

Review Summary

May 19, 2026

Pharmaceuticals and Medical Devices Agency

The following are the summary of the review of the following medical device submitted for marketing approval conducted by the Pharmaceuticals and Medical Devices Agency (PMDA).

Classification : Instrument & Apparatus 25, Medical Scope

Term name : Capsule imaging and tracking device

Brand name : PillCam COLON 2 Capsule Endoscopy System

Applicant : Covidien Japan Inc.

Date of application : April 18, 2025

Date of approval : December 19, 2025

Application classification : New medical device Improved medical device (with clinical data)
Improved medical device (without clinical data)

New approval / partial Change : New Approval Partial Change

Review category : Brain and Circulatory Medicine, Respiratory Medicine, Neurology, and Psychiatry
Cardiopulmonary Circulation
Dentistry and Oral Medicine
Gastroenterology, Genitourinary, and Reproductive Medicine
Ophthalmology and Otorhinolaryngology
Orthopedic and Plastic Surgery
Robotics, IoT, and other devices (not classified as other categories)
Program D1
Program D2

Items warranting special mention : Designated as medical devices with high medical need
Designated as specific-usage medical device
Application in accordance with conditional early approval system for medical devices (Type 1)
Application in accordance with conditional early approval system for

medical devices (Type 2: “Physical operation of items’ extrapolative and inclusive approval” (Phoenix))

Application in accordance with the notification on pre- and post-market rebalancing (1st step 2nd step)

Application in accordance with “Improvement design within approval for timely evaluation and notice” (IDATEN)

Designated as orphan medical device

Application in accordance with the 0929 notification

Other ()

Expert Discussion : Yes No

1. Submitted data

(1) Background of the development

The product is a capsule imaging and tracking device to provide images for the diagnosis of colorectal disease. The data captured by the capsule endoscope is processed by software to create a video that deletes images deemed to be of low clinical significance. It also has a Quick-view function to select frames suspected of containing a polyp or a red lesion, and a Collage-view function to trim and display sections of a suspected polyp.

The purpose of this submission is to update the software to improve the ability to delete images deemed to be of low clinical significance and to accommodate the new OS due to the end of support.

(2) Non-clinical Data

The following non-clinical data were submitted (data items were based on applicant submission data).

- Electrical safety and electromagnetic compatibility: data indicating conformity with IEC 60601-1:2005/AMD1:2012/AMD2:2020、IEC 60601-1-2:2014/AND:2020
- Biological safety: Omitted based on identity with the approved product
- Mechanical safety: Omitted based on the identity with the approved product
- Stability and durability: Omitted based on the identity with the approved product
- Performance: Documents that evaluate the proper operation of software functions
- Software Lifecycle Process: data on conformity to IEC 62304:2006/AMD1:2015
- Cyber security: data on conformity to IEC 81001-5-1:2023
- Usability engineering process: data on conformity to IEC 62366-1:2015/AMD 1:2020

(3) Clinical data

The applicant submitted a clinical evaluation report on algorithm validation tests based on data collected from clinical studies conducted in the United States and other countries. The outline of the data submitted is as follows.

For the video generation function for deleting less clinical important images, the number of frames to be deleted and the sensitivity of polyp detection were similar to those of approved product. In addition, the accuracy of polyp detection in Quick-view and Collage-view was similar to that in approved product.

2. Review Results

PMDA concluded that the application for approval based on the clinical evaluation report is acceptable based on the following considerations comprehensively: the clinical study based on the data used in algorithm validation tests was conducted under management at least equivalent to “Ministerial Ordinance on Good Clinical Practice for Medical Devices Ordinance” of Japan; ; and the domestic share of the product is approximately 100% and a stable supply is required.