

Journal of Diseases

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From the Journal of Disease, we recognize that studies of diseases have greatly contributed to the understanding of the intricacies of the biochemistry of the normal human body physiology. An example of this process is appreciated in the studies of Chronic Obstructive Pulmonary Disease (COPD), where at its beginning was treated as asthma. However, the basic research on immune cells from diseased tissue was central to understand not only the mechanism of the disease but also the regulation of the immune system which was mostly researched by studies of patients with human immunodeficiency virus (HIV). This disease has the particularity to make evident how after the immune system has been triggered, by an injury or toxic like cigarette smoke, it may derive to different diseases like cancer or emphysema. It has been reported that only 0.8 to 1.7% of COPD patients develops cancer[1,2] and a maximum of 8.6% incidence has been reported[3], while 27% of HIV patients have COPD[4], suggesting a mechanism orthogonal of disease progression between cancer and emphysema.

What are the determinants to the disease outcome after smoke exposure? is it genetics? gene regulation or epigenic? intensity of the exposure to smoke or infections? The answers to these questions

would give a better insight of the immune system regulation after it has been activated and cleared the injury.

This is why studying the diseased state is so important for understanding the functioning in health and how to restore it once it has been lost.

**References**

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