Start up the system

1. Log in to BD FACSuite software.
2. Check the fluid levels.
3. Check the connection and fluidics status.
4. Verify that the 20-minute laser warmup has been completed.
Performance QC and Assay Setup

**Performance QC**

1. Open the Setup & QC workspace.

   ![Select Setup & QC](image1)

   - Verify the bead lot ID.
   - Click Start.

2. Run the BD FACSuite™ CS&T Research beads.

3. View the Setup and QC Report and QC Tracking tabs.

   ![Setup & QC Options](image2)

   - Verify that the Performance QC passed.

**Assay and Tube Settings Setup**

1. Select the Setup & QC tab.

   ![Select Assay & Tube Settings Setup](image3)

   - Select the Assay & Tube Settings Setup task.
   - Click Select.

2. Select the Assays tab.

   ![Select Assays & Tube Settings](image4)

   - Select the assays that you want to set up.

3. Run the BD FACSuite CS&T Research beads.

   ![Verify Lot ID](image5)

   - Verify the Lot ID.
   - Click Start.
Acquire and Analyze Data

1. Open the Worklist workspace.

2. Modify the loading options, as needed.

3. Create Worklist entries.

4. If using the Loader, place the sample carrier on the Loader tray. Click Load.

5. Click Run All.
6 Verify the gates, PMT voltages, and threshold values.

To make modifications:
   a. Click **Stop Timer** to pause the acquisition delay timer.

   Click **PMTV** to enable the sliders in the worksheet to make adjustments to the PMT voltages.

   Verify that the voltage and threshold settings are appropriate.

   Verify that the gates and populations are set appropriately.

   b. Click **Resume**.

7 Perform quality control of the analysis report.

   To make modifications:
       a. Click **Stop Timer** to pause the acquisition delay timer.

       Verify that the gates and populations are set appropriately.

       b. Click **Resume**.
Shut Down the System

1. Open a worklist.

<table>
<thead>
<tr>
<th>Sample ID</th>
<th>Task</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Perform Daily</td>
<td>Ready</td>
</tr>
<tr>
<td>2</td>
<td>Shutdown</td>
<td>Ready</td>
</tr>
</tbody>
</table>

If needed, add the daily clean and shutdown tasks to the worklist.

2. Run the worklist.

3. Log out of the software, if necessary.
Additional Information

Any experiment can be used to create a user-defined assay and used in a worklist to acquire and analyze data. Additionally, experiments can be created from assays and used to acquire and analyze data in the Experiment workspace or saved as an assay to be used in a worklist.

Creating an Assay from an Experiment

1. Open an existing experiment or create a new one.
2. Select File > Create Assay.

![Create Assay dialog box]

Enter a name.

Select a report to display, if needed.

Click OK.

Creating an Experiment from an Assay

1. Select File > New Experiment from Assay.
2. Modify the assay as needed.
3. Select File > Create Assay to save the experiment as an assay and acquire data in a worklist. Alternatively, you can continue with data acquisition and analysis in the Experiment workspace.