SRDHS
SOCIETY FOR RESEARCH DEVELOPMENT IN HEALTH SCIENCE

## Society for Research Development in Health Sciences (RDHS),
Sponsored

# 2nd International Conference

**Organized By**
Ambe Durga Education Society's
## Dadasaheb Balpande College of Pharmacy
(Degree and Diploma),
Near Swami Samarth Dham Mandir, Besa,
Nagpur-440037, Maharashtra, India.

**on 14th and 15th February 2020**

**Theme:**
**"Invigorating Research in Pharmaceuticals: Reasonable Industrial Approach"**

**Venue:** Hotel RE-GEN-TA, CENTRAL Nagpur. Jagnade Square, Nandanvan, Nagpur, Maharashtra, India.

# Souvenir and Abstract Book

***"An event that is full of potentials to learn the latest trends in the Pharma industry and to learn about the business culture."***

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## NUTRI-COSMETICS : A NEW APPROACH

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**ABSTRACT**

The nutricosmetics are products and ingredients that act as nutritional supplements to care skin, nails and hair natural beauty. They work from the inside to promote beauty from within. Nutricosmetics is the latest trend in beauty industry. This tendency rapidly gained many followers because it fits with the modern culture: Today, consumers are very careful with the food that they introduce into their body and there is also increasing demand for natural products able to enhance one's health and beauty without side effects and significant traction before use. However, many nutricosmetic products are considered effective due to the historical used and word of mouth. Nutricosmetics are usually based on combination of the carotenoids, polyphenol, several vitamins, soy extract, micronutrients, herbs, collagen, co-Q10, grape-seed extract, green tea, lutein, lycopene, marine complex, omega-3, zinc etc. Those ingredients which are used as nutricosmetic are safe and ingestible, generally antioxidant and anti-inflammatory are offer more. Nutricosmetic primarily aim at skin (anti-aging, repair and prevention, sun protection, pigmentation, whitening, slimming), hair(retention and growth, restoration, nourishment, volumizing), and nail(strengthening). Nutricosmetic market will reach 7.9 billion in 2025 registering a compounded average growth rate of 5.0% in the forecasted period (Global Industry Analysts, 2017). Europe is the largest investor in the market, followed by Asia-Pacific and North America. Asia-Pacific is the fasted growing region in the market.

**Keywords** Nutricosmetics, Beauty, Oral & Food supplements.

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## FORMULATION AND EVALUATION OF ONCE A DAILY SUSTAINED RELEASE MATRIX TABLET OF LOSARTAN POTASSIUM

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**ABSTRACT**

The present study was undertaken to develop sustained release (SR) matrix tablets of losartan potassium, an angiotensin-II antagonist for treatment of hypertension. The tablets were prepared by direct compression method, with HPMC K4M and Carbapol 934 as release retardant polymer. The amount of losartan potassium remains fixed (100 mg) for all the three formulations whereas the amounts of HPMC K4M were 70 mg, 90 mg, and 95 mg for F-1, F-2, and F-3 for Carbapol 934 were 80 mg, 80 mg, and 95 mg for F-1, F-2, and F-3 in given proportions. The evaluation involves three stages: the micromeritic properties evaluation of granules, physical property studies of tablets, and in-vitro release kinetics studies. The USP apparatus type II for dissolution test and the dissolution medium was 900 mL phosphate buffer pH 6.8. The test was carried out at 75 rpm, and the temperature was maintained at 37 oC ± 0.5 oC. The release kinetics was analyzed using several kinetics models. Higher polymeric content in the matrix decreased the release rate of drug. At lower polymeric level, the rate and extent of drug release were enhanced. All the formulations followed Higuchi release kinetics where the Regression co-efficient (R2) values are more than 0.968 for formulations, and they exhibited diffusion drug release. Statistically significant ($P<0.05$) differences were found among the drug release profile from different level of polymeric matrices. The release mechanism changed as a function of decreasing the polymer concentration. The Mean Dissolution Time (MDT) values were increased with the increase in polymer concentration.

**Keywords** Losartan potassium, Sustained release, Release retardant.