



Online Resource 2. Mutation analyses in CSHS105 bone. An iliac crest biopsy was performed in subject CSHS105 at age 17 in an area that appeared dysplastic on CT imaging (white arrow). Bone marrow stromal cells (BMSCs) single colony isolation was performed on a piece of the biopsy. Sanger sequencing of colonies showed that approximately 30% of the BMSC colonies from this bone specimen had a *HRAS* G37C nucleotide substitution in one of the DNA strands (black arrow) leading a *HRAS* G13R mutation (asterisk), the same mutation that the subject harbored in his nevi. In contrast, the remaining colonies were unaffected (right chromatogram). *NOTE:* The sequences read in a 3'-- 5' direction