PHILOSOPHY, SOFTWARE

# DEEP FAKE IMAGE FRAUD

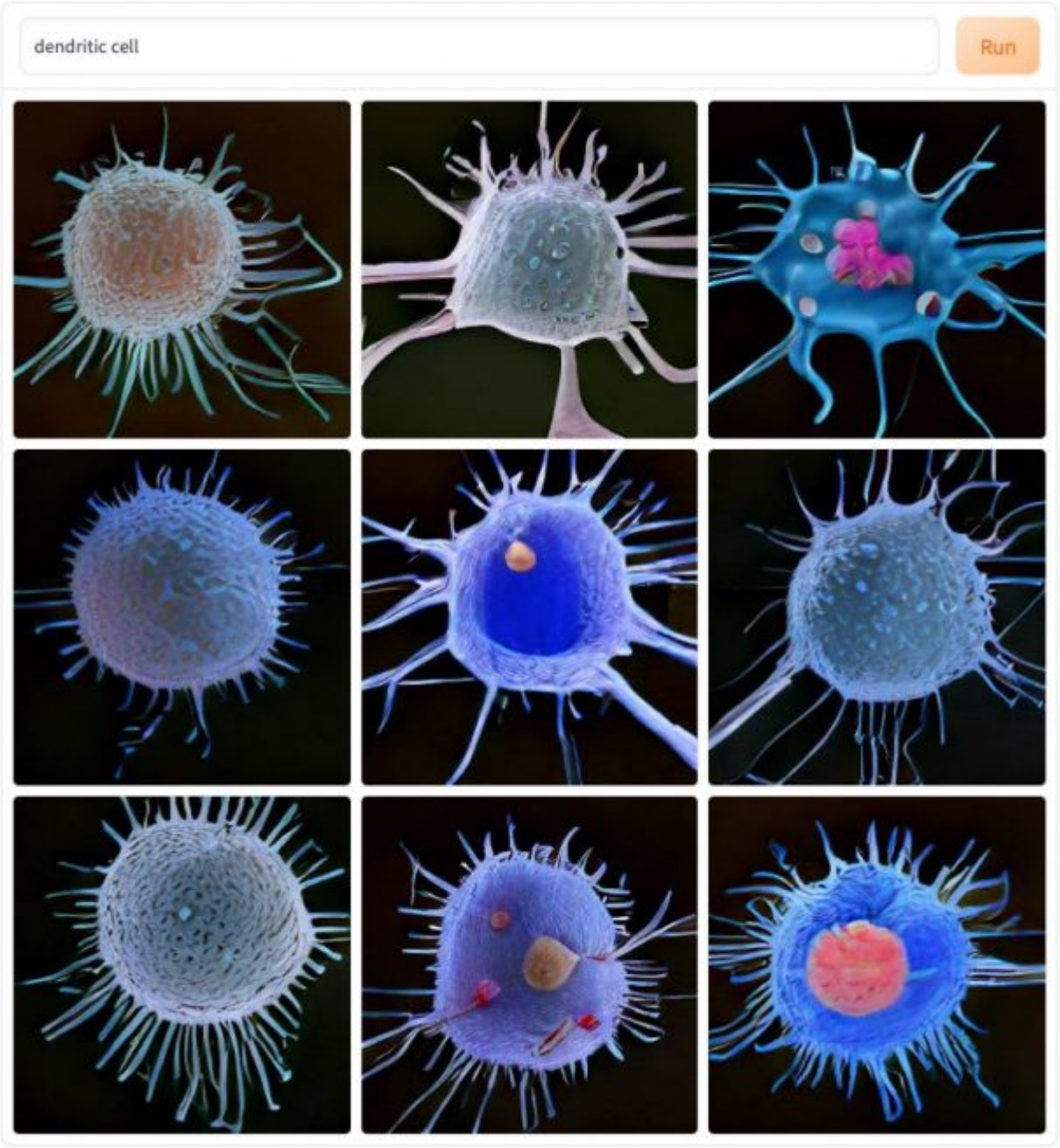
14.06.2022

Doing now another image integrity study, I fear that we may already have the deep fake images in current scientific papers. Never spotted any in the wild which doesn't mean that it does not exist…

Here are some T cells that I produced this morning.

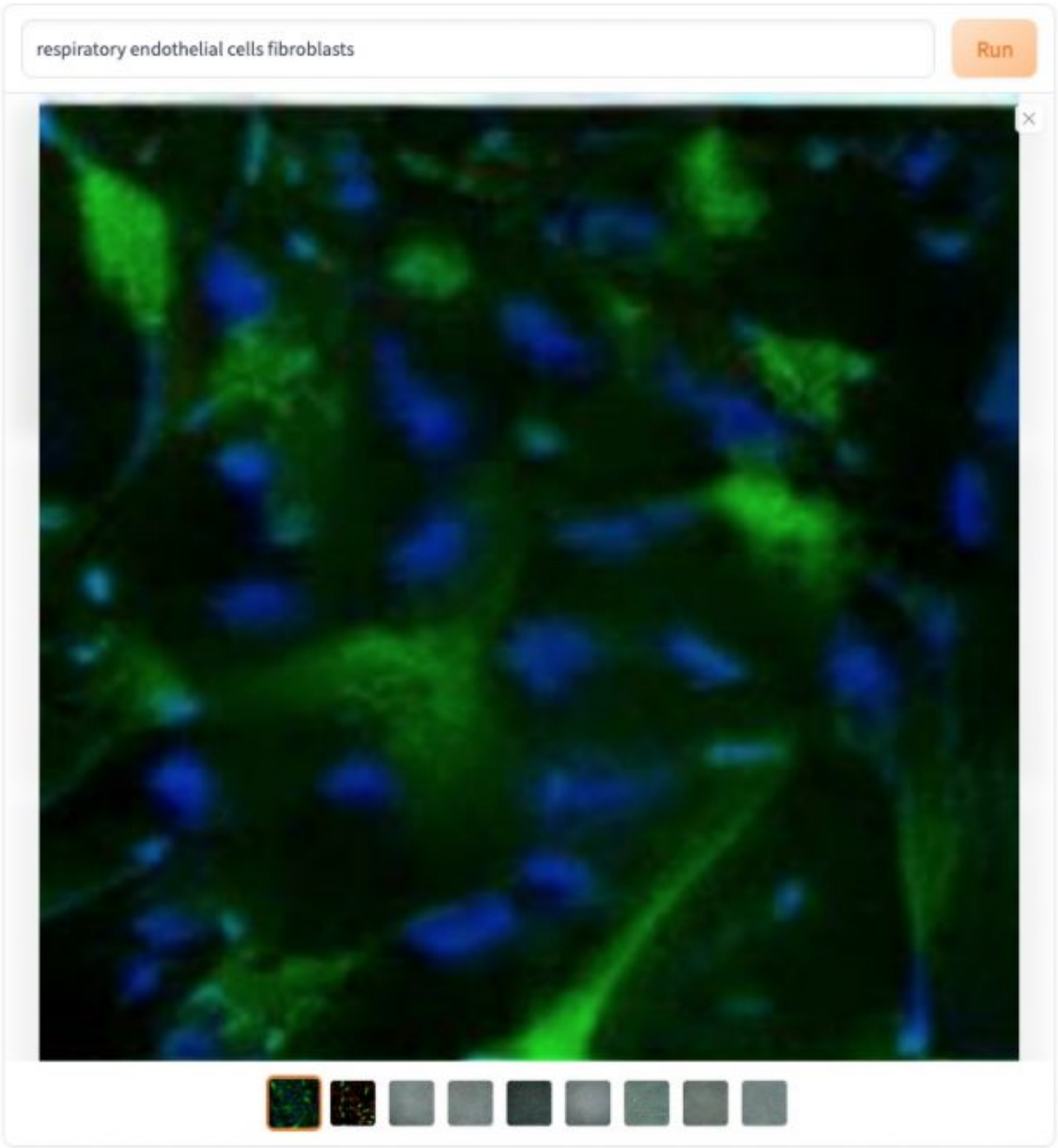

*https://huggingface.co/spaces/dalle-mini/dalle-mini*

... some deep fake dendritic cells ...




*https://huggingface.co/spaces/dalle-mini/dalle-mini*

... and some respiratory epithelium ...




My current strategy is to use impainting detection along with some GAN detectors while I would welcome recommendations how to detect these fakes…

The size of the problem has also been highlighted by a recent paper

There is an increasing risk of people using advanced artificial intelligence, particularly the generative adversarial network (GAN), for scientific image manipulation for the purpose of publications. We demonstrated this possibility by using GAN to fabricate several different types of biomedical images and discuss possible ways for the detection and prevention of such scientific misconducts in research communities.