Monocytes from the blood displayed epigenetic changes after vaccination that opened chromatin harboring multiple genes involved in driving an inflammatory response, making them more accessible for transcription. Meanwhile, chromatin closed around genes associated with immune tolerance.

When exposed to the fungal pathogen Candida albicans in vitro, immune cells sampled from patients’ blood 90 days after vaccination released more of the cytokine interleukin 1β, which mediates inflammation, than did cells from blood drawn from the same individuals before vaccination.