

*Note: All participants who have an MRI scan are enrolled in the **Pulmonary Imaging (Plm)** Registry, they are also enrolled in a substudy:

- CANUCK - cannabis and cigarette substudy
- RESPONSE - long-covid substudy
- VAPE - vape substudy

PARTICIPANT INFORMATION:

PlmID: Pulmonary Imaging ID number, each participant scanned has a unique Plm ID

SubstudyID (All): Substudy they were enrolled in (CANUCK, RESPONSE etc.) and their substudy ID

RESPONSE Group: Whether participants have long-COVID, are recovered from Covid or were a control for the RESPONSE study

GAS EXCHANGE DATA:

rbc_shift: shift of the rbc spectroscopy peak in ppm

Inflation: the inflation level of the lungs after inhaling ¹²⁹Xenon (can sometimes influence gas exchange measurements)

rbc_m_ratio: red blood cell/membrane ratio

vent_defect_pct: ventilation defect percent - percent of the lung with no xenon signal in the air spaces

vent_high_pct: ventilation high percent - percent of the lung with high signal

vent_mean:

rbc_defect_pct: red blood cell defect percent - percent of lung with no xenon signal in the red blood cells

rbc_low_pct: red blood cell low percent - percent of the lung with low xenon signal in the red blood cells

rbc_high_pct: red blood cell high percent: percent of the lung with low xenon signal in the red blood cells

rbc_mean: red blood cell/gas (ventilation) ratio

membrane_mean: membrane/gas (ventilation) ratio

membrane_defect_pct: membrane defect percent - percent of the lung with no membrane signal

membrane_high_pct: membrane high percent - percent of the lung membrane with high membrane signal

membrane_low_pct: membrane low percent - percent of the lung with low signal

DIFFUSION-DATA:

ADC Mean: apparent diffusion coefficient - indirect measurement of airspace size

CLINICAL DATA:

age2: age

sex2: sex

height_m: height in meters

weight_kg: weight in kilograms

bmi: body mass index

Exposures:

cannabis: never, current or former

cannabis_frequency: daily, weekly, monthly, less than monthly

jointyear: 1 joint year = 1 joint everyday for 1 year

gramyear: only used when we don't have joint years, 1 joint year = 2 gram years

cannabis_years: how many years the participant who currently smokes cannabis has smoked cannabis for

former_jointyear: how many years the participant used to smoke cannabis for

Former_gramyear:

former_cannabisyears: how many years the participant used to smoke cannabis for

cigarette: current, former, never

pakyear: 1 pack year = 1 pack of cigarettes per day for a year

cigarette_years: how many years current cigarette smokers have been smoking

former_packyear: how many pack years former cigarette smokers have

former_cigaretteyears: how many years former cigarette smokers have smoked for

former_years_quit: how many years former cigarette smokers have quit for

vape: yes, no

vape_nicotine: yes, no

vape_thc: yes, no

vape_cbd: yes, no

vape_times_per_day: how many times a day the participant vapes

vape_days_per_week: how many days per week the participant vapes

vape_years: how many years has the participant has vaped for

PFTs (Pulmonary Function Tests):

**note gli= Global Lung Initiative which has race-neutral reference equations to be used to calculate the predicted lung function, pp=percent predicted*

pre_fev1_fvc: forced expiratory volume in 1 second/ forced vital capacity

pre_fev1_pp_gli: forced expiratory volume in 1 second

pre_fvc_pp_gli: forced vital capacity

rv_pp_gli: residual volume

tlc_pp_gli: total lung capacity

rv_tlc: residual volume/total lung capacity

dlco_pp_gli: diffusion capacity of the lungs for carbon monoxide

Questionnaires:

CAT_Score: COPD Assessment Test score (higher score = more symptoms)

SGRQ_Symptoms_score: score on the symptoms section of the St. George's Respiratory Questionnaire

SGRQ_Activity_score: score on the activity section of the St. George's Respiratory Questionnaire

SGRQ_Impacts_score: score on the impact section of the St. George's Respiratory Questionnaire

SGRQ_Total_score: total score on the St. George's Respiratory Questionnaire

MEDICAL HISTORY:

asthma: yes, no

pulmonary fibrosis: yes, no

hiv: yes, no

anemia: yes, no

diabetes: yes, no

lung_cancer: yes, no

depression: yes, no

anxiety: yes, no

copd_emphysema: yes, no

bronchiectasis: yes, no

tuberculosis: yes, no

covid_19: yes, no

2Exposures: "1" if the participants has at least two of "current/former" for Cannabis and Cigarette and "yes" for vape, if there is less than two exposures, there is a "0"