

# BQC 19

## A GROWING RESOURCE AT YOUR DISPOSAL

User's Forum

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Centre Universitaire de Santé McGill

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**CRCHUM**

CENTRE DE RECHERCHE

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Centre de Recherches du CHUM



Agence de la santé  
publique du Canada

Public Health  
Agency of Canada



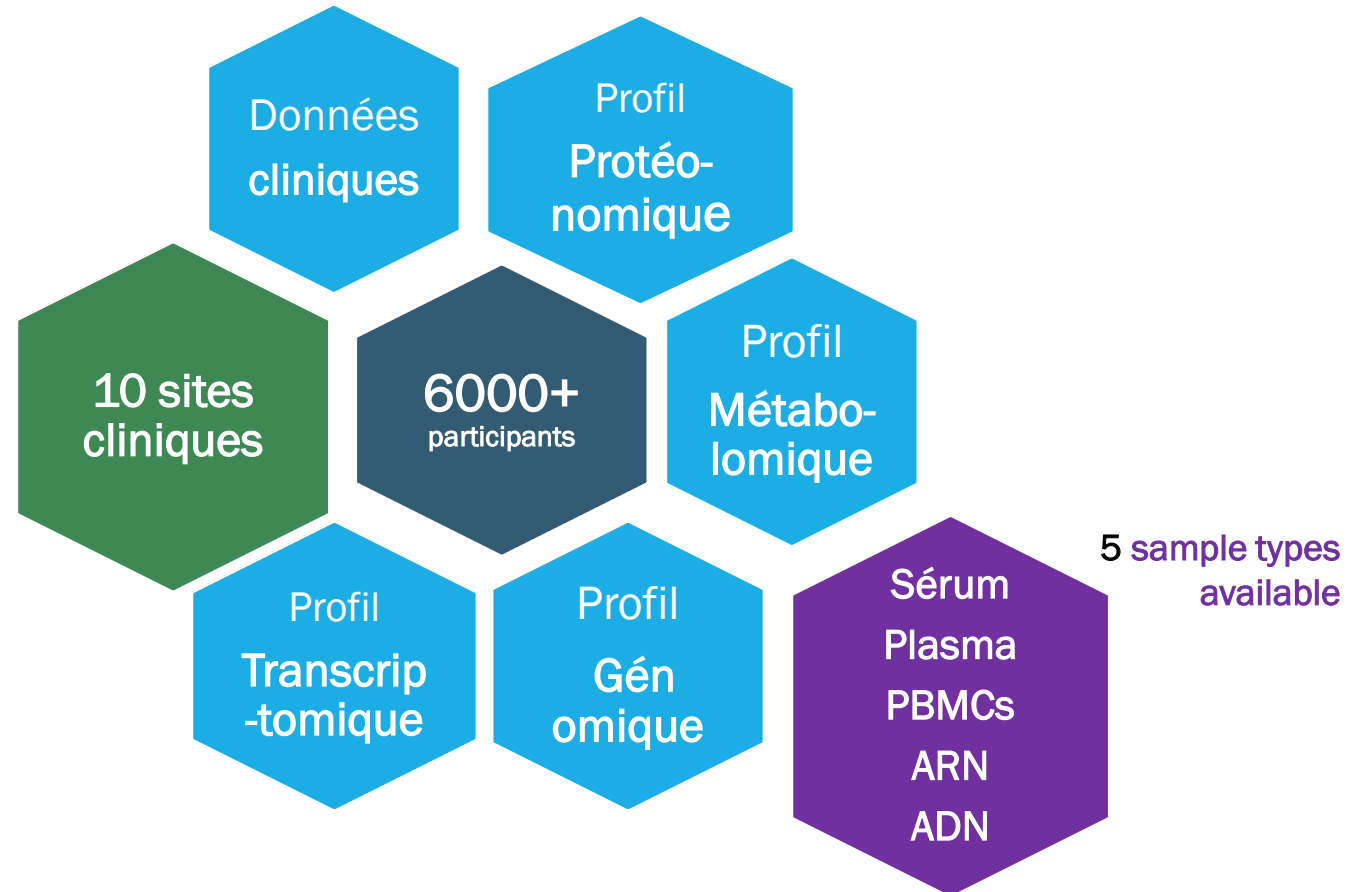
## OBJECTIVES

- Understand the dynamics underlying participation to BQC 19
- Overview of characteristics of participants
- Familiarize ourselves with type of available content and data

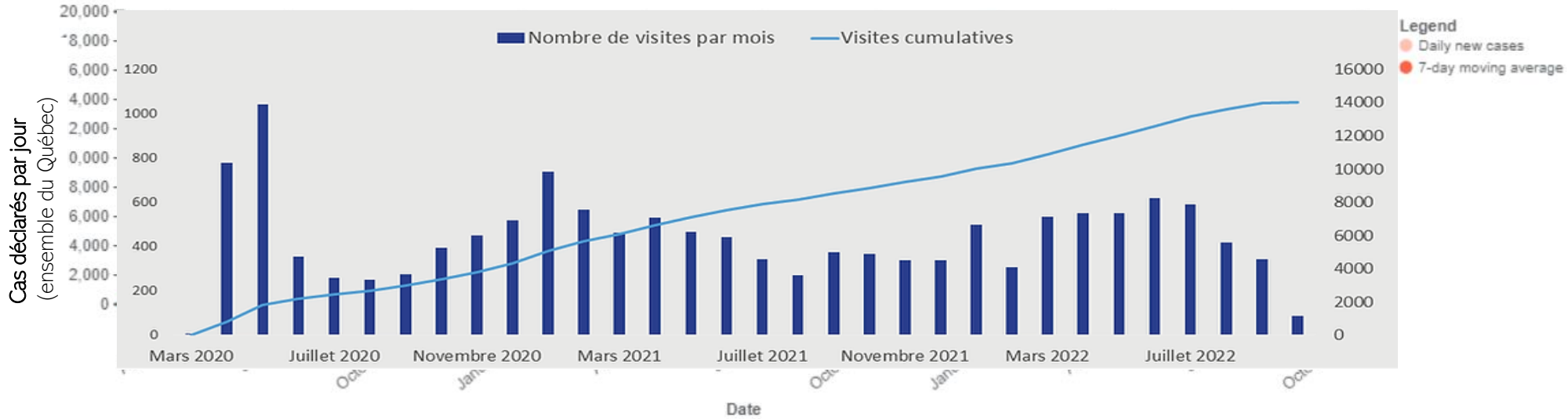
# A UNIQUE RESSOURCE

300+ reinfections  
14,750+ visites

3,350+ patients sévères  
50,000+ échantillons



# BQC19'S TIMELINE



2020

2021

2022

2023

**Novembre 2020 :**  
Ajout du volet pédiatrique

**Avril 2020 :**  
Début collecte  
d'échantillons BQC19

**Mars 2021 :**  
Début de campagne  
de vaccination

**Décembre 2021 :**  
Arrivée du variant  
Omicron

**Novembre 2022 :**  
Arrivée des vaccins  
bivalents (WT & BA.5)

**Juin 2022 :**  
Allègement des  
restrictions sanitaires

**Décembre 2022 :**  
Ajout de la clinique  
COVID-longue

**2023+**

**Mars 2020:**  
OMS déclare la  
pandémie

# VARIANTS IN CONSTANT EVOLUTION

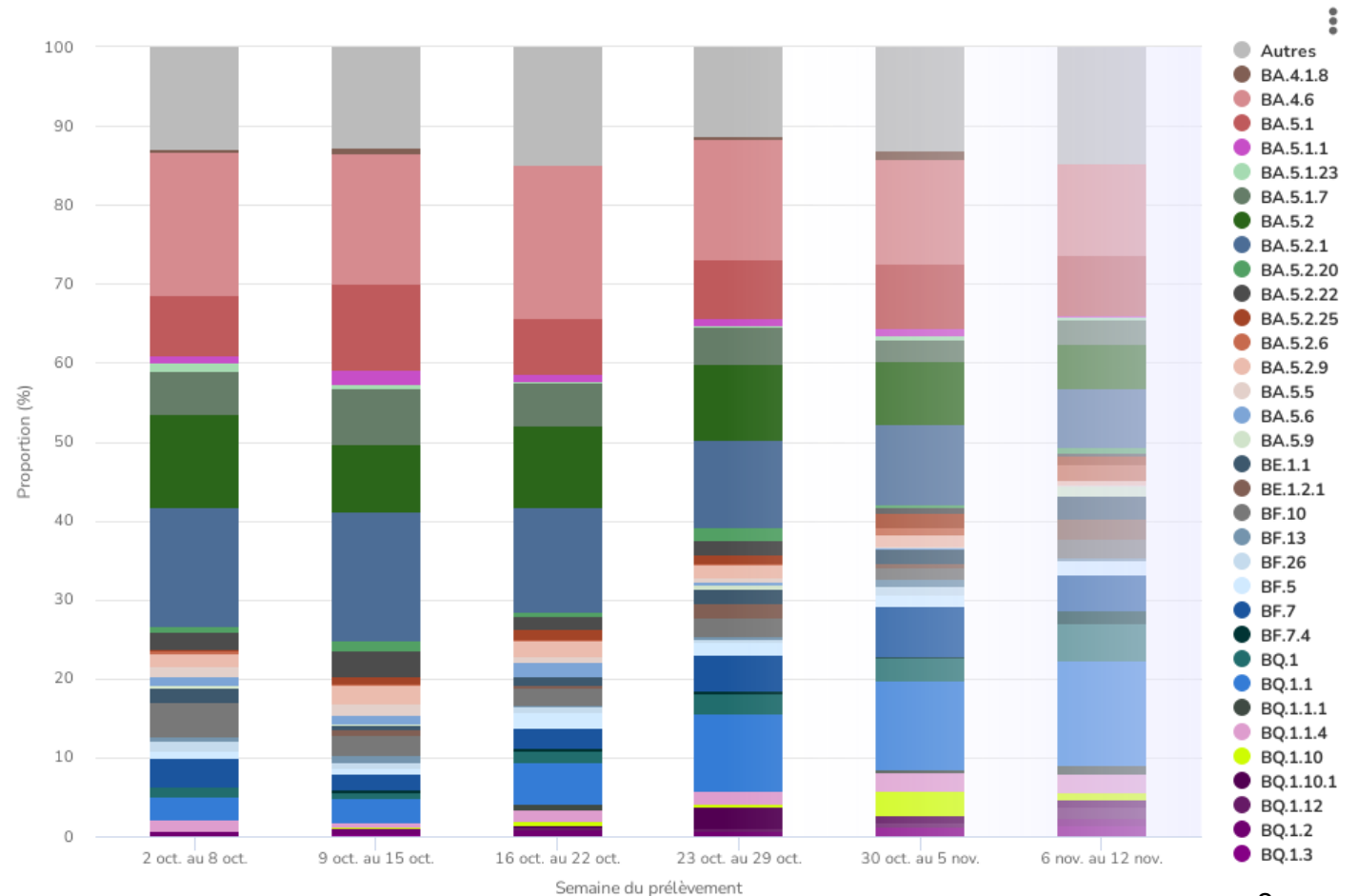
... and ongoing BQC19 recruitment

10 clinical sites are active

Project to link BQC19 with the network of long COVID clinics (n=15) deployed within the province

## Évolution de la proportion des variants parmi les cas issus du séquençage aléatoire - détaillé

Les sous-lignées sont mutuellement exclusives et isolées contrairement au graphique agrégé qui somme les sous-lignées. Attention de ne pas comparer les lignes ayant un nom similaire entre les deux graphiques comme par exemple BA.2 et sous-lignées du graphique agrégé avec le BA.2 du graphique détaillé. Tous les variants en circulation sont des lignées et sous-lignées du variant Omicron. Voir "[À propos des données](#)" pour plus de précisions sur les sous-lignées.



## ACTIVE RECRUITMENT ACTIVITIES

### Participants with the following characteristics

- Hospitalized for COVID
- Hospitalized with COVID
- Uninfected
- People with Long COVID
- Re-infected participants
- Pediatric participants

### At following timepoints

- Day 0, 2, 7, 14, 30 (hospitalized)
- Months 1, 3, 6, 12, 18, 24

### Participating sites

- CHU-Montréal
- CHU-Québec
- CHU-Sherbrooke
- CIUSSS Nord de l'Île de Montréal (Hôpital Sacré Cœur)
- CIUSSS de l'Estrie
- CIUSSS Saguenay-Lac-Saint-Jean
- CIUSSS Centre-Ouest-de-l'Île-de-Montréal (Hôpital Général Juif)
- Centre Universitaire de Santé McGill
- Institut Universitaire de cardiologie & pneumologie (IUCPQ)
- Institut de Recherches Cliniques de Montréal - Clinique Post-COVID

Data and samples are available via the streamlined access procedure

# CONTENT TO DATE

**6000+ participants**

**3,350+ hospitalized**

**300+ reinfections**

**350 immunocompromised**

**530 with active cancer**

**1600 with high blood pressure**

**600 with asthma**

**900 with diabetes**

**150 received tocilizumab**

**14,750+ visits**

**50,000+ samples**

***BQC19's Public data  
portal is now publicly  
available to visualize  
data***



## BASELINE CHARACTERISTICS

	Inpatients n=2581	Outpatient n=3074
Age (years, mean, SD)	59.85 (21.8)	43.81 (14.81)
Age categories		
≤17	157 (6%)	39 (1%)
18-50	723 (28%)	1708 (56%)
51-64	815 (32%)	618 (20%)
65-79	893 (35%)	205 (7%)
80+	545 (21%)	18 (0.6%)
Female sex (n, %)	1420 (55%)	1790 (58%)
Admission modality (n, %)		
ICU	651 (25.2%)	
Covid status (n, %)		
Positive	1814 (70%)	2943 (96%)
Negative	767 (30%)	131 (4%)



	<b>inpatients</b>	<b>outpatients</b>
<b>Comorbidities (n, %)</b>	N=2581	N=3074
Hypertension	1318 (51%)	300 (10%)
Asthma	325 (13%)	259 (8%)
Chronic obstructive pulmonary disease	304 (12%)	37 (1%)
Diabetes	763 (30%)	124 (4%)
Stroke	160 (6%)	13 (0.4%)
Heart failure	249 (10%)	6 (0.2%)
Myocardial infarction	170 (6%)	13 (0.4%)
Chronic kidney disease stages $\geq$ 3	343 (13%)	24 (0.8%)
<b>Clinical frailty scale (n, %)</b>	N=668	N=65
Non-frail (1-4)	505 (76%)	64 (98%)
Mild-to-moderately frail (5-6)	122 (18%)	1 (2%)
Severely frail (7+)	41 (6%)	0 (0%)

## COMPLICATIONS AMONG HOSPITALIZED

Type of complication	n
Myocardial ischaemia	59
Thromboembolism	22 VTE + 108 PE
Myocarditis	12
Endocarditis	8
Heart failure	39
Cardiac arrest	34
Acute kidney injury	381
Acute liver injury	156
Stroke	22

## VACCINATION STATUS

Vaccination status	
At least 1 dose	3030
At least 2 doses	2682
At least 3 doses	1602
At least 4 doses	215

# FOLLOW-UP

## Total number of in-outpatients per site and monthly follow up

Enrolling institution	Inpatients (total)	Outpatient s (total)	Monthly follow-up (total)					
			M1	M3	M6	M12	M18	M24
CHU_Qc	104	0	55	0	0	0	0	0
CHU_STJ	178	40	92	88	74	67	37	12
CHUM	399	0	153	106	88	50	25	13
CHUS	31	1868	993	737	597	282	211	83
CIUSSSS_SLSJ	44	273	173	268	255	217	102	8
CUSM	255	208	117	116	135	94	91	36
HSCM	388	0	81	76	78	48	32	3
IRCM	0	16	0	0	4	12	12	3
IUCPQ	91	0	0	0	0	0	0	0
JGH	1668	187	983	59	313	143	32	43



## **FUTURE DEVELOPMENTS – LONG COVID**

- Development of data capture tailored for Long COVID (domains of symptoms, PEM)
- Linkage with network of long COVID clinics
- Collection of high quality data through routine clinical follow-up
- Offering of biobanking capacities
- Create a cohort to piggy back intervention trials

# DATA REQUESTS AND PUBLICATIONS

- *34 active data requests*
- *18 active data and samples requests*
- *78 groups received access to data*
  
- *16 publications*





## CONCLUSIONS

- Rich cohort data, capturing diverse populations affected by COVID 19, offering huge potential for research
- Recruitment and follow-up dynamics different by disease severity
- Attrition is high for hospitalized participants (and correlated to disease severity)
- Importance of defining study population carefully

# THANKS TO THE BQC19 TEAM



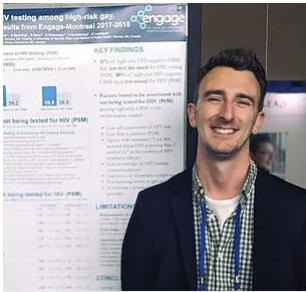
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Finance Manager





## QUESTIONS?

[bqc19.ca](http://bqc19.ca) ou [quebecCOVIDbiobank.ca](http://quebecCOVIDbiobank.ca)



Twitter : @BQC\_19

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