#### **OUR MISSION**

AONM is an international, multi-disciplinary forum promoting health and wellness through partnerships with world experts in chronic and tick-borne diseases. We invest in projects that combine established and successful medical methodologies with cutting-edge nutritional approaches and pioneering complementary skills.

Our desire to establish excellence in diagnostic testing has led us to ArminLabs. Its founder, Dr. Armin Schwarzbach, has been at the forefront of tickborne research for more than 20 years and his expertise in diagnosing and treating infectious diseases is second to none, having tested over 20,000 patients.



Before establishing his own Laboratory, Dr. Schwarzbach was the co-founder and CEO of the Borreliosis Clinic Augsburg and laboratory manager of Infectolab, Germany. He is an Advisory Board member of AONM, a Board Member of the International Lyme and Associated Diseases Society (ILADS) and serves as an expert on advisory committees on Lyme Disease in Australia, Ireland, France and Germany.

Being acutely aware of the insufficient sensitivity and standardization of Borrelia antibody ELISA and Western blot tests, Dr. Schwarzbach offers tests with greater sensitivity and specificity.

#### WHERE TO GET KITS AND ADVICE?

Please contact us on 03331 210 305 or laboratories@aonm.org for ArminLabs kits, which will be sent out to you immediately and free of charge. Our helpline is available if you would like assistance with deciding which tests to order, or any other aspect of ArminLabs testing. This will enable you to confidently choose tests that are specific, sensitive, cost-effective and tailored to your exact needs.

# UNCERTAIN HOW TO SEND PAYMENT IN EUROS TO GERMANY?

No need to pay in euros any longer: you can pay in pounds, in the UK. We accept debit cards, cheques and bank transfers.

If you would like to pay by credit card, please call the Academy helpline to make your payment.

# WORRIED ABOUT SHIPPING BLOOD SAMPLES ABROAD?

We provide step-by-step instructions for your phlebotomist so that they collect and process the blood samples correctly. We also provide full and detailed instructions for contacting FedEx to arrange the collection and shipping of your samples.

Please contact us to discuss your requirements.

Tel: 03331 210 305 Email: laboratories@aonm.org Web: www.aonm.org



UK REPRESENTATIVES OF



#### SPECIALISTS IN TICK-BORNE DISEASES



# Academy of Nutritional Medicine (AONM)

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# WE OFFER TESTS FOR THE DIAGNOSIS OF INFECTION WITH, AMONGST OTHERS

- Borrelia burgdorferi
- Babesia
- Rickettsia
- Bartonella
- Anaplasma
- Ehrlichia
- Mycoplasma
- Wiycopiasiii
- Toxoplasma
- Candida
- HSV 1 & HSV 2

- Chlamydia pneumoniae
- Chlamydia trachomatis
- Yersinia
- Epstein-Barr Virus
- Cytomegalovirus
- Coxsackie Virus
- Varicella ZosteVirus
- •HHV 6 & HHV 8

# CHOOSING THE RIGHT TEST IS EASIER THAN YOU THINK!

	Elispot	Antibodies	PCR	NK-Cells
Borr. burg.	✓	✓	✓	✓
Babesia		✓	✓	
Rickettsia		✓	✓	
Bartonella		✓	<b>✓</b>	
Anaplasma	✓	✓	<b>✓</b>	
Ehrlichia	✓	✓	✓	
Mycoplas.		✓	✓	
Toxoplas.		✓	✓	
Candida		✓		
Chlam. Pn.	✓	✓	✓	
Chlam. Tr.	✓	✓	✓	
Yersinia	✓	✓	✓	
EBV	✓	✓		
CMV	✓	✓		
Coxsackie		✓		
Var. Zost.		✓	✓	
HSV 1		✓		
HSV 2		✓		
HHV 6		✓	✓	
HHV 8		✓	✓	

### SOME OF THE TESTS WE OFFER

## **Elispot**

#### For current active infections with:

Borrelia burgdorferi, Anaplasma, Ehrlichia, Chlamydia pneymoniae, Chlamydia trachomatis, Yersinia, Epstein-Barr Virus, Cytomegalovirus.

- This test is highly sensitive and can detect even one single Borrelia burgdorferi-reactive T-cell.
   This is one of the most sensitive cellular assays available, as detection levels can be as low as one cell in 100,000.
- The Elispot reflects chronic and recent Borrelia burgdorferi infections.
- It is between 20 and 200 times more sensitive than a conventional ELISA test.
- The EliSpot displays similar sensitivity to an RT-PCR (Real Time PCR) analysis, but detects the secreted protein instead of the mRNA (messenger RNA).

This test can be helpful in monitoring therapeutic treatments. It should become negative about 4 to 8 weeks after the completion of an effective therapy.

### **Antibodies**

Antibodies can be tested by the modern microarray SeraSpot and ELISA test techniques. In general, the SeraSpot test is more specific and sensitive in detecting Borrelia antibodies than the ELISA test.

The development of Borrelia burgdorferi-specific antibodies can be avoided by antibiotic therapy in recent infections.

### **CD NK Cells**

While acute Borrelia burgdorferi infections and other diseases show normal CD57+ parameters, *chronic* Lyme patients often have less than 100 CD57+ cells/µl. According to scientific studies, a suppressed absolute number of CD57+ cells has been observed in patients whose nervous system has been affected rather than patients whose tissue or skeleton system has been affected. The decrease in CD57+ cells lasts until improvements in symptoms have been achieved via antibiotics and other forms of treatment.

# **Polymerase Chain Reaction (PCR)**

Polymerase Chain Reaction (PCR) is a molecular biology technique that amplifies a few DNA molecules into millions of copies of a special DNA sequence. Bacteria or viruses can be directly detected from different human samples, such as blood, urine and tissue. In 1993, Mullis and Smith were awarded the Nobel Prize in Chemistry for their work on PCR.

PCR is used for the detection of:

- Borrelia burgdorferi (from blood, spinal fluid, skin and other biopsies)
- Anaplasma / Ehrlichia (from blood)
- Bartonella (from blood, skin biopsies, lymphnodes)
- Babesia (from blood)
- Rickettsia (from blood)

ArminLabs specialises in T-cell tests (Elispot), B-cell tests (IgA, IgM and IgG antibodies), and NK cell tests (CD56+ and CD57+).

We also routinely provide a vast array of both common and exclusive diagnostics and can arrange many further tests on request.