

# Overview of the Novartis Leukapheresis Reference Manual vG4.0

[Tisagenlecleucel \(KYMRIAH®/CTL019\)](#)

[Rapcabtagene autoleucel \(YTB323\)](#)

[Durcabtagene autoleucel \(PHE885\)](#)

## Introduction

Leukapheresis material provides the starting material for CAR-T cell product manufacturing. The Leukapheresis Reference Manual details requirements and guidance for successful collection, cryopreservation, and shipping of leukapheresis material.

Following the steps in the Leukapheresis Reference Manual will prevent delay in product manufacturing.

Please ensure continued compliance with local quality standards and the Novartis Clinical Trial Agreement/Quality Agreement/Technical Agreement.

## Manual Structure

The Leukapheresis Reference Manual is for **both commercial and clinical uses**. It covers requirements and guidance for 3 different CAR-T cell products:

- Tisagenlecleucel (KYMRIAH/CTL019) → Commercial and clinical trials
- Rapcabtagene autoleucel (YTB323) → Clinical trials
- Durcabtagene autoleucel (PHE885) → Clinical trials

As with previous versions of the manual, many of the processes (eg, collection, cryopreservation, packing/shipment) remain largely the same for each of the products and are therefore presented in common chapters. In these chapters, notes are included indicating any differing requirements for clinical trials.

In several cases (eg, specifications, drug/therapy washout periods), processes differ between the products and are therefore presented in new individual product-specific chapters.

This version of the manual also includes a new chapter which provides an overview of Novartis CAR-T cell therapy and a new Appendix which details instructions for packing/shipping fresh leukapheresis material (applicable to select clinical trials in approved countries).

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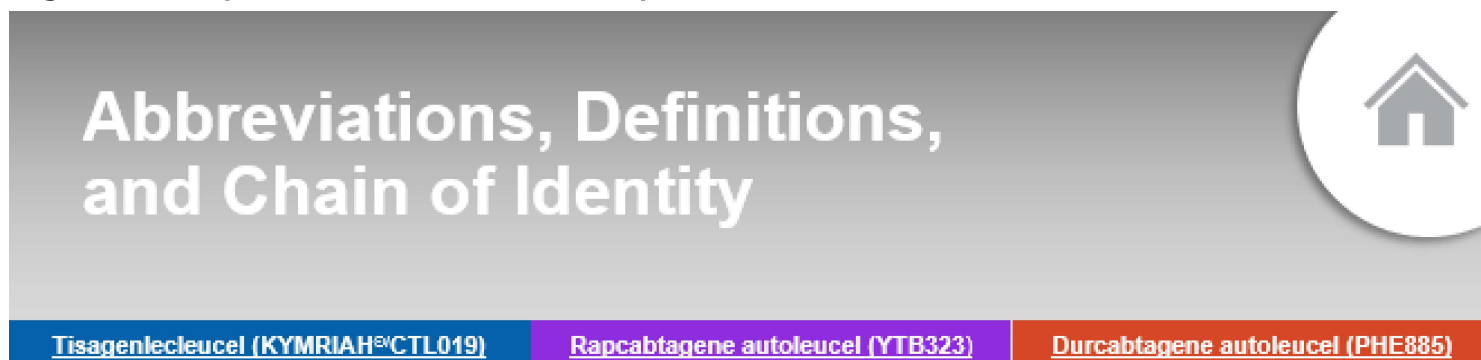
## Navigating the Manual

The electronic version of the manual contains a separate table of contents for each of the 3 products. Clicking the hyperlinks in the right-hand panel will take you directly to the appropriate chapter (Figure 1). On each chapter page, colored tabs within the header (Figure 2) also indicate the applicable product(s) and serve as links back to the product-specific table of contents. The home icon at the top of the header navigates back to the first page of the manual.

Figure 1. Example of product-specific table of contents



Figure 2. Example of color-coded tabs in chapter header



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## Leukapheresis and Cell Processing Overview

Figure 3 shows a high-level summary of topics included in this version of the Leukapheresis Reference Manual.

Figure 3. Key topics in the manual



### LEUKAPHERESIS COLLECTION

- Ensuring patient readiness for leukapheresis, including required infectious disease testing and therapy/drug washout. For clinical trials, refer to the clinical trial protocol
- Leukapheresis material specifications
- Collection procedure requirements and guidance for optimization, including guidance on peripheral blood testing and performing leukapheresis in small patients
- Documentation and Chain of Identity



### CELL PROCESSING

- Leukapheresis material testing requirements
- Cell processing and cryopreservation requirements and guidance, including guidance on controlled-rate freezing
- Documentation and Chain of Identity



### PACKING AND SHIPPING

- Instructions on packing and shipping cryopreserved leukapheresis material
- Instructions on packing and shipping fresh leukapheresis material for cryopreservation for select clinical trials in approved countries
- Documentation and Chain of Identity