



**XVR013m, a variant-proof antibody  
with exceptional potency to prevent  
and treat COVID-19**

[WWW.EXEVIR.COM](http://WWW.EXEVIR.COM)

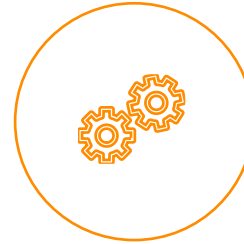
# Company growth and key milestones since foundation



Founded in **2020**, during the SARS-CoV-2 pandemic to develop **heavy chain-only antibody (VHH) based treatments**



In **2021**, **Phase 1a & 1b** trials completed for COVID-19 1<sup>st</sup> generation treatment



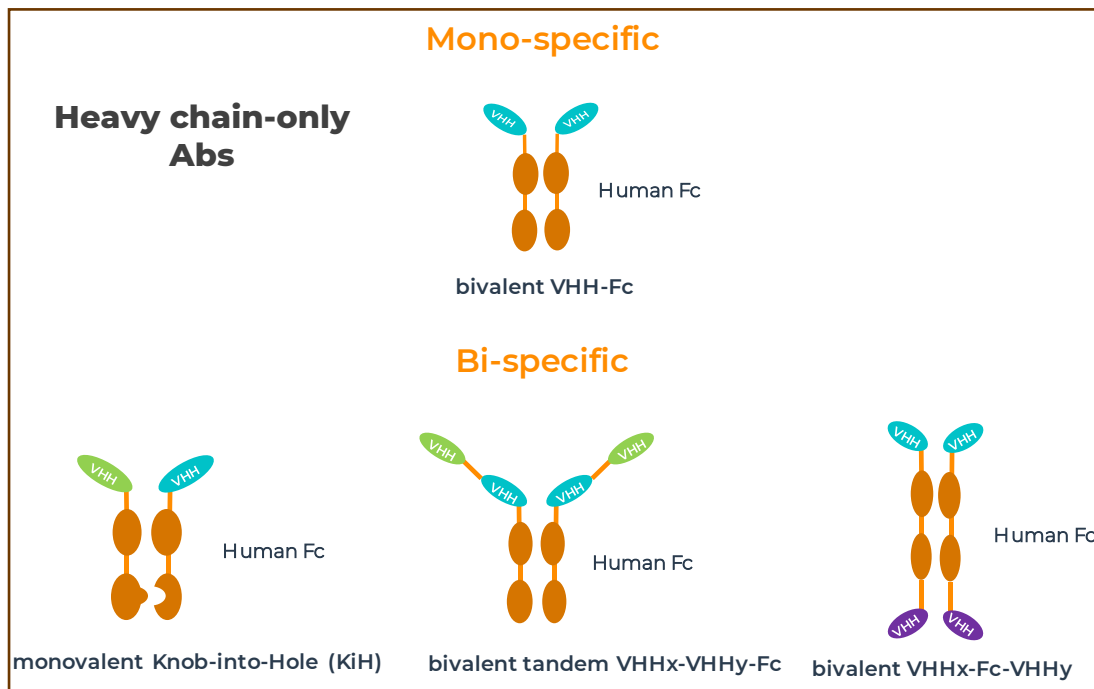
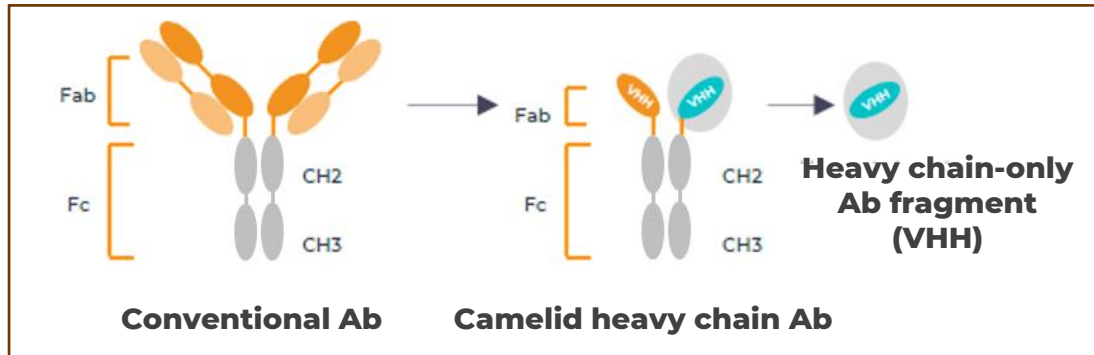
In **2022**, development of **2<sup>nd</sup> generation antibodies** for COVID-19 prevention and treatment targeting **highly conserved epitopes** in the spike protein



In **2023**, pipeline extension with focus on **dengue** and **pandemic** preparedness

# Key differentiators from conventional monoclonal Abs

Ease to make multi-specifics, smaller and access to hidden epitopes

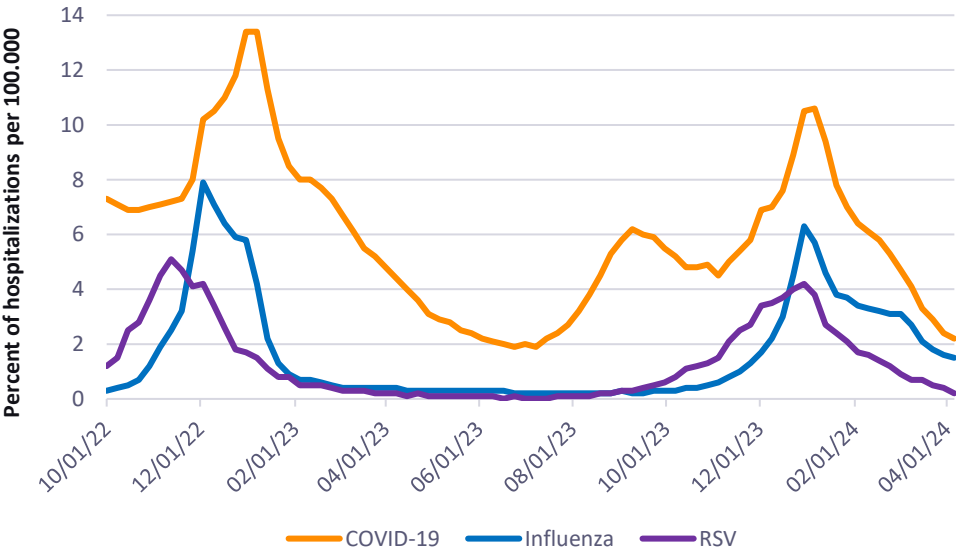


- **Modular** VHH building blocks provide **unique combinatory flexibility**
- Potential to access **unique** and **occluded** epitopes that are often well **conserved**
  - *Small size (80 kDa VHH-Fc) vs 150kDa for traditional Ab*
  - *Extended CDR3 regions*
- **Advantage of multi-specifics:** **reduced risk of viral escape** by targeting more than 1 epitope
- Favorable **solubility, stability** and **biodistribution** profiles supporting rapid and better tissue penetration
- Possibility for production in **Pichia pastoris** for more **rapid and cost-effective** manufacturing

# COVID-19: Remains worldwide the most important respiratory ID

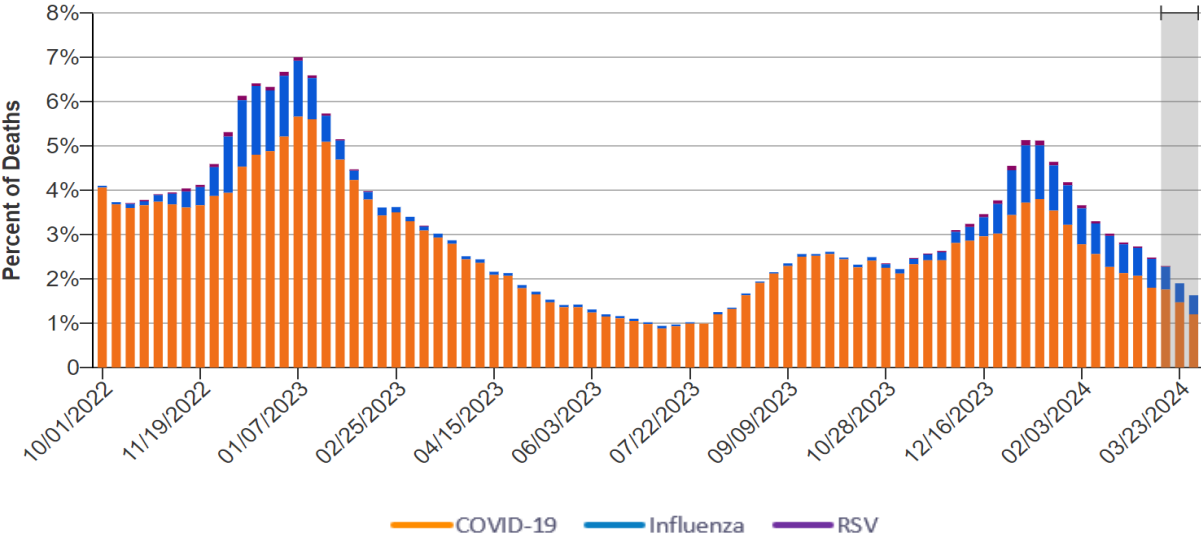


Cumulative **hospitalization** rate for COVID-19 is **3x higher** than **influenza** and **5x higher** than **RSV**



**US data**  
(01 OCT 2022 – 01 APR 2024)

Cumulative **death** rate for COVID-19 is **6x higher** than **influenza**



**US data**  
(01 OCT 2022 – 23 MAR 2024)

**COVID-19 is here to stay**

# COVID-19: Urgent and high unmet medical need for protection of vulnerable populations



## Unmet medical need

**841.000**

**Hospitalizations\*** during 2023/24 season in US<sup>1</sup>

**65.000**

**deaths** during 2023/24 season in US<sup>1</sup>

### Immunocompromised: ~4% of US population<sup>2</sup>

- Account for **22% of hospitalizations**<sup>3</sup>
- Account for **24% of deaths**<sup>3</sup>

### Elderly: ~17% of US population<sup>4</sup>

- Account for **67% of hospitalizations**<sup>3</sup>
- Account for **88,4% of deaths**<sup>3</sup>



## Vaccines

- IC and elderly may not respond adequately to vaccination
- Vaccines are not variant-proof and yearly update required



## Medicines

- Intense treatment schedules
- Severe side effects
- Drug-drug interactions often incompatible with medication



## Antibodies

- **Essential as additional layer of protection** for IC and elderly
- All **previously authorized antibodies** (AZ, Regeneron, VIR, Celltrion) are **no longer active** against circulating variants
- Only one recently approved (EUA) antibody works (Invyvid)
  - RBD-targeting antibody sensitive to viral escape
  - High IV dose in hospital setting
  - 3 months duration of protection

\* Mean length of hospital stay is 15 days, mean cost per patient is \$64,029

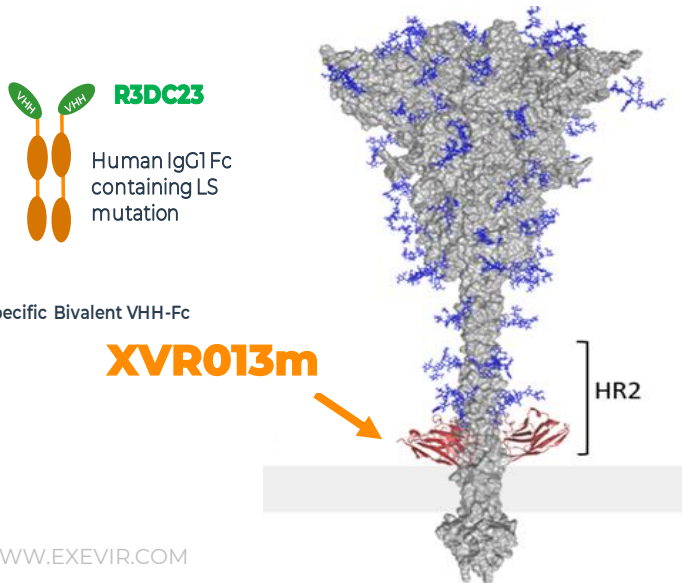
1, CDC, COVID Data Tracker; 2, Evans et al, The Lancet, 2023; 3, Airfinity internal analyst report; 4, Total and Percentage of Elderly in Nursing Homes: 2023 Data (aplaceformom.com)

# COVID-19: Exceptional broad neutralizing potency and high resilience against all SARS-CoV-2 variants tested

## ExeVir's solution:

### XVR013m

- Highly conserved epitope in S2 subunit, unmutated across all previous and current VOC, VOI and VUM
- variant-proof
- Target duration of protection up to 6m
- Target SC administration



## Pseudovirus neutralization data

Variant	Mean IC50 (ng/mL)	XVR013m	VYD222
Reference	D614G	6,4	8,4
Omicron	XBB.1.5	3,6	104,3
	XBB.2.3	4,0	87
	XBB.1.16	3,6	77,6
	FL.1.5.1	3,7	-
	EG.5.1	4,3	-
	HK.3	4,6	72,3
	HV.1	3,0	41,2
	BA.2.74	3,5	-
	BA.2.86.1	3,0	167,7*
	<b>JN.1</b>	<b>2,8</b>	<b>74,6</b>

- VYD222 data against BA.2.86 variant
- Data unknown

Relative to reference virus D614G:

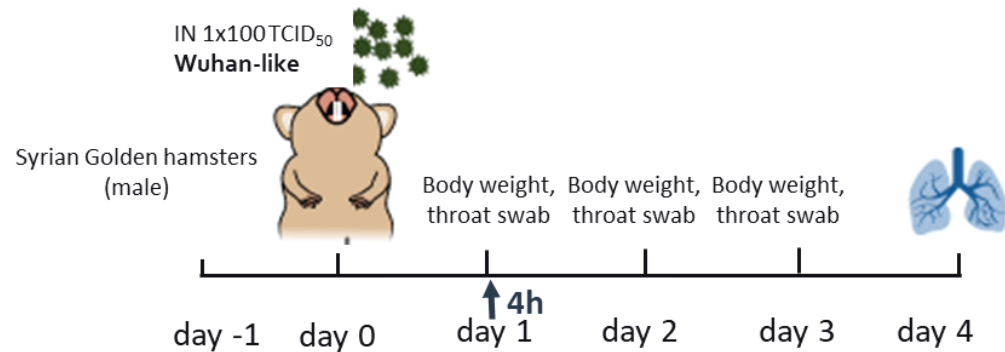
No impact (<5-fold)
5<x<25-fold reduction in potency

"After careful consideration of the scientific rationale, mechanism of action, scientific data and unique features of ExeVir's technology, I am convinced that it holds great promise in meeting the unmet medical needs of the vulnerable populations."

## Roger Paredes, MD, PhD

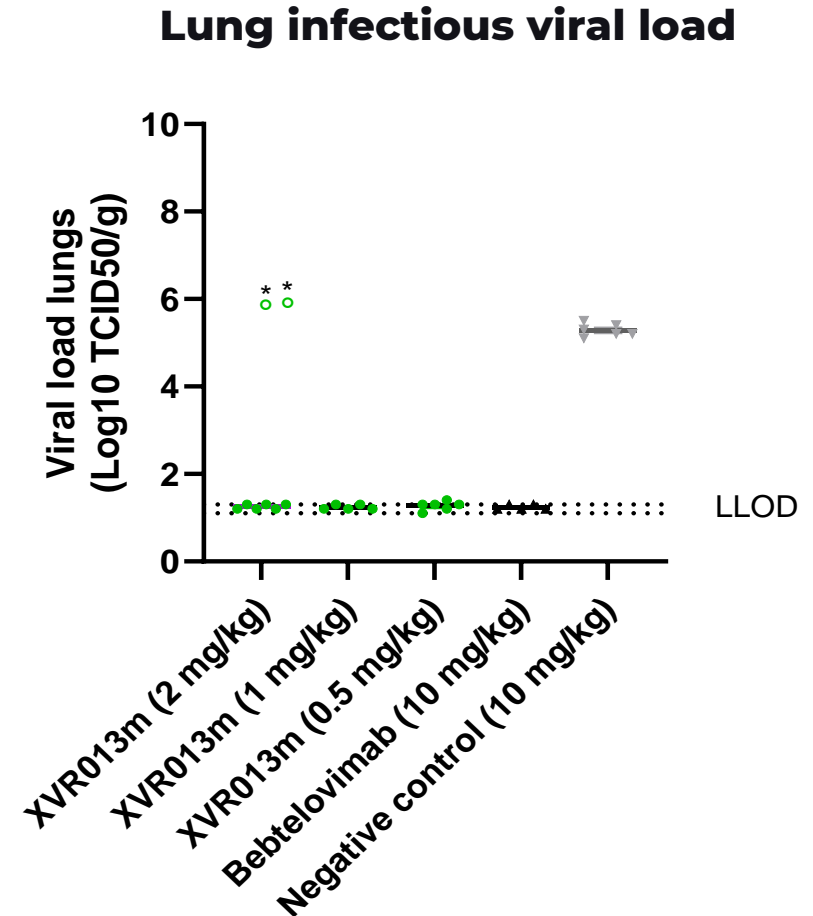
Head, Department of Infectious Diseases, Hospital Universitari Germans Trias i Pujol, Barcelona, Spain  
Adjunct Professor, Center for Global Health and Diseases, Department of Pathology, Case Western Reserve University School of Medicine, Cleveland, OH, USA

# COVID-19: *In vivo* efficacy demonstrated in SARS-CoV-2 hamster post-exposure treatment challenge model



- Low XVR013m doses of 2mg/kg to 0,5mg/kg evaluated in Syrian Golden Hamster model
- Infectious viral loads in the lungs completely reduced below detection levels in all animals treated with XVR013m

→ Efficacy of XVR013m demonstrated in animal challenge model, even at extremely low dose of 0,5 mg/kg



Lung infectious viral titers in Syrian golden hamster post-infection challenge model (Wuhan strain) on day 4 post infection. Mean values + standard error of the mean (SEM) are reported. \* Two animals in 2 mg/kg group were experimentally confirmed in PK assays to not have been exposed to the drug. Dotted lines represent the lower limit of detection (LLOD) range.

## Potential best-in-class antibodies for COVID-19

### Lead candidate: XVR013m

- ✓ Potential best-in-class , variant-proof
- ✓ Pre-IND ready, **Candidate for EUA**

## Targeting highly attractive markets

### COVID-19 prevention in IC and elderly

- ✓ Well defined patient populations poised for-growth
- ✓ Huge patient demand for effective prevention and treatment

## VHH-Fc platform

- ✓ **Multi-specific antibodies** targeting **difficult to reach epitopes**
- ✓ Platform ideally suited to address **growing infectious diseases markets** (e.g. dengue) and pandemic preparedness



# Backed by blue chip healthcare investors and industry leaders



- Raised **€42M in Series A** funding round
- Raised **~€18M in non-dilutive funding**
  - Horizon Europe grant of € 9.9M and €3.6M SPW-Recherche repayable advance and €4.6M VLAIO grants;
- Option for **€25M Venture Debt from EIB**



## Board of Directors



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