## Large-scale open-source three-dimensional growth curves for clinical facial assessment and objective description of facial dysmorphism

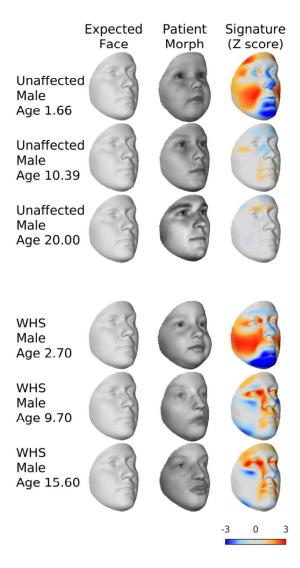
Short title: 3D growth curves for facial assessment

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**S1 Figure.** Assessing individual patients against a model of variation derived from the entire normative training sample with equal weight given to each training observation. The first column plots the age and sex-specific expected face for the age and sex of the patient. The second plots the 3D image of the patient morph. The third plots the facial signature of the patient morph along the direction perpendicular to the expected face. Each point is colored according to the patient morph's individual z-score. Orange and red indicates the region of the face is displaced outwardly, relative to the expected facial shape, light and dark blue indicate the point is displaced inwardly. Dark red and dark blue indicate z scores outside of the range +/- 2. This figure was generated in MATLAB 2021a (https://www.mathworks.com/).