



Reference points to be marked on the 3D scanned models of cleft infants	
Reference point Description	
PL	The posterior-most point of the alveolar crest in the LS
PS	The posterior-most point of the alveolar crest in the SS
AL	The anterior-most point of the alveolar crest in the LS
AS	The anterior-most point of the alveolar crest in the SS
BL'	The intersection point between the palatally extended lateral sulcus line and the gingival groove in the LS
BS'	The intersection point between the palatally extended lateral sulcus line and the gingival groove in the SS
BL	The intersection point between the lateral sulcus line-BL line and the alveolar crest in the LS
BS	The intersection point between the lateral sulcus line-BS line and the alveolar crest in the SS
ML	The anterior-most point of the LS from PL-PS line
MS	The anterior-most point of the SS from PL-PS line
MLS	The midpoint of the PL-PS line
I	The intersection point between the line from labial frenum-incisive papilla point and the alveolar crest of the premaxilla in the LS
PL	PS line the horizontal reference line
SL	The perpendicular line to the PL-PS line. It crosses the midpoint (MLS) between PL in the LS and PS in the SS
LS	Larger segment
SS	Smaller segment

Definitions of linear and angular parameters

Linear

PL-PS **Width between the posterior most point in between the larger and smaller segments**

BL-BS Width between the intersection points between the palatally extended lateral sulcus line and the gingival groove of the larger and smaller segments

Transverse AL-AS Transverse cleft gap between the anterior most points of the alveolar crest in the larger and smaller segments

Sagittal AL-AS Sagittal cleft gap between the anterior most points of the alveolar crest in the larger and smaller segments

AL-AS Linear cleft gap between the anterior most points of the alveolar crest in the larger and smaller segments

ML-(PL-PS) Length of the anterior most point in the larger segment when measured from the PL-PS line which is the horizontal reference line

MS-(PL-PS) Length of the anterior most point in the smaller segment when measured from the PL-PS line which is the horizontal reference line

Angular

(AL-PL)-(PL-PS) Angle between the line drawn from the anterior and posterior most point in the larger segment and the horizontal reference line

(AS-PS)-(PL-PS) Angle between the line drawn from the anterior and posterior most point in the smaller segment and the horizontal reference line

AL-BL-PL Angle between the anterior and posterior most point and the intersection point of the lateral sulcus and the gingival groove in the larger segment

AS-BS-PS Angle between the anterior and posterior most point and the intersection point of the lateral sulcus and the gingival groove in the smaller segment

(BL-AL)-(BS-AS) Angle between the anterior most point and the intersection point of the lateral sulcus and the gingival groove of the larger and smaller segments