P103 Etiology of respiratory infections in non-hospitalised patients:Baseline etiological data from a randomised trial to investigate the effect of nasal sprays versus usual care in non-hospitalised patients with respiratory infections (ECRAID-Prime)

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BACKGROUND & OBJECTIVES

COVID-19 and COVID-like-illness cause significant ill-health. Since the greatest burden is in the community, it is in primary care (PC) and community settings where early treatments will provide most benefit.

ECRAID-Prime is a platform randomised, multi-country trial for the evaluation of investigational products for treatment of patients in PC with respiratory infections.

The aim of the current study was to determine the baseline etiology in the recruited patient population.

METHODS

Study design

Platform randomised, trial comparing nasals sprays with usual care in PC patients with a respiratory tract infection (RTI) conducted in Belgium, France, Germany, Georgia, Ireland, Poland, United Kingdom (UK), and Spain.

Participants

795 patients (290 male and 505 female), aged 18-93 years, presenting to PC with RTI symptoms ≤7 days (**Fig.1**)

Study duration

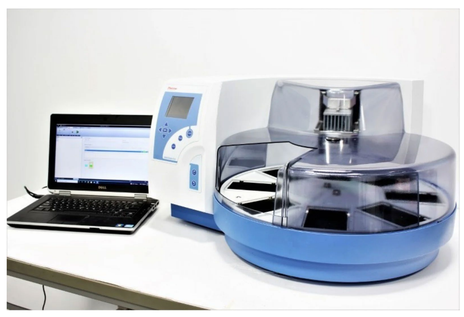
Patients were enrolled during 2 consecutive winter periods (09/10/2024 and 20/03/2026)

Procedure

Nose/throat swabs taken at baseline (D0; N=795), D4, D7 and D14.

Nucleic acids extraction using the MagMAX Viral/Pathogen II Nucleic Acid Kit on the KingFisher Flex.

Analysis by the TrueMark Respiratory Panel 2.0, TaqMan Array Card (ThermoFisher Scientific) to detect presence of 21 respiratory viruses and 5 atypical bacteria.



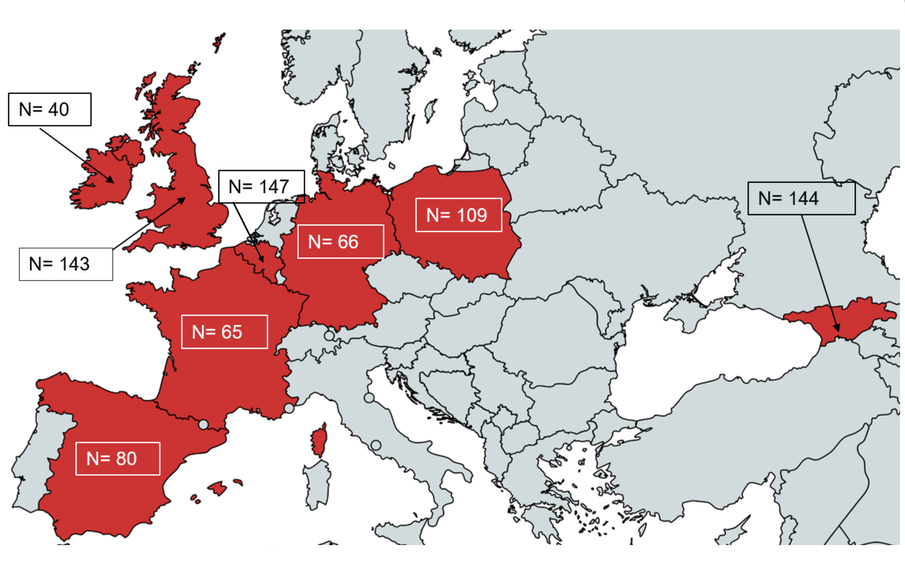


Figure 1: Number of participants per country

RESULTS

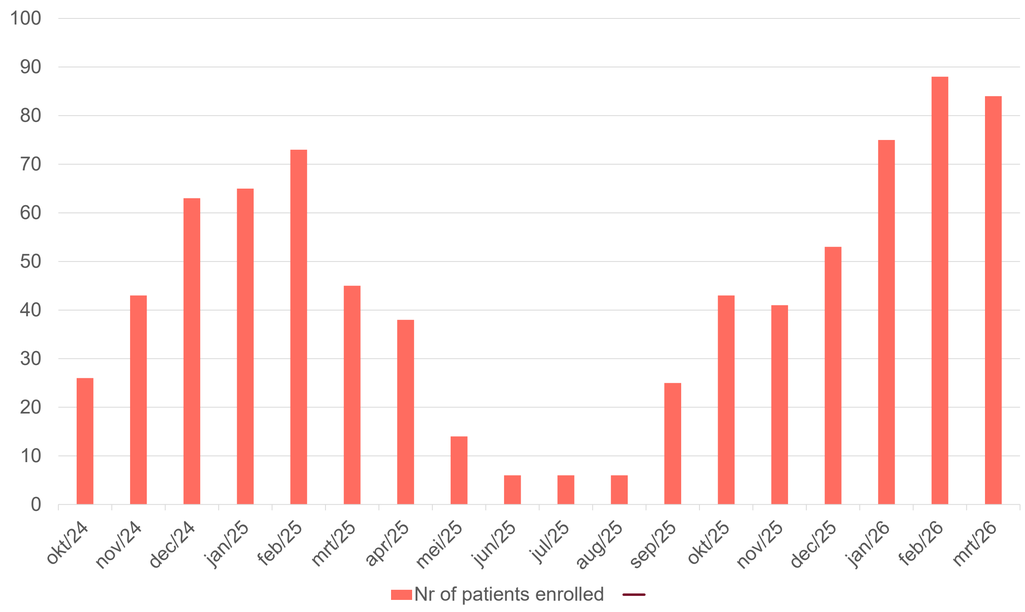


Figure 2: Per month participant enrollment

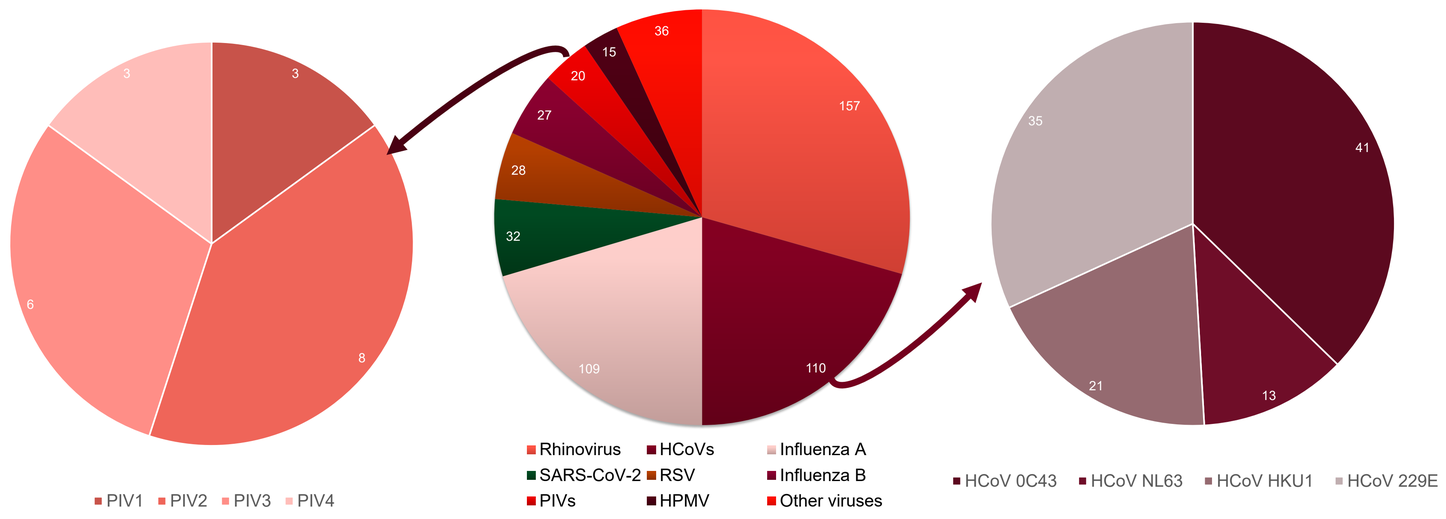


Figure 3: Cumulative positive results per virus October 2024 to March 2026

- Samples from 794/795 patients, enrolled from 10/2024 till 03/2026, in Belgium, France, Germany, Georgia, Ireland, Poland, UK and Spain (Fig. 1), respectively, were analysed (males n=209, females n=505, 18 - 93 years old).
- Respiratory viruses were detected in 489 (61.6%) of cases: human rhinovirus (157), influenza A/B (136), seasonal coronaviruses (110, predominantly HCoV OC43 at 37.3%), human parainfluenza viruses (HPIV, 20, predominantly HPIV-2 at 40.0%), severe acute respiratory syndrome-Coronavirus-2 (SARS-CoV-2; 32), RSV (28), human metapneumovirus (HMPV, 15), EV-D68 (17), HBoV (11) and HADE (8) **(Fig. 3)**.
- *M. pneumoniae* (n=3) and *C. pneumoniae* (n=1) infections were also detected.
- Viral coinfections occurred in 44 (5.5%) of positive samples, with influenza and rhinovirus (75.0%, 33/44) being most frequent involved (**Fig. 4)**.

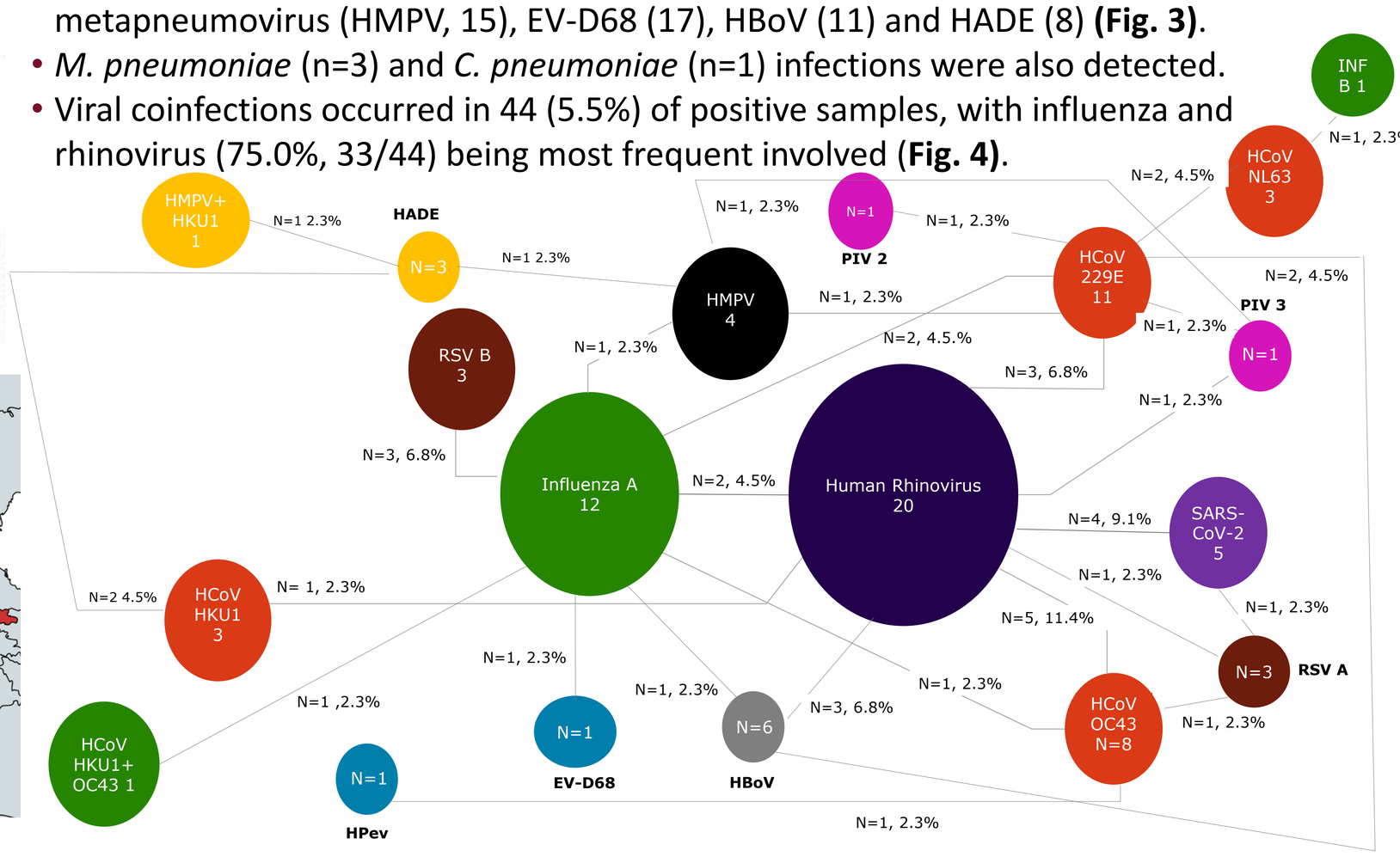


Figure 4: Viral coinfections in primary care patients with respiratory tract infections

CONCLUSION

In two out of three patients presenting with COVID-like-illness to primary care, a respiratory virus was detected. Influenza, Human Rhinovirus and seasonal coronaviruses were most often detected. In 5.5% multiple respiratory viruses were detected.

Funded by the European Union

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