7, NOD2, PLCG2, PSMA3, PSMB4, PSMB8, PSMB9, PSTPIP1, RBCK1, RNASEH2A, RNASEH2B, RNASEH2C, SAMHD1, SLC29A3, SH3BP2, TMEM173, TNFRSF1A, TNFRSF11A, TREX-1                                                                                      | pannello NGS "FP41"                     |
| emato-immuno-reumatologica | sindromi emato-immuno-reumatologiche                    | FAS, FASL, CASP8, CASP10, KRAS, NRAS, MAGT1, FADD, ITK, CTLA4, LRBA, PIK3CD, PIK3R1, CARD11, TNFRSF13B, TNFRSF13C, CD19, CD20, CD40, CD40L, PRKCD, DKC1, CTC1, RPL5, NOP10, RTEL1, RPL11, TERT, TINF2, RPL35A, RPS10, RPS19, RPS24, RPS26, SBDS, WRAP53, RPS7, RPS17, RPL26, NHP2, ELA2, GFI1, HAX1, G6PC, VPS45, CSF3R, JAGN1, VPS13B, AP3B1, C16orf57, CXCR4, LAMTOR2, LYST, RAB27A, RAC2, SLC37A4, TAZ, WAS | pannello NGS (58 geni)                  |
| stroke                     | sindromi con stroke quale manifestazione clinica comune | ABCC6, ACTA2, ATP7A, CBS, CECR1, COL4A1, ELN, GLA, HTRA1, JAG1, NF1, NOTCH3, PCNT, SAMHD1, SLC2A10                                                                                                                                                                                                                                                                                                             | pannello NGS (15 geni)                  |
|                            |                                                         | ABCA1, ABCC6, ABCG2, ACE, ACTA2, ACVRL1, ADAMTS17, ADAR, ANK1, APOA1, APOA2, APOA4, APOA5, APOB, APOE, APP, ARHGAP10, ATP1A2, ATP1A3, ATP7A, BHMT, BRCC3, CACNA1A, CBS, CCM2, CECR1, COL1A1, COL1A2, COL3A1, COL4A1, COL4A2, COL5A1, COL5A2, CST3, ELN, ENG, ENPP1, F13A1, F13B, F2, F5, F7, F8, F9, FBLN5, FBN1, FGA, FGB, FGG, FLNA, GGCX,                                                                   | pannello NGS (127 geni)                 |

|                                           |                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                     |
|-------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
|                                           |                                                                 | GLA, GNAQ, GP1BA, GP6, GUCY1A3, HBA1, HBA2, HBB, HTRA1, IFIH1, ITGA2, ITGB1, ITGB2, ITGB3, ITM2B, JAG1, KNG1, KRIT1, LPL, MCFD2, MMADHC, MMP3, MTHFR, MTR, MTRR, NF1, NOS3, NOTCH3, PDCD10, PDE4D, PDGFRB, PKD1, PKD2, PLAT, PLAU, PLAUR, PLG, PLOD1, PMF1, PON1, PROC, PROCR, PROS1, RASA1, RNASEH2A, RNASEH2B, RNASEH2C, RNF213, SAMHD1, SCN1A, SERPINA5, SERPINC1, SERPIND1, SERPINE1, SKI, SLC1A2, SLC25A44, SLC2A10, SLC44A2, SLC4A1, SMAD3, SMAD4, SPTA1, SPTB, STAT3, STXB5P5, TGFB1, TGFB2, TGFB1R1, TGFB1R2, THBD, TIMP2, TREX1, TSPAN15, VEGFA, VWF |                                     |
|                                           | stroke post-evento infettivo (varicella)                        | ABCA1, ACE, ADAMTS17, ADAR, APOA1, APOA2, APOA4, APOA5, APOB, BHMT, CBS, CECR1, F13A1, F13B, F2, F5, F7, F8, F9, FGA, FGB, FGG, GP1BA, GP6, ITGA2, ITGB3, KNG1, LPL, MCFD2, MMADHC, MTHFR, MTR, MTRR, NOS3, PDGFRB, PLAT, PLAU, PLAUR, PLG, POLR3A, PON1, PROC, PROS1, SAMHD1, SERPINC1, SERPIND1, SERPINE1, STAT3, THBD, VWF.<br>POLR3C*, POLR3F*<br>* sequenziamento Sanger                                                                                                                                                                                 | pannello NGS (50 geni) e Sanger seq |
| Malattie rare                             | ipoventilazione centrale congenita (CCHS)                       | PHOX2B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Sanger Seq                          |
|                                           | Alexander Disease                                               | GFAP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Sanger Seq                          |
| Malattie rare/Quadri sindromici congeniti | Nail-Patella Syndrome (NPS, 161200)                             | <i>LMX1B</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Sanger Seq                          |
|                                           | Fibrodysplasia Ossificans Progressiva (FOP, 135100)             | <i>ACVR1</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Sanger Seq                          |
|                                           | EEC and related disorders                                       | <i>TP63</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Sanger Seq                          |
|                                           | Oloprosencefalia                                                | SHH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Sanger Seq                          |
| Malattie ad eziologia sconosciuta         | Malattie complesse congenite o ad esordio infantile             | Analisi dell'esoma che comprende tutte le regioni codificanti, le regioni di splicing, le regioni non tradotte (UTR) al 5' ed al 3' dei geni codificanti ed alcune regioni introniche di particolare interesse clinico.                                                                                                                                                                                                                                                                                                                                       | NGS                                 |
| Farmacogenetica                           | Reazioni avverse al trattamento con farmaci a base di Tiopurine | TPMT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Sanger Seq                          |