





LaVoieHealthScience Develops and Executes

Vectors Gone Viral; Episodic Social Series on Viral Vectors for Gene and Cell Therapy, and Vaccine Development

OBJECTIVES, CHALLENGES, AND SOLUTIONS

Our **objectives** were to highlight SIRION's role in gene therapy development and showcase research papers where SIRION's viral vector technology was used in both a digestible and visually pleasing way.

Some **challenges** we faced with this campaign were making deep but important science visually appealing and easy to understand.

We resolved these challenges by spending ample time understanding each research paper, incorporating video and a consistent style and look and feel, and collaborating with team members with unique experience and expertise around SIRION'S science, client preferences, social and new media, and graphic design. Our **solution** resulted in a client pleased with the results, a robust episodic social campaign, promotion of the partnerships and collaborations our client has, and a useful lead list generated from our paid campaign. In this niche target audience,15,818 people were reached over a 10-day period between two of the posts. The Sirion LinkedIn page experienced 452% growth in impressions during the duration of the campaign.



#SUCCEEDWITHSIRION: INTRODUCTORY POST

LinkedIn /Facebook (Click for Animation)

Did you know SIRION's technology is leveraged in laboratories across the globe each day? We have manufactured more than 5,000 vectors and have more than 500 repeat clients who have implemented our optimized #viralvectors for #genetherapy and #celltherapy, as well as #vaccinedevelopment, and transduction enhancement. Over the next few weeks, we're going to share research leveraging our technology! Follow along with #SUCCEEDWITHSIRION to learn more.

Twitter (Click for Animation)

#DYK SIRION's technology is leveraged in laboratories across the globe each day? We have more than 500 repeat clients who have implemented our optimized #viralvectors for #genetherapy & #celltherapy, and #vaccine development, as well as our leading transduction enhancers.

Thread: Over the next few weeks, we're going to share research leveraging our technology. Follow along with #SUCCEEDWITHSIRION to learn more



Video views 22,689 >



LinkedIn/Facebook (Click for Animation)

#SUCCEEDWITHSIRION: SIRION's LentiBOOST® technology was leveraged in research on enhancing #lentiviral and alpharetroviral transduction of human hematopoietic from @Dr. Juliane Wilhelmine Schott and colleagues in #stemcells for use in a clinical setting. They systematically tested eight transduction enhancers and developed a protocol for usage in clinics. The research was published in the journal, Molecular Therapy: https://bit.ly/Sir24. #biotech #genetherapy #celltherapy #viralvector #hematology (Tags: (4) Juliane Wilhelmine Schott | LinkedIn)

Twitter (Click for Animation)

#SUCCEEDWITHSIRION: SIRION technologies were leveraged in research on enhancing #lentiviral and alpharetroviral transduction of human hematopoietic #stemcells for use in a clinical setting by Dr. Juliane Wilhelmine Schott and colleagues in @MolTherapy. https://bit.ly/Sir24

Tags: @ucl, @uclchildhealth, @BostonChildrens, @harvardmed, @GreatOrmondSt, @moltherapy, @elsiver, @CellCellPress, @ElsevierNews

"Application of one of the most promising combinations, the poloxamer LentiBOOST®; and protamine sulfate, for GMP-compliant manufacturing of a clinical-grade advanced therapy medicinal product (ATMP) increased total VCN by over 6-fold, with no major changes in global gene expression profiles or inadvertent loss of CD34+CD90+HSPC populations."

Sefout IV, Leon-Rico D, Ferreira CB, Buckland IV, Sancilli G, Armant MA, Schambach A, Contra D, A. Throshef AJ, Enhancing Lentilital and No Paradoviral Transduction of Human National Application Not the Methods Clin Dev. 2019 Jun 7th AJ 34, 17. doi: 10.1016/j.com/m.2019.05.015. PMID: 3 1838385. PMCID: PMC6629974.

SUCCEEDWITHSIRION

Video views 13,569 >



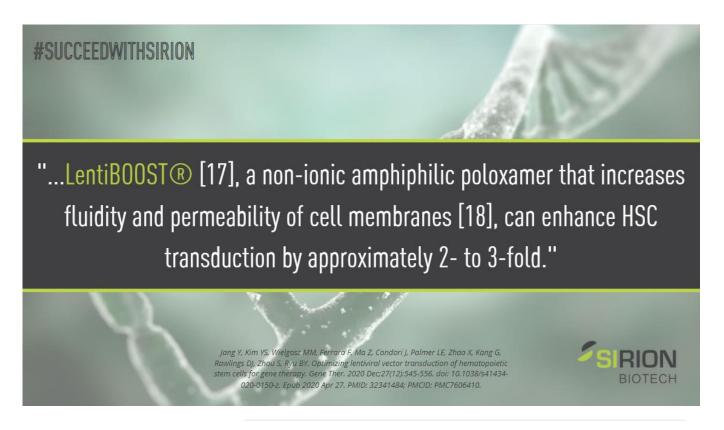
LinkedIn/Facebook (Click for Animation)

#SUCCEEDWITHSIRION: Research shows that SIRION's #LentiBOOST® increases hematopoietic #Stem Cell VCN by 2-to-3-fold. The scientists developed an optimized protocol to increase the VCN of HSCs. This research by Jang Yoonjeong, of St. Jude's Children's Hospital, and her colleagues was published in the journal Gene Therapy: https://bit.ly/Sir77.

Twitter (Click for Post)

#SUCCEEDWITHSIRION: Research shows that SIRION's #LentiBOOST® increases #HematopoieticStemCell VCN by 2-to-3-fold. This research by Jang Yoonjeong, of St. Jude's Children's Hospital, and her colleagues was published in the journal Gene Therapy: https://bit.ly/Sir77. #stemcells

Tags: @StJudeResearch, @Mustang_Bio, @seattlechildren, @UWDeptMedicine, @nresearchnews, @SpringerNature



Video views 366 >



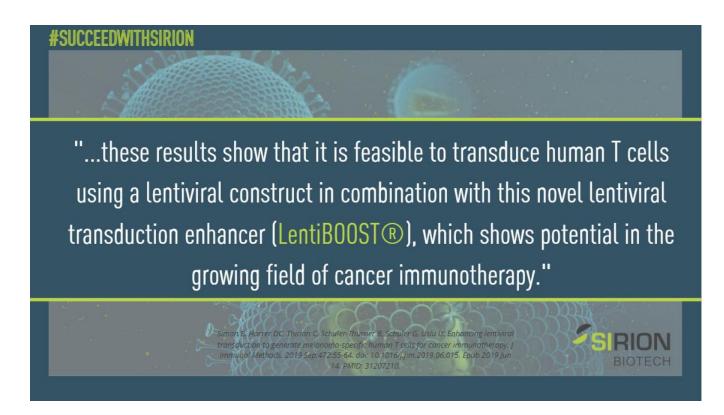
LinkedIn/Facebook (Click for Post)

#SUCCEEDWITHSIRION: #SIRION'S technologies were leveraged in @ Dr. Bianca Simon and her colleagues' research showing potential in the growing field of #cancer #immunotherapy. They isolated human CD8+ T cells and transduced them with a lentiviral construct for a tumor antigen-specific T cell receptor (TCR) combined with the transduction enhancer #LentiBOOST®. Their research shows it is feasible to transduce human T cells using a lentiviral construct in combination with #LentiBOOST®. Read the paper here: https://bit.ly/Sir56. #oncology

Twitter (Click for Animation)

#SUCCEEDWITHSIRION: SIRION'S technologies were leveraged in research by Bianca Simon and colleagues showing potential in the field of #cancerimmunotherapy.

Thread: The research shows it is feasible to transduce human T cells using a lentiviral construct in combination w/ LentiBOOST®. https://bit.ly/Sir56.



LinkedIn/Facebook (Click for Post)

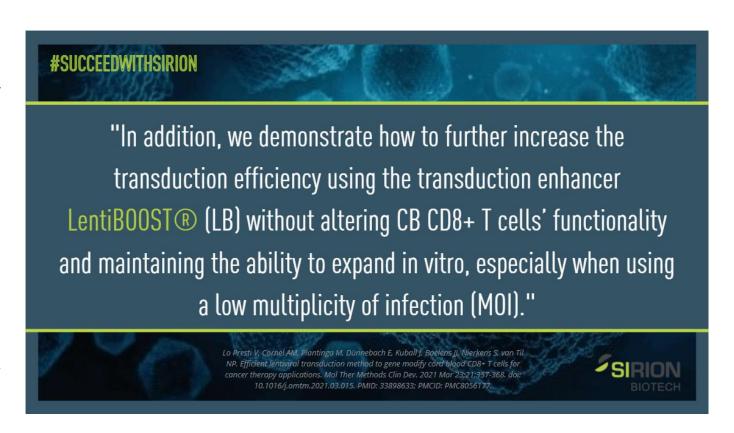
#SUCCEEDWITHSIRION: A study by @ Vania
Lo Presti and her colleagues shows efficient gene
modification of CB CD8+ T cells using LV to potentially
generate off-the-shelf T cell therapy products for #cancer
treatment. SIRION's #LentiBOOST® was proven a nontoxic transduction enhancer of CB CD8+ T cells in this
study published in the Molecular Therapy – Methods and
Clinical Development

journal: https://bit.ly/Sir78. #oncology #genemodification #cancertherapy #viralvector #lentiviral

Twitter (Click for Post)

#SUCCEEDWITHSIRION: A study done by Vania Lo Presti and her colleagues, shows efficient gene modification of CB CD8+ T cells using LV to potentially generate off-the-shelf T cell therapy products for #cancer treatment. https://bit.ly/Sir78. #genemodification #cancertherapy #viralvector

Tags: @CTI_UMCUtrecht, @prinsesmaximac, @cancercenterumc, @sloan_kettering, @amsterdamumc, @VUamsterdam, @moltherapy



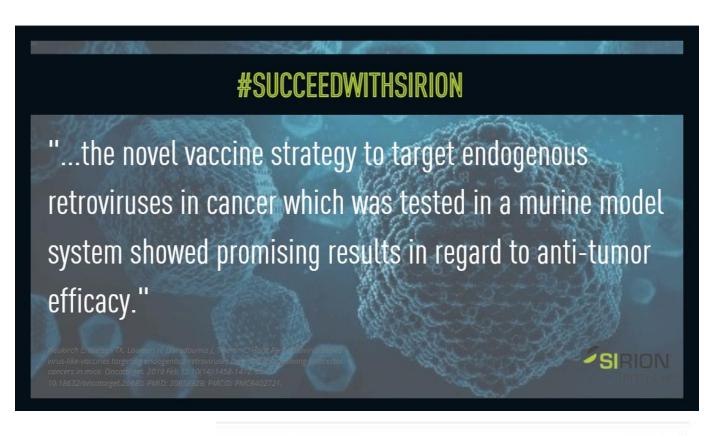
LinkedIn/Facebook (Click for Post)

#SUCCEEDWITHSIRION: Lasse Neukirch and colleagues, including Christian Thirion, Dr., CEO and Founder of SIRION Biotech, developed a #vaccine strategy that could represent a novel tool to successfully target diverse ERV-bearing tumors in patients with #cancer. The vaccine strategy led them to find that T cell responses were strong enough to prevent colorectal CT26 tumor growth and progression in BALB/c mice after a single vaccination before or after tumor challenge. Read the full paper here: https://bit.ly/Sir90. #oncology #colortectalcancer #cancerresearch

Twitter (Click for Post)

#SUCCEEDWITHSIRION: Thirion & colleagues developed a #vaccine strategy that may act as a tool to target diverse ERV-bearing tumors in cancer patients. T cell responses were strong enough to prevent tumor growth & progression in mice after one vaccination. https://bit.ly/Sir90.

Tags: @KU_GlobalHealth, @DKFZ, @sirionbiotechmu



Organic Impressions

660





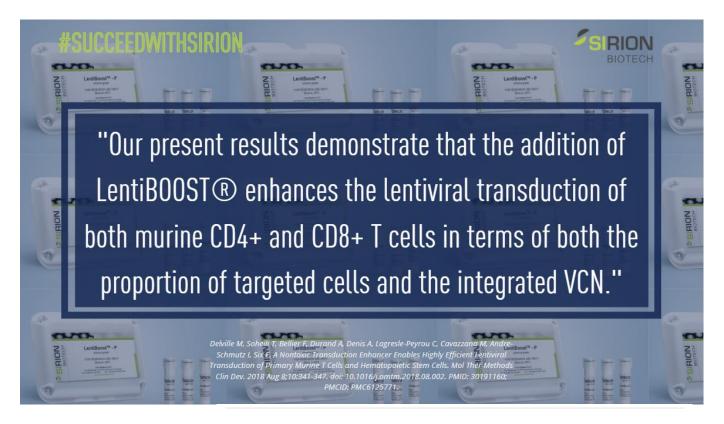
LinkedIn/Facebook (Click for Post)

#SUCCEEDWITHSIRION: The use of LentiBOOST® in a study by @ Marianne Delville and research colleagues resulted in high-level transduction of murine T cells and consistently efficient transgene expression, with no signs of toxicity. The study can be found in the Molecular Therapy Methods - Clinical Development journal: https://bit.ly/Sir55.

Twitter (Click for Post)

#SUCCEEDWITHSIRION: The use of LentiBOOST® in a study by Marianne Delville and research colleagues resulted in high-level transduction of murine T cells and consistently efficient transgene expression, with no signs of toxicity. https://bit.ly/Sir55. #Lentiviral #Tcells

Tags: @InstitutImagine, @Univ_Paris, @APHP.



Organic Impressions

795 >

LinkedIn/Facebook (Click for Animation)

#SUCCEEDWITHSIRION: SIRION's clinically proven poloxamer, LentiBOOST®, can significantly improve lentiviral CD34+ HSC transduction protocols with the potential to improve production of gene-modified cell products, found Ilona Hauber and colleagues, including some researchers from SIRION. Read the full paper here: https://bit.ly/Sir59 #lentiviral #genemodified #Stemcells #genetherapy

Twitter (Click for Animation)

#SUCCEEDWITHSIRION: SIRION's reagent LentiBOOST®, can significantly improve lentiviral CD34+ HSC transduction protocols with the potential to improve production of gene-modified cell products, Ilona Hauber and colleagues found. https://bit.ly/Sir59. #lentiviral #genemodified

Tags: @DZIF_, @sirionbiotechmu, @UKEHamburg

#SUCCEEDWITHSIRION

"We demonstrate that inclusion of LentiBOOST® in a standard HSC transduction protocol yields high transduction efficiencies while preserving the ability of the transduced HSC to differentiate into various hematopoietic lineages."

Video views 207 >

Content highlights ②

Impressions

Last 30 days

452% growth in impressions throughout 1 month between 4 of the posts.

166,308

▲ 452%

high-level transduction of murine T cells and

SIRION BIOTECH GmbH

447 Organic **Impressions**

795 Organic **Impressions SIRION BIOTECH GmbH** 2.124 followers

#SUCCEEDWITHSIRION: The use of LentiBOOST® in a study

"Our present results demonstrate that the addition of

LentiBOOST® enhances the lentiviral transduction of

both murine CD4+ and CD8+ T cells in terms of both the

proportion of targeted cells and the integrated VCN."

by Marianne Delville and research colleagues resulted in

660 Organic **Impressions**

2,124 followers 1mo • 🕓

SIRION Update: Succeed with Sirion - Cancer Immunotherapy #SirionBiotech #Biotech #GeneTherapy

"...these results show that it is feasible to transduce human T cells using a lentiviral construct in combination with this novel lentiviral transduction enhancer (LentiBOOST®), which shows potential in the growing field of cancer immunotherapy."

Succeed with Sirion - Cancer Immunotherapy

www.pharmaceutical-networking.com • 1 min read

13

Like

Comment Comment

Organic Impressions 447

RION

18

SIRION

1mo • 🕓

Like

C Comment

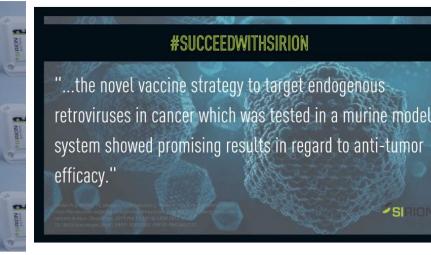
795 > Organic Impressions

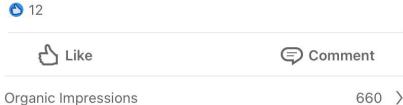
SIRION

SIRION BIOTECH GmbH

2.124 followers 1mo • 🕲

#SUCCEEDWITHSIRION: Lasse Neukirch and colleagues, including Christian Thirion, Dr., CEO and Founder of SIRION Biotech, developed a #vaccine strategy that





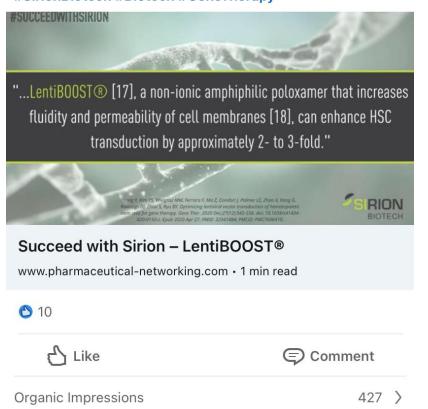


SIRION BIOTECH GmbH

2,124 followers

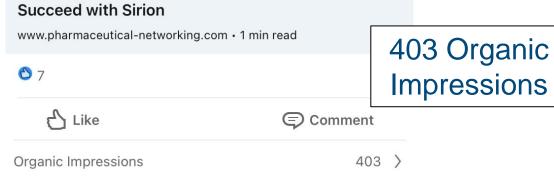
427 Organic Impressions

SIRION Update: Succeed with Sirion – LentiBOOST® #SirionBiotech #Biotech #GeneTherapy





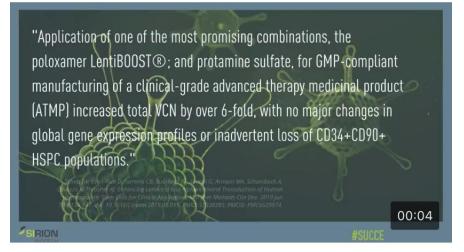




SIRION BIOTECH GmbH

2,124 followers 2mo · Edited · ③ 13,569 Video Views

#SUCCEEDWITHSIRION: SIRION'S LentiBOOST® technology was leveraged in research on enhancing #lentiviral and alpharetroviral transduction of human ...see more



12

ک Like

Comment

Video views

13,569 >

SIRION BIOTECH GmbH

2.124 followers 2mo • 🕲

22,689 Video **Views**

Did you know SIRION's technology is leveraged in laboratories across the globe each day? We have manufactured more than 5,000 vectors and ...see more





درم Like

Comment

Video views

22,689 >

SIRION BIOTECH GmbH

2,124 followers 3w • 🕥

207 Video Views

#SUCCEEDWITHSIRION: SIRION's clinically proven poloxamer, LentiBOOST®, can significantly improve lentiviral CD34+ HSC transduction protocols with the

"We demonstrate that inclusion of LentiBOOST® in a standard HSC transduction pretacol yields high transduction efficiencies while preserving the ability of the transduced HSC to differentiate into various hematopoietic lineages." SIRION



Like

Comment

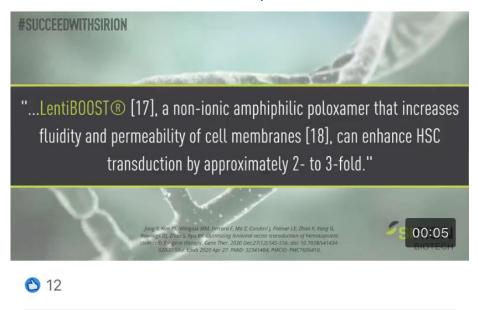
Video views 207 >

SIRION BIOTECH GmbH

2,124 followers 2mo • 🕥

366 Video Views

#SUCCEEDWITHSIRION: Research shows that SIRION's #LentiBOOST® increases hematopoietic #StemCell VCN by 2-to-3-fold. The scientists developed an ...see more



درم Like



Video views

366 >

| Total Spent | Impressions |
|-------------|-------------|
| \$800 | 187,784 |