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Medical Technology

Feedback from J-Robo Conference: Summarizing Stances of Sysmex & Olympus Toward Surgical Robots Field

Wider reimbursement for robotic surgery in Japan increases market focus on Sysmex' development of surgical robots among Japanese medtech stocks. The conference also featured comments on Sysmex' approach, and we bring together the main points here.

What's new: Attending a conference of the Japan Robotic Surgery Society (J-Robo) in mid-Feb enabled us to gather information on various subjects, including current penetration of robotic surgery in Japan and issues faced. We do not go into detail here but round up the main points that came to our attention, as well as summarize the approaches of Sysmex and Olympus toward the surgical robot field.

Outline of surgical robot development at Sysmex: Sysmex develops surgical robots via Medcaroid, its JV with Kawasaki Heavy Industries (equal stakes of 50% each). Medcaroid launched a robotic operating table based on industrial robotics in Mar 2017, but separately it is developing a robot for laparoscopic surgery with a launch target of F3/20. We expect some form of update from the company in fall 2018. There is also much call in Japan for cheaper, domestically produced surgical robots in order to bring down the cost of robotic surgery, and we believe the company is aiming to meet such needs.

Medicaroid's development plans as discussed at the conference: One speaker, who is also involved in surgical robot development at Medcaroid, commented on the increasingly high regard in which Intuitive Surgical's new *da Vinci Xi* product is held on a functional basis, and the need for Medcaroid to launch surgical robots of with functions to match *da Vinci Xi*. The company aims to use a robot structure close to *da Vinci Xi* in the interests of bringing products to market as quickly as possible as well, thus lowering the hurdles to approval by the Pharmaceuticals and Medical Devices Agency (PMDA) and shortening the approval process. Such an approach would result in similar performance to *da Vinci Xi* at the time of the initial launch, but the plan is to progressively add on more functions post-launch.

Olympus has a wait-and-see stance: Olympus' Surgical business mainlines in rigid scopes and energy devices used in conventional laparoscopic surgeries performed by humans, so it could feel some effects if robots for use in these procedures took off rapidly. At the same time, Olympus too has a sufficient base in technology to join in development competition in laparoscopic surgical robots,

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and we could also envisage it transforming this into growth potential. However, the company takes the view that penetration will be limited as costs of robotic surgery have yet to fall far enough, and has a reticent stance on surgical robot development while the returns from entry still do not look sufficiently enticing (we think that it might consider entry once cheaper surgical robots have gone on sale and robotic surgery penetrates far enough).

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	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MSC
Overweight/Buy	1175	37%	315	41%	27%	555	39%
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Underweight/Sell	552	18%	87	11%	16%	222	16%
TOTAL	3,149		764			1427	

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Hogy Medical (3593.T)	U (08/30/2017)	¥8,440
MB (2413.T)	O (03/22/2017)	¥4,245
Miraca Holdings (4544.T)	U (10/26/2017)	¥4,020
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Olympus (7733.T)	E (08/30/2017)	¥4,245
Sysmex (6869.T)	E (11/04/2015)	¥8,640
Terumo (4543.T)	U (08/30/2017)	¥5,610

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