

Financial Summary
Consolidated Financial Results for the Six Months Ended September 30, 2020 (2Q FY2020)
(Japanese standard)

October 26, 2020

Listed company name: JCR Pharmaceuticals Co., Ltd.
Listed stock exchange: Tokyo Stock Exchange
Code number: 4552 URL: <https://www.jcrpharm.co.jp/>
Representative (Title) Representative Director, Chairman and President
(Name) Shin Ashida
Person in charge of inquires (Title) Senior Corporate Officer, Executive Director, Administration Division
(Name) Akihiro Haguchi TEL: 0797(32)1995
Scheduled date to file quarterly report: November 12, 2020
Scheduled date to commence dividend payments: December 10, 2020
Preparation of supplemental information for the financial summary for the quarterly financial results: Yes
IR Conference: To be held (for institutional investors and analysts)

(Fractions smaller than one million yen omitted)

1. Consolidated Financial Results for 2Q FY2020 (Apr. 1, 2020 to Sep. 30, 2020)

(1) Consolidated Operating Results (Cumulative)

(Percentage figures represent year-on-year changes.)

	Net Sales		Operating Income		Ordinary Income		Profit Attributable to Owners of Parent	
	Million yen	%	Million yen	%	Million yen	%	Million yen	%
Six Months Ended								
Sep. 30, 2020	10,951	(2.5)	1,307	31.0	1,351	37.7	1,227	33.0
Sep. 30, 2019	11,236	9.3	998	(48.7)	981	(51.1)	992	(33.0)

(Reference) Comprehensive income: Six months ended Sep. 30, 2020: 1,282 million yen (71.5%),
Six months ended Sep. 30, 2019: 747 million yen ((52.6)%)

	Net income per Share (basic)		Net Income per Share (diluted)	
	Yen	Yen	Yen	Yen
Six Months Ended				
Sep. 30, 2020	9.94		9.89	
Sep. 30, 2019	7.49		7.44	

(Note) We conducted a 4-for-1 stock split on October 1, 2020.

Calculations of "Quarterly net income per share" and "Diluted net income per share" are based on the assumption that the stock split was implemented at the beginning of the previous fiscal year.

(2) Consolidated Financial Position

	Total Assets	Net Assets	Equity Ratio
	Million yen	Million yen	%
As of			
Sep. 30, 2020	59,708	33,472	54.8
Mar. 31, 2020	47,775	32,579	66.6

(Reference) Shareholders' equity: As of Sep. 30, 2020: 32,738 million yen
As of Mar. 31, 2020: 31,806 million yen

2. Dividends

	Dividend per Share				
	1st quarter	2nd quarter	3rd quarter	Year-end	Annual
	Yen	Yen	Yen	Yen	Yen
FY2019	-	15.00	-	17.00	32.00
FY2020	-	18.00	-	-	-
FY2020 (Forecast)	-	-	-	4.50	-

(Note) No adjustment was made to the most recently announced forecast of the dividend.

We conducted a 4-for-1 stock split on October 1, 2020.

For the year-end year-per-share divide for the fiscal year ending March 2021 (forecast), the amount taken into account the effect of the stock split is stated and the total annual divide is stated as "-".

For the fiscal year ending March 31, 2021 (forecast) without taking into account the stock split, the year-end dividend per share would be 18 yen, and the annual dividend per share would be 36 yen.

For details, please refer to "Explanation of the Appropriate Use of Financial Results Forecasts and Other Special Instructions."

3. Consolidated Forecasts for the Fiscal Year Ending Mar. 31, 2021 (Apr. 1, 2020 – Mar. 31, 2021)

(Percentage figures for the fiscal year represent the changes from the previous year.)

Year ending Mar. 31, 2021	Net Sales		Operating Income		Ordinary Income		Profit Attributable to Owners of Parent		Net Income per Share
	Million yen	%	Million yen	%	Million yen	%	Million yen	%	Yen
	27,200	9.8	6,000	84.9	6,000	82.2	4,800	79.2	38.86

(Note) No adjustment was made to the most recently announced forecast of financial results.

We conducted a 4-for-1 stock split on October 1, 2020.

The effect of the stock split is taken into account for the net Profit per Share in the forecast of the fiscal year ending March 2021.

For details, please refer to "Explanation of the Appropriate Use of Financial Results Forecasts and Other Special Instructions."

* Note

(1) There was no transfer of important subsidiary (transfer of a specific subsidiary resulting in changes in the scope of the consolidation) during the Six months ended Sep. 30, 2020.

(2) No specific accounting process was applied to the preparation of the quarterly consolidated financial statements.

(3) Changes in accounting policy, changes in accounting estimates and retrospective restatement

1. Changes in accounting policy due to the revision of accounting standards, etc.: None
2. Changes in accounting policy other than 1: None
3. Changes in accounting estimates: None
4. Retrospective restatement: None

(4) Number of outstanding shares (common shares)

1. Number of outstanding shares as of the end of the term (including treasury stock)
2. Number of treasury stock as of the end of the term
3. Average number of shares during the term (quarterly cumulative amount)

As of Sep. 30, 2020	129,686,308 shares	As of Mar. 31, 2020	129,686,308 shares
As of Sep. 30, 2020	6,103,184 shares	As of Mar. 31, 2020	6,369,036 shares
As of Sep. 30, 2020	123,427,591 shares	As of Sep. 30, 2019	123,255,700 shares

(Note) We conducted a 4-for-1 stock split on October 1, 2020.

The number of outstanding shares at the end of the period, the number of treasury shares at the end of the period, and the average number of shares during the period have been calculated as if this stock split had taken place at the beginning of the previous fiscal year.

* The quarterly financial statements are outside of the scope of quarterly review by a certified public accountant or an audit firm.

* Explanation on the appropriate use of the forecasts of financial results and other comments

(Note on forward-looking statements, etc.)

The forward-looking statements such as the forecasts of financial results contained in this document are based on the information that the company currently holds and certain assumption that the company judges as rational. The company does not assure the achievement of those forecasts. In addition, actual financial results may differ significantly from forecasts due to various reasons. For the assumptions underlying the forecasts of financial results and notes for the appropriate use of the forecasts of financial results, please refer to the attached material on Page 4, "1. Qualitative information for the quarterly financial statements (3) Explanation on projections such as forecasts of consolidated financial results."

(Dividends paid and Consolidated Earnings Forecasts after the Stock Split)

At a meeting of the Board of Directors held on August 26, 2020, the Company resolved on a stock split and conducted a 4-for-1 stock split on October 1, 2020.

Dividend forecasts and consolidated earnings forecasts for the fiscal year ending March 31, 2021, calculated prior to the stock split, are as follows.

Dividend forecast for the year ending March 1, 2021

Dividends per share End of 2nd Quarter: 18.00 yen (Note 1) Year-end: 18.00 yen (Note 2)

Forecasts for the fiscal year ended March 31, 2, 2021

Earnings per share Full-year 155.44 yen

(Note 1) Dividends paid at the end of the second quarter will be paid on the number of shares before the stock split.

(Note 2) Figures are dividends paid calculated before considering stock splits.

(Note 3) The annual dividend for the year ended March 31, 2021 (prior to the stock split) is 36.00 yen.

○ Table of Contents for Attached Material

1.	Qualitative information for the quarterly financial statements	2
	(1) Explanation on financial results	2
	(2) Explanation on financial status	4
	(3) Explanation of Consolidated Earnings Forecasts and Other Forward-Looking Information.....	5
2.	Quarterly consolidated financial statements and important notes	6
	(1) Quarterly consolidated balance sheets	6
	(2) Quarterly consolidated statements of income and quarterly consolidated statements of comprehensive income	8
	(Quarterly consolidated statements of income).....	8
	(Quarterly consolidated statements of comprehensive income).....	9
	(3) Consolidated Statements of Cash Flows	10
	(4) Notes for quarterly consolidated financial statements.....	11
	(Notes for going concern assumption)	11
	(Notes for any significant changes in the amount of shareholders' equity)	11
	(Additional Information).....	11
3.	Other.....	12
	R&D Pipeline	12

1. Qualitative information for the quarterly financial statements

(1) Explanation on financial results

[1] Financial results during 2Q FY2020

Net sales amounted to 10,951 million yen (down 2.5% year on year).

Sales of mainstay products, such as our core product GROWJECT[®], a recombinant human growth hormone product, increased year on year, due to an increase in sales volume, although there were NHI price revisions in April 2020. Meanwhile, revenue from licensing decreased year on year. Consequently, the JCR Group's overall net sales declined year on year.

On the profit front, SG&A expenses, including R&D expenses, decreased year on year, mainly owing to efforts to raise operating efficiency. Through these and other efforts, profits increased year on year at every level, with operating income of 1,307 million yen (up 31.0%), ordinary income of 1,351 million yen (up 37.7%), and profit attributable to owners of parent of 1,227 million yen (up 33.0% year on year).

R&D expenses decreased by 26.0% from the previous fiscal year to 2,407 million yen (down 847 million yen year on year).

	Previous Quarterly consolidated (Cumulative) (From April 1, 2019 to Sep. 30, 2019)	Current Quarterly consolidated (Cumulative) (From April 1, 2020 to Sep. 30, 2020)	Increase- decrease rate
	Amount (millions of yen)	Amount (millions of yen)	%
Net sales	11,236	10,951	(2.5)
Operating income	998	1,307	31.0
Ordinary income	981	1,351	37.7
Profit attributable to owners of the parent	922	1,227	33.0

[2] Main components of sales

	Previous Quarterly consolidated (Cumulative) (From April 1, 2019 to Sep. 30, 2019)	Current Quarterly consolidated (Cumulative) (From April 1, 2020 to Sep. 30, 2020)	Increase- decrease rate
	Amount (millions of yen)	Amount (millions of yen)	%
Human growth hormone product GROWJECT [®]	6,235	6,538	4.9
Regenerative medical products TEMCELL [®] HS Inj.	1,527	784	(48.6)
Treatment for renal anemia	2,272	3,390	49.2
Epoetin Alfa BS Inj. [JCR]	2,272	1,696	(25.4)
Darbepoetin Alfa BS Inj. [JCR]	-	1,694	-
Treatment for Fabry disease Agalsidase Beta BS I.V. Infusion [JCR]	123	220	79.1
Income from contractual payment	1,002	10	(99.0)

(Notes) 1: Sales of Epoetin Alfa BS Inj. [JCR], a short-acting renal anemia treatment, decreased due to the impact of the launch of Darbepoetin Alfa BS Inj. [JCR], a long-acting renal anemia treatment, in November 2019. However, total sales of renal anemia treatments increased year on year.

2: The year-on-year decrease in revenue from licensing was due to the postponement of revenue from licensing that had been expected to be recorded in the six months ended September 30, 2020 to the third quarter (three months ending December 31, 2020) onward. This postponement reflected the fact that JCR was unable to reach an agreement on licensing out enzyme replacement therapies (ERT) for lysosomal storage disorders (LSDs) by the end of September because face-to-face negotiations were hindered by the spread of COVID-19, among other factors.

[3]The status of R&D

[Lysosomal Disease Drugs]

- In treatments for lysosomal storage disorders, a priority field for development, we are currently conducting development of new drugs that employ our unique blood-brain barrier (BBB) penetration technology, J-Brain Cargo®.
- In September 2020, we filed for marketing approval of Pabinafusp Alfa (development code: JR-141), our blood-brain barrier (BBB) penetrating product candidate for the treatment of patients with Hunter syndrome. In March 2018, the Ministry of Health, Labour and Welfare of Japan (MHLW) designated JR-141 as a covered item under the SAKIGAKE Designation System in Japan. In Brazil, we initiated Phase II clinical trial in June 2018. In other regions, we have also been proceeding with preparations for global development. Notably, JR-141 received orphan drug designation from the U.S. Food and Drug Administration (FDA) in October 2018 and the European Medicines Agency (EMA) in February 2019. We have been conducting discussions with the FDA on initiating global Phase III clinical trial.
- We submitted Phase I/II investigational new drug for our BBB-penetrating product candidate for the treatment of patients with mucopolysaccharidosis type I (MPS I) (development code: JR-171), to the Pharmaceuticals and Medical Devices Agency (PMDA) in Japan in July 2020, and to the Brazilian Health Regulatory Agency (ANVISA) in Brazil in October 2020. These were received by both the PMDA and ANVISA. The study will be conducted as JCR's first global clinical trial. It will be initiated first in Japan, before being started in Brazil and the U.S.
- We have also been successively conducting R&D into other treatments for lysosomal storage disorders that employ J-Brain Cargo®, including a treatment for Pompe disease (development code: JR-162), a treatment for Sanfilippo syndrome type A (development code: JR-441), a treatment for Sly syndrome (development code: JR-443), and a treatment for Sanfilippo syndrome type B (development code: JR-446). We will also develop each of these treatments globally.

[Regenerative medical products]

- In July 2019, we commenced Phase I/II clinical trial of TEMCELL® HS Inj. for the additional indication of neonatal hypoxic ischemic encephalopathy (HIE) (development code: JR-031HIE).
- In February 2019, we commenced Phase I/II clinical trial of an allogeneic regenerative medical product using dental pulp stem cells (DPCs) for the indication of acute cerebral infarction (development code: JTR-161/JR-161).

[Human growth hormone preparations].

- In July 2018, we started a Phase III clinical trial for an additional indication for GROWJECT® in patients with short stature homeobox-containing gene (SHOX) deficiency
- In May 2019, we initiated a Phase I clinical trial of a recombinant long-acting growth hormone (development code: JR-142).

(2) Explanation on financial status

① Financial position

As of September 30, 2020, total assets amounted to 59,708 million yen (an increase of 11,932 million yen from March 31, 2020), total liabilities were 26,236 million yen (an increase of 11,040 million yen from March 31, 2020), and net assets were 33,472 million yen (an increase of 892 million yen from March 31, 2020).

Current assets increased by 9,161 million yen from March 31, 2020 to 37,504 million yen, mainly due to an increase in cash and deposits, which was partly offset by a decrease in notes and accounts payable-trade. Noncurrent assets increased by 2,771 million yen from March 31, 2020 to 22,204 million yen, mainly due to insertion of patent right following acquisition of ArmaGen, Inc. in U.S.

Current liabilities increased by 10,321 million yen from March 31, 2020 to 20,755 million yen, mainly due to increases in short-term loans payable.

Non-current liabilities increased by 719 million yen from March 31, 2020 to 5,480 million yen, mainly due to increases in bonds payable and long-term borrowings.

Net assets increased by 892 million yen from March 31, 2020 to 33,472 million yen. This decrease was mainly due to insertion of profit attributable to owners of parent, despite the payment of dividends.

As a result, the equity ratio was 54.8% as of September 30, 2020, a decrease of 11.8 percentage point from March 31, 2020.

At this point in time, the JCR Group has not felt the impact of the COVID-19 pandemic, other than having to postpone the timing of recording revenue from licensing to the third quarter onward. However, the global outlook remains uncertain. In order to achieve sustainable global growth, we need to secure a flexible and stable source of funds. In the six months ended September 30, 2020, we concluded commitment line agreements with our financial institutions for a total of 15.5 billion yen for the purpose of securing operating funds as a backup plan.

② Cash Flows

Cash and cash equivalents stood at 19,565 million yen as of September 30, 2020, an increase of 8,637 million yen from March 31, 2020. The status of cash flows from operating, investing, and financing activities and the main reasons for changes are as follows.

(Cash flows from operating activities)

Net cash provided by operating activities was 4,232 million yen (an increase of 1,283 million yen from the same period of the previous fiscal year). The main contributing factors were income before income taxes of 1,381 million yen, depreciation and amortization of 872 million yen, and a decrease in notes and accounts receivable-trade of 1,462 million yen.

(Cash flows from investing activities)

Net cash used in investing activities was 4,484 million yen (an increase of 871 million yen from the same period of the previous fiscal year). The main uses of cash were 2,747 million yen for the purchase of patent rights, and 1,437 million yen for the purchase of property, plant and equipment.

(Cash flows from financing activities)

Net cash provided by financing activities was 8,867 million yen (an increase of 6,272 million yen from the same period of the previous fiscal year). This result was mainly attributable to an increase in short-term loans payable of 9,070 million yen, while there were cash dividends paid of 525 million yen.

(3) Explanation of Consolidated Earnings Forecasts and Other Forward-Looking Information

As stated in (1) Explanation on financial results, the JCR Group's consolidated financial results for the six months ended September 30, 2020 showed lower net sales and profits compared with initial forecasts, mainly due to the postponement of revenue from licensing to the third quarter onward. The postponed revenue from licensing involved the licensing out of enzyme replacement therapies for lysosomal storage disorders.

Looking at the consolidated forecasts for the fiscal year ending March 31, 2021, we have maintained the full-year forecasts announced on May 12, 2020. We are currently negotiating agreements on matters such as the licensing out of enzyme replacement therapies for lysosomal storage disorders. If revisions become necessary based on future business performance trends, JCR will promptly disclose those revisions. The consolidated forecasts for the fiscal year ending March 31, 2021 are as follows.

	Net Sales		Operating Income		Ordinary Income		Profit Attributable to Owners of Parent		Net Income per Share
	Million yen	%	Million yen	%	Million yen	%	Million yen	%	Yen
Year ending Mar. 31, 2021	27,200	9.8	6,000	84.9	6,000	82.2	4,800	79.2	38.86

2. Quarterly consolidated financial statements and important notes

(1) Quarterly consolidated balance sheets

(Millions of yen)

	As of March 31, 2020	As of September 30, 2020
Assets		
Current assets		
Cash and deposits	10,973	19,910
Notes and accounts receivable - trade	7,977	6,515
Securities	220	212
Merchandise and finished goods	880	1,239
Work in process	2,929	3,068
Raw materials and supplies	5,046	6,110
Other	315	447
Total current assets	28,342	37,504
Non-current assets		
Property, plant and equipment		
Buildings and structures, net	5,115	5,474
Land	5,664	5,664
Construction in progress	2,283	894
Other, net	1,811	2,366
Total property, plant and equipment	14,875	14,400
Intangible assets		
Patent right	—	3,126
Other	263	239
Total intangible assets	263	3,366
Investments and other assets		
Investment securities	2,408	2,466
Other	1,909	1,976
Allowance for doubtful accounts	△23	△4
Total investments and other assets	4,294	4,437
Total non-current assets	19,433	22,204
Total assets	47,775	59,708
Liabilities		
Current liabilities		
Notes and accounts payable - trade	679	1,103
Short-term loans payable	4,880	13,600
Income taxes payable	534	1,039
Provision for bonuses	713	856
Provision for bonuses for directors (and other officers)	77	31
Other	3,549	4,124
Total current liabilities	10,434	20,755
Non-current liabilities		
Long-term loans payable	3,800	4,000
Bonds payable	—	500
Provision for loss on guarantees	108	95
Retirement benefit liability	730	748
Other	122	136
Total non-current liabilities	4,761	5,480
Total liabilities	15,195	26,236

(Millions of yen)

	As of March 31, 2020	As of September 30, 2020
Net assets		
Shareholders' equity		
Capital stock	9,061	9,061
Capital surplus	10,891	10,928
Retained earnings	15,039	15,737
Treasury stock	△3,865	△3,703
Total shareholders' equity	31,127	32,024
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	583	625
Deferred gains or losses on hedges	—	△0
Foreign currency translation adjustment	134	115
Remeasurements of defined benefit plans	△39	△27
Total accumulated other comprehensive income	679	713
Subscription rights to shares	584	544
Non-controlling interests	189	190
Total net assets	32,579	33,472
Total liabilities and net assets	47,775	59,708

(2) Quarterly consolidated statements of income and quarterly consolidated statements of comprehensive income
(Quarterly consolidated statements of income)

(Millions of yen)

	Six months ended September 30, 2019	Six months ended September 30, 2020
Net sales	11,236	10,951
Cost of sales	3,173	3,513
Gross profit	8,063	7,438
Selling, general and administrative expenses	7,064	6,130
Operating profit	998	1,307
Non-operating income		
Interest income	7	3
Dividend income	12	11
Foreign exchange gains	—	54
Other	9	21
Total non-operating income	28	91
Non-operating expenses		
Interest expenses	10	18
Commission expenses	—	4
Foreign exchange losses	30	—
Other	4	23
Total non-operating expenses	46	47
Ordinary income	981	1,351
Extraordinary income		
Reversal of provision for loss on guarantees	118	12
Reversal of allowance for doubtful accounts	—	19
Total extraordinary income	118	31
Extraordinary losses		
Loss on disposal of non-current assets	2	1
Total extraordinary losses	2	1
Profit before income taxes	1,098	1,381
Income taxes - current	473	809
Income taxes - deferred	△299	△659
Total income taxes	173	150
Profit	924	1,231
Profit attributable to non-controlling interests	1	4
Profit attributable to owners of parent	922	1,227

(Quarterly consolidated statements of comprehensive income)

(Millions of yen)

	Six months ended September 30, 2019	Six months ended September 30, 2020
Profit	924	1,231
Other comprehensive income		
Valuation difference on available-for-sale securities	△201	28
Deferred gains or losses on hedges	—	△0
Foreign currency translation adjustment	△22	△21
Remeasurements of defined benefit plans, net of tax	48	44
Total other comprehensive income	△176	51
Comprehensive income	747	1,282
Comprehensive income attributable to		
Comprehensive income attributable to owners of parent	746	1,281
Comprehensive income attributable to non-controlling interests	1	0

(3) Consolidated Statements of Cash Flows

(Millions of yen)

	Six months ended September 30, 2019	Six months ended September 30, 2020
Cash flows from operating activities		
Income before income taxes	1,098	1,381
Depreciation	658	872
Increase (decrease) in provision for loss on guarantees	△118	△12
Increase (decrease) in net defined benefit liability	23	25
Increase (decrease) in net defined benefit asset	7	10
Increase (decrease) in provision for bonuses	121	143
Share-based compensation expenses	175	149
Interest and dividend income	△19	△15
Interest expenses	10	18
Foreign exchange losses (gains)	23	△43
Decrease (increase) in trade receivables	2,098	1,462
Decrease (increase) in accounts receivable - other	25	△63
Decrease (increase) in inventories	△860	△1,562
Increase (decrease) in trade payables	379	423
Increase (decrease) in accounts payable - other	195	△85
Increase (decrease) in accrued consumption taxes	△334	△90
Increase (decrease) in advances received	△37	1,931
Other, net	173	71
Subtotal	3,619	4,616
Interest and dividends received	21	19
Interest expenses paid	△10	△23
Income taxes (paid) refund	△680	△380
Net cash provided by (used in) operating activities	2,949	4,232
Cash flows from investing activities		
Payments into time deposits	—	△300
Proceeds from sales and redemption of securities	240	—
Purchase of property, plant and equipment	△3,746	△1,437
Purchase of patent	—	△2,747
Other, net	△106	0
Net cash provided by (used in) investing activities	△3,612	△4,484
Cash flows from financing activities		
Net increase (decrease) in short-term loans payable	1,000	9,070
Proceeds from long-term loans payable	2,200	300
Repayments of long-term loans payable	—	△450
Proceeds from issuance of bonds	—	500
Repayments of lease obligations	△88	△37
Net decrease (increase) in treasury shares	10	8
Cash dividends paid	△525	△525
Other, net	△1	1
Net cash provided by (used in) financing activities	2,595	8,867
Effect of exchange rate change on cash and cash equivalents	△55	21
Net increase (decrease) in cash and cash equivalents	1,876	8,637
Cash and cash equivalents at beginning of period	8,091	10,928
Cash and cash equivalents at end of period	9,968	19,565

(4) Notes for quarterly consolidated financial statements

(Notes for going concern assumption)

None

(Notes for any significant changes in the amount of shareholders' equity)

None

(Additional Information)

(Acquisition of patent right through acquisition of ArmaGen, Inc.)

At a meeting of the Board of Directors held on February 27, 2020, JCR passed a resolution to acquire ArmaGen, Inc. and completed the acquisition on April 10. JCR judged that it could secure its competitive edge by acquiring ArmaGen's technological assets, including intellectual property rights for its blood-brain barrier (BBB) penetration technology. The acquisition is accounted for the acquisition of assets.

1. Outline of acquisition of ArmaGen's shares

(1) Outline of share purchase

1) Name, business and scale of counterparty to share purchase

Name of acquired company: ArmaGen, Inc. (ArmaGen)

Location: San Diego, California, USA

Business: Development of innovative drugs, originally or jointly with other companies, to treat various types of mucopolysaccharidoses and other lysosomal storage disorders (LSDs) based on BBB penetration technology (base technology).

Scale: Share capital: 41 thousand USD (As of December 31, 2019)

Total assets: 1,244 thousand USD (As of December 31, 2019)

2) Purpose of share purchase

JCR is currently focused on the research and development of innovative drugs for LSDs on the platform of its unique BBB penetration technology, J-Brain Cargo[®]. ArmaGen is developing innovative drugs using its proprietary BBB penetration technology. ArmaGen has filed for and obtained a portfolio of intellectual property rights applicable to a broad spectrum of diseases, including LSDs, in several key markets around the world, such as the U.S.

JCR has extensively studied its strategy for developing treatment options for LSDs in the global market. Based on these studies, JCR has judged that it can solidify its technology led by acquiring ArmaGen's technology assets, including the intellectual property rights for its BBB penetration technology.

3) Date of share purchase

April 10, 2020

4) Number of shares to acquire and ownership ratio after acquisition

Number of shares to acquire: 100 shares*

Ownership ratio after acquisition: 100%

*JCR has owned 100 shares of ArmaGen after the merger by establishing specific purpose company with wholly owned investment of the Company as a subsidiary, merging (Cash-out Merger) the subsidiary with ArmaGen and turning the surviving company into ArmaGen.

(2) Acquisition cost of the acquired company

The acquisition cost is determined at an appropriate amount based on discussions between the two parties, based on the results of the calculation of the share value by an outside expert. However, the acquisition cost, etc. will not be disclosed as agreed upon by the parties.

(3) Financing and Payment Method

By own fund.

2. Acquisition of patent right (Acquisition cost, amortization method and amortization period)

Acquisition cost of patent right	29,858 thousand USD (3,287 million yen)
Amortization method	Straight-line method
Weighted-average amortization period	11.88 years

3. Other

R&D Pipeline

Recombinant drug products

Code	Status	Indication
		Remarks
JR-141 BBB-penetrating iduronate -2-sulfatase (rDNA origin)	Japan: Application for approval Brazil: Phase II	Mucopolysaccharidosis II (Hunter syndrome)
		ERT J-Brain Cargo®
JR-171 BBB-penetrating α -L-iduronidase (rDNA origin)	Phase I / II	Mucopolysaccharidosis I (Hurler syndrome, etc)
		ERT J-Brain Cargo® J-MIG System®
JR-162 J-Brain Cargo®-applied acid α -glucosidase (rDNA origin)	Preclinical	Pompe disease
		ERT J-Brain Cargo®
JR-441 BBB-penetrating heparan N-sulfatase (rDNA origin)	Preclinical	Mucopolysaccharidosis III A (Sanfilippo syndrome type A)
		ERT J-Brain Cargo®
JR-443 BBB-penetrating β -glucuronidase (rDNA origin)	Preclinical	Mucopolysaccharidosis VII (Sly syndrome)
		ERT J-Brain Cargo®
JR-446 BBB-penetrating α -N-acetylglucosaminidase (rDNA origin)	Preclinical	Mucopolysaccharidosis III B (Sanfilippo syndrome type B)
		ERT J-Brain Cargo®
JR-401X Somatotropin (rDNA origin)	Phase III	SHOX deficiency
		Expanded Indication of GROWJECT®
JR-142 Long-acting growth hormone (rDNA origin)	Phase I	Pediatric growth hormone deficiency
		J-MIG System®
JR-041 Follicle stimulating hormone (rDNA origin)	Phase I / II	Infertility
		Out-licensed ASKA Pharmaceuticals Co., Ltd.

(Note) ERT = Enzyme Replacement Therapy

Allogeneic regenerative medical products

Code	Status	Indication
		Remarks
JR-031EB Human mesenchymal stem cells	Application withdrawn in September 2019 (Future development plans are under review.)	Epidermolysis bullosa
		Expanded Indication of TEMCELL® HS Inj.
JR-031HIE Human mesenchymal stem cells	Phase I / II	Hypoxic ischemic encephalopathy in neonates
		Expanded Indication of TEMCELL® HS Inj.
JTR-161/JR-161 Dental pulp stem cells (DPCs)	Phase I / II	Acute cerebral infarction
		Co-development with Teijin Limited