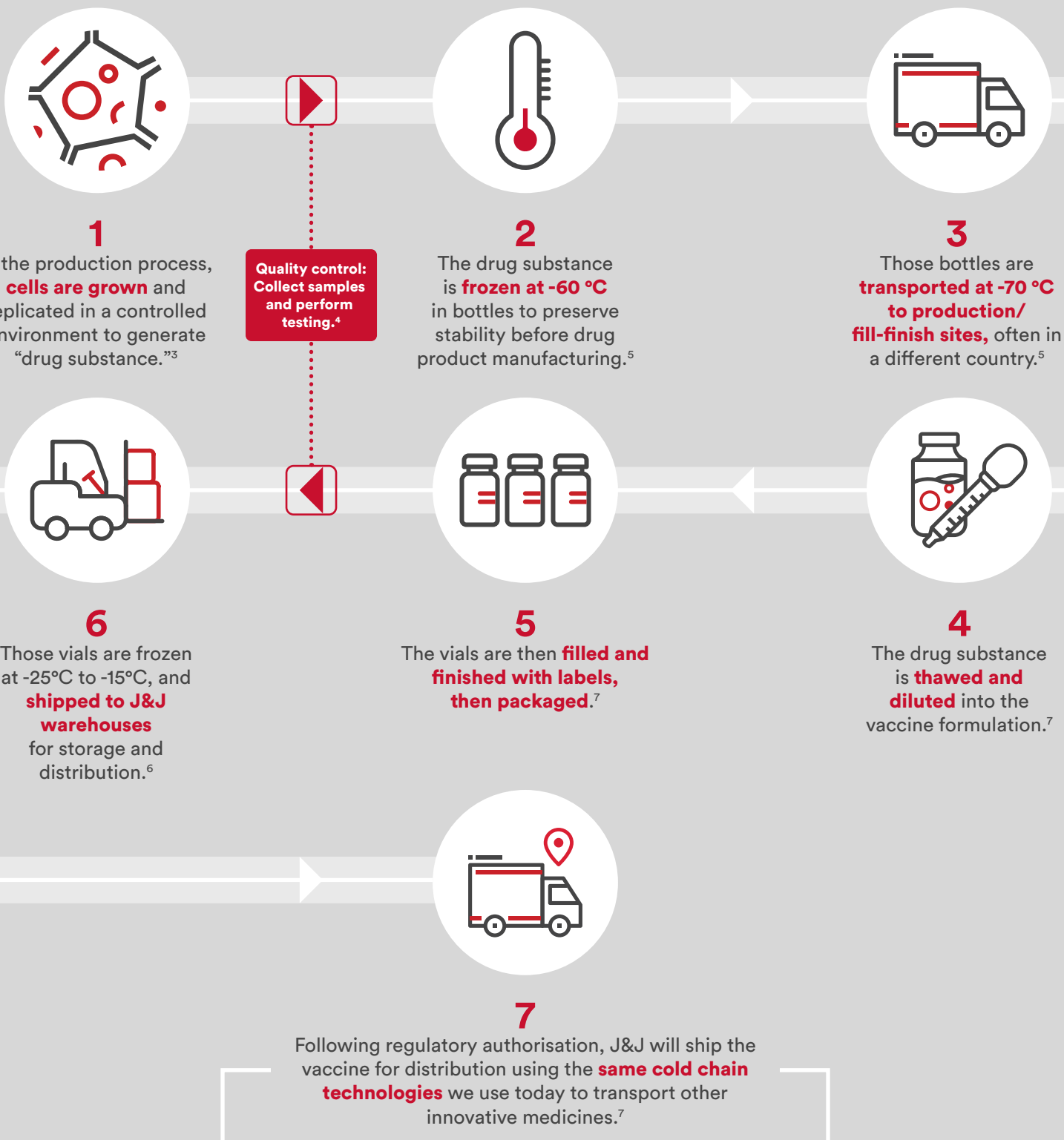


# Johnson & Johnson Supply Chain

COVID-19 Vaccine Manufacturing

At Johnson & Johnson (J&J), we take seriously our responsibility to supply our COVID-19 vaccine candidate around the world upon approval, and are confident we have the capabilities<sup>1</sup>, collaborations, and rigorous safety and quality standards to do so.<sup>2</sup>

## Vaccine Production and Distribution Process



With Janssen’s AdVac® technology platform, the vaccine **is estimated to remain stable for two years at -25°C to -15°C (-13°F to 5°F)**, three months of which can be at temperatures of 2-8 °C (36-46 °F).<sup>6</sup>

Each pallet of our vaccine will include **track-and-trace technologies** that will provide real-time location, temperature and other information needed to maintain the vaccine’s quality.<sup>7</sup>

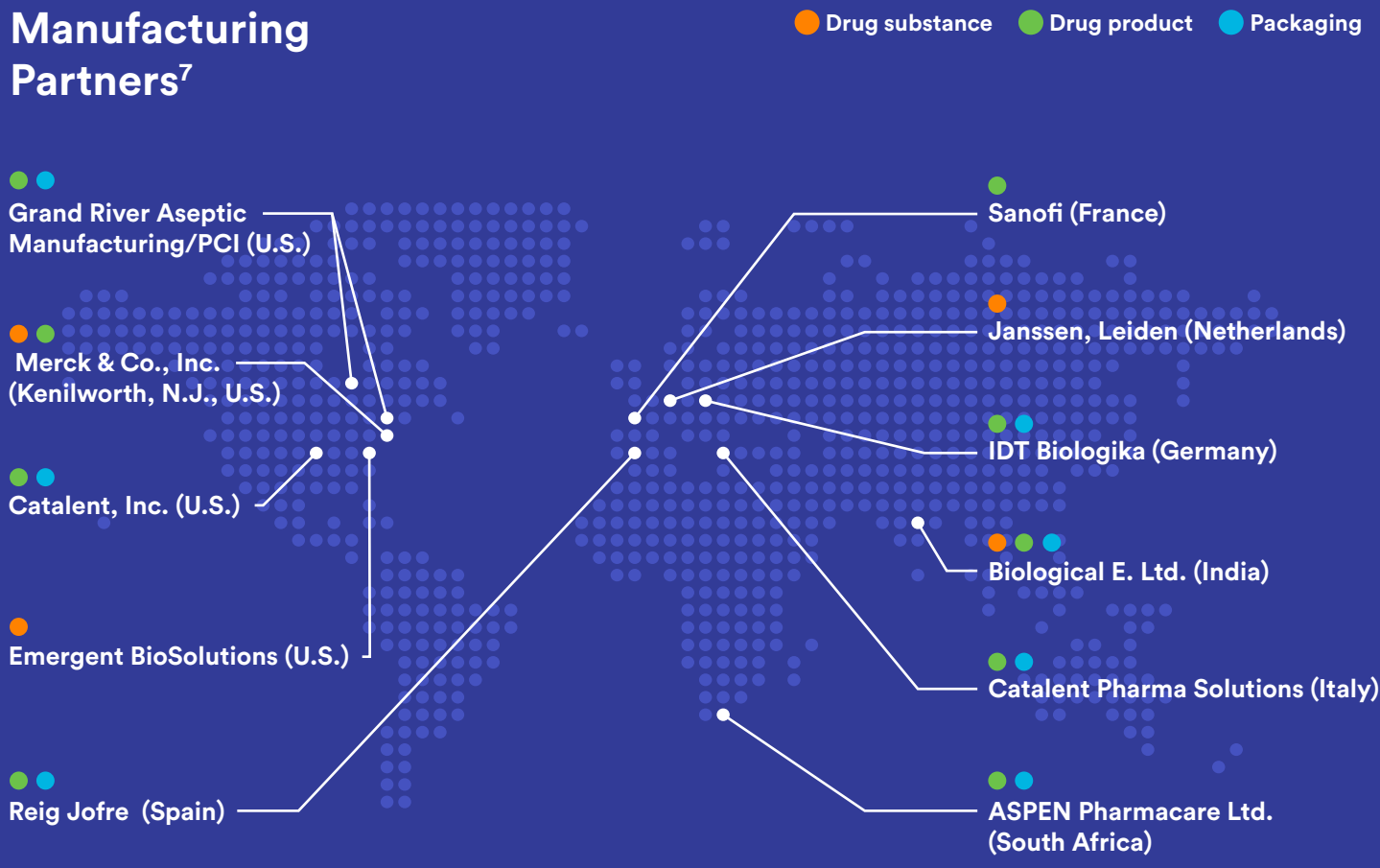
The general timeframe to produce a batch of vaccine, from drug substance to fill and finish, is **60–70 days, plus 18–22 days** for final product quality testing and release.<sup>8</sup>

## Global Manufacturing Collaborations

Given the unprecedented nature of the pandemic, Johnson & Johnson is expanding its global manufacturing capacity. We have established new U.S. vaccine manufacturing capabilities and are scaling up capacity in other countries.<sup>9</sup>

In addition to our existing manufacturing capacity in Leiden, the Netherlands, we have entered into multiple agreements to expand our manufacturing capability of our COVID-19 vaccine candidate.<sup>7</sup>

### Manufacturing Partners<sup>7</sup>



Due to the global interconnectivity of our production and supply chain processes, one batch of the J&J COVID-19 vaccine **will likely visit multiple countries** through the course of various manufacturing stages in its journey from drug substance to a finished vial for injection.

For more information on Johnson & Johnson’s approach to help combat COVID-19, **visit [www.jnj.com/coronavirus](http://www.jnj.com/coronavirus)**.

1. Johnson & Johnson Announces Collaboration to Expand Manufacturing Capabilities For its COVID-19 Vaccine Candidate in Support of the Company’s Goal to Supply More Than One Billion Vaccine Doses Globally. Available at: <https://www.jnj.com/johnson-johnson-announces-collaboration-to-expand-manufacturing-capabilities-for-its-covid-19-vaccine-candidate-in-support-of-the-companys-goal-to-supply-more-than-one-billion-vaccine-doses-globally>. Last accessed: March 2021.

2. Our commitment to safety. Available at: <https://www.janssen.com/emea/our-commitment-safety-0>. Last accessed: March 2021.

3. FDA. Guidance for Industry. Available: <https://www.fda.gov/media/73614/download>. Accessed: March 2021.

4. Janssen. Data on File. Vaccine Quality Control Steps. March 2021.

5. Janssen. Data on File. Ad26.Cov2.S vaccine supply info. Feb 2021

6. Janssen COVID-19 vaccine. Summary of Product Characteristics. March 2021.

7. From Lab to Vaccine Vial: The Historic Manufacturing Journey of Johnson & Johnson’s Janssen COVID-19 Vaccine. Available: <https://www.jnj.com/innovation/making-johnson-johnson-janssen-covid-19-vaccine>. Last accessed: March 2021.

8. Janssen. Data on File. Vaccine production timeframe. Jan 2021.

9. Johnson & Johnson. Johnson & Johnson Announces a Lead Vaccine Candidate for COVID-19; Landmark New Partnership with U.S. Department of Health & Human Services; and Commitment to Supply One Billion Vaccines Worldwide for Emergency Pandemic Use. Available: <https://www.jnj.com/johnson-johnson-announces-a-lead-vaccine-candidate-for-covid-19-landmark-new-partnership-with-u-s-department-of-health-human-services-and-commitment-to-supply-one-billion-vaccines-worldwide-for-emergency-pandemic-use>. Last accessed: March 2021.