



OWS Therapeutics

Pre-EUA Playbook – Monoclonal Antibodies

Outpatient administration playbook

02 NOV 2020; VERSION 1.0

Pre-EUA Playbook Audience

This playbook is intended to support sites interested in administering COVID-19 treatment under EUA including:

- Existing hospital or community-based infusion centers
- Existing clinical space (e.g. urgent care, emergency depts)
- Ad hoc new infusion sites (e.g. "hospitals without walls")

Initial version of playbook focused on:

- Monoclonal antibody treatment
- Delivery via infusion
- Outpatient setting

This playbook will continue to evolve as other treatments and administration methods become available. We hope this playbook will be used to help healthcare facilities to start planning on how to implement monoclonal antibody treatment in an outpatient setting for those with COVID-19.

**Information in this playbook will be adjusted based on FDA guidance. This initial guidance should be used to help with preparedness*

Overview of therapeutic

Monoclonal antibodies (mAbs) directly neutralize the COVID-19 virus and are intended to **prevent progression of disease**

mAbs likely to be most effective when **given early in infection**

Product delivered via **single administration (e.g., IV infusion)**

Early evidence appears to suggest promise of mAb products in outpatient settings

- Early evidence from Eli Lilly mAb **showed potential to reduce hospitalization** for infected people if given early in infection in BLAZE-1 clinical trial
- Early evidence from Regeneron data **showed potential to reduce viral load compared to placebo** through Day 7 in seronegative patients

Possible patients eligible for treatment

Product potentially could be granted EUA for **mild to moderate COVID-19 cases** early in infection, with following criteria

- Confirmation via **positive PCR or antigen test**
- Treatment **early in the progression of the disease** recommended to ensure mAb most effective
- Patient symptomatic but **not yet progressed to require hospitalization**

Treatment likely recommended just for **high-risk adult and pediatric patients 12 years and older >40 kgs:**

- High risk likely to be defined by a combination of risk factors such as
 - Are ≥ 65 years of age or have a body mass index (BMI) ≥ 35

Please reference any ultimate EUA factsheet for specific treatment guidelines

**For your awareness
(e.g. for patients not eligible for
treatment under EUA):**

**Monoclonal antibodies under evaluation
for additional indications**

Participation encouraged in clinical trials
to assess additional drugs and indications

Clinical trial information available at

Riseabovecovid.org
<http://insight-trials.org/>

Lilly clinical trials:
<https://blaze2study.com/>
<https://trials.lillytrialguide.com/en-US/>

Regeneron clinical trials:
<https://www.regeneron.com/covid19>

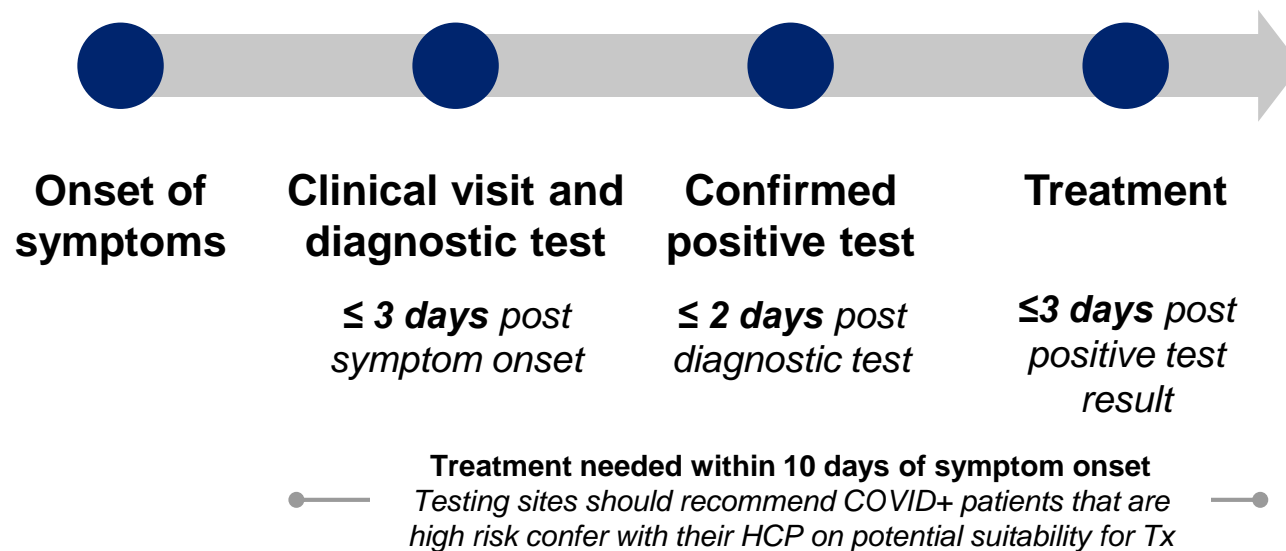


Based on what we have learned to date - early administration of treatment needs **fast testing turnaround** and **patient scheduling**

Overview

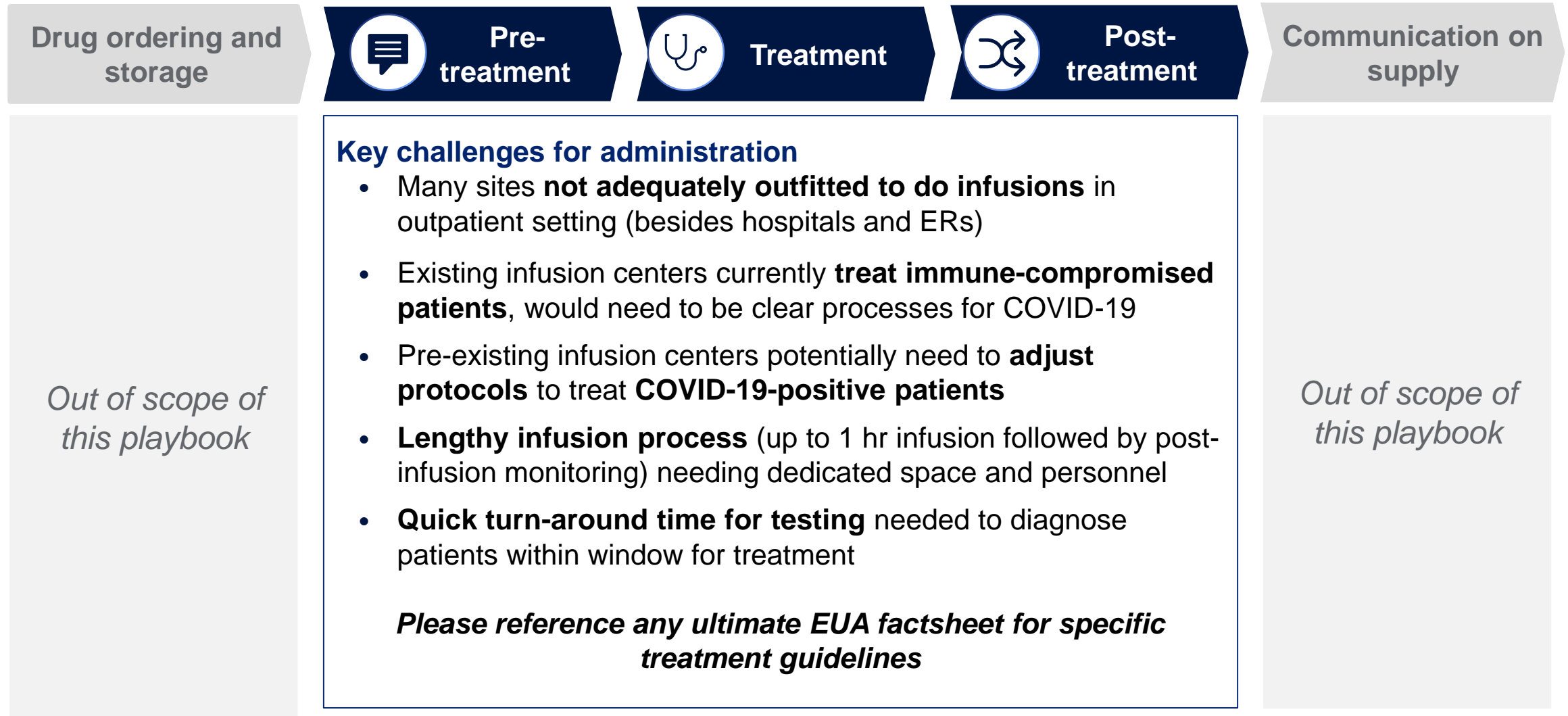
- Treatment likely most beneficial to patients if given **early in symptom progression**
- EUA likely to require administration of **treatment within 3 days** of confirmed positive test result and within **10 days of symptom onset**
- Strong **partnership and communication** between patients and HCP to get right treatment to right patients at right time
- Fast testing turnaround needed, to efficiently **identify positive tests** and **schedule for treatment**

Example timeline



Please reference any ultimate EUA factsheet for specific treatment guidelines including recommended treatment window

Key challenges to overcome to allow for successful administration of mAb in outpatient setting



Comprehensive checklist overview

Plan of action to administer monoclonal antibodies under outpatient EUA



Confirm your site wants to participate

- Review needs** for treatment in outpatient settings
- Ensure site prepared** to meet needs for treatment or willing to make required investments
- Confirm site leadership supportive** of participation
 - Including senior clinical leadership (e.g., Chief Medical Officer)
- Approval of product for use by the hospital's **Pharmacy and Therapeutics Committee** (or equivalent committee)



Prepare your site and staff for outpatient mAbs administration

- Ensure **sufficient supply** of needed materials for treatment
 - Infusion supplies, resuscitation equipment, etc
- Develop **staffing and personnel** plan to support treatment
- Allocate **needed facilities and equipment** to support administration
- Ensure existing **infection prevention plan** sufficient
 - Adjust existing plan if needed to safely manage patient flow
 - Consider potential security requirements if needed
- Review **drug administration needs** with staff
- Inquire with hospital leadership about **reimbursement process**
- Prepare for **adverse events data tracking process**



Develop procedures to identify and treat patients in timely manner

- Prepare for scheduling and routing of referrals** from testing center or other HCPs to treatment
- Ensure hospital staff and doctors **aware of outpatient treatment** availability
- Ensure **patient privacy** (HIPAA compliant) **maintained during** process
- Communicate to patient that EUA issued for investigational treatment but **does not constitute research** on behalf of the hospital

Readiness checklist: Administration of outpatient mAbs under EUA



Allocate **dedicated space** and develop plan to **manage patient flow**

- Clear process for patients that are coming to clinical site including scheduling requirements
- Admission process for COVID-19 positive patients designed to minimize risk of spread per facility requirements / directions / guidelines'
- Dedicated room available for treatment



Ensure **dedicated source of supplies**; which may be difficult to procure

- Needed infusion components obtained
 - Example: IV kits, infusion chair, IV pole, vital sign monitoring equipment, emergency medications



Assign **sufficient personnel** to meet expected demand

- Sufficient staffing plans in place for Nurse/IV tech, Physician, Pharmacist
 - Likely need dedicated team to treat patients



Prepare for **drug administration** process

- Pre-visit: Clear treatment and monitoring plan developed for during infusion
- Treatment: 1-hour treatment and up to 6 hours post-treatment observation
 - Emergency protocol defined for addressing potential infusion reactions or complications
- Post-treatment: Clear process for patient follow-up defined using telemedicine as possible



Ensure **process for reimbursement** in place (non-drug administrative costs)



Prepare for **reporting needs** for adverse events and record keeping

To be included in next potential version of playbook to be released following an EUA as relevant

Activity 1: Define facilities and patient visit logistics



**Site will need
dedicated outpatient
COVID-19 treatment
space**

Dedicated COVID-19 patient area with needed infusion supplies

- Some sites using COVID-19 waiting rooms for monitoring post infusion
- Rededication of existing clinical space acceptable under CMS Hospital Without Walls Initiative

*Select recommendations for outpatient setting, for more information reference CDC guidelines
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>*



Alternate site of care allowances and needs

As part of **CMS Hospital Without Walls initiative**, hospitals can **provide services** outside of standard hospital settings

- **Other healthcare facilities** (e.g., urgent care clinics, doctors' offices etc)
- **Remote locations or sites** not normally considered healthcare facilities, (e.g., patient home via telemedicine, hotels, community site, temporary tents)

Alternate site of care **must be linked to hospital** to allow for reimbursement of medical services

Alternate site of care will need **same core capabilities and supplies** as typical site of administration

- Facility and patient flow needs (page 10)
- Supplies needed on site (e.g., rescue medication, infusion supplies, etc – page 17)



Pharmacy needs

Infusion preparation process:

- Prepare sterile infusions in a manner consistent with local laws, regulations, guidelines and policies
- If a laminar flow hood is available, it is recommended for dose solution preparations
- Use aseptic technique and applicable good clinical practice for intravenous solution preparations
- Obtain new vial(s) and/or IV bags if the drug product contains any visible particulate matter

Needs for space to prepare mAb drug:

- Dedicated preparation area with sufficient capacity onsite or nearby
- Prep room that allows aseptic techniques

Acceptable equipment for mAb drug storage:

- Functional pharmacy sink
- Refrigerated storage (2-8° C)
- Temperature monitoring system with back-up
- Alarm system for notification to authorized personnel of temperature deviations/excursions in place

Drug-specific requirements will be added when available



Testing needs

Outpatient monoclonal antibody product likely to need administration early in symptom progression

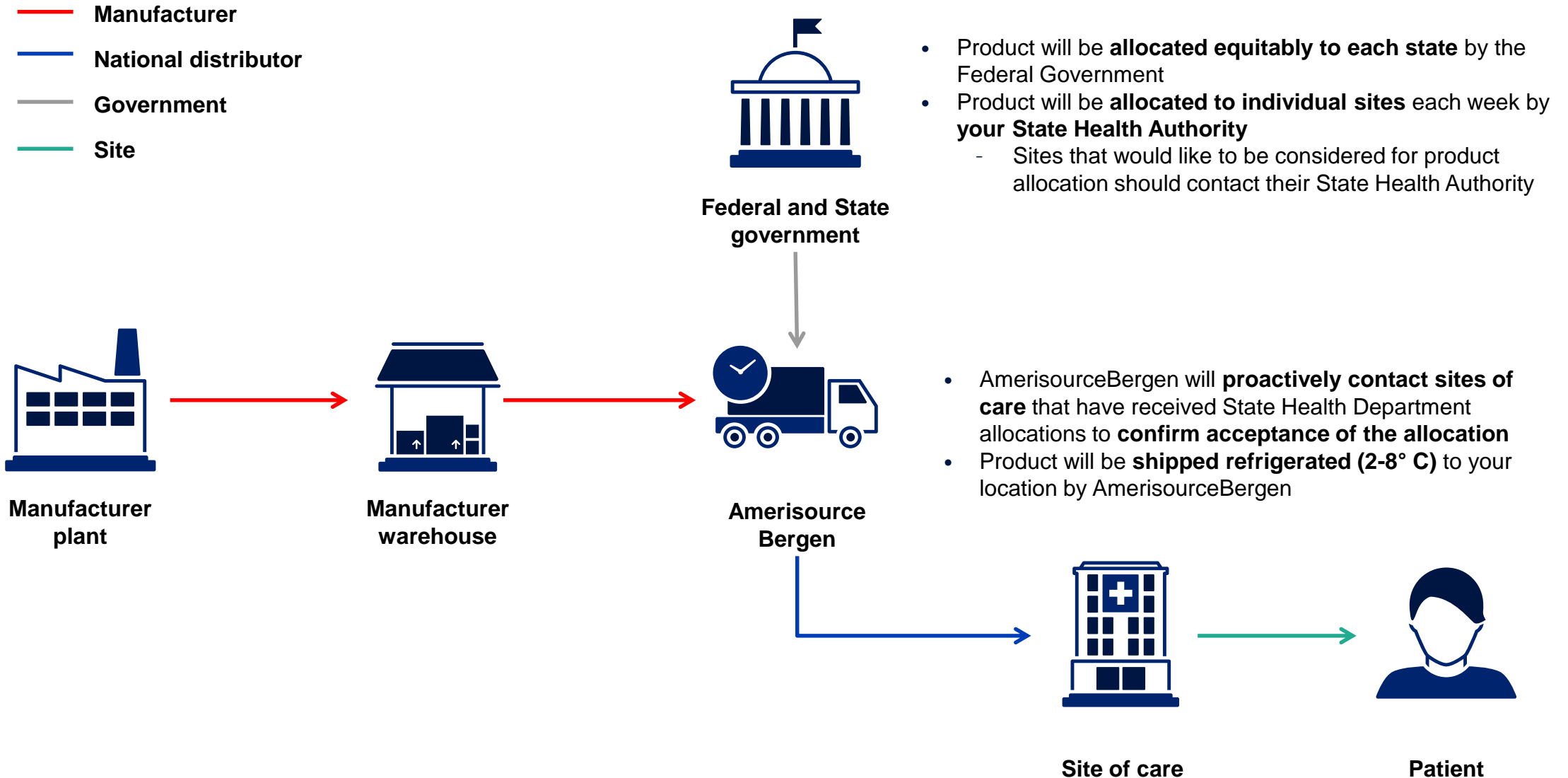
- Treatment likely to be required within 3 days of positive test result, and within 10 days of symptom onset

Fast turn-around testing capabilities key to identify patients and treat within this window

- On-site point-of-care rapid testing or PCR tests ideal to provide quick diagnosis and treat patients on the same day
- Alternatives include partnership with off-site testing facility nearby with reliable and quick turnaround and robust patient tracking and reporting mechanism
 - Testing results turnaround within 2 days likely recommended to allow for infusion early in disease progression

Please reference any ultimate EUA factsheet for detailed treatment guidelines including recommended treatment window

Product distribution and shipping information





High level guidance on product shipping and storage

Product will be **shipped refrigerated (2-8° C)** to your location by USG distribution partners

Product should be **stored refrigerated (2-8° C)** before use

Target **shelf-life for product ~10 months at minimum**, follow guidance from manufacturer on expiration dates and product turnover

Prepared IV solutions are **intended for immediate patient administration**. If not used immediately:

- Solutions may be held at refrigerated conditions for example **no more than 24 hours**
- Solutions may be held at ambient light and room temperature conditions for example **no more than 7 hours**
 - Hold time includes preparation, solution hold, infusion and flush

Please adhere to all guidelines for storage and use provided by manufacturer of ultimate EUA product

Activity 2: Ensure sufficient supplies

Site supplies needed: Standard infusion supplies are needed but several components have been difficult to source

Sites interested in providing outpatient infusions of mAbs to COVID+ patients should:

1. Confirm sufficient supplies of infusion materials
2. Proactively ensure items with long-lead times are sourced for your site

Ensure supplies sufficient to cover mAbs treatment in addition to day to day operations needs

List of suggested supplies (not exhaustive)

PPE

- Gloves
- Gowns
- Eye and face protection (e.g. goggles, safety glasses, face shields)
- NIOSH-certified, disposable N95 filter facepiece respirators or better

Infusion supplies

- Infusion chairs – *recommended only*
- IV pole
- IV administration sets
 - *PVC infusion set with/without DEHP containing 0.2 or 0.22 micron polyethersulfone (PES) in-line filter*
- IV and catheters
- 3mL saline syringes
- Appropriately sized syringes
- Alcohol wipes
- 2x2 gauze pads
- Adhesive bandages
- Tegaderm bio-occlusive dressing
- Absorbent underpads (blue pads)
- Extension set tubing
- Needles – stainless steel 18ga
- Sharps containers
- Transpore tape
- Transilluminator (vein finder)

General supplies

- Infusion Reaction Kit
- Vital signs equipment
- Crash cart or Emergency Medical Management Equipment and Backboard
- Refrigerator
 - *Optional to store prepared solution onsite*
- Privacy screens
- Biohazard disposal bag
- Disposable disinfecting wipes
- Thermometer probe covers (*if required*)
- 70% alcohol wipes
- Paper towels
- Trash bins and liners

Please reference EUA guidelines for final requirements

Pharmacy supplies needed

List of needed supplies

Sterile empty PVC infusion bag with or without DEHP
1 unit of 0.9% Saline per dosing

Activity 3: Develop plan for staffing and personnel

Treating patients needs support of...

HCP



Prescribe monoclonal antibody to patient, answer questions and **respond in case of emergency**

- Infectious disease or general HCP
- HCP will need to be on site for treatment
- At least 1 HCP should have Advanced Cardiovascular Life Support (ACLS) certification or equivalent

Pharmacist



Prepare the infusion, answer questions and support with monoclonal antibody storage

- Pharmacy requirement does not need to be physically located at the site of infusion

Nurses



Administer patient infusion (up to 1 hr) and monitor patient wellbeing (up to 6 hrs)

- May require 2 nurses to start infusion, nurse practitioner to oversee larger infusion unit (if needed)
- Experienced phlebotomist needed as often difficult to find vein in patients (often high BMI and dehydrated)

Please reference any ultimate EUA factsheet for specific treatment guidelines



Thank you!