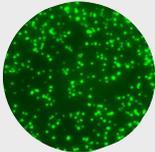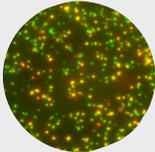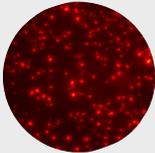# LymeSpot Revised: The new EliSpot

The EliSpot is a tried, tested and reliable method that we have been using to detect infections of Borrelia and its co-infections on a cellular level for several years. The first generation of enzymatic EliSpots determines the quantity of CD3 and CD57-NK-cells and provides important information about the infection. We have now developed this test even further.

The new EliSpot, **LymeSpot Revised**, delivers detailed information about the activity of the infection. This test is better at determining whether we are dealing with an active (specific effector-cells) or a latent (specific memory-cells) infection. It will now be possible to evaluate whether the problem lies with a patient's infection, an inflammation or their autoimmune processes. EliSpot is based on the production of γ-interferon, whereas LymeSpot also detects cytokine IL-2.

Using LymeSpot's 'traffic light' principle, an active infection (mainly the effector-cells) will be indicated by green, which shows that the infection needs to be treated. If the relationship between y-interferon and interleukin-2 is inverted, the disease is more likely to be at a latent stage. This is indicated by a red colouration of the cells (mainly memory-cells) and in this case an anti-infective treatment would not be applicable. If the memory cells and effector-cells are both present, indicated by red and green together, then both the infection and the inflammation are still present. In this case, the best course of therapy will be decided based upon the clinical profile of the patient.

This additional differentiation allows us to make much more clear and informed decisions on how to approach a patient's treatment.

This unique test was released for the first time on 1st April 2015. We will offer LymeSpot for Borrelia or as a package along with EliSpot for Chlamydia Pneumonia.

	IL2 - value	Interferon-γ - Value	Therapeutic Consequence
	low	high	Treatment with specific antibiotic protocols is necessary
			Clinical symptoms may be considered before treatment decision starts or stops
	high	low	Both the clinical symptoms and the immune system must be considered with regards to any treatment