

The Pediatric Arm of BQC-19

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Montreal Children's
Hospital
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Health Centre

Pediatric arm

- ▶ Implemented at the start of the pandemic
 - ▶ First participant recruited in April 2020
- ▶ Harnessing the *Pediatric Respiratory Biobank* of the CHU Sainte-Justine to start rapidly
- ▶ Joined by the Montreal Children's Hospital shortly after

Wide recruitment:

- COVID+ and COVID-
- Hospitalised and non-hospitalised
- Household contacts
- Mothers who were positive and their babies

Targeted recruitment:

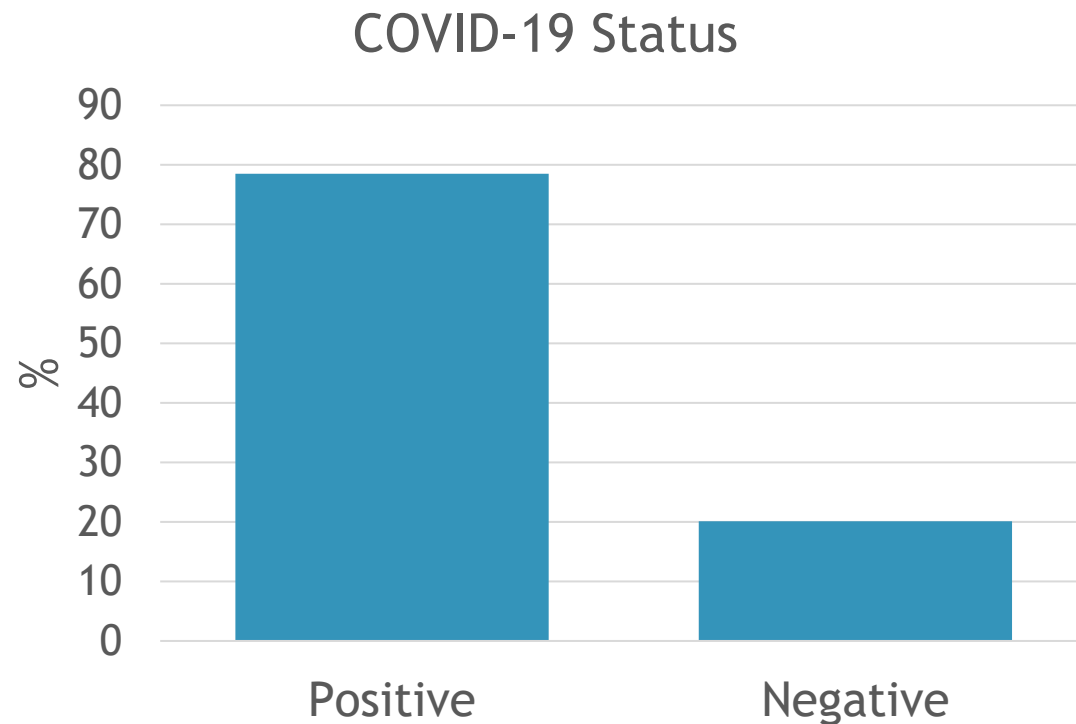
- Hospitalised children
- For and With COVID

Specificities in pediatrics

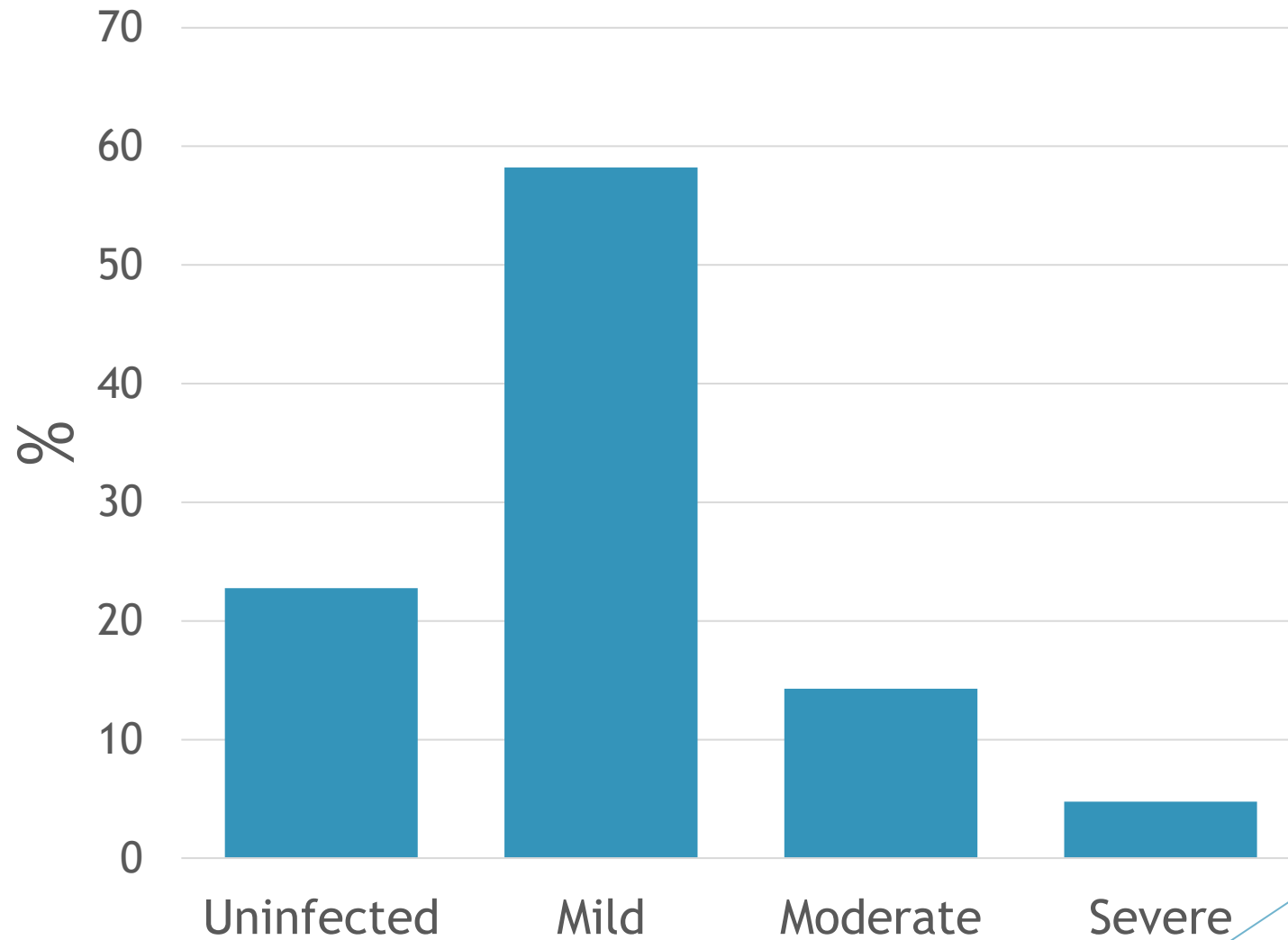
- ▶ Shorter hospitalisations
- ▶ Quicker resolution of symptoms
- ▶ More parental/patient resistance for blood sampling
- ▶ Recuperation of blood from clinical leftovers
- ▶ Consent from parents and assent from children

Description of the pediatric cohort

- ▶ 2 recruiting centers: CHU Sainte-Justine and Montreal Children's Hospital (MUHC)
- ▶ 216 patients <18 years
- ▶ Mean age 6.2 years (0-17.9 years)
- ▶ 47.4% male

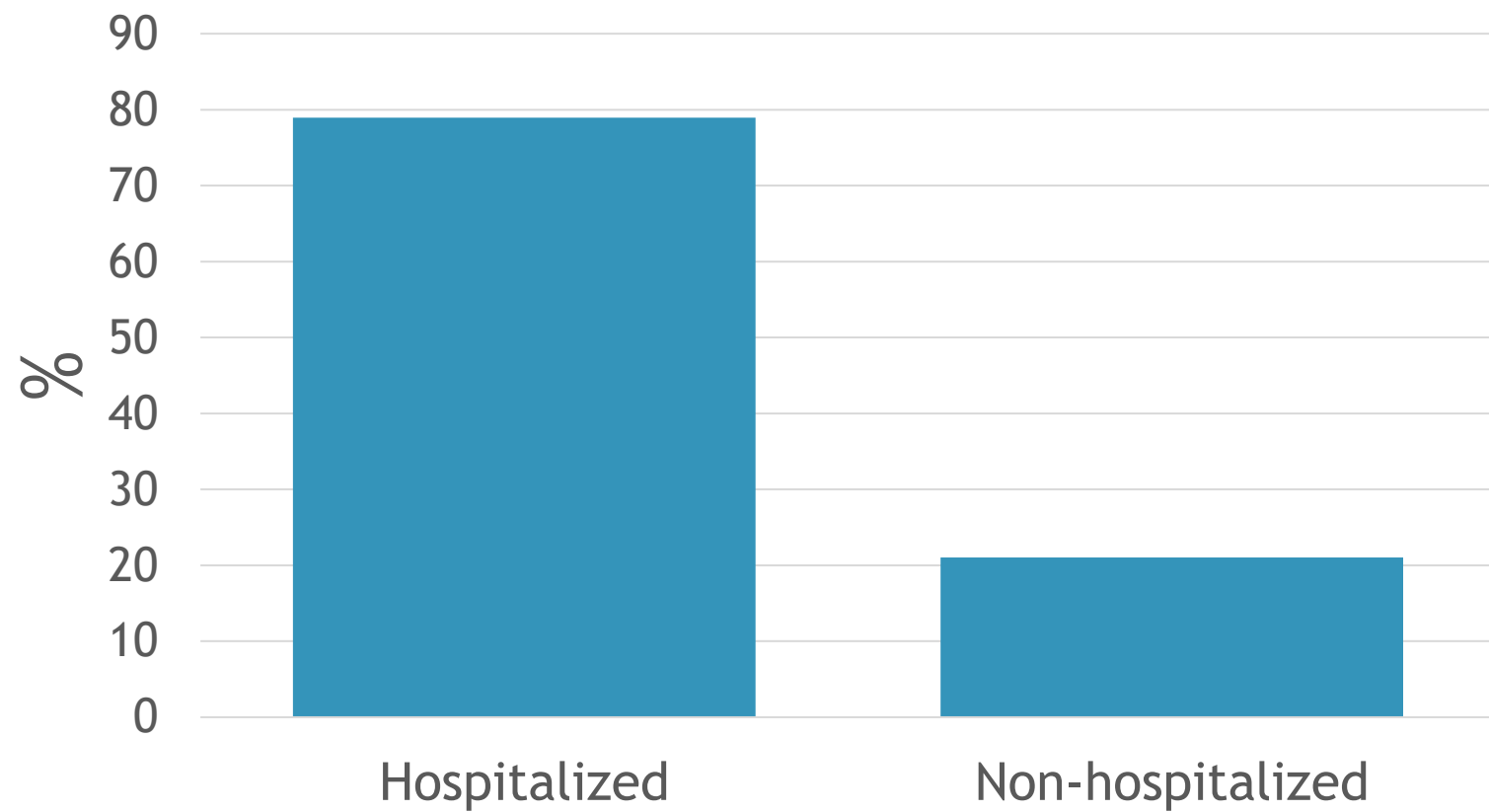


COVID-19 Severity



79% symptomatic

Hospitalization status



Among the hospitalized children (n=169)

- ▶ Median length of hospitalisation = 3 days
- ▶ 12.8% admitted to the intensive care unit
 - ▶ Median ICU length of stay = 4 days
- ▶ 16.5% required respiratory support

Longitudinal follow-up

Follow-up	N	Symptomatic (%)	Complication/ New condition (%)
1 month	98	17.5	8.2
3 month	91	24.7	6.7
6 month	76	24.4	8.0
12 month	55	17.3	17.3
18 month	38	6.2	12.5
24 month	11	20.0	30.0

Reinfections

- ▶ 18 participants with reinfection
 - ▶ 2 with 2nd reinfection

Samples

- ▶ Among hospitalized patients, samples available over more than 1 day
- ▶ 252 visits
 - ▶ 245 have blood sampling

Follow-up	N
Whole blood	61
DNA extract	49
Plasma	103
PBMC	37
PAXgene	42
Serum	132

Core analyses to come

Follow-ups with samples

Follow-up	N
1 month	7
3 month	8
6 month	16
12 month	2
18 month	2
24 month	0

Current status

- ▶ Recruitment is ongoing
 - ▶ Hospitalized patients
 - ▶ Post-COVID clinic
- ▶ On average 1-3 hospitalized COVID+ recruited per week
- ▶ 1-3 post-COVID patients per month with the goal to expand to other clinics

Thank you

The background features a series of overlapping, semi-transparent geometric shapes in various shades of blue and teal. These shapes are primarily located on the right side of the frame, creating a modern, layered effect. The colors range from light sky blue to deep forest green. The overall composition is clean and minimalist.