

4. Brief discussion and conclusions

We strengthen of steady differences for various diseases during transitions of Shannon entropies from n to w and W variables in Figs. 3-6 (a, d). We observe the universal exponential distribution of the central moments for information entropies in Figs. 3-6 (b, e). Parameters of exponential decreases are various for the different health statuses. Therefore we have new tools to conduct diagnostics and monitoring of health statuses with the exponentially high sensitivity, precision and accuracy. We observe anti-persistent, $H_H < 0.5$ distributions of Hurst's indices for information entropy of wavelet and wavelet spectra in Figs. 3-6 (c, f). In the latter case wavelet analysis of information entropies in Figs. 4-6 does not have advantages in comparison with the analysis of the persistent Hurst indices for the initial information entropies in Fig. 3c. Most unexpected is a noticeable, sometimes two-fold increase, Shannon-Weaver index $D_S > 2$ upon transfer to the oncology diseases. Large values of $D_S > 2$ reflect the noticeably more complex networks of correlations in the populations of neutrophils and more complex genes regulation, than for the healthy people.

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