



## Personalized and Precision Medicine as a Unique Avenue to have the Healthcare Model Renewed to Secure the National Biosafety: To Get Cancer Treated or Cured?

Sergey Suchkov

Sechenov University, Russia

### Abstract:

A new systems approach to diseased states and wellness result in a new branch in the healthcare services, namely, personalized and precision medicine (PPM). Since traditional approaches based on clinical (including dermatological) symptoms and a few classic laboratory markers can only provide incomplete information on disease manifestations. So, to achieve the implementation of PPM concept, it is necessary to create a fundamentally new strategy based upon the subclinical recognition of biomarkers of hidden abnormalities long before the disease clinically manifests itself.

The move to personalized treatment first requires the large-scale unbiased analysis of genomic and molecular characteristics of individuals experiencing defined skin disease conditions to identify reliable patient-specific biomarkers linking genotypes, molecular profiles/endotypes, disease progression and “Omics” data and to process them computationally to identify personalized biomarkers.

One of the most common skin conditions, atopic dermatitis (AD), affects up to 25% of children and 10% of adults in developed countries. Identifying patients by their specific phenotype and endotype of AD, along with their individual immunologic biomarkers, and using this information to treat them in a targeted fashion, may not only help more effectively treat patients with AD, but it may potentially help identify risk for this inflammatory disease in susceptible individuals (persons-at-risk) and help avoid the development of AD in the first place. The improved understanding and development of biomarkers and emergence of targeted therapies promises potential breakthroughs in the management and prevention of AD.

One more inflammatory condition is psoriasis with a background of polygenic inheritance. Some genetic markers have been applied in this disease prediction, clinical diagnosis, treatment, and new drug development, which



could further explain the pathogenesis of psoriasis and promote the development of PPM and PPM-related tools and armamentarium to get the disease treated and cured. To date, genetic studies have identified >80 susceptibility loci for psoriasis and provided mechanistic insights into its pathogenesis. With development of NGS technology and the newest gene testing, more accurate and reliable genetic markers would be identified, and development of target biological agents is progressing rapidly, with novel agents in the development phase or at clinical trial stage. These findings provide guidance for the pathogenesis, prevention, and effective treatment of the skin diseases, and lay a solid foundation for research into PPM-related dermatology.

### Biography:

Sergey Suchkov was born in the City of Astrakhan, Russia, in a family of dynasty medical doctors. In 1980, graduated from Astrakhan State Medical University and was awarded with MD. In 1985, Suchkov maintained his PhD as a PhD student of the I.M. Sechenov Moscow Medical Academy and Institute of Medical Enzymology. In 2001, Suchkov maintained his Doctor Degree at the National Institute of Immunology, Russia.

### Publication of speakers:

1. Sergey Suchkov, J Clin Exp Dermatol Res 2020, ISSN: 2155-9554 Volume: 11, 2020

World Cosmetology and Beauty Expo | March 19-20, 2020 | London, UK

**Citation:** Sergey Suchkov; Personalized and Precision Medicine as a Unique Avenue to have the Healthcare Model Renewed to Secure the National Biosafety: To Get Cancer Treated or Cured?; Cosmetology 2020; March 19-20, 2020 | London, UK