CHAPTER VI
CONCLUSIONS

Prediction of orthodontic treatment plan may reduce the possibility of orthodontic overcompensation which likely results not only in unaesthetic, unstable, and unhealthy periodontal tissue outcome, but also prolong the treatment time in growing patients who have a tendency of severe skeletal discrepancy. The Formula for Orthodontics and Surgery Prediction (FOSP) may be useful for such prediction even though only with 75.2% of accuracy. However, considering agreement between actual treatment plan and predicted treatment plan interpreted from the FOSP, only moderate strength of agreement with kappa value of 0.5 was observed. This finding indicated that there might be factors other than the ANB (degree), U1-APog (mm), and L lip-Nperp. (mm) that could potentially influence on the decision for orthognathic surgery in cleft patients. One of the main confounding factors for the final treatment decision is the responsibility of the patient which may be contrary to the clinician's recommendation. Therefore, this FOSP might be used in prediction of the treatment plan. However, for the final treatment decision, other sources of information from clinical examination, evaluation of psychological and socioeconomic status and, most importantly patient's demand must inevitably be taken into account. At this point, the FOSP will be expected to be most useful in advising parents of possible future treatment needs of their child and adolescent offspring.

Further evaluation of reliability and validity of the FOSP for specific age groups and specific types of cleft is recommended to reduce the possible effect of confounding variables of age or cleft type on the prediction ability.