Summary

Hirsutism is the presence of excessive terminal hair in females in an androgen-dependent, male pattern distribution. Although it is not considered to be a life threatening disease, it should not be treated as a common cosmetic problem, as it is related with hormonal disorders and other comorbidities. Hirsutism has a greatly negative effect on the psychology and quality of life of the afflicted patients, especially when it appears on visible anatomical areas, such as the face.

The use of LASERs is the most common and contemporary depilatory method, offering balance between long term therapeutic results and safety in application. Nevertheless, LASER cannot accomplish the wanted results in hormonal dependent areas. At the same time, it cannot be applied on darker skin types, it does not have significant effects on fair hair and can cause the appearance of contradictory hypertrichosis (paradoxical effect). It is, thus, imperative to search for a complimentary, auxiliary method which will be used in combination with LASER to enhance the therapeutic results.

Enzymatic depilation is the use of specific enzymes for the removal of unwanted hair. It is a technique with proven results on the hair follicle and especially on the Bulge spot, where the stem cells of hair lie, leading to permanent destruction of its' regenerating power. Moreover, this method appears to have best results on vellus hair, which is inadequately treated by LASER, can be safely used on darker skin types and is effective on fair hair. Subsequently, the combined application of the two methods could probably optimize the therapeutic effect on women with hirsutism, thus enhancing their quality of life.

The aim of this project is to survey the effectiveness of the combined application of Alexandrite LASER and enzymatic depilation, in order to benefit from their individual advantages. The two main goals of the study are to enhance the therapeutic results in hirsute women and, at the same time, minimize the risk of side effects.