

December 20, 2018

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### Revision of Results Forecast for the Fiscal Year Ending December 31, 2018

Carna Biosciences has revised its consolidated results forecast for the fiscal year ending December 31, 2018 (January 1, 2018 to December 31, 2018) announced on February 9, 2018.

#### 1. Revised consolidated results forecast

The consolidated results forecast for the fiscal year ending December 31, 2018 (January 1, 2018 to December 31, 2018) has been revised as below.

(Millions of yen)

	Net sales	Operating income	Ordinary income	Profit attributable to owners of parent	Net profit per share
Previous Forecast (A)	1,190	(679)	(694)	(758)	(79.39)yen
Revised Forecast (B)	753	(1,136)	(1,152)	(1,204)	(124.37)yen
Change from Previous Forecast (B-A)	-437	-457	-458	-446	
Change from Previous Forecast (%)	-36.8%	—	—	—	
(Ref.) December 31, 2017 Results (Previous Year)	657	(699)	(711)	(737)	(78.53) yen

#### 2. Reason of the revision

The company out-licensed its drug candidate SRA141 (formally AS-141) to Sierra Oncology in 2016. Sierra Oncology successfully completed the Investigational New Drug Application (IND) process of SRA141 in the third quarter of 2018 and it is planning for a Phase 1/2 trial in patients with colorectal cancer. Upon dosing of the first patient in the first Phase 1 clinical trial of SRA141, a milestone payment of \$4.0 million will be due to the company, and this milestone payment, originally budgeted for FY2018, is likely to be postponed to FY2019, as it is taking longer than anticipated.

In March 2018, we entered into an agreement with Sumitomo Dainippon Pharma Co., Ltd. on joint research with the aim of discovering novel kinase inhibitors for psychiatric and neurological disorders, and we received an upfront payment in the second quarter of 2018.

Therefore, at the Drug Discovery and Development business, we revised down our sales forecast by 88.6% to 50 million yen as the milestone payment from Sierra Oncology is likely to be received in FY2019 rather than in FY2018.

At the Drug Discovery Support business, we revised down our sales forecast by 6.3% to 703 million yen, 45 million yen or 6.9% year-on-year increase compared to the previous fiscal year. By region, sales have expanded sharply in China, where drug discovery research is becoming increasingly active, thanks to the contribution by our local distributor, Shanghai Universal Biotech Company. The new sales forecast for other region including China is 70 million yen, up 27 million yen from the previous forecast and up 41 million yen from the previous fiscal year. In Europe, sales have been also strong as a result of frequent contacts with the existing customers. The new sales forecast for Europe is 94 million yen, up 14 million yen from the previous forecast and up 29 million yen from the previous fiscal year. In North America, sales from start-up biotech companies and mega pharmaceutical companies have been robust thanks to the strategic approach to our customers. The new sales forecast for North America is 249 million yen, down 10 million yen from the previous forecast and up 39 million

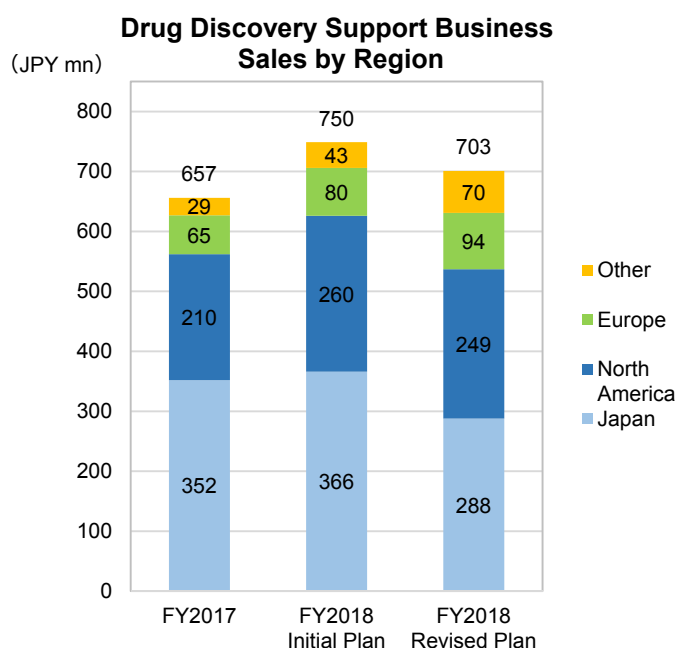
yen from the previous fiscal year. In Japan, sales from Ono Pharmaceutical is expected to decrease year-on-year, and the new sales forecast for Japan is 288 million yen, down 78 million yen from the previous forecast and down 64 million yen from the previous fiscal year.

As a result, Carna Biosciences has downwardly revised its full year consolidated sales forecast by 36.8% to 753 million yen.

For operating profit forecast, we initially expected consolidated operating loss of 679 million yen, operating profit of 150 million yen from the Drug Discovery Support business and operating loss of 829 million yen from the Drug Discovery and Development business. However, we now expect consolidated operating loss of 1,136 million yen, operating profit of 119 million yen from the Drug Discovery Support business and operating loss of 1,256 million yen from the Drug Discovery and Development business. At the Drug Discovery and Development business, we expect operating loss to expand from the previous forecast as we are investing actively in the IND-enabling preclinical studies of our two BTK inhibitor programs. At the Drug Discovery Support business, the operating profit forecast was downwardly revised due to lower than initially expected sales and investment in R&D expense to develop new products and services and to improve qualities.

As a result, we now expect ordinary loss of 1,152 million yen after considering non-operating income and expenses and net loss attributable to the owner of the parent of 1,204 million yen.

We continue to invest actively in our promising preclinical stage programs to initiate clinical studies as soon as possible. At the same time, we accelerate the lead optimization of our compounds to advance them to the next stage.



\* The forward-looking statements in this document have been prepared based on information available at the time of the issuance of this release as well as on the certain assumptions considered by the management to be reasonable. Actual results may differ from this forecast due to variety of factors.

*This document is an English translation of the Japanese original released on December 20, 2018.*