inv(16)(p12.2)

- inversion on Chr16: 21502978(p12.2) - 22436123(p12.2)

- all genes near breakpoints: ['RHBDF1', 'SMG1P1', 'METTL9', 'HBQ1', 'SNRNP25', 'HBM', 'LOC100190986', 'MIR6859-3', 'WASIR2', 'SLC7A5P2', 'MIR6859-1', 'POLR3E', 'HBZ', 'OTOAP1', 'MFSD13B', 'NPIPB3', 'MPG', 'HBA2', 'DDX11L10', 'MIR3680-1', 'RRN3P3', 'OTOA', 'LOC101927814', 'CRYM-AS1', 'NPIPB5', 'SMG1P3', 'MIR3680-2', 'EEF2K', 'CRYM', 'NPRL3', 'LOC440346', 'MIR6859-2', 'CDR2', 'IGSF6', 'SNX29P1', 'MIR6859-4', 'HBA1', 'LUC7L', 'POLR3K']

- genes near breakpoints documented in DDG2P: None

inv(16)(p12.2)

- inversion on Chr16: 21502978(p12.2) - 22436123(p12.2)

- all genes near breakpoints: ['RHBDF1', 'SMG1P1', 'METTL9', 'HBQ1', 'SNRNP25', 'HBM', 'LOC100190986', 'MIR6859-3', 'WASIR2', 'SLC7A5P2', 'MIR6859-1', 'POLR3E', 'HBZ', 'OTOAP1', 'MFSD13B', 'NPIPB3', 'MPG', 'HBA2', 'DDX11L10', 'MIR3680-1', 'RRN3P3', 'OTOA', 'LOC101927814', 'CRYM-AS1', 'NPIPB5', 'SMG1P3', 'MIR3680-2', 'EEF2K', 'CRYM', 'NPRL3', 'LOC440346', 'MIR6859-2', 'CDR2', 'IGSF6', 'SNX29P1', 'MIR6859-4', 'HBA1', 'LUC7L', 'POLR3K']

- genes near breakpoints documented in DDG2P: None

dup(7)(q11.23)

- tandem duplication on Chr7: 76500710(q11.23) - 76944527(q11.23)

- all genes near breakpoints: ['LOC102723672', 'SPDYE16', 'LOC100507642', 'FDPSP2', 'DTX2P1-UPK3BP1-PMS2P11', 'FAM20C', 'YWHAG', 'UPK3B', 'HSPB1', 'PMS2P9', 'SSC4D', 'ZP3', 'CCDC146', 'POMZP3', 'SPDYE18', 'DTX2', 'FAM185BP', 'LOC100133091', 'SPDYE17', 'LOC105375115']

- genes near breakpoints documented in DDG2P:
FAM20C(611061): RAINE SYNDROME(259775)
YWHAG(605356): Early-Onset Epilepsy(No disease mim)

- all genes with +1 CN: ['DTX2', 'UPK3B', 'SPDYE16', 'LOC100133091', 'POMZP3']

- genes with +1 CN documented in DDG2P: None

del(3)(p12.3)

- deletion on Chr3: 75345111(p12.3) - 75588798(p12.3)

- all genes near breakpoints: ['MIR4444-1', 'CHL1-AS2', 'LINC01986', 'MIR4273', 'CHL1', 'FRG2C', 'MIR4444-2', 'ZNF717', 'FAM86DP', 'LINC02018', 'LINC00960', 'MIR1324']

- genes near breakpoints documented in DDG2P: None

- all genes with -1 CN: ['FAM86DP', 'LINC02018']

- genes with -1 CN documented in DDG2P: None

del(12)(q21.32)

- deletion on Chr12: 86345178(q21.32) - 87555442(q21.32)

- all genes near breakpoints: ['SLC6A12', 'WASH8P', 'IQSEC3', 'MGAT4C', 'SLC6A12-AS1', 'FAM138D', 'LOC574538']

- genes near breakpoints documented in DDG2P: None

- all genes with -1 CN: ['MGAT4C', 'MIR3059', 'LOC105369879']

- genes with -1 CN documented in DDG2P: None