COG-ACCL21C2: Prospective Cohort Study to Evaluate Immunologic Response Following COVID-19 Vaccination in Children, Adolescents and Young Adults with Cancer

FAST FACTS
Eligibility Reviewed and Verified By
_____ MD/DO/RN/LPN/CRA Date _____
_____ MD/DO/RN/LPN/CRA Date _____
Consent Version Dated_____

PATIENT ELIGIBILITY:
Important note: The eligibility criteria listed below are interpreted literally and cannot be waived (per COG policy posted 5/11/01). All clinical and laboratory data required for determining eligibility of a patient enrolled on this trial must be available in the patient's medical research record which will serve as the source document for verification at the time of audit.

___1. Timing
The decision to vaccinate is according to local discretion and should be made prior to consideration of enrollment. For this observational study, vaccine timing and regimen proceed according to local discretion. However, patients who do not receive an initial dose of the planned COVID-19 vaccine within 3 months after enrollment will be removed from the study. See Section 5.2 for relevant Off Study criteria.

___2. Patient consent followed by baseline clinical labs and blood sampling must be accomplished pre-vaccination. Baseline study blood specimens must be obtained during the 5-day window prior to a patient receiving their initial COVID-19 vaccine dose. See Section 4.1 Study Components and Timing, and Section 4.2 Specimen Collection and Clinical Evaluations for the specifics.

___3. Age
≥6 months and ≤37 years of age at time of enrollment.

___4. COVID-19 Vaccine
Patient plans to receive one of the FDA approved/FDA-EUA approved COVID-19 vaccines
Note: *for this observational study, the decision to vaccinate is according to local discretion and should be made prior to consideration of enrollment.*

___5. Diagnosis
Must have a diagnosis of cancer.

___6. Cancer Treatment
Before the planned initial COVID-19 vaccine dose, patient must be undergoing or have previously received one of the following cancer treatments within 12 months:
a. Dosing with chemotherapy or immunotherapy agent, including tyrosine kinase inhibitors and small molecule inhibitors targeting cancer.
b. Dosing with monoclonal antibodies targeting B-cell antigens (e.g. Rituximab), or Bruton tyrosine kinase inhibitors or Janus Kinase inhibitors.
c. Stem cell infusion for bone marrow transplant or CAR-T infusion for cellular therapy.

___7. Timing
Patient is eligible only if it is feasible to collect required baseline study specimens within protocol mandated time period prior to the initial COVID-19 vaccine dose.
Note: *for this observational study, the vaccine timing and regimen will proceed according to local discretion. Patients who do not receive initial vaccine dose within 3 months after enrollment will be taken off study. See requirements for timing in Section 3.1.4* and see *Section 5.2 for relevant off study criteria.*

EXCLUSION CRITERIA

___1. Prior Therapy
Documented SARS-CoV-2 monoclonal antibody infusion or convalescent plasma after COVID-19 infection within last 90 days.
Note: *patients with previous COVID-19 infection are eligible as long as Section 3.2.6 requirements are met. Patients receiving IVIG therapy (i.e., post BMT or CART) are eligible.*

___2. Patients undergoing radiation therapy only are ineligible.
Reminder: *before the planned initial COVID-19 vaccine dose, patient must be undergoing or have received cancer treatments meeting criteria in Section 3.2.4.*

REQUIRED OBSERVATIONS:

Specimen Collection, Clinical Evaluations and Patient Self-Report Measures

Table 1: Time Points, Required Specimens, Clinical Evaluation, Patient Self-Report Measures

Time Points	**Baseline**	**Post-First Dose (PFD) Follow-up**						***As Applicable*** [1, 2, 3]		
									Boost(s)	
	First Dose of **Vaccine (D1)**	**1m**[3] **PFD**	**3m PFD**	**6m PFD**	**12m PFD**	**18m PFD**	**24m PFD**	Documented **SARS-CoV-2 Infection**	Pre-dose[1]	1m Post-dose[1]
Permitted Flexibility	*Within 5 days* ***prior to first dose*** *administration.*	*±1 week* [3]	*±2 weeks*	*±1 month*		*±2 months*		*within 2 weeks*[2]	*Within 5 days prior to dose*	*±1 week*
Study Specimen Collection (Sec Section 4.2.1)										
Peripheral blood	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**	**X**
Clinical Evaluations[4]										
CBC, Diff	*X*	*X*	*X*	*X*[5]	*X*[5]	*X*[5]	*X*[5]	*X*	*X*	*X*
SARS-CoV-2 test results								*X*[6]		
Patient Self-Report Measures (See Section 4.2.2)										
Demographics and Vaccine Decision Form	*X*									
COVID-19 Vaccine Side Effects Form		*X*								*X*

1. If ***As Applicable*** event timing coincides with a planned PFD time point, then the *As Applicable* time point would be prioritized (i.e., only one specimen submission is needed).
2. For SARS-CoV-2 infection documented by a confirmatory test, a specimen is requested within 2 weeks of symptoms or within 2 weeks of positive test results, if asymptomatic. One specimen collection is requested per new, incident infection. In case of repeat testing with positive results for the same incident infection *no additional study specimen is requested*.
3. For a 2- or 3-dose primary vaccine series, the timing of the second dose is likely to coincide with the 1m PFD follow-up time point. In such cases, the pre-dose specimen collection (i.e., within 5 days prior to the second vaccine dose) would be prioritized.
4. Local clinical evaluation with results reported via study CRFs.
5. For these specified time points, CBC, Diff reporting will be collected only if assessed as part of standard-of-care.
6. For the Documented SARS-CoV-2 Infection time point, RT-PCR testing is the preferred modality for the Clinical Evaluation but is not a requirement. Results from any testing modality are permitted. Note: data regarding any incidental SARS-CoV-2 screening test results will be collected with each reporting period with testing modality according to local discretion and standards.

SPECIMEN REQUIREMENTS:

Brief Overview of Study Blood Sample Collection and Processing
Consult the current version of the Specimen Processing Manual available on the study web page for detailed instructions on specimen collection, labeling, processing, storage and shipment.

Study Sample	Collection Tube Volume	Local Processing Summary
Serum	10 mL in red top tube	Blood samples collected in the red top tubes will be allowed to clot for 30-60 minutes, centrifuged, and the serum component aliquoted, labeled, and frozen without delay. ***Aliquots are Shipped Frozen with Dry Ice to the BPC***
Blood in Anticoagulant	10 mL in EDTA (purple top) tube 10 mL in Sodium Heparin (green top) tube	Collection tubes are labeled and shipped directly to the BPC. ***Shipped Overnight at Room Temperature to the BPC***

Established institutional guidelines should be followed for safe collection of peripheral blood. A maximum of 2 mL/kg should be drawn. For patients who are < 18 years of age, the following table provides the suggested approach for volume and tube types:

Patient's Weight (kg)	Red Top (mL)	Na Heparin (mL)	EDTA (mL)
5-5.99	3	3	3
6-6.99	4	4	4
7-8.99	5	5	5
9-10.99	6	6	6
11-11.99	7	7	7
12-13.99	8	8	8
14-14.99	9	9	9
≥15	10	10	10

The serum (red top tube) should be given first priority, followed by Na Heparin (green top tube) and EDTA (purple top tube) if there is concern for total volume of blood requested at a given time point.

Ambient blood in EDTA and Sodium Heparin Tubes is shipped to the BPC on Monday through Friday for Tuesday through Saturday delivery.

Frozen serum specimens must be batch shipped to the BPC on Monday through Thursday for Tuesday through Friday delivery. Saturday delivery is only available for shipments of fresh blood in anticoagulant.

Reminder: include a specimen transmittal form with each shipment.