

Recommendations for Preoperative Evaluation of Previously COVID+ Patients for Elective Surgery (Applies to patients with COVID+ test in previous 6 months)

| Patient's COVID history | PCR Test within 7 days | Minimum delay before surgery ¹ | EKG | CBC w/diff CMP | CXR | D-dimer PTT Fibrinogen ² | NT-proBNP +/- High-sensitivity troponin ³ | Echo | Eval by Preop Clinic, Pulm or PCP |
|---|------------------------|---|-------------------------------|----------------|----------------|-------------------------------------|--|----------------|-----------------------------------|
| No known history of COVID | Yes | | Tests as clinically indicated | | | | | | |
| No known history of COVID and Received COVID vaccine | Yes | | Tests as clinically indicated | | | | | | |
| Asymptomatic with COVID(+) test within 90 days | No | 4 weeks | X | X | | | | | |
| Mild symptoms of COVID (non-respiratory) and COVID(+) test within 90 days | No | 4 weeks | X | X | | | | | |
| Symptoms of COVID (e.g. Cough, dyspnea) without hospitalization and COVID(+) test within 90 days | No | 6-8 weeks | X | X | X ⁴ | X ⁴ | X ⁴ | | X |
| Moderate/severe symptoms of COVID with hospitalization or immunocompromise and COVID(+) test within 90 days | No | 8-10 weeks | X | X | X | X ⁴ | X | X ⁵ | X |
| Severe symptoms of COVID and admitted to ICU | Yes ⁶ | 12 weeks | X | X | X | X ⁴ | X | X ⁵ | X |

1. After first positive COVID test or illness onset
2. If elevated prothrombotic workup, consider further delay of surgery and/or intensifying postop VTE prophylaxis. May warrant eval for DVT/PE depending on clinical presentation.
3. Add High-sensitivity troponin, if myocarditis suspected or if patient had elevated troponins while hospitalized
4. May consider ordering based on history, +symptoms and exam
5. Consider echo based on history, exam and +cardiac biomarkers
6. If over 90 days since first positive COVID test

- NOTE: these are MINIMUM recommendations for ELECTIVE surgery that are based on COVID history and should be considered in addition to other tests and evaluations that are indicated for the procedure and patient comorbidities.
- Patients > 6 months from illness or discharge from hospital should have preoperative evaluation driven by presence of any residual symptoms or complications.
- Procedures that need to be done sooner than 4 weeks for urgency can be evaluated on a case by case basis. In situations where patients need to be scheduled earlier, at minimum patient should be cleared from isolation (e.g., 10 days since onset of symptoms or 20 days for critically ill/immunocompromised).
 - Immunocompromised criteria: current chemotherapy treatment, CD4 count <200, combined immunodeficiency disorders, or patients on prednisone >20 mg/day for 14 days.
 - Severely immunocompromised patients may need extend isolation and need a negative test to remove isolation. This can be handled on a case by case basis.
 - All symptomatic patients should have resolution of symptoms for 72 hours AND appropriate wait time.
- Retesting is required after 90 days from positive test. This is consistent with CDC recommendations. Due to residual inactive RNA particles that may persist for weeks, a positive test within the 90 days cannot be accurately interpreted as active infection. A positive COVID test after 90 days should be considered a new or re-infection, regardless of symptoms.
- COVID is associated with a hypercoagulable state as is the post-surgical period. This should be considered when planning for postoperative VTE prophylaxis, particularly in longer and more invasive procedures.
- **For COVID vaccinated patients, ensure that they are 72 hours post vaccination and are not symptomatic from vaccine.**

References

- <https://www.asahq.org/about-asa/newsroom/news-releases/2020/12/asa-and-apsf-joint-statement-on-elective-surgery-and-anesthesia-for-patients-after-covid-19-infection>
- Bui et al. Perioperative Medicine (2021) 10:1 <https://doi.org/10.1186/s13741-020-00172-2>
- J Am Heart Assoc. 2021;10:e019650. DOI: 10.1161/JAHA.120.019650