



August 11, 2020
Medicaroid Corporation

Medicaroid receives Japanese regulatory approval for the “hinotori™ Surgical Robot System”,
the first made-in-Japan robotic assisted surgery system

Medicaroid Corporation (HQ: Kobe, Japan; President: Kaoru Asano; hereinafter referred to as Medicaroid) announces it received regulatory approval from the Japanese Ministry of Health, Labor and Welfare (MHLW) for the hinotori™ Surgical Robot System.

In recent years, along with the progress of minimally invasive surgery that reduces the burden on the patient, there is a growing need for robotic surgery. Japan is one of the world's leading robot powers and has achieved more than half of the world's market share of industrial robots, however, no made-in-Japan surgical robot had been launched on the market.

To meet such expectations for medical robots, Medicaroid was jointly established in 2013 by Kawasaki Heavy Industries, Ltd., a leading company of industrial robots, and Sysmex Corporation, an experienced business player which has expertise in inspection and diagnosis and an extensive network in the medical field. Medicaroid has been developing a medical robot based on the concept of “co-existence of humans and robots” since 2015, and finally achieved Japanese regulatory approval for the hinotori™ Surgical Robot System, as the first made-in-Japan robotic assisted surgery system. For now, Medicaroid aims for prompt introduction in the urology market of Japan.

The hinotori™ Surgical Robot System consists of three components¹: the Surgeon Cockpit, Operation Unit, and Vision Unit. Arms of the Operation Unit are designed to be as compact as human arms, which contributes to smoother operation because it reduces interferences between arms or between an arm and an assistant. The Surgeon Cockpit adopts ergonomic design to fit the postures of surgeons during surgeries. It reduces the physical burden on surgeons and supports stress-free surgeries.

The Vision Unit provides high-definition 3D images on the stereoscopic viewer of the Surgeon Cockpit and supports smooth communication between surgeons and assistants.

The origin of this system's name, Hinotori, is the title of classic manga (graphic novel) “*Hinotori (aka. Phoenix)*” written by Osamu Tezuka as his life's work. He was one of the greatest Japanese manga artists and is known to have had a medical license. Tezuka Productions approved the adoption of the name Hinotori for the surgery system, agreeing with the concept of Medicaroid's robot: “a robot to serve and support humans rather than to replace humans”. Just as Osamu Tezuka continued to face the preciousness of lives through his work “Hinotori”, Medicaroid will keep supporting healthcare workers who face lives through the hinotori™ Surgical Robot System.

Going forward, Medcaroid will continue development to expand the applicable indications for use to make contributions to more patients.

Medcaroid is committed to contribute to a prosperous society where everyone, including patients, their families and medical professionals, can live with peace of mind.

Product Outline

JMDN: Surgical robot unit

Brand name: hinotori™ Surgical Robot System (Approval number: 0200BZX00256000)

HF series instruments (Approval number: 30200BZX00257000)

Target market: Japan and overseas (International sales will start after regulatory approval and certification for each country)

Marketing authorization holder: Medcaroid Corporation

Appearance



Company outline

Name: Medcaroid Corporation

Location: International Medical Device Alliance 6th Floor,
1-6-5 Minatojima Minami-machi, Chuo-ku, Kobe 650-0047, Japan

Establishment: August 29, 2013

Capital: ¥7.96 billion (as of December 31, 2019)

Ownership: Kawasaki Heavy Industries: 50%; Sysmex Corporation: 50%

Representative: President: Kaoru Asano
Executive Vice President, Member of the Managing Board: Hirofumi Tanaka

Lines of business: Marketing, development, design, manufacturing, sales, and after-sales-service related to the medical robot

Notes:

¹ Components of the hinotori™ Surgical Robot System

Surgeon Cockpit: A component where a surgeon controls a 3D videoscope and instruments by operating it using hands and feet while viewing the surgical site in the 3D viewer.

Operation Unit: A component which actually performs a surgical operation by the use of the Surgeon Cockpit.

Vision Unit: A component which integrates the images to display on the surgeon's viewer and controls the voice audio and volume.

Contact: Corporate Planning Department
Tel : 078-303-8770
contact@medicaroid.com