## Frequently Asked Questions-FAQ\*

#### Sources:

- 1) RGCC company docs
- 2) Facebook group: s.o.t. for lyme, ebv & co-infections (supportive oligonucleotide therapy). <u>https://www.facebook.com/notes/sot-for-lyme-ebv-co-infections-supportive-oligonucleotide-therapy</u>
- 3) Original FAQ by Brightwell, Denton, Myers and Swims https://tinyurl.com/y8a3dyuv (required membership)

#### What is SOT?

SOT is Supportive Oligonucleotide Therapy. It is an updated version of antisense therapy that tells the pathogen to stop replicating and induces apoptosis (cell death). SOT can be used to treat Lyme bacteria, co-infections, and viruses like EBV, HSV, CMV, Varicella and others. This breakthrough therapy utilizes short DNA or RNA segments to block the expression of critical segments of genes needed for Lyme or viruses to survive and replicate.

What pathogens does SOT target (as of May 20, 2020)?

## Lyme-related

- Borrelia
  - o B. mayonii
  - o B. burgdorferi
  - o B. garinii
  - o B. bissettii
  - o B. bavariensis
  - o B. miyamotoi
  - Candidatus B. tachyglossi
  - o B. valaisiana
  - o B. afzelii
  - B. finlandensis
  - B. recurrentis
- Bartonella
  - o B. henselae
  - o B. bacilliformis
  - o B. vinsonii
  - o B. quintana
- Babesia
  - o B. microti
  - o B. bigemina
  - B. divergens
  - o B. duncani
  - o B. bovis

## Virus-related

- HHV1/HSV1 (Human Simplex Virus-Oral-Facial)
- HHV2/HSV2 (Human Simplex Virus-Genital)
- HHV6 (A & B) (Human Herpes Virus 6)
- CMV (Cytomegalovirus)
- Coxsackie (Type A & B)
- VZV Varicella-zoster (shingles)
- EBV (Epstein Barr)
- HPV (16/18) Human papillomavirus
- HPV (6/11) Human papillomavirus
- HBV (hepatitis B)
- HCV (hepatitis C)
- HIV (human immunodeficiency virus)-AIDS
- HTLV1— (human T-cell lymphotropic virus)

## What studies can you show me about SOT?

While SOT has been administered to target cancer for years, it has only been used for Lyme and co-infections for a few years. You will find plenty of studies via an internet search for cancer, but not the latter. Several are listed below.

#### Mechanisms of Antisense Oligonucleotides (Feb 2019)

https://books.google.com/books?hl=en&lr=&id=EpiHDwAAQBAJ&oi=fnd&pg=PA22&dq=antisense+oligonucleotide+therapy&ots=tNHeQlfZiJ&sig=A9DNx-

hfrst5kg6xEu1GW3Dt7vU#v=onepage&q=antisense%20oligonucleotide%20therapy&f=false

## Therapeutic Antisense Oligonucleotides Are Coming of Age (Jan 2019)

https://www.annualreviews.org/doi/abs/10.1146/annurev-med-041217-010829

#### Antisense Technology (Jul 2011)

http://globalresearchonline.net/journalcontents/volume9issue2/Article-007.pdf

#### Pharmacology of Antisense Drugs (Jan 2017)

https://www.annualreviews.org/doi/pdf/10.1146/annurev-pharmtox-010716-104846?fbclid=IwAR0dyOrIc5ht6NRrFDrvMf3BdUXZeZBvCgzuKqUHicZsaEEMJ4t6\_b87RNY

## Recent Advances in Antisense Oligonucleotide Therapy in Genetic Neuromuscular Diseases (Jan 2018)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5909143/

#### Antisense oligonucleotide therapy for neurodegenerative disease (Aug 2006)

https://www.jci.org/articles/view/25424

# Antisense Oligonucleotide: Basic Concepts and Therapeutic Application in Inflammatory Bowel Disease (Mar 2019)

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6450224/

#### Antisense-Oligonucleotide Therapy (Feb 1996, pay access)

https://www.nejm.org/doi/full/10.1056/NEJM199602013340508

# Oligonucleotides Designed to Inhibit TLR9 Block Herpes Simplex Virus type 1 Infection at Multiple Steps (Sep 2014)

 $\underline{https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4135040/?fbclid=IwAR3jKaiSXulwIkrLkQSY9LmKiLpb3JKWE1Z4-nN8E-hZEIotJOXMlecGpwk}$ 

#### How do I qualify to receive SOT?

You must have a positive test result that is no more than 6 months old. You only need one positive band or, on MDL, one band over 60.

### What is the Success rate of SOT?

The top 2 practitioners have a 96% success rate and that is what RGCC says as well. This is for Lyme SOT. The other pathogen SOTs are too new.

#### What is PrimeSpot testing?

One of the labs used to test for pathogens. Produced by Biocentaur, a sister company of RGCC. Reliably detects the organisms listed above.

#### What is MDL?

Medical Diagnostics Lab in New Jersey. Some practitioners use this lab to get a Lyme diagnosis with at least one band over 60.

## What should I do to prepare for blood tests?

Some suggest refraining from antibiotic and herbal treatments. Others say to exercise to "stir the pathogen up" or "bring it out". Nothing is required though.

## What co-infections are covered in the Lyme SOT?

Co-infections are not covered in the Lyme SOT. Each co-infection requires a different SOT. See the list above for which strains of Borrelia, Babesia, and other pathogens a SOT can be made to target. What you are treated for will be determined by what your doctor decides and what RGCC (lab in Greece) finds.

## What is the process for getting SOT- Start to finish?

- 1. Get your blood test by one of the labs your doctor uses. Your doctor will write a lab order or draw your blood and send it to their preferred lab. If you have a test that is newer then 6 months, you can use that test.
- 2. Your doctor will decide which pathogen to get SOT for. Most, but not all, practitioners advise the Lyme SOT first.
- 5. Have blood drawn (15-20 cc) for SOT. The clinic then sends the blood to RGCC in Greece.
- 6. After about 4 weeks, your antisense molecules (SOT) will arrive at your SOT clinic and you will return to have your SOT administered.
- 7. Six weeks after SOT, co-infections may flare. Have a follow-up and retesting with your practitioner.
- 8. Six months post-SOT, get another lab test to see how you are progressing.

## How is SOT administered, and how long does it take?

The molecules are put into the body via an IV push that takes approximately 5 minutes. The entire process takes about 30 minutes because saline is also administered via an IV. You are watch in the clinic for 1-2 hours to be sure there are no side-effects.

## How many species of one pathogen can be targeted with a single SOT?

One. Each species would require a separate SOT, as it is DNA specific.

## Can SOTs be combined to target more than one pathogen or species of a pathogen?

No.

## How long does it take lab work to come back?

Lyme and co-infection results: 2-4 weeks (depending on your doctor's office).

SOT turnaround time from Greece: 4-6 weeks.

#### What is the cost for lab work?

PrimeSpot is \$1350. MDL is capped at \$295.00. PrimeSpot can detect more co-infections and viruses.

#### How much does SOT cost?

Cost varies by clinic. The cost to produce the SOT is about \$1500. There is a cost to give the SOT which runs between \$500-\$1000, depending on the clinic.

## Can you have EBV SOT before the end of the 6 months?

This depends on the doctor who administers your SOT. Some doctors suggest getting the EBV SOT before the Lyme SOT. Others offer it within 2 weeks of the Lyme SOT. Others will wait 6 months for the Lyme SOT to have a chance to work and get your immune system back up and running to deal with it on its own.

#### Are steroids administered during SOT?

A very small dose is given per standard RGCC protocol but Lyme patients can be sensitive so there are exceptions.

## Should I do EBV SOT before Lyme since my test result was higher?

It is recommended that SOT for Lyme be done first. Lyme is an immune system suppressor and should be taken care of first. Many times, you will see underlying co-infections and other viruses improve when the immune system is allowed to heal and catch up. Consult your physician for the right treatment for you.

## Why isn't SOT known by many people? How many people have received SOT for Lyme?

Approx. 1000+ patients. We do not have exact numbers. It has only been used in the US for about 4 years for Lyme. Its popularity is growing exponentially with word of mouth success and the advent of the SOT Facebook page.

### Is SOT FDA approved?

No, it is not.

## Why do I feel so bad? I feel like my Lyme is coming back and this is not working?

Usually, around 6-9 weeks when Borrelia is downregulated, the immune system comes back online and begins to attack other pathogens. You will start to notice symptoms from other viruses and/or co-infections surfacing. It is like layers. Once the larger issues are addressed, what was being suppressed is now coming to the surface. Also, as you start to feel better and you are going out in public more, you may be catching various things from others that you come in contact with. Lastly, Lyme is most likely not the only issue for you, and in many cases, you will need a practitioner to be a detective to figure out everything that is going on and how to approach it.

## Can a child get SOT?

Yes, we have heard of a three-year-old receiving it. It has been said that if a child is able to sit still for the IV, he is able to receive it. Please consult with your physician to see if it is right for your child(ren).

## Does the SOT get into connective tissue or other places in the body that Borrelia can hide?

The antisense molecules are so tiny that they go everywhere blood goes. They even cross the blood-brain barrier.

## Can I have dental work after receiving my SOT?

A prominent Lyme-SOT doctors states that root canals are not recommended after SOT. He suggests waiting for 6+- months. Spirochetes live and hide in the gums.

## Does the SOT prevent me from being re-infected? Why do some people need a second Lyme SOT?

No. If a second Lyme is needed, it is because someone has either been re-infected by a partner, bitten by another tick, or there is another species that is also causing problems.

## Should I try other treatments before getting SOT?

This is a decision that only you can make after discussing it with your healthcare practitioner. But, why would you? SOT is the only therapy known to stop Lyme from replicating, so it eventually dies out. No other therapy that we know of does anything but put Lyme in remission at best only to resurface with a major stressor.

## How long can my antisense molecules be stored before I get my SOT?

The molecules are suspended in a dehydrated lyophilized solution and have a one-year expiration. The molecules are stable for months if they are not reconstituted. They do not weaken if they are in their original state. However, Lyme and other organisms do mutate, so the sooner the SOT is administered, the better.

## How long does it take for my SOT molecules to be received at my clinic?

It can vary, but it usually takes about four weeks.

## How long after getting SOT did you notice that your symptoms were better?

This varies from person to person. Most people start to notice improvements around the 6-month mark. Some notice sooner.

## How long does sot therapy last in the body?

The molecules start to taper off in effectiveness starting at about 4 months until they are all gone at about 6 months. Healing continues afterward.

## What symptoms went away after your SOT?

Each person's situation is different, so this varies. We encourage you to search the Facebook group using the keyword "success" to read testimonies. See https://www.facebook.com/notes/sot-for-lyme-ebv-co-infections-supportive-oligonucleotide-therapy

#### Why do I feel worse after getting SOT?

SOT causes the targeted pathogen to die out, but it also lead to apoptosis of the pathogen. This can cause dieoff symptoms or herxing.

## What is herxing?

A Jarisch–Herxheimer reaction is a reaction to endotoxin-like products released by the death of harmful microorganisms within the body during antibiotic treatment. Efficacious antimicrobial therapy results in lysis (destruction) of bacterial cell membranes, and in the consequent release into the bloodstream of bacterial toxins, resulting in a systemic inflammatory response. It usually manifests in 1–3 hours after the first dose of

antibiotics as fever, chills, rigor, hypotension, headache, tachycardia, hyperventilation, vasodilation with flushing, myalgia (muscle pain), exacerbation of skin lesions and anxiety. The intensity of the reaction indicates the severity of inflammation. Reaction commonly occurs within two hours of drug administration but is usually self-limiting.

## Should I stop other treatments when I get my SOT?

Please discuss this with your healthcare practitioner. However, in general, you should continue all treatments that you were taking pre-SOT unless your practitioner says otherwise.

## Is there a recommended prep for SOT?

No, but it is helpful to make sure you have your detox protocols in place, as well as eating as healthy as you can.

#### Do antibiotics interfere with SOT?

No.

## How important is follow-up care after I get my SOT?

We cannot express how important following-up and retesting are. Most of us have far more health issues than the pathogen we received SOT for, whether they were caused by that organism or not. SOT is not a cure-all. Together with our healthcare practitioner(s), we must find and address other health issue to regain our health. Seldom do we see someone who only has Lyme Disease or one co-infection, and many of us have had these undiagnosed infections wreaking havoc in our bodies for many years.

What authors from the Facebook users group compiled major portions of the original FAQ. What caveats are there for this FAQ's accuracy? See <a href="https://tinyurl.com/y8a3dyuv">https://tinyurl.com/y8a3dyuv</a>

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