

Supplementary Table 1: Diagnostic criteria for patients with OI

OI type	Clinical features	Inheritance	Biochem.Abn	Mutation
I	Normal stature, little or no deformity, blue sclerae, hearing loss	AD	50% reduction in type I collagen synthesis	<i>COL1A1</i>
II	Lethal; minimal calvarial mineralization, beaded ribs, compressed femurs, long bone deformity	AD	Structural alterations of type I collagen chains - overmodification	<i>COL1A1</i> <i>COL1A2</i>
III	Progressively deforming bones, DI, hearing loss, very short stature	AD	Structural alterations of type I collagen chains – overmodification	<i>COL1A1</i> <i>COL1A2</i>
IV	Normal sclerae in adult, mild/moderate deformity, variable short stature, DI, some hearing loss	AD	Structural alterations of type I collagen chains – overmodification	<i>COL1A1</i> <i>COL1A2</i>
V	Similar to type IV plus calcification of interosseus membrane of forearm, hyperplastic callus formation	AD	None described	<i>IFITM5</i>
VI	Similar to type IV with vertebral compression; mineralization defect	AR	None described	<i>SERPINF1</i>
VII	Moderate to severe, with fractures at birth, early deformity and rhizomelia	AR	Overmodification	<i>CRTAP</i>

*Patients classified into as type III and IV OI on a clinical basis were reclassified into appropriate subtypes when genotype information was available.