**Research lipophilic derivative of salicylic acid in cosmetic facial skin care product.**

 Dr n. med. Marta KLIMCZYK

 Department of Dermatology, Child’s Dermatology and Oncology

Head of Department: prof. dr hab. Andrzej Kaszuba

 Doctoral Dissertation – abstract

 Advisor - prof. dr hab. Andrzej Kaszuba

 Reviewers - prof. dr hab. Sławomir Majewski, prof. dr hab. Zygmunt Adamski

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**Introduction**

5 - octanoylosalicylic acid was created in the eighties of the last century, while new derivative of this acid – zinc salt octanoylosalicylic acid (ZN - LHA) was developed in conjunction with research for the doctoral thesis (Patent dated 26.09.2012, the number P. 400929).

**Aim**

Evaluation of the effectiveness and efficiency of the selected skin parameters in patients using cream with LHA vs placebo, cream with LHA in the evaluation of photographic image analysis and cream with ZN – LHA.

**Material and Methods**

First test – 16 women, 26 – 82 years, who have used cream with 1% LHA on one half face, and the other half face placebo cream for 6 weeks. The second study – 14 women, 32 – 65 years, who used cream with 1 % LHA for 4 weeks. A third study – 16 women, 21 – 30 years, who used an emulsion with 1 % ZN – LHA for 6 weeks.

**Results**

After applying the creams with LHA decreased TEWL, the amount of discoloration, increased hydration, skin elasticity and the number of wrinkles around the eyes and naso – labial definitely decreased. After applying ZN – LHA significantly reduced the amount of sebum on the forehead and chin.

**Conclusions**

Carried out own research may contribute to the use creams with LHA in the daily care of the young and mature skin, while photographic image analysis method to evaluate the effectiveness of the new cosmetics. A new derivative of LHA, zinc salt octanoylosalicylic acid can contribute to the expansion of range cosmetics for oily and combination skin.