

Table S1. Primers and probes used for multiplex PCR for detection of bacterial co-pathogens: sequences, sizes, and concentrations.

Bacteria	Gene	Sequence 5'→3'	PCR Product Size (bp)
<i>Haemophilus influenzae</i>	<i>hpd</i>	F: GGT TAA ATA TGC CGA TGG TGT TG R: TGC ATC TTT ACG CAC GGT GTA	151 bp
<i>Chlamydia pneumoniae</i>	MOMP	F: ACA CGA TGC AGA GTG GTT CA R: TGT TTA CAG AGA ATT GCG ATA CG	368 bp
<i>Mycoplasma pneumoniae</i>	P1	F: ACT CGG AGG ACA ATG GTC AG R: CAA ACC CGG TCT TTT CGT TA	483 bp

Table S2. Conventional PCR conditions.

PCR Conditions			
Step	Cycles	Temperature	Time
1. Initial denaturation	1	94°C	3 min.
2.1 Denaturation	35	(1) 94 °C	30 sec.
2.2 Annealing		(2) 61 °C	30 sec.
2.3 Extension		(3) 72 °C	45 sec.
3. Final extension	1	72 °C	7 min.

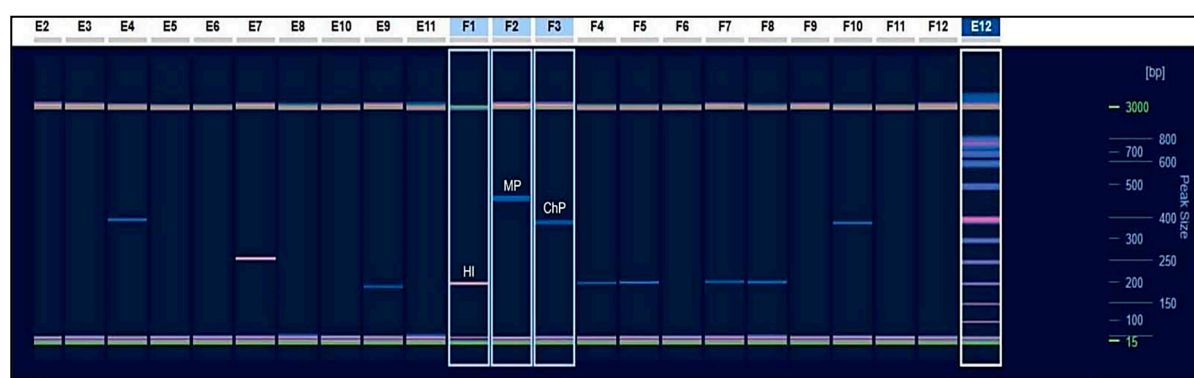


Figure S1. Visualization from automated electrophoretic analysis. (F1—positive control for HI; F2—positive control for MP; F3—positive control for ChPn; E11—negative control (water); E12—molecular marker (50-800 bp); E4, E7, E9, F4, F5, F7, F8, and F10—positive patient samples).

Table S3. Primers and probes used for multiplex real-time PCR to detect respiratory viruses: sequences, sizes, and concentrations.

Virus	Gene	Sequence 5'→3'	Total Concentration	Fluorescent Dye
Adenovirus (AdV)	HEXON	F: GCC ACG GTG GGG TTT CTA AAC TT R: GCC CCA GTG GTC TTA CAT GCA CAT C P: TGC ACC AGA CCC GGG CTC AGG TAC TCC GA	500 nM 500 nM 100 nM	Texas red
Respiratory syncytial virus (RSV)	M	F: GGC AAA TAT GGA AAC ATA CGT GAA R: TCT TTT TCT AGG ACA TTG TAY TGA ACA G P: CTG TGT ATG TGG AGC CTT CGT GAA GCT	500 nM 250 nM 50 nM	HEX
Parainfluenza type 1 (PIV1)	HN	F: AGT TGT CAA TGT CTT AAT TCG TAT CAA T R: TCG GCA CCT AAG TAA TTT TGA GTT P: ATA GGC CAA AGA "T" TGT TGT CGA GAC TAT TCC AA	500 nM 500 nM 50 nM	FAM
Bocavirus (BoV)	NS1	F: TGC AGA CAA CGC YTA GTT GTT T R: CTG TCC CGC CCA AGA TAC A P: CCA GGA TTG GGT GGA ACC TGC AAA	500 nM 500 nM 100 nM	Cy5
Rhinovirus (RV)	5'NCR	F: CPA GCC TGC GTG GC R: GAA ACA CGG ACA CCC AAA GTA P: TCC TCC GGC CCC TGA ATG YGG C	1000 nM 1000 nM 100 nM	HEX
Parainfluenza type 2 (PIV2)	HN	F: GCA TTT CCA ATC TAC AGG ACT ATG A R: ACC TCC TGG TAT AGC AGT GAC TGA AC P: CCA TTT ACC "T" AAG TGA TGG AAT CAA TCG CAA A	750 nM 750 nM 50 nM	FAM
Human metapneumovirus (HMPV)	F	F: CAA GTG TGA CAT TGC TGA YC R: ACT GCC GCA CAA CAT TTA GR P: TGG CYG TYA GCT TCA GTC AAT TCA ACA GA	600 nM 600 nM 100 nM	HEX
Parainfluenza type 1 (PIV3)	HN	F: TGG YTC AAT CTC AAC AAC AAG ATT TAA G R: TAC CCG AGA AAT ATT ATT TTG CC P: CCC RTC TG"TT" TGG ACC AGG GAT ATA CTA CAA A	750 nM 500 nM 200 nM	FAM

Virus	Gene	Sequence 5'→3'	Total Concentration	Fluorescent Dye
HCoV-229E	NP	F: CAG TCA AAT GGG CTG ATG CA R: AAA GGG CTA TAA AGA GAA TAA GGT ATT CT P: CCC TGA CGA CCA CGT TGT GGT TCA	750 nM 500 nM 50 nM	Texas red
HCoV-HKU-1	NP	F: CCT TGC GAA TGA ATG TGC T R: TTG CAT CAC CAC TGC TAG TAC CAC P: TGT GTG GCG GTT GCT ATT ATG TTA AGC CTG	100 nM 750 nM 50 nM	FAM
HCoV-NL63	NP	F: GAC CAA AGC ACT GAA TAA CAT TTT CC R: ACC TAA TAA GCCTCTTTCTCAACCC P: ACC TAA TAA GCC TCT TTC TCA ACC C	250 nM 250 nM 50 nM	FAM
HCoV-OC43	NP	F: CGA TGA GGC TAT TCC GAC TAG GT R: CCT TCC TGA GCC TTC AAT ATA GTA ACC P: TCC GCC TGG CAC GGT ACT CCC T	500 nM 750 nM 50 nM	HEX