

# **Biochemistry & Analytical Biochemistry**

Editorial

# Editorial of Thermodynamics

#### Ponizovskiy MR<sup>\*</sup>

Head of the Laboratory Biochemistry and Toxicology, Kiev, Ukraine, Kiev Regional P/N hospital, Germany

\*Corresponding author: Ponizovskiy MR, Head of the Laboratory Biochemistry and Toxicology, Kiev, Ukraine, Kiev Regional P/N Hospital, Germany, Tel: (49911)-653-78-11, E-mail: ponis@online.de

Received date: October 31, 2014, Accepted date: November 3, 2014, Published date: November 10, 2014

**Copyright:** © 2014 Ponizovskiy MR. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

## Editorial

There were considered both a human organism and cells of an organism as the open non equilibrium nonlinear thermodynamic systems which are subjected laws of thermodynamics, mechanism stability of them are described by Prigogine Theorem, and development Stationary State an able-bodied organism and Quasistationary pathologic State an organism are described by Glansdorff-Prigogine theory. The mechanisms operation of a human organism and cells of an organism in norm and pathology were studied from point of view of biophysics and biochemistry taking into account laws of thermodynamics. Thus it was explained biochemical and biophysical mechanism maintenance stability Internal Energy and Internal Medium of the open thermodynamic system of an organism. Also there were revealed the availability of cellular capacitors and variable cellular capacitors in cellular wall, and mechanisms of their operation gave possibility to offer mechanism cellular remote reaction across distance and contact cellular reaction in immune response to strange object and hormonal reactions. Besides there were offered new elucidation of mechanism Warburg effect which gave possibility to explain mechanisms metastasis, irrepressible proliferative processes of cancer cells and irrepressible growth of cancer tissue, unhealed cancerous ulcers and also distinction between mechanism Warburg effect and mechanism Pasteur Effect. The explanation mechanism Warburg effect gave possibility to explain mechanism new method cancer treatment which was borrowed by folk healers [1-11].

### References

1. Ponisovskiy MR (2010) Cancer metabolism and the Warburg effect as anabolic process outcomes of oncogene operation. Crit Rev Eukaryot Gene Expr 20: 325-339.

- Ponisovskiy MR (2011) Warburg effect mechanism as the target for theoretical substantiation of a new potential cancer treatment. Crit Rev Eukaryot Gene Expr 21: 13-28.
- 3. Ponisovskiy MR (2011) Driving mechanisms of passive and active transport across cellular membranes as the mechanisms of cell metabolism and development as well as the mechanisms of cellular distance reaction on hormonal expression and the immune response. Critical Reviews in Eukaryotic Gene Expression, 21: 267-290.
- 4. Ponizovskiy MR (2012) The detailed description mechanisms of the herbs extracts operations in the new method cancer disease treatment via rearrangement of metabolism from pathologic development into normal development. Journal of Clinical Trials 2: 124.
- Ponizovskiy MR (2013) Biophysical and biochemical models of cellular development mechanisms via cellular cycle as in normal tissue and as well as in cancer tissue and in inflammatory processes. Critical Reviews in Eukaryotic Gene Expression 23: 171-193.
- 6. Ponizovskiy MR (2013) The Central Regulation of all Biophysical and Biochemical Processes as the Mechanism of Maintenance Stability of Internal Energy and Internal Medium both in a Human Organism and in cells of an Organism. Modern Chemistry & Application 1: 1.
- Ponizovskiy MR (2013) Biochemical and biophysical mechanisms of methods using for an organism health improvement. World research journal of biochemistry 2: 42-48.
- 8. Ponizovskiy MR (2013) The mechanisms maintenance stability Internal Energy and Internal Medium an organism in norm and in quasi-stationary pathologic states. Biochemistry & Physiology 2: 115.
- Ponizovskiy MR (2013) Biophysical and biochemical transmutation of mitochondrial function in cancer genesis. Biochemistry & Analytical Biochemistry 2: 137.
- 10. Ponizovskiy M (2014) The mechanisms operation of thermodynamic system of a human organism, European Journal of Biophysics, 2: 29-37.
- Ponizovskiy MR (2014) Cancer therapy via targeting Warburg effect leads to cancer metabolism depression that promotes efficient treatment with small dosage cytotoxic drugs. American Journal of Cancer Science 3: 30-53.