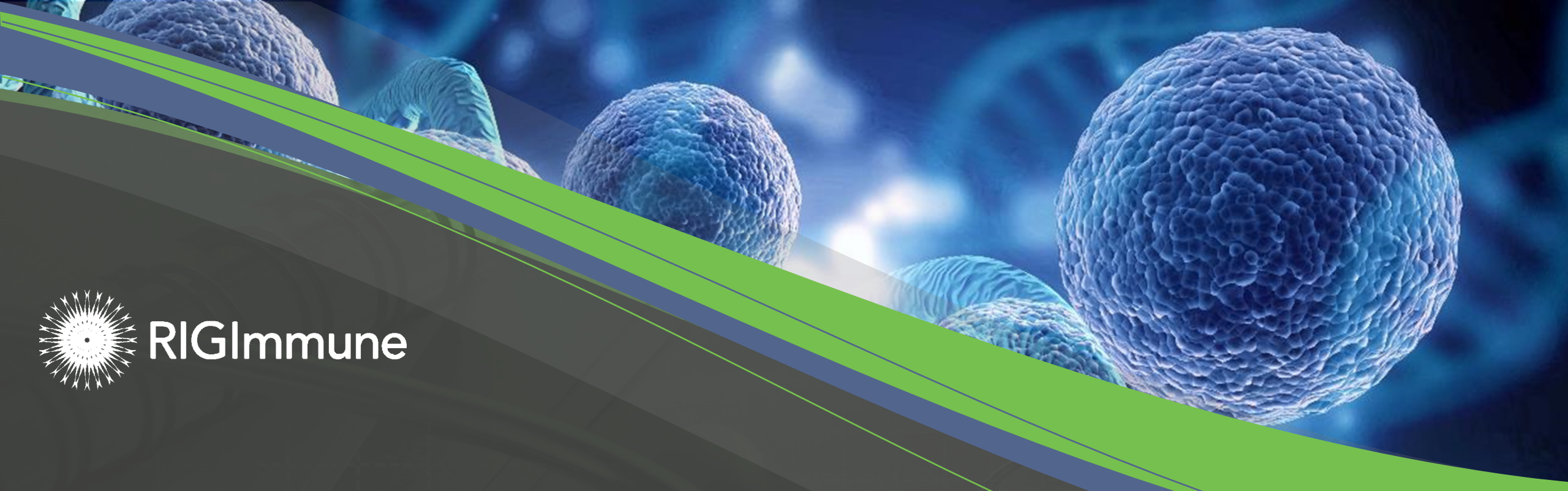

RIGImmune

NOVEL RNA THERAPEUTICS THAT TARGET RIG-I

MARTIN DRISCOLL
MDRISCOLL@RIGIMMUNE.COM

RIGImmune Founders & Scientific Advisors

Anna Marie Pyle, PhD

Anna Marie Pyle, PhD is a Yale Sterling Professor, in the Department of Molecular, Cellular and Developmental Biology and Department of Chemistry. She is an HHMI investigator since 1997. Dr. Pyle is a co-discoverer of the RIG-I receptor family. She conducted many of the first structural and biochemical investigations on RIG-I.

Akiko Iwasaki, PhD

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- Formed a Delaware Corp. in 2020
- Exclusive option to license extensive IP from Yale University
- Launched a Seed Round effort in April ‘21 with a $5 million goal

Company Overview

RIGImmune

RIGImmune

Biopharmaceutical research company developing immunomodulatory therapies against the cytosolic RNA sensor *RIG-I*

Stem Loop RNA Therapeutics (SLRs)

A New Class of

Therapeutic Oligonucleotides for

Diseases Caused by RNA Viruses

+

Antitumor Immune Response Induction

↓

Internal platform for small molecule RIG-I agonist & antagonist development

Key Investment Highlights

- Developing a novel class of host-targeted agents that activate the body's innate and adaptive immune capability for antiviral defense and antitumor response
  - Lead development product, SLR-14, could be in the clinic before YE'22
- Pan-viral benefit - demonstrated efficacy in multiple models for diseases caused by RNA viruses
- SLR-14 demonstrated treatment & prevention effects for serious viral respiratory diseases
  - SARS-CoV-2, influenza
  - Capability for development as a vaccine adjuvant
- Antitumor immune response POC in multiple oncology models
  - Demonstration of abscopal effect, immune memory, and additive benefit with checkpoint inhibition
- Significant interest with potential support from Gates Foundation and NIAID
- Experienced leadership team to execute the development programs
- Future internal capability to develop RIG-I agonists & antagonists
  - Interferonopathies, inflammatory-mediated diseases

Significant Unmet Clinical Needs & Market Opportunities

Influenza A virus (flu) epidemics occur annually*

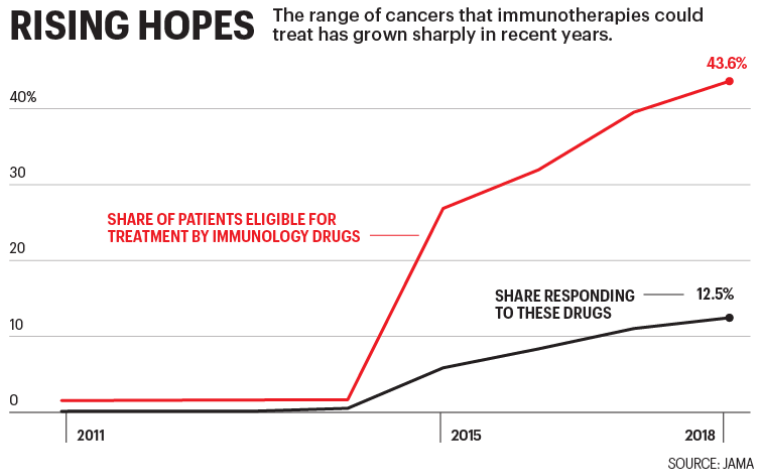
3 – 5 million severe cases annually

~ 500,000 deaths worldwide each year

HPIV3 & RSV cause severe respiratory disease in infants and children

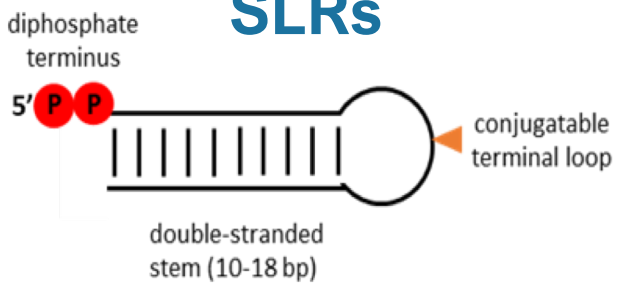
SARS & MERS have caused significant morbidity and mortality

SARS-CoV-2 has infected >180 million people globally thus far



Novel immune-therapeutics could play an essential role in the enhancement of response rates & durability of the responses to checkpoint inhibitors for a broad range of cancers

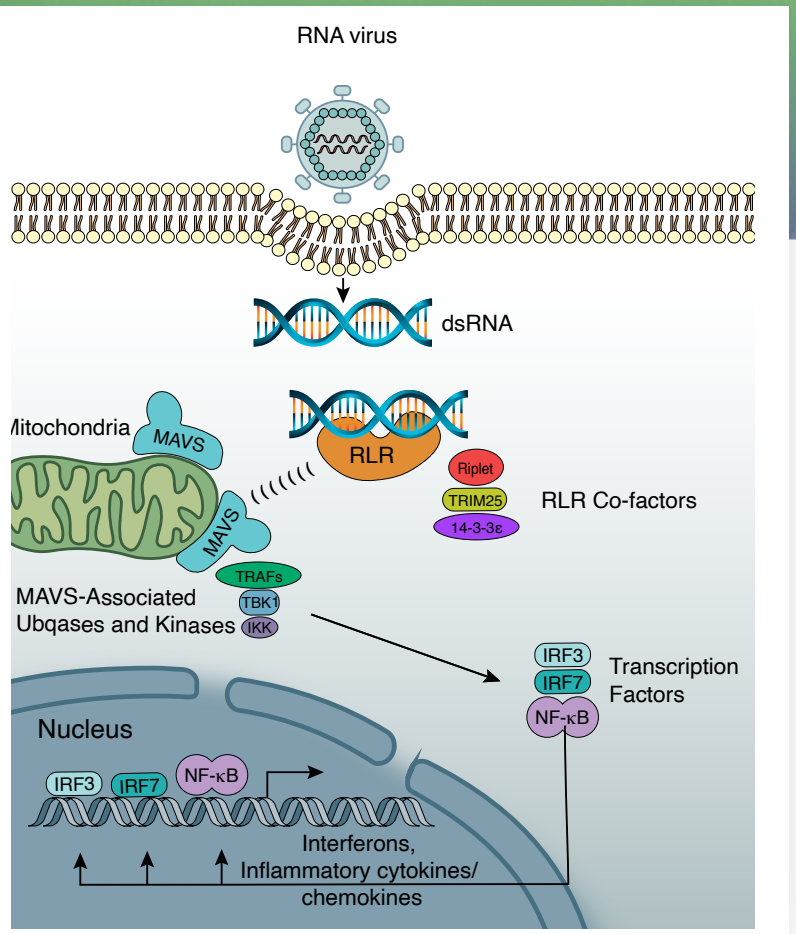
SLRs



* Prevalence substantially lower in 2020-21 season

RIG-I Activation Triggers a Multifaceted Innate Immune Response

RIGImmune



Triggered by double stranded RNA from virus or SLR mimic

Central role in innate immunity and antiviral response

RIG-I – the first line of defense against RNA viral pathogens

- Coronaviruses (COVID-19, SARS, MERS)
- Influenza, RSV
- Ebola
- Flaviviruses (Dengue)

By harnessing and controlling RIG-I, we can create new immunomodulatory therapies for…

- Viral Respiratory Diseases
- Oncology
- Viral Hemorrhagic Fevers
- Inflammatory Diseases

Product Development Pipeline

RIGImmune

	Product Candidate	Indication	Discovery	Lead	Preclinical	Phase 1	Strategy
Viral	SLR-14	Influenza, vaccine adjuvant RNA viral prophylaxis, pan-viral tx					Pursue FIH Trial & Vaccine adjuvant
Immuno-Oncology	SLR-14S18	Cancer Immunotherapeutic					Seek partnerships w/ novel delivery systems
Platform Technology	RIG-I antagonist	Interferonopathies					Internalize validated platform Selectively implement discovery programs to fund internally and partner others
	MDA5 agonist	Infectious diseases and cancers					
	LGP2 agonist	Infectious diseases and cancers					

Stem Loop RNA Compounds (SLRs) Viral Respiratory Infections Opportunities & Strategic Focus

RIGImmune

- Notable human respiratory diseases caused by RNA viruses
  - COVID-19, SARS, MERS, Influenza, RSV
- SLRs - a role in managing the next respiratory disease outbreak?

Viral Respiratory Diseases Development Strategy

- Pan-viral – immediate tx upon symptoms
- Prophylaxis
- Vaccine adjuvant
- Favorable solubility profile allows for direct mucosal delivery - intranasal

I.V. SLR14 protects C57BL/6J mice from influenza infection

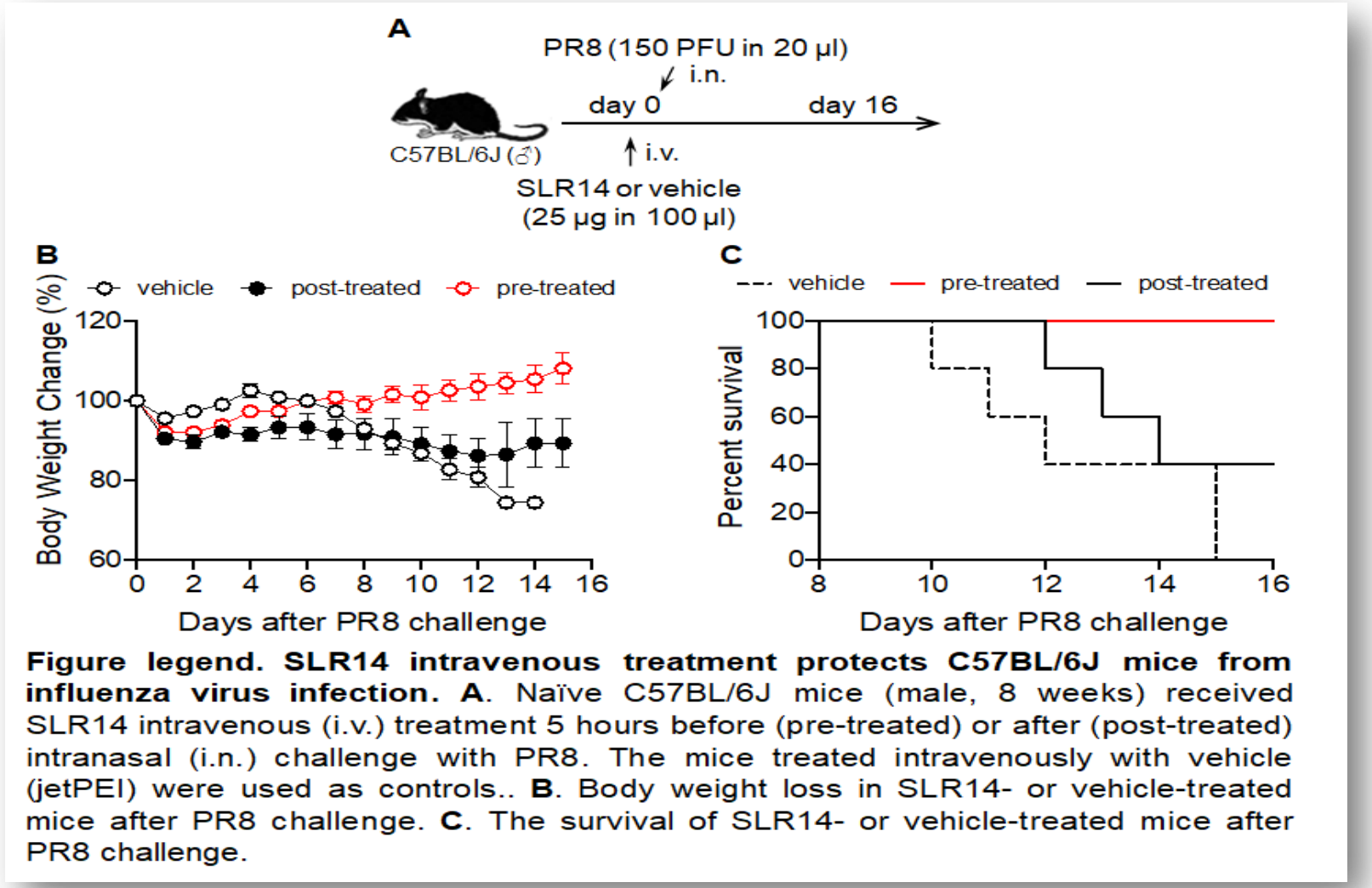
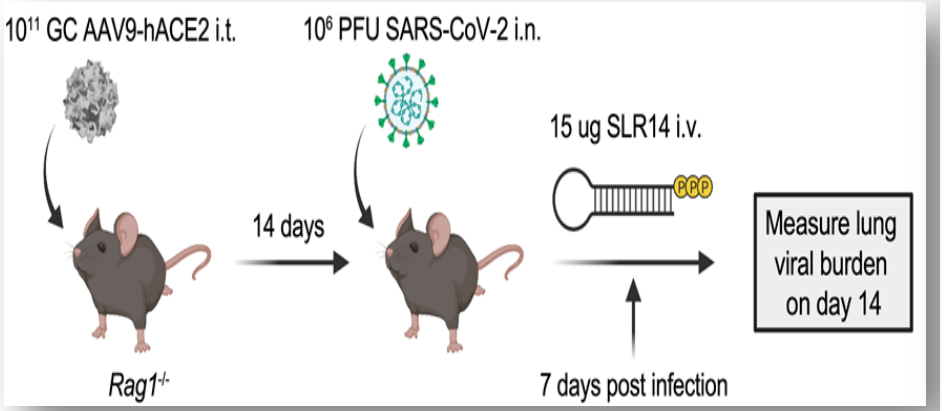
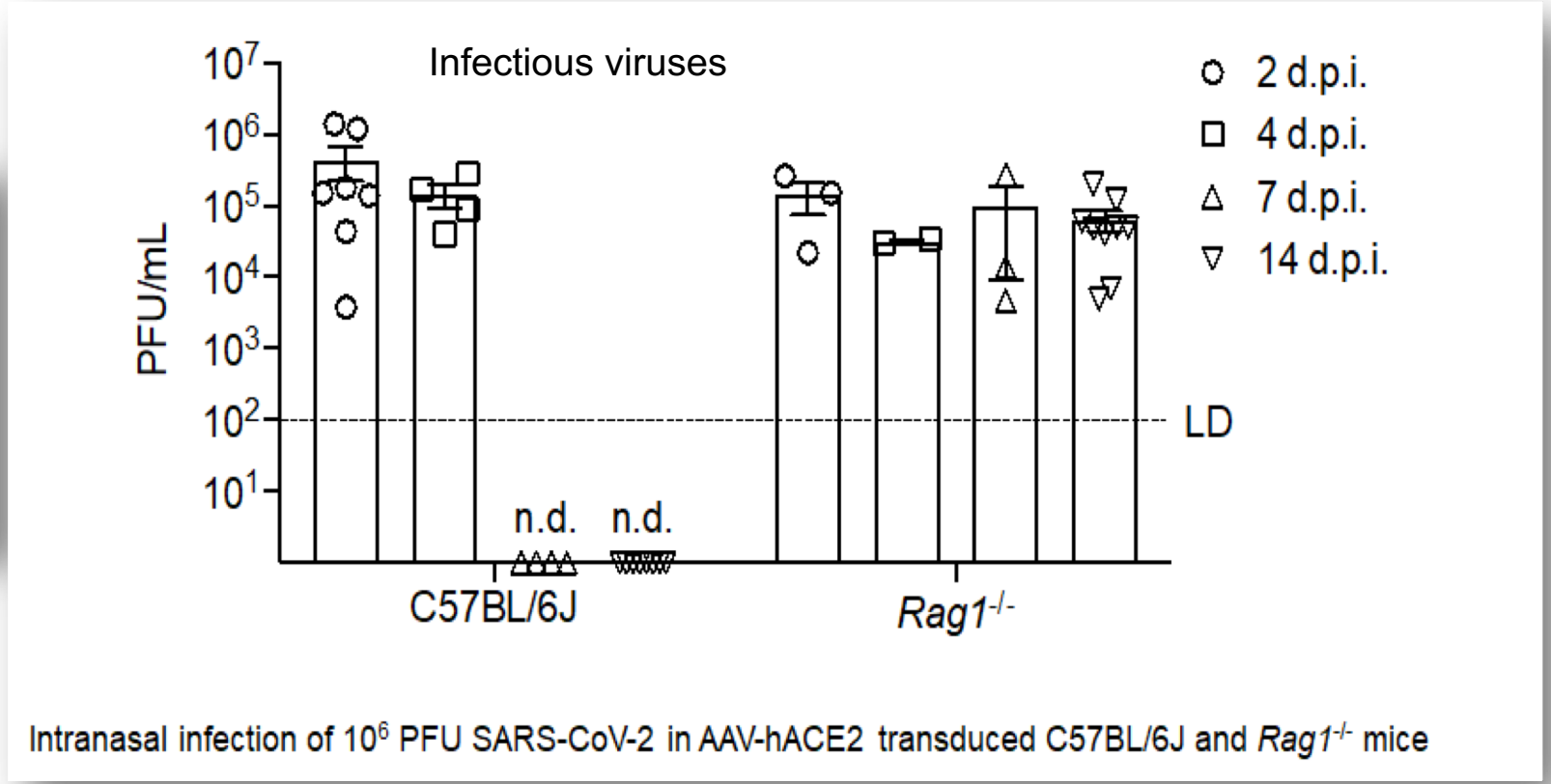


Figure legend. SLR14 intravenous treatment protects C57BL/6J mice from influenza virus infection. A. Naïve C57BL/6J mice (male, 8 weeks) received SLR14 intravenous (i.v.) treatment 5 hours before (pre-treated) or after (post-treated) intranasal (i.n.) challenge with PR8. The mice treated intravenously with vehicle (jetPEI) were used as controls.. **B**. Body weight loss in SLR14- or vehicle-treated mice after PR8 challenge. **C**. The survival of SLR14- or vehicle-treated mice after PR8 challenge.

SLR14 treatment of persistent infection and long COVID

Rag1$^{-/-}$ mice lack T and B cells and suffer from persistent SARS-CoV-2 infection

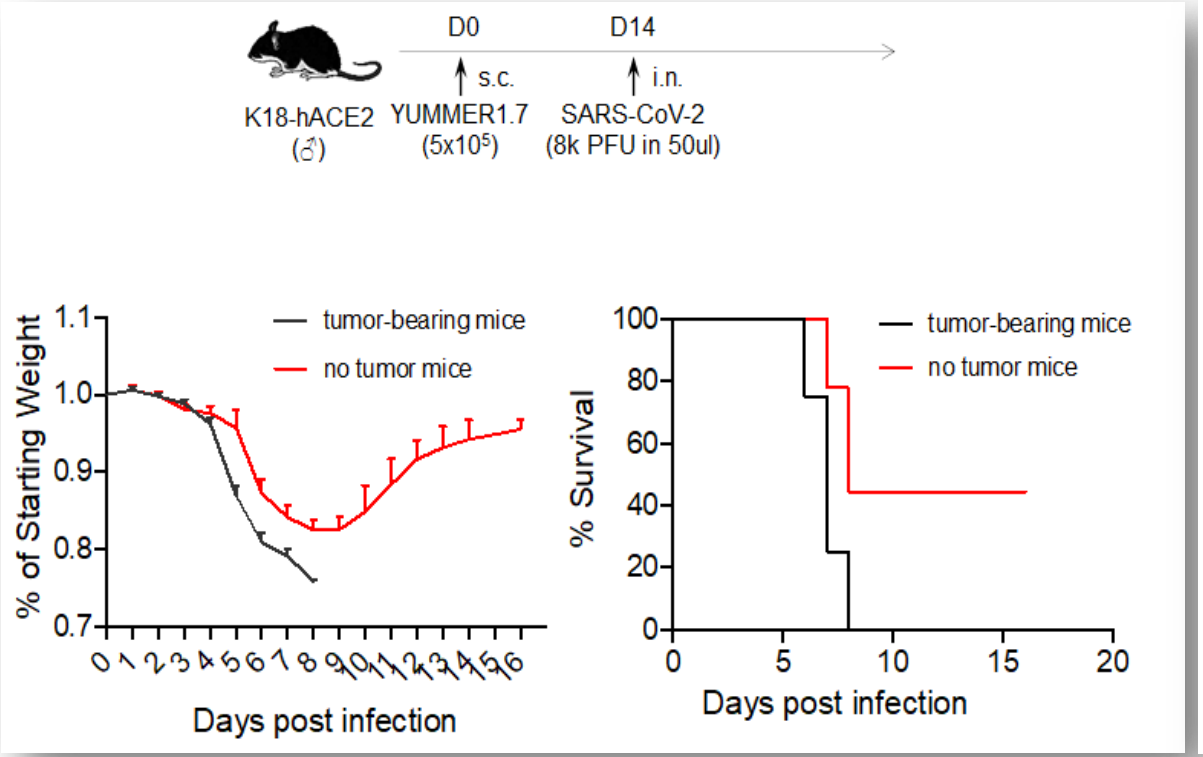




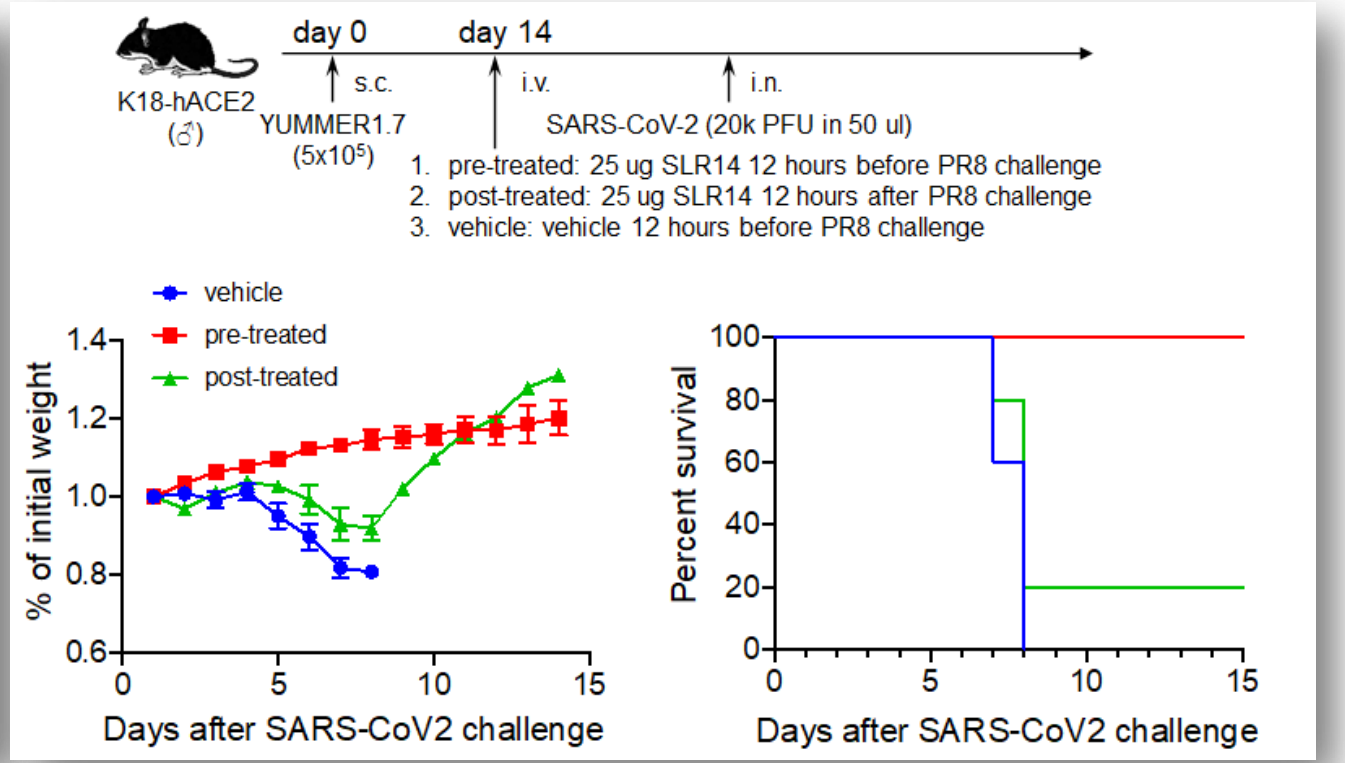
Intranasal infection of 10^{6} PFU SARS-CoV-2 in AAV-hACE2 transduced C57BL/6J and *Rag1*$^{-/-}$ mice

SLR14 treatment in tumor-bearing mice pre- & post-SARS-CoV-2 infection

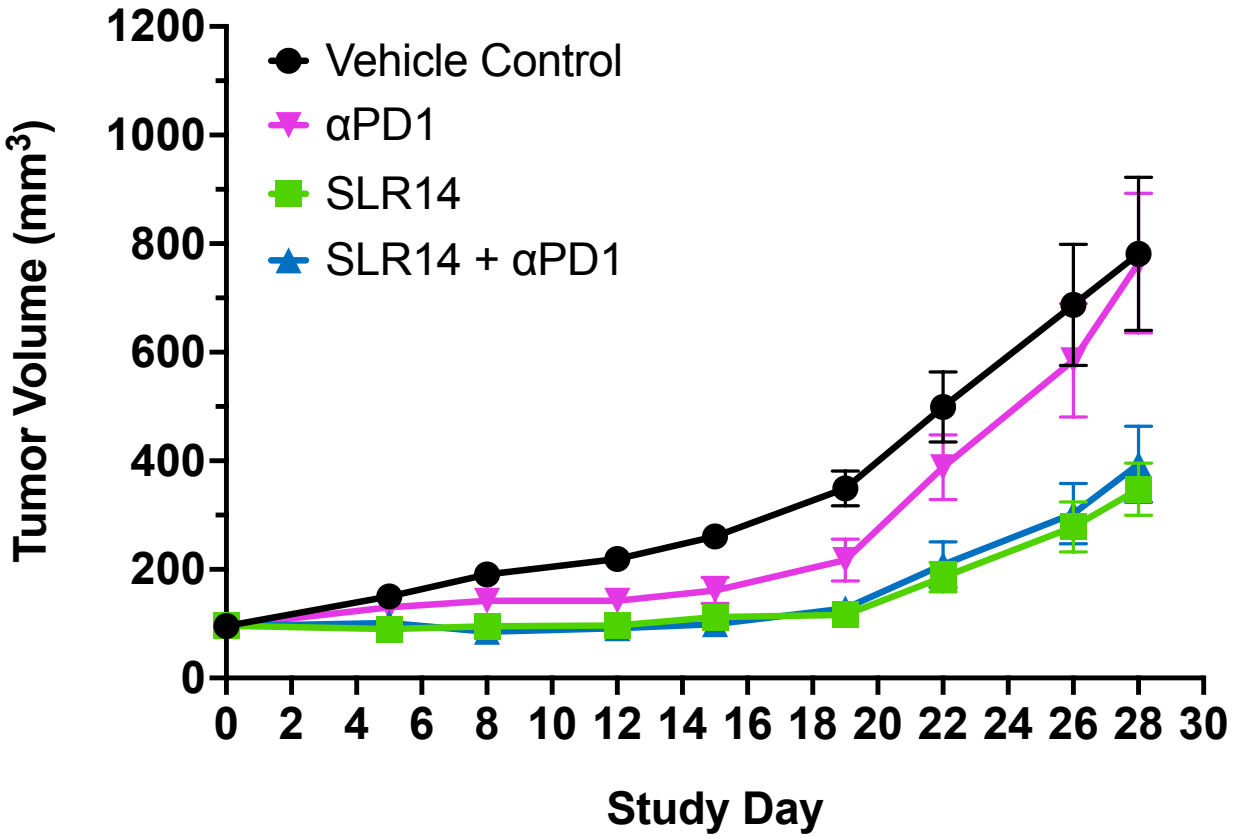
BWL and survival of tumor-bearing mice after SARS-CoV-2 i.n. infection

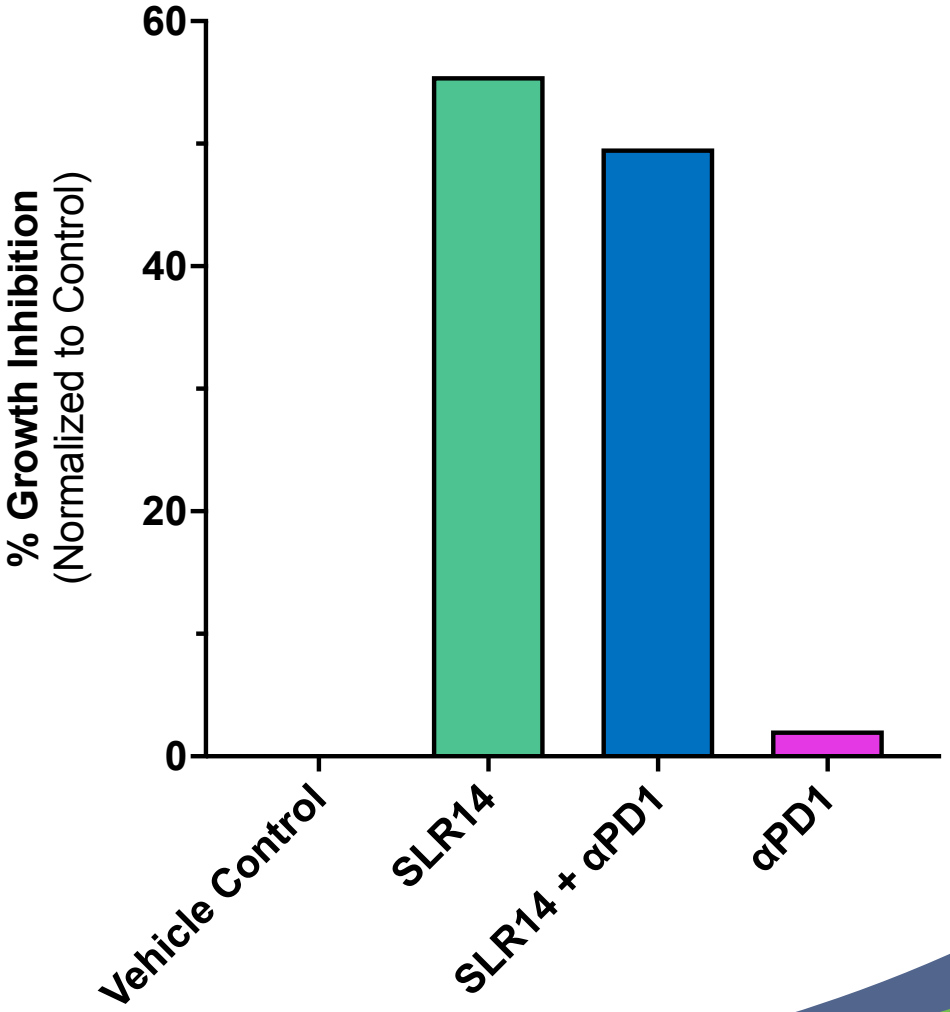


BWL and survival of tumor-bearing mice with SLR14 tx 12 hours before or after SARS-CoV2 i.n. infection



Tumor Growth Inhibition in Pan02 Syngeneic Pancreatic Cancer Model

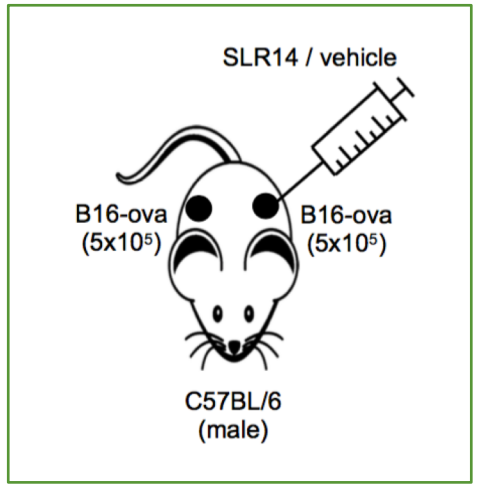


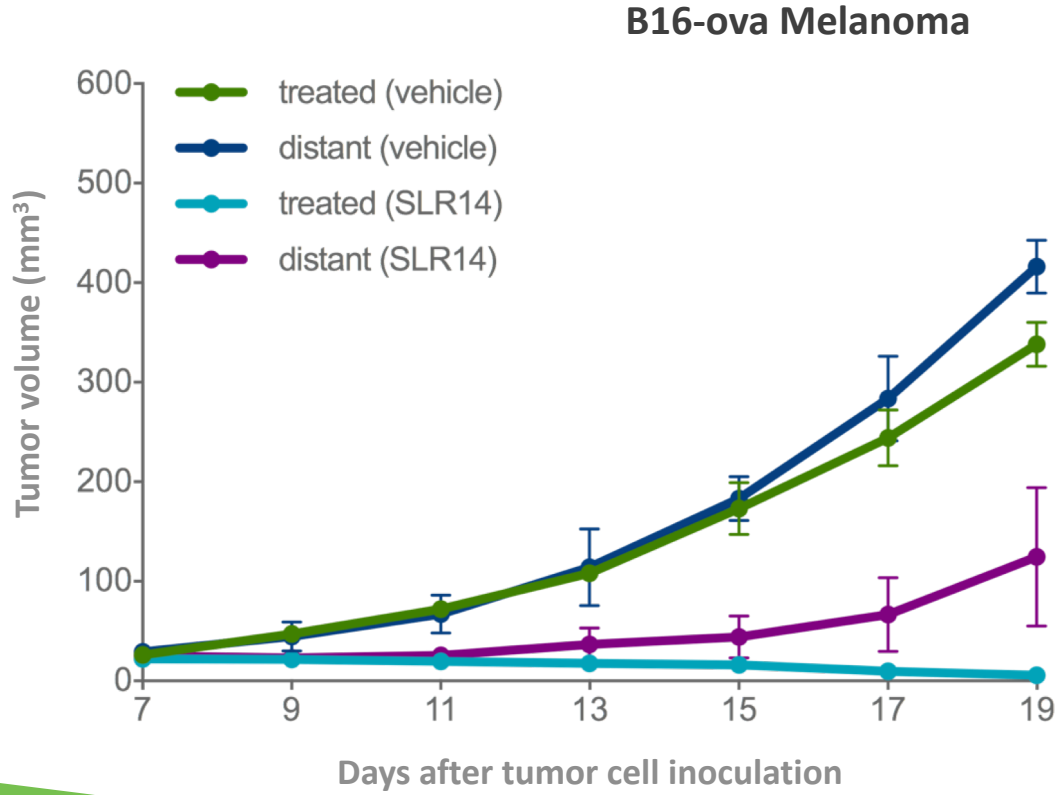


SLR14 Recruits the Adaptive Immune System

SLR14 induces robust abscopal effect

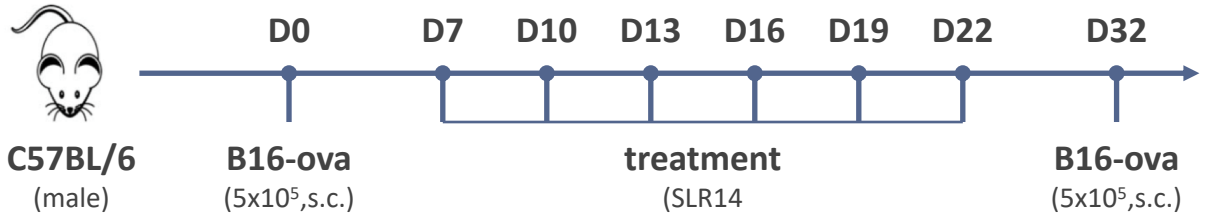
Growth of untreated (left) tumor is inhibited by SLR14 injection into treated (right) tumor



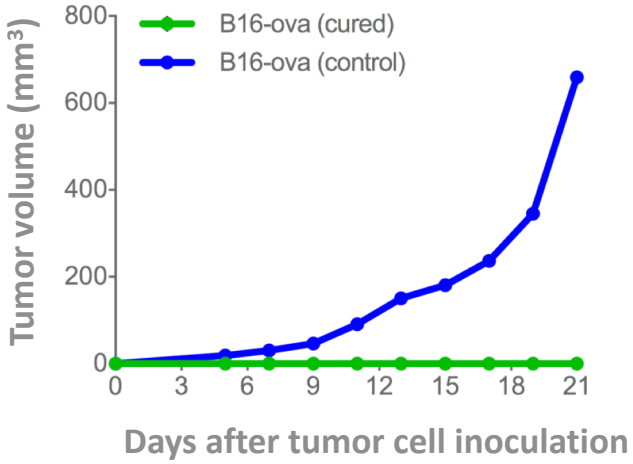


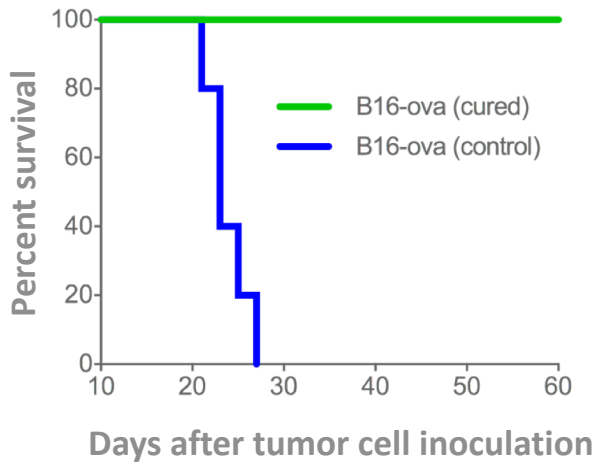
SLR14 Induces Immune Memory

Tumors implanted in mice previously cured with SLR14 do not grow



B16-Ova Melanoma

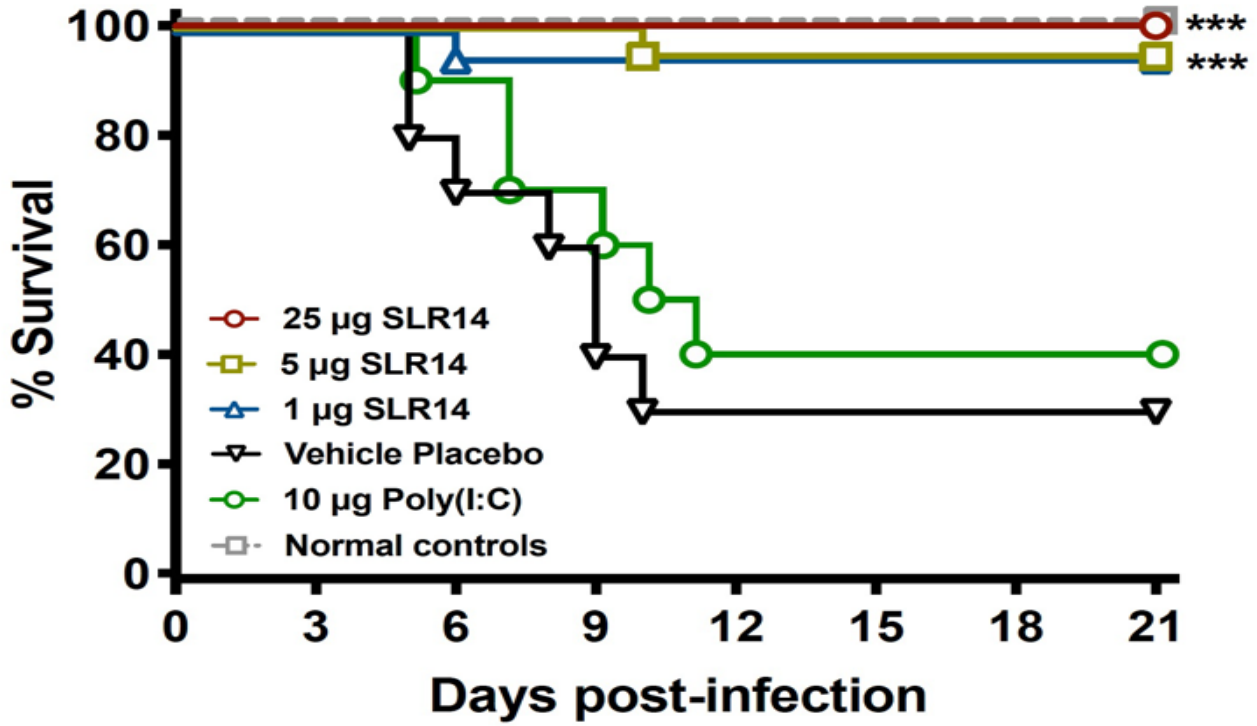




SLR-14 Protects Against Rift Valley Fever Mortality

- RIG-I shown to be receptor that responds to flaviviral & HCV infection
- SLR compounds shown to be effective, prophylactically and post-infection, in three viruses completely different in composition and biological mechanisms
  - Influenza viruses, bunyaviruses and coronaviruses

Rift Valley Fever
Bunyavirus Study
Utah State
SLR14 Compound
Administered subQ



Treatment	Protection (% Survival)
Non-infected Controls	100
25 µg SLR14	100
5 µg SLR14	90
1 µg SLR14	90
10 µg Poly(I:C)	40
Vehicle Placebo	30

Use of Proceeds & Near-Term Plans

Build a biopharma development company with a platform capability to develop differentiated RIG-I agonist & antagonist compounds

Pre-Seed Round (Completed)
Management Investment + CT Innovations
$300k

Seed Round
Goal: $5 million

- Further Synthesis & Formulation Optimization
- Intranasal delivery
- Co-formulation with flu vaccine

→ IND-enabling efforts for SLR-14 for FIH Influenza Challenge

→ Additional MOA, Nonclinical POC & co-formulation w/ vaccine

→ Potential FIH Trial Initiation YE'22

- Research collaborations related to immuno-oncology

→ Formulate the SLR-14S18 for IV ROA as adjunct to checkpoint inhibitors

→ Potential FIH Trial Initiation 2023

RIGImmune Leadership Team

RIGImmune Founders & Scientific Advisors

Anna Marie Pyle, PhD

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Martin Driscoll Chair

OncoNano Medicine, Inc. CEO & Director

- Former CEO & Director at Spring Bank Pharmaceuticals (NASDAQ:SBPH)
- Former CEO & Director at Javelin Pharmaceuticals (NYSE Euronext: JAV)

Dov Goldstein MD Director

Indapta Therapeutics CFO, CBO & Director

- Former CFO at Vicuron Pharmaceuticals (NASDAQ: MICU)
- Former CFO Loxo Oncology (NASDAQ:LOXO)

Tom Smart Director

Gravitas Therapeutics, Inc.

Board Chair & CEO

- Former Chair and CEO of AnaptysBio (NASDAQ: ANAB)
- Extensive fund-raising and corporate partnering transaction experience

Donald Corcoran

Current Advisor & Future CEO

- Former CEO at Methlygene and Cyteir Therapeutics
- Head of Business Development & Alliance Mgmt for Epi-Cure Pharma
- Chief of Staff & Head of Operations for AstraZeneca Boston R&D
- Multiple prior and current board roles

Kris Iyer, PhD

Chief Scientific Officer

- Previously CSO Spring Bank
- >40 yrs oligonucleotide research
- Advanced multiple therapeutics to clinical development
- Former NIH

Jim McArdle, PhD

CMC

- >35 yrs. In biopharma
- Developed antisense oligonucleotides at ISIS (now Ionis)
- ICH Expert Working Groups

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Akansha Bhargava, MD MS

Blavatnik Fellow, Yale OCR

- Former Head of Clinical Development Soleno Therapeutics.

Contacts for Further Information

RIGImmune

Marty Driscoll
mdriscoll@rigimmune.com

Kris Iyer, PhD
kiyer@rigimmune.com

Anna Marie Pyle
Anna.pyle@yale.edu

Akiko Iwasaki, PhD
Akiko.iwasaki@yale.edu