**پانل بیماری های کبدی**

|  |  |  |  |
| --- | --- | --- | --- |
| **ردیف** | **نام بیماری** | **تعداد ژن** | **ژن مورد بررسی** |
| 1 | Familial cholestasis | 8 | ABCB11, ABCB4, ABCG5, ABCG8, ATP8B1, DCDC2, MYO5B, NR1H4 |
| 2 | Hypercholanemia and defects of bile acid synthesis | 11 | ABCD3, AKR1D1, AMACR, BAAT, CYP27A1, CYP7A1, CYP7B1, EPHX1, HSD3B7, SLC10A2, TJP2 |
| 3 | Impairments of transport in hepatocytes and cholangiocytes | 8 | ABCC2, ATP7B, CFTR, CIRH1A, SERPINA1, VIL1, VIPAS39, VPS33B |
| 4 | Impairments of organogenesis | 10 | CC2D2A, CLDN1, INVS, JAG1, NOTCH2, PKD2, PKHD1, RPGRIP1L, TMEM67, ZIC3 |
| 5 | Metabolic disorders of hepatocytes, including Tyrosinemia, Glycogen storage diseases, Hyperammonemia, Shwachman- Diamond syndrome, Disorder of fatty acid oxidations and Peroxisomal disease | 59 | ACADM, ACADVL, ADK, AGL, AGPAT2, ALAD, ALDOB, ASL, ASS1, BSCL2, CCDC115, COG1, COG6, COG7, CPS1, ETFA, ETFB, ETFDH, FAH, G6PC, GAA, GALE, GALT, GBE1, GYS2, IARS, KRT18, KRT8, LMNA, MPI, NGLY1, NR1H4, OTC, PEX1, PEX12, PEX13, PEX14, PEX16, PEX19, PEX2, PEX26, PEX3, PEX5, PEX6, PEX7, PGM1, PHKA1, PHKA2, PHKB, PHKG2, PKLR, PMM2, PTRF, PYGL, SBDS, SLC37A4, SLC39A8, STT3B, TTC37 |
| 6 | Lysosomal storage disorders | 5 | GBA, LIPA, NPC1, NPC2, SMPD1 |
| 7 | Recurrent acute liver failure | 6 | DLD, EIF2AK3, HMGCL, LARS, NBAS, TRMU |
| 8 | Mitochondriopathies | 17 | BCS1L, C10orf2, CPT1A, CPT2, DGUOK, FARS2, GFM1, HADHA, MPV17, MRPS16, POLG, SCO1, SLC25A20, SUCLG1, TRMU, TSFM, TYMP |
| 9 | Complete Panel- Liver Diseases | 118 | ABCB11, ABCB4, ABCC2, ABCD3, ABCG5, ABCG8, ACADM, ACADVL, ADK, AGL, AKR1D1, ALAD, ALDOB, AMACR, ASL, ASS1, ATP7B, ATP8B1, BAAT, BCS1L, C10orf2, CC2D2A, CCDC115, CFTR, CIRH1A, CLDN1, COG1, COG6, COG7, CPS1, CPT1A, CPT2, CYP27A1, CYP7A1, CYP7B1, DCDC2, DGUOK, DLD, EIF2AK3, EPHX1, ETFA, ETFB, ETFDH, FAH, FARS2, G6PC, GAA, GALE, GALT, GBA, GBE1, GFM1, GYS2, HADHA, HMGCL, HSD3B7, IARS, INVS, JAG1, KRT18, KRT8, LARS, LIPA, MPI, MPV17, MRPS16, MYO5B, NBAS, NGLY1, NOTCH2, NPC1, NPC2, NR1H4, OTC, PEX1, PEX12, PEX13, PEX14, PEX16, PEX19, PEX2, PEX26, PEX3, PEX5, PEX6, PEX7, PGM1, PHKA1, PHKA2, PHKB, PHKG2, PKD2, PKHD1, PKLR, PMM2, POLG, PYGL, RPGRIP1L, SBDS, SCO1, SERPINA1, SLC10A2, SLC25A20, SLC37A4, SLC39A8, SMPD1, STT3B, SUCLG1, TJP2, TMEM67, TRMU, TSFM, TTC37, TYMP, VIL1, VIPAS39, VPS33B, ZIC3 |