

# INTREPID Alliance Antiviral Landscape: Overview of 13 Priority Viral Families\*

As of December 18, 2024, for the 13 Viral Families with Greatest Risk of Pandemic Potential, Clinical Phase & Approved Antiviral Compounds Fall Into 9 of 13 and Preclinical Into 7 of 13 Viral Families

Primarily Respiratory Transmission		
Pillar	Disease Indication (n)**	
	Preclinical (103)	Clinical (39)
Adenoviridae	X	• HuAdeno A-G (1)
Coronaviridae	• COVID-19 (74) • MERS-CoV (5) • SARS-CoV-1 (5) • Seasonal CoV (1)	• COVID-19 (25)
Orthomyxoviridae	• Influenza (12)	• Influenza (10)
Paramyxoviridae	• Hendra virus (1) • Measles (1) • Nipah virus (3) • Parainfluenza (1)	X
Picornaviridae	X	• Polio (2) • Rhinovirus (1)

Primarily Contact/Vector-Mediated Transmission		
Pillar	Disease Indication (n)**	
	Preclinical (22)	Clinical (13)
Arenaviridae	• Junin virus (1) • Lassa fever (1)	• Lassa fever (3) • Chapare hem. fever (1)
Filoviridae	X	• Ebola (2)
Flaviviridae	• Dengue (5) • West Nile (1) • Yellow fever (1) • Zika (2)	• Dengue (3)
Hantaviridae	X	X
Nairoviridae	X	• Crimean Congo hem. fever (2)
Peribunyaviridae	X	X
Poxviridae	• Mpox (8)	• Mpox (2)
Togaviridae	• Chikungunya (3)	X

X = absence of preclinical or clinical phase antivirals

\*As of December 18, 2024; \*\*Number of compounds in ongoing development.

# Approved Antivirals: COVID-19, Influenza, Smallpox/Other Poxviruses\*

Approved S.A. (n=14)		Approved O.N.A. (n=12)	
Ensitrelvir (S-217622)	Molnupiravir	Azvudine	Umifenovir
Nirmatrelvir/rtv	Remdesivir	Leritrelvir (RAY1216)	Simnotrelvir/rtv
Amantadine	Rimantadine	Enisamium (VR17-04)	Triazavirin
Favipiravir	Baloxavir Marboxil	Favipiravir	Mindeudesivir (VV116)
Laninamivir	Oseltamivir	Triazavirin	Umifenovir
Peramivir	Zanamivir	Enisamium (VR17-04)	NIOCH-14
Tecovirimat	Brincidofovir		

Indication		
COVID-19 (12)	Influenza (11)	Smallpox/Other Poxviruses (3)

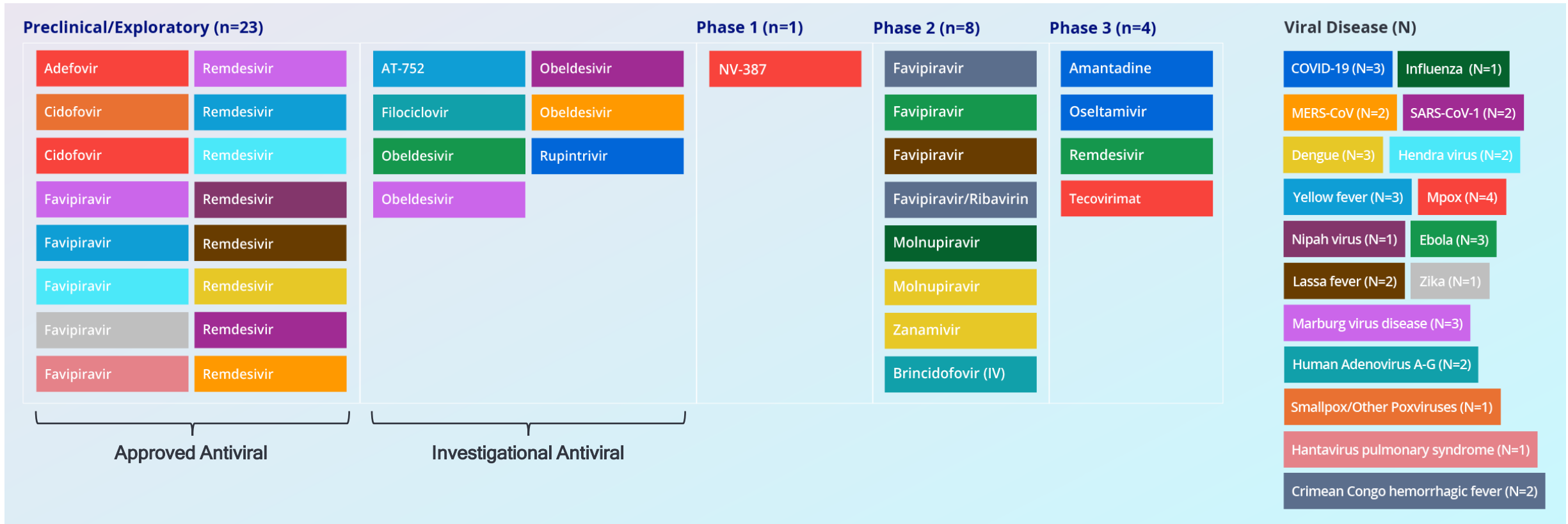
- **22** distinct antiviral compounds have received regulatory approval for COVID-19, Influenza, or Smallpox/Other Poxviruses
- **4** compounds are approved for COVID-19 and Influenza (favipiravir, triazavirin, umifenovir, and enisamium)
- **3** compounds have regulatory authorization by Animal Rule Development or similar mechanism
  - Tecovirimat is approved for Smallpox in U.S. & EU, and Cowpox and Mpox in EU only
  - Brincidofovir for Smallpox in U.S.
  - NIOCH-14 for Smallpox in Russia

\*As of December 18, 2024; WHO defined Other National Authority (<https://www.who.int/publications/m/item/list-of-transitional-wlas>).

# Antiviral-Indication Expansions: Preclinical & Clinical Compound/Indications (N=36)

Investigational: Antiviral compounds in clinical phase development for a different virus disease indication.

Approved: Antiviral compounds approved for treatment of a different virus disease indication.



- ▶ 6 of these antivirals (favipiravir, remdesivir, molnupiravir, amantadine, oseltamivir, & zanamivir) are approved for treatment of COVID-19 and/or Influenza.
  - ▶ Adefovir is approved for treating Hepatitis B virus disease and cidofovir is approved for treating CMV disease.
  - ▶ Tecovirimat is approved for treating smallpox.
- ▶ Favipiravir and remdesivir have the most indication expansions under evaluation (9 each).

\*As of December 18, 2024; Clinical phase Investigational (Unapproved) and Approved antivirals being explored for expanded indications.

# All Clinical Phase & Approved Antivirals (N=75)

## INTREPID Alliance Analysis (4<sup>th</sup> Edition)\*

### Preclinical/Exploratory (n=23)

Adefovir +	Remdesivir +
Cidofovir +	Remdesivir +
Cidofovir +	Remdesivir +
Favipiravir +	Remdesivir +
Favipiravir +	Remdesivir +
Favipiravir +	Remdesivir +
Favipiravir +	Remdesivir +
Favipiravir +	Remdesivir +
Favipiravir +	Remdesivir +
Rupintrivir ◆	Obeldesivir ◆
AT-752 ◆	Obeldesivir ◆
Filiciclovir ◆	Obeldesivir ◆
	Obeldesivir ◆

### Phase 1 (n=20)

ALG-097558 ●	ASC10 ●
ASC11/Ritonavir ●	ARN-75039 ●
CDI-988 ●	LHF 535 ●
Delcetravir ●	LHF 535 ●
GS-00202 ●	Pocapavir ●
HY3000 ●	V-7404 ▲
IPD-52520 ●	TRX100 (AV5124) ●
ISM3312 ●	NV-387 ◆
Limnetrevlir (ABBV 903) ●	
NV-387 ●	
RQ-01 ●	
S-892216 ●	

### Phase 2 (n=18)

EDP-235 ▲	Favipiravir +
Ibuzatrelvir ▲	Favipiravir +
SHEN26 ▲	Favipiravir +
HS 10517/Ritonavir ●	Favipiravir/ribavirin +
EYU688 ●	Molnupiravir +
CD388** ▲	Molnupiravir +
CC-42344 ●	Zanamivir +
HNC042 ●	Brincidofovir (IV) +
AV5080 ●	
Vapendavir ●	

### Phase 3 (n=14)

GST-HG171 ▲	Amantadine +
QLS1128 ▲	Oseltamivir +
STI-1558 ▲	Remdesivir +
FB2001 ●	Tecovirimat +
WPV01 ●	
YKYY017** ●	
GP681 ▲	
Onradivir ▲	
TG-1000** ▲	
ZX-7101A** ▲	

### Viral Disease (N)

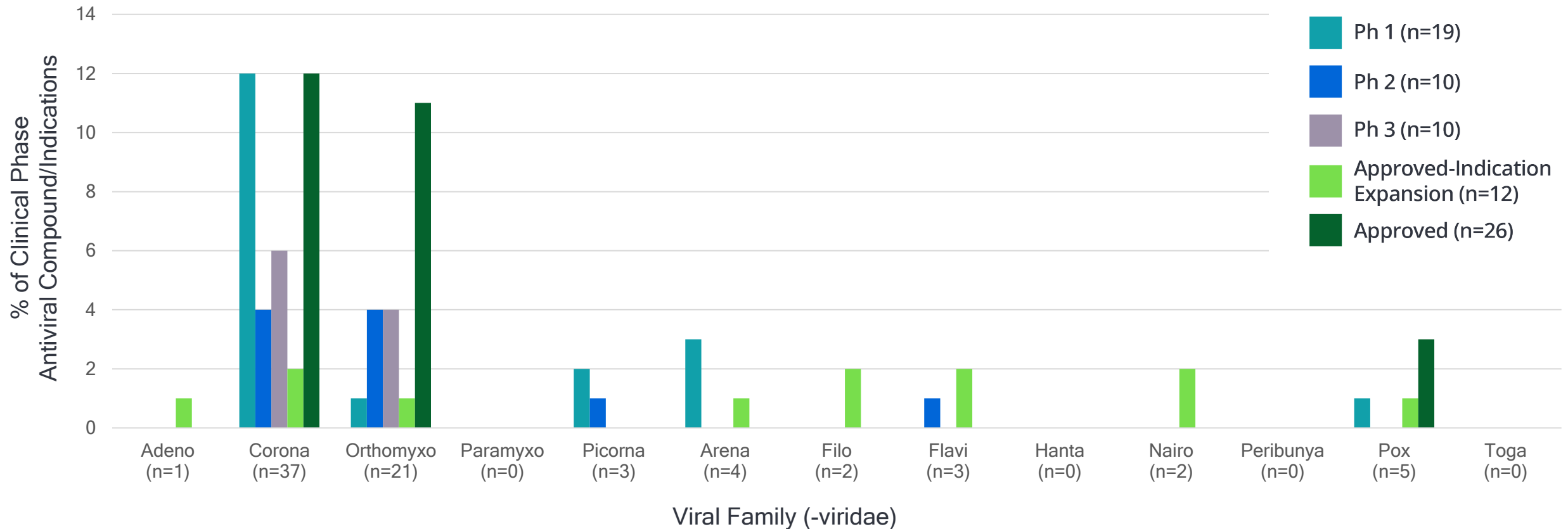
Human Adenovirus A-G (N=2)	COVID-19 (N=25)
MERS-CoV (N=2)	SARS-CoV-1 (N=2)
Influenza (N=10)	Hendra virus (N=2)
Nipah virus (N=1)	Rhinovirus (N=1)
Polio (N=2)	Chapare hemorrhagic fever (N=1)
Lassa fever (N=4)	Ebola (N=3)
Marburg virus disease (N=3)	Dengue (N=4)
Yellow fever (N=3)	Zika (N=1)
Hantavirus pulmonary syndrome (N=1)	
Crimean Congo hemorrhagic fever (N=2)	
Mpox (N=5)	Smallpox/Other Poxviruses (N=1)

+ Approved Antiviral-Indication Expansion    ▲ Promising    \*\* New; Change in Status  
 ◆ Investigational Antiviral-Indication Expansion    ● Watch & Wait

\*December 18, 2024 data with "Promising" Analysis defined in March 2024.

# The Majority of Clinical Phase Antiviral Compound/Indications Are Targeting Coronaviruses and Orthomyxoviruses\*

% Clinical Phase Antiviral Compound/Indications by Virus Family (4<sup>th</sup> Edition, N=78)

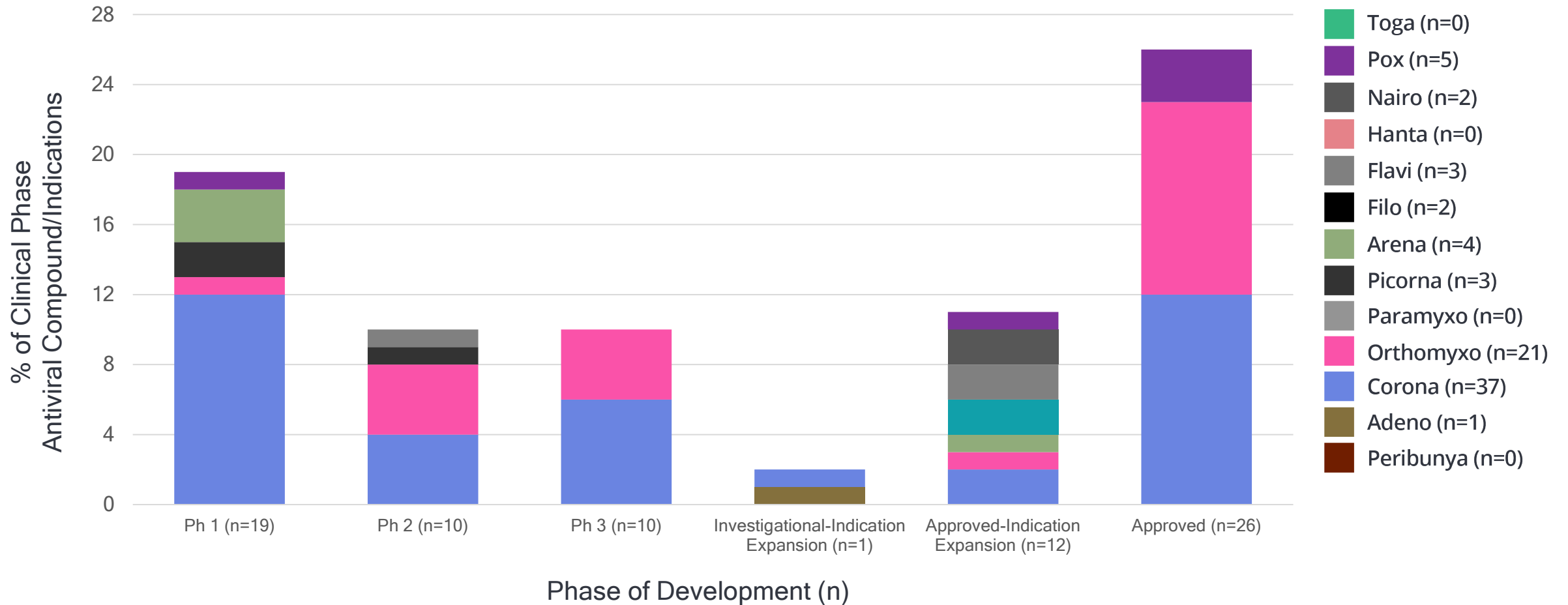


Transmission (Primary) Respiratory Contact/Vector

\*As of December 18, 2024. Adenoviridae has 1 clinical phase program listed in Archived.

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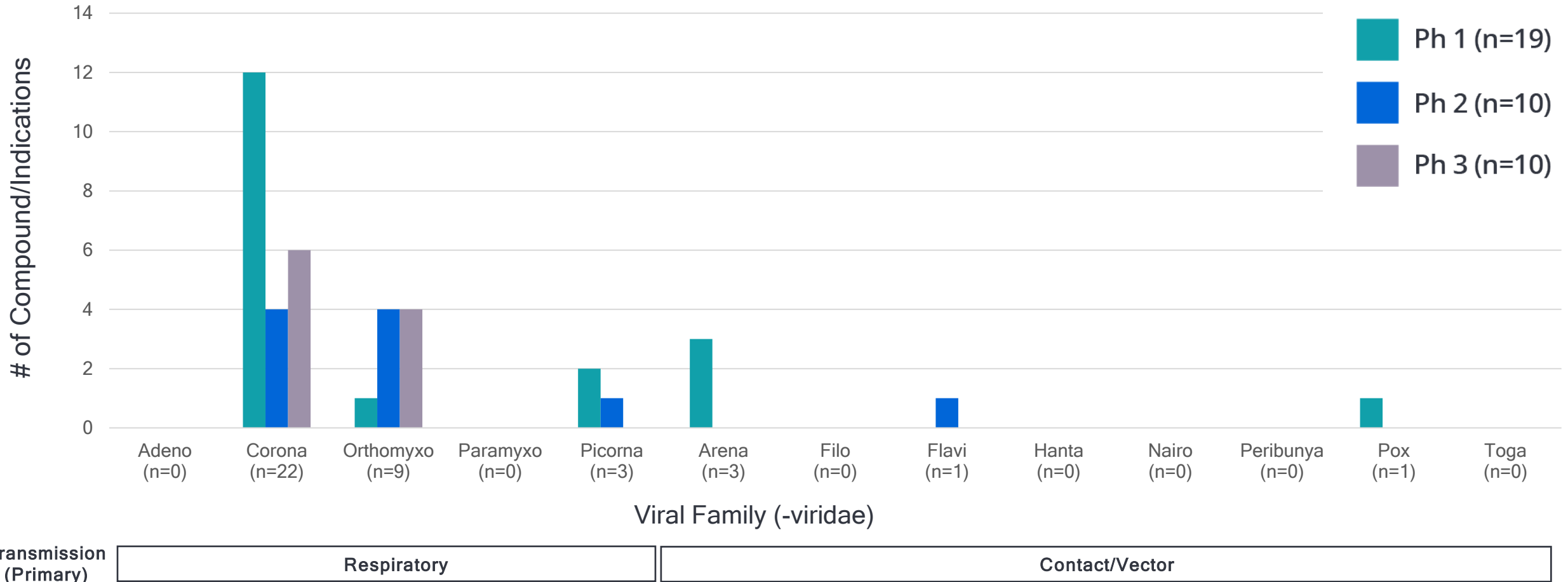
% Clinical Phase Antiviral Compound/Indications by Virus Family (4<sup>th</sup> Edition, N=78)



\*As of December 18, 2024.

# “Promising” Clinical Compounds Analysis (4<sup>th</sup> Edition)\*

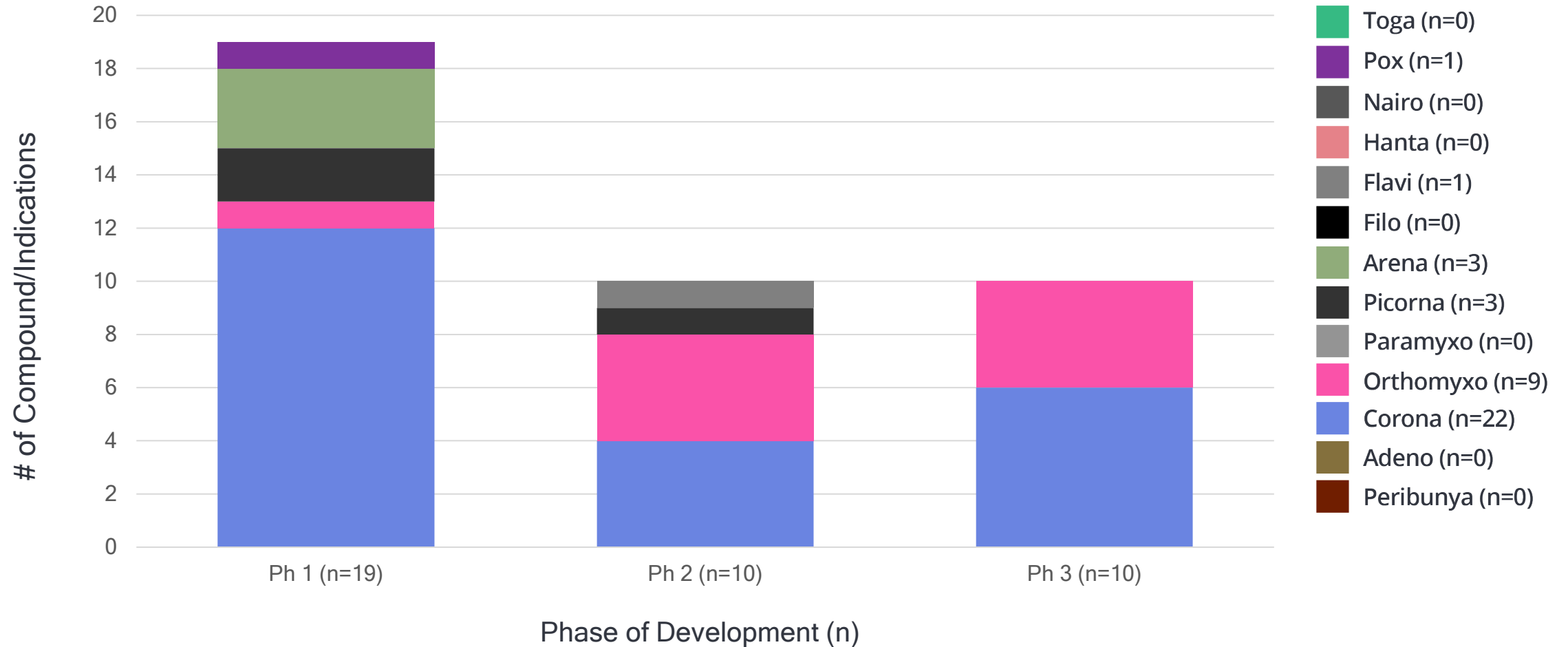
Unapproved Compounds (Promising and Watch & Wait) by Virus Family (N=39)



\*As of December 18, 2024.

# “Promising” Compounds Analysis (4<sup>th</sup> Edition)\*

Novel Compound/Indications (Promising and Watch & Wait) by Phase of Development (N=39)



\*As of December 18, 2024.



# Disclaimer

The INTREPID Alliance is a not-for-profit consortium of innovative biopharmaceutical companies committed to accelerating antiviral research, aiming to ensure that we have a stronger pipeline and are better prepared for future pandemics.

As part of our efforts, the INTREPID Alliance maintains and publishes a centralized list of promising investigational candidate compounds, with the purpose of knowledge-sharing and to support better pandemic preparedness. These compounds have been selected based on objective, scientific criteria, using publicly available sources, and at arm's length from commercial influence of our member companies. See criteria listed in the report “Antiviral Clinical Development Landscape and Promising Clinical Compounds.” The designation of certain compounds as promising is based upon currently available information, and exclusively upon an assessment against these criteria.

“Promising” is not a promotional claim. Candidate compounds have not been assessed by regulatory authorities to be safe and efficacious for the treatment of disease in humans. Our content is designed to be factual, informative, and non-commercial. It is not designed or intended to advertise or promote any pharmaceutical product or therapy or to advance the commercial interests of any company.