

## **5 510(K) SUMMARY**

In accordance with 21 CFR 807.87(h) and 21 CFR 807.92, the 510(k) Summary is provided.

## 510(k) Summary

### I. SUBMITTER

Terumo BCT, Inc.  
10810 W. Collins Avenue  
Lakewood, Colorado 80215  
Phone: 720-480-6702

Contact Person: Jennifer Burton  
Title: Sr. Regulatory Affairs Specialist  
Phone: (b) (6)  
Fax: 303-231-4756

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### II. DEVICE

Trade Name of Device: IMUGARD WB PLT Platelet Pooling Set  
Common or Usual Name: Platelet Pool and Store Set with Filter  
Classification Name: Container, empty, for collection & processing of blood & blood components  
Regulatory Class: In accordance with 21 CFR 864.9245(b), the classification for this device is Class II.  
Product Code: KSR

### III. PREDICATE DEVICE

**Table 5.1: Predicate and Reference Device Information**

Device	Product Classification	Trade Name Of Predicate Device	Manufacturer and 510(k) Holder	510(k) Clearance Number
Predicate	KSR	IMUGARD WB PLT Platelet Pooling Set	Terumo BCT	BK210658

### IV. DEVICE DESCRIPTION

This 510(k) is to extend the intended use of the IMUGARD WB PLT Platelet Pooling Set to include platelets derived using the Reveos® Automated Whole Blood Processing System. There are no changes to the design or use of the device.

#### A. Device Identification

The IMUGARD WB PLT Platelet Pooling Set, hereafter referred to as IMUGARD, can be used to leukoreduce (LR), pool and store up to six single units of whole blood derived platelets. For platelets prepared through manual methods, LR and pooling occur on Day 1. For platelets prepared by Reveos Automated Whole Blood Processing System, LR and pooling occur on Day 1 or Day 2. The resulting platelet product is comparable to a single apheresis therapeutic dose and can be stored up to seven days.

**Terumo BCT, Inc.**  
10811 West Collins Ave.  
Lakewood, Colorado 80215-4440  
USA  
USA Phone: 1 877 339.4228  
Phone: +1.303.231.4357  
Fax: +1 303.542.5215

**Terumo BCT Europe N.V.**  
Europe, Middle East and Africa  
Ikaroslaan 41  
1930 Zaventem  
Belgium  
Phone: +32.2.715 05 90  
Fax: +32.2.721.07.70

**Terumo BCT (Asia Pacific) Ltd.**  
Room 3903-3903A, 39/F  
ACE Tower, Windsor House  
311 Gloucester Road  
Causeway Bay, Hong Kong  
Phone: +852 2283.0700  
Fax: +852.2576.1311

**Terumo BCT Latin America S.A.**  
La Pampa 1517 – 12<sup>th</sup> Floor  
C1428DZE  
Buenos Aires  
Argentina  
Phone: +54.11.5530.5200  
Fax: +54.11.5530.5201

**Terumo BCT Japan, Inc.**  
20-14, 3-chrome  
Higashi Gotanda, Shinagawa-ku  
Tokyo 141-0022  
Japan  
Phone: +81 3 6743.7890  
Fax: +81 3.6743.9800

## **B. Device Characteristics**

IMUGARD is an ethylene oxide (ETO) sterilized, single use disposable set.

## **C. Device Description**

IMUGARD is designed to allow the attachment of up to six (6) Whole Blood Derived Platelet (WBDP) concentrates for filtration, pooling and storage. WBDPs can be prepared using commercially available manual/semi-automated blood collection systems or automated blood processing systems. Up to 6 single units of WBDPs are sterile docked to the pooling arms and are then gravity drained through a leukoreduction filter. The leukoreduced and pooled platelet product then enters the ELP platelet storage bag (ELP bag). A sampling assembly is attached to the ELP bag. The sampling assembly allows aseptic removal of a sample from the ELP bag for subsequent bacterial or other applicable testing conducted by the blood center. The platelet pooling set allows for the combination of WBDPs to create a leukoreduced product that is comparable to a single apheresis therapeutic dose.

## **D. Environment of Use**

IMUGARD is intended to be used in blood centers, hospitals and healthcare facilities.

## **E. Materials of Use**

IMUGARD is generally comprised of Polyvinyl chloride (PVC) components with variable plasticizers depending on the component. The ELP bag is constructed of Polyvinyl chloride (PVC) citrated.

## **F. Key Performance Specifications/Characteristics of the Device**

IMUGARD is designed to allow the attachment of up to six (6) Whole Blood Derived Platelet (WBDP) concentrates for filtration, pooling and storage in the ELP bag. Single units of WBDPs are sterile docked to the pooling arms and are then gravity drained through a leukoreduction filter. A sampling assembly allows aseptic removal of a sample from the ELP bag for subsequent bacterial or other applicable testing conducted by the blood center. The platelet pooling set allows for the combination of WBDPs to create a leukoreduced product that is comparable to a single apheresis therapeutic dose.

## **V. INTENDED USE**

IMUGARD WB PLT Platelet Pooling Set is intended to be used to leukocyte-reduce, pool and store whole-blood-derived platelets. For platelets prepared through manual methods, leukoreduction and pooling occur on Day 1, the day after whole blood collection and processing, with subsequent platelet storage up to Day 7 in the Terumo BCT ELP storage bag when used with FDA-cleared or approved bacterial detection tests. For platelets prepared by the Reveos® Automated Blood Processing System, leukoreduction and pooling occur on Day 1 or Day 2, with subsequent platelet storage up to Day 7 in the Terumo BCT ELP storage bag when used with FDA-cleared or approved bacterial detection tests. Additionally, for platelet units stored past 5 days and through 7 days, every pooled platelet product must be tested with a bacterial detection device cleared by FDA and labeled as a "safety measure."

## **VI. LABELING COMPARISON**

A comparison of IMUGARD labeling with the predicate device to establish substantial equivalence is provided in **Table 5.2**.

**Table 5.2: Labeling Comparison**

Category	Predicate Device (BK210658)	Subject Device	Comparison
Intended Use	IMUGARD WB PLT Platelet Pooling Set is intended to be used to leukocyte-reduce, pool and store whole-blood-derived platelets. Leukoreduction and pooling occur on Day 1, the day after whole blood collection and processing, with subsequent platelet storage up to Day 7 in the Terumo BCT ELP storage bag when used with FDA-cleared or approved bacterial detection tests. Additionally, for platelet units stored past 5 days and through 7 days, every pooled platelet product must be tested with a bacterial detection device cleared by FDA and labeled as a "safety measure."	IMUGARD WB PLT Platelet Pooling Set is intended to be used to leukocyte-reduce, pool and store whole-blood-derived platelets. For platelets prepared through manual methods, leukoreduction and pooling occur on Day 1, the day after whole blood collection and processing, with subsequent platelet storage up to Day 7 in the Terumo BCT ELP storage bag when used with FDA-cleared or approved bacterial detection tests. For platelets prepared by the Reveos® Automated Blood Processing System, leukoreduction and pooling occur on Day 1 or Day 2, with subsequent platelet storage up to Day 7 in the Terumo BCT ELP storage bag when used with FDA-cleared or approved bacterial detection tests. Additionally, for platelet units stored past 5 days and through 7 days, every pooled platelet product must be tested with a bacterial detection device cleared by FDA and labeled as a "safety measure."	The intended use is identical for whole blood platelets prepared through manual methods. The subject device includes additional text for whole blood platelets prepared by Reveos. There have been no modifications or changes in the safety or effectiveness of the device since clearance; therefore, the difference in platelet preparation does not impact the safety or effectiveness of IMUGARD.

As shown in **Table 5.2**, the intended use is identical for whole blood platelets prepared through manual methods. There have been no modifications of the device since clearance; therefore, the additional text included for whole blood platelets prepared by Reveos does not impact the safety or effectiveness of IMUGARD.

## VII. PERFORMANCE DATA

*In vitro* bench testing performance data was provided in support of the substantial equivalence determination.

Platelets prepared using the Reveos Automated Whole Blood Processing System were pooled and stored using the IMUGARD WB PLT Platelet Pooling Set. Platelets met expectations for leukoreduction, platelet recovery, and pH at the end of storage, whether pooling occurred on Day 1 or Day 2 after collection.

Reveos platelet pools are capable of being stored for up to 7 days in the Terumo BCT ELP storage bag, whether pooling occurs on Day 1 or Day 2 after collection, when used with FDA-cleared or approved bacterial detection tests. Acceptable platelet quality was well-maintained for the 7-day storage duration.

## **VIII. CONCLUSIONS**

Based upon the results of the non-clinical tests performed, IMUGARD is shown to be as safe and effective as the identified predicate device. The information provided in the 510(k) demonstrates that IMUGARD is substantially equivalent to its identified predicate device.