

## **One Step Closer to Lymphedema Treatment: the Relevance of Retinoic Acid**

Lymphedema is a hidden pandemic that has afflicted more than 250 million people worldwide. Professionals specializing in the management of lymphedema are not many; therefore, individuals suffering from the disease have substantial public health significance<sup>1</sup>. Its progressive soft tissue swelling can characterize the disease<sup>2</sup>.

RA's potential uses have been determined to be an effective curative agent that could potentially be used to reduce secondary lymphedema<sup>3</sup>.

Dr. Alex Wong from the Keck School of Medicine of the University of Southern California (USC) and his research team show promising results using a metabolite of vitamin A called retinoic acid (RA).

Using experimental mouse models, Dr. Wong and his research team stimulated lymphedema in mice's hind legs. Dividing the mice into two categories, with one receiving RA treatment while the other was used as a control, the experiment had demonstrated that the mice receiving RA treatment had experienced a significantly reduced postsurgical edema and a lower degree of paw lymphedema when compared to the control group<sup>4</sup>.

With further research into RA, it has the potential to be used as a deterrent agent for postsurgical lymphedema in humans.

### **References**

[1]<https://healthconomicsreview.biomedcentral.com/articles/10.1186/s13561-018-0194-6>

[2]<https://www.nature.com/articles/s41598-019-54201-2#ref-CR1>

[3]<https://healthconomicsreview.biomedcentral.com/articles/10.1186/s13561-018-0194-6>

[4]<https://www.sciencedaily.com/releases/2016/09/160916093628.htm>