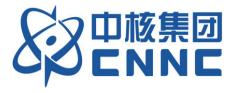
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CHINA ISOTOPE & RADIATION CORPORATION

中國同輻股份有限公司

(A joint stock company incorporated in the People's Republic of China with limited liability)

(Stock Code: 1763)

ANNOUNCEMENT OF ANNUAL RESULTS FOR THE YEAR ENDED 31 DECEMBER 2022

ANNUAL RESULTS

The board of directors (the "Board") of China Isotope & Radiation Corporation (the "Company" or "CIRC", together with its subsidiaries, the "Group" or "we") is pleased to announce the consolidated financial statements of the Group for the year ended 31 December 2022 ("2022" or the "Reporting Period") audited by SHINEWING (HK) CPA Limited, the Company's auditor, together with the comparative figures for the same period of 2021, as follows:

CONSOLIDATED STATEMENT OF PROFIT OR LOSS for the year ended 31 December 2022

(Expressed in Renminbi ("RMB"))

	Notes	2022 RMB'000	2021 <i>RMB'000</i>
Revenue Cost of sales	4	6,146,172 (2,631,493)	5,143,694 (1,901,790)
Gross profit		3,514,679	3,241,904
Other income, gains and losses Selling and distribution expenses Administrative expenses Research and development costs Impairment losses on trade and other receivables	5	91,183 (1,787,952) (573,463) (300,510) (31,193)	61,569 (1,820,458) (497,984) (196,214) (10,996)
Profit from operations		912,744	777,821
Finance costs Share of profits less losses of associates Share of profits of joint ventures	6(a)	(34,399) 8,618 33,548	(35,803) 6,962 53,698
Profit before taxation Income tax expense	6 7	920,511 (165,947)	802,678 (129,641)
Profit for the year	<u>.</u>	754,564	673,037
Attributable to: Equity shareholders of the Company Non-controlling interests Profit for the year	- -	391,605 362,959 754,564	335,751 337,286 673,037
Earnings per share Basic and diluted (RMB)	8	1.22	1.05

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

for the year ended 31 December 2022

(Expressed in Renminbi)

	2022 RMB'000	2021 <i>RMB'000</i>
Profit for the year	754,564	673,037
Other comprehensive income for the year (after tax and reclassification adjustments) Item that may be reclassified subsequently to profit or loss		
Exchange differences on translation of share of profits less losses of an associate	-	(2,623)
Items that will not be reclassified to profit or loss Remeasurement of defined benefit liability Equity investments at FVOCI-net movement in	(3,374)	(1,469)
fair value reserve (non-recycling)	15,523	10,047
Other comprehensive income for the year	12,149	5,955
Total comprehensive income	766,713	678,992
Attributable to:		
Equity shareholders of the Company Non-controlling interests	405,135 361,578	341,921 337,071
Total comprehensive income for the year	766,713	678,992

CONSOLIDATED STATEMENT OF FINANCIAL POSITION at 31 December 2022

(Expressed in Renminbi)

	Notes	2022 RMB'000	2021 <i>RMB'000</i>
Non-current assets Property, plant and equipment Investment properties Intangible assets Goodwill Interests in associates Interests in joint ventures Long-term receivables Unquoted equity investments Deferred tax assets Other non-current assets		2,820,749 49,604 160,876 30,764 165,096 512,867 38,997 162,494 221,484 9,899	2,512,947 19,670 156,496 44,036 52,500 594,252 37,176 150,410 214,445 35,255
		4,172,830	3,817,187
Current assets Inventories Contract assets Trade and bill receivables Deposits and other receivables Prepayments Cash at bank and on hand	10	677,636 27,359 3,501,338 146,462 236,724 2,923,191 7,512,710	691,923 29,424 2,821,153 153,733 212,358 2,748,190 6,656,781
Current liabilities Bank loans Corporate bond Trade payables Accruals and other payables Lease liabilities Provisions Income tax payable	11	18,196 - 488,288 3,270,735 28,520 86,322 95,729	118,084 499,996 337,856 2,816,406 53,368 76,554 69,398
Total current liabilities		3,987,790	3,971,662
Net current assets		3,524,920	2,685,119
Total assets less current liabilities	!	7,697,750	6,502,306

	2022 <i>RMB'000</i>	2021 <i>RMB'000</i>
Non-current liabilities	KMD 000	KMB 000
Bank loans	786,513	144,680
Deferred income	60,001	43,875
Lease liabilities	51,631	40,500
Defined benefit retirement obligation	53,940	49,898
Deferred tax liabilities	18,242	17,347
Provisions	137,885	131,706
Other long-term payables	36,255	42,912
Total non-current liabilities	1,144,467	470,918
Net assets	6,553,283	6,031,388
Capital and reserves		
Capital	319,875	319,875
Reserves	4,145,412	3,859,415
Total equity attributable to equity		
shareholders of the Company	4,465,287	4,179,290
Non-controlling interests	2,087,996	1,852,098
Total equity	6,553,283	6,031,388

1. STATEMENT OF COMPLIANCE

These consolidated financial statements have been prepared in accordance with all applicable International Financial Reporting Standards ("IFRSs"), which collective term includes all applicable individual International Financial Reporting Standards, International Accounting Standards ("IASs") and Interpretations issued by the International Accounting Standards Board ("IASB") and the applicable disclosure requirements of the Hong Kong Companies Ordinance. These consolidated financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on the Stock Exchange. Significant accounting policies adopted by the Group are disclosed below.

The IASB has issued certain amendments to IFRSs that are first effective or available for early adoption for the current accounting period of the Group. Note 3 provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current and prior accounting periods reflected in these consolidated financial statements.

2. BASIS OF PREPARATION OF THE FINANCIAL STATEMENTS

The consolidated financial statements for the year ended 31 December 2022 comprise the Company and its subsidiaries (together referred as the "Group") and the Group's interest in associates and joint ventures.

The measurement basis used in the preparation of the financial statements is the historical cost basis except that the equity investments are stated at their fair value.

The preparation of consolidated financial statements in conformity with IFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

3. CHANGES IN ACCOUNTING POLICIES

The Group has applied the following amendments to IFRSs issued by the IASB to these financial statements for the current accounting period:

Amendments to IFRS 3	Reference to the Conceptual Framework
Amendments to IAS 16	Property, plant and equipment: Proceeds before Intended Use
Amendments to IAS 37	Onerous Contracts – Cost of fulfilling a contract
Amendments to IFRSs	Annual Improvement to IFRSs 2018-2020 Cycle

In addition, the Group applied the agenda decision of the International Financial Reporting Standards Interpretations Committee (the "IFRS Interpretations Committee") of the International Accounting Standards Board which are relevant to the Group.

None of these developments have had a material effect on how the Group's results and financial position for the current or prior years have been prepared or presented in this financial report.

4. REVENUE AND SEGMENT REPORTING

(a) Revenue

The Group is principally engaged in research, development, manufacturing and sale of a broad range of pharmaceuticals and radioactive source products, also design, manufacturing, construction and installation of gamma ray irradiation facilities, provision of irradiation service for sterilisation purpose, and sale of radiation therapy equipment as well as independent clinical laboratory services.

(i) Disaggregation of revenue

Disaggregation of revenue from contracts with customers by major products or service lines is as follows:

	2022 RMB'000	2021 RMB'000
Revenue from contracts with customers within the scope of IFRS 15		
Disaggregated by major products of service lines		
- sales of pharmaceuticals	3,880,262	3,742,267
 sales of radioactive source products 	533,725	488,772
– sales of radiation therapy equipment	502,731	195,726
- sales of medical device	171,843	113,445
 sales of detection kit 	152,669	14,324
– irradiation services	151,175	135,870
 technical services 	232,052	169,282
 revenue from construction contracts 	60,366	47,569
 independent clinical laboratory services 	384,777	227,800
– others	76,572	8,639
	6,146,172	5,143,694

Disaggregation of revenue from contracts with customers by the timing of revenue recognition is disclosed in Note 4(b).

The Group's customer base is diversified and there is no customer with whom transactions have exceeded 10% of the Group's revenue in 2022 and 2021.

(ii) Revenue expected to be recognised in the future arising from contracts with customers in existence at the reporting date.

As at 31 December 2022, the aggregated amount of the transaction price allocated to the remaining performance obligations under the Group's existing contracts is approximately RMB23,817,000 (2021: RMB4,283,000). This amount mainly represents revenue expected to be recognised in the future from construction contracts entered into by the customers with the Group. The Group will recognise the expected revenue in future when or as the work is completed, which is expected to occur within the next 12 months.

The Group has applied the practical expedient in paragraph 121 of IFRS 15 to its sales contracts such that the above information does not include information about revenue that the Group will be entitled to when it satisfies the remaining performance obligations under the sales contracts that had an original expected duration of one year or less.

The above amount also does not include any amounts of completion bonuses that the Group may earn in the future by meeting the conditions set out in the Group's construction contracts with customers, unless at the reporting date it is highly probable that the Group will satisfy the conditions for earning those bonuses.

(b) Segment reporting

The Group manages its businesses by divisions, which are mainly organised by business lines (products and services). In a manner consistent with the way in which information is reported internally to the Group's most senior executive management for the purposes of resource allocation and performance assessment, the Group has presented the following five reportable segments. No operating segments have been aggregated to form the following reportable segments.

- Pharmaceuticals: manufacturing and sale of a range of imaging diagnostic and therapeutic radio pharmaceuticals imaging, UBT diagnostic kits and test analyzers, in vitro immunoassay diagnostic reagents and kits and other products.
- Radioactive source products: sale of medical and industrial radioactive source products and technical services.
- Irradiation: provision of irradiation services to manufacturers of medical facilities, pharmaceuticals, cosmetics and food in the PRC for sterilization purposes, and also design, manufacturing and installation of gamma ray irradiation facilities to irradiation service providers.
- Radiation therapy equipments and related services: sale of radiation therapy equipments and provision of related maintenance services.
- Independent clinical laboratory services and other businesses: provision of independent clinical laboratory services for customers, sale of radiation therapy equipment and other miscellaneous services.

(i) Segment results, assets and liabilities

For the purposes of assessing segment performance and allocating resources among segments, the Group's senior executive management monitors the results attributable to each reportable segment on the following basis:

Revenue and expenses are allocated to the reportable segments with reference to revenue generated by those segments and the expenses incurred by those segments. The measure used for reporting segment profit is gross profit. The Group's other income and expense items, such as other income, selling and distribution expenses, administrative and other operating expenses, and assets and liabilities, are not measured under individual segments. Accordingly, neither information on segment assets and liabilities nor information concerning capital expenditure, interest income and interest expenses is presented.

Disaggregation of revenue from contracts with customers by timing of revenue recognition, as well as information regarding the Group's reportable segments as provided to the Group's most senior executive management for the purposes of resource allocation and assessment of segment performance for the years ended 31 December 2022 and 2021 is set out below.

		Y	ear ended 31 De	ecember 2022		
	Pharmaceuticals <i>RMB'000</i>	Radioactive source products RMB'000	Irradiation <i>RMB'000</i>	Radiation therapy equipment and related services RMB'000	Independent clinical medical and laboratory services and other businesses RMB'000	Total <i>RMB'000</i>
Disaggregated by timing of						
revenue recognition						
Point in time	3,923,267	580,929	151,175	514,012	745,106	5,914,489
Over time			13,513	218,170		231,683
Revenue from external customers	3,923,267	580,929	164,688	732,182	745,106	6,146,172
Inter-segment revenue	1,793	37,508	132	7,796	9,263	56,492
Reportable segment revenue	3,925,060	618,437	164,820	739,978	754,369	6,202,664
Reportable segment profit						
(gross profit)	2,823,082	282,878	85,057	143,754	272,740	3,607,511
		Ŋ	Year ended 31 De	ecember 2021		
	Pharmaceuticals RMB'000	Radioactive source products RMB'000	Irradiation RMB'000	Radiation therapy equipment and related services RMB'000	Independent clinical medical and laboratory services and other businesses RMB'000	Total <i>RMB'000</i>
Disaggregated by timing of revenue recognition Point in time	3,753,365	520,167	135,870	224,189	336,030	4,969,621
Over time			8,260	165,813		174,073
Revenue from external customers	3,753,365	520,167	144,130	390,002	336,030	5,143,694
Inter-segment revenue	1,677	34,661	116	14,222	1,687	52,363
Reportable segment revenue	3,755,042	554,828	144,246	404,224	337,717	5,196,057
Reportable segment profit						
(gross profit)	2,696,586	232,355	73,748	127,029	135,549	3,265,267

(ii) Reconciliations of reportable segment profit (gross profit)

	2022 RMB'000	2021 RMB'000
Reportable segment profit (gross profit) Elimination of inter-segment profit (gross profit)	3,607,511 (92,832)	3,265,267 (23,363)
Consolidated gross profit	3,514,679	3,241,904

(iii) Geographic information

All of the Group's operations are carried out and most of the Group's customers are located in the PRC. The Group's non-current assets, including property, plant and equipment, investment property, lease prepayments and intangible assets are all located or allocated to operations located in the PRC.

5. OTHER INCOME, GAINS AND LOSSES

	2022	2021
R	MB'000	RMB'000
Bank interest income	45,286	26,254
Government grants	41,948	14,220
Dividend income on unquoted equity investments	6,404	4,739
Rental income from operating leases	6,397	7,794
Net foreign exchange loss	(13,290)	(1,649)
Net loss on disposal of property, plant and equipment	(1,116)	(683)
Gain on disposal of interest in an associate	_	4,548
Gain on bargain purchase	125	_
Others	5,429	6,346
	91,183	61,569

6. PROFIT BEFORE TAXATION

Profit before taxation is arrived at after charging/(crediting):

(a) Finance costs

	2022 RMB'000	2021 RMB'000
Interests on bank loans	8,386	8,852
Interests on corporate bond	19,004	19,105
Interests on lease liabilities	4,696	5,649
Less: interest expense capitalised into construction progress	(5,330)	(5,127)
	26,756	28,479
Interests accretion on reclamation obligations, net	3,579	3,511
Interests cost on defined benefit retirement plans	1,675	1,762
Interests cost on long-term payables	2,389	2,051
	34,399	35,803

The borrowing costs have been capitalised at 4.71% per annum (2021: 4.4%).

(b) Staff costs#

	2022 RMB'000	2021 RMB'000
Salaries, wages and other benefits Contributions to defined contribution retirement plans	712,808 81,974	591,134 71,391
Expenses recognised in respect of defined benefit retirement plans	876	894
<u>-</u>	795,658	663,419

Employees of the Company's subsidiaries in the PRC are required to participate in a defined contribution retirement scheme administered and operated by the local municipal government. The Company's subsidiaries in the PRC contribute funds which are calculated on certain percentages of the average employee salary as agreed by the local municipal government to the scheme to fund the retirement benefits of the employees.

(c) Other items

	2022 RMB'000	2021 RMB'000
Depreciation*		
– property, plant and equipment	202,364	178,477
 investment properties 	2,392	1,098
Amortisation#		
intangible assets	15,819	17,662
Impairment losses recognised (reversed)		
 trade and bill receivables 	28,931	15,547
- prepayments, deposits and other receivables	2,262	(4,551)
intangible assets	3,392	7,446
– goodwill	13,272	4,313
Write-off of intangible assets	8	-
Auditors' remuneration		
 audit services 	1,950	3,736
Increase in provisions for reclamation obligations	14,250	7,191
Cost of inventories#	2,467,555	1,703,554

^{*} Cost of inventories includes approximately RMB360,696,000 (2021: RMB340,712,000) relating to staff costs, depreciation and amortisation expenses, which are also included in the respective total amounts disclosed separately above or in Note 6(b) for each of these types of expenses.

7. INCOME TAX IN THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS

Taxation in the consolidated statement of profit or loss represents:

	2022 RMB'000	2021 <i>RMB'000</i>
Current tax		
Provision for the year Under-provision in respect of prior years	165,517 8,309	141,232 2,486
Deferred tax	173,826	143,718
Origination and reversal of temporary differences	(7,879)	(14,077)
	165,947	129,641

8. EARNINGS PER SHARE

The calculation of basic earnings per share is based on the profit attributable to ordinary equity shareholders of the Company of approximately RMB391,605,000 (2021: RMB335,751,000) and the weighted average of 319,874,900 ordinary shares (2021: 319,874,900 ordinary shares).

The Company did not have any potential dilutive shares in existence during the years ended 31 December 2022 and 2021. Accordingly, diluted earnings per share is the same as basic earnings per share.

9. DIVIDENDS

(i) Dividends payable to equity shareholders of the Company attributable to the year

	2022 RMB'000	2021 <i>RMB'000</i>
Final dividend proposed after the end of the reporting period of RMB44.07 cents per ordinary share (2021: RMB37.79		
cents per ordinary share)	140,969	120,881

The final dividend proposed after the end of the reporting period has not been recognised as a liability at the end of the reporting period.

(ii) Dividends payable to equity shareholders of the Company attributable to the previous financial year, approved and paid during the year

	2022 RMB'000	2021 RMB'000
Final dividend in respect of the previous financial year, approved and paid during the year, of RMB37.79 cents per share		
(2021: RMB18.03 cents per share)	120,881	57,673

10. TRADE AND BILL RECEIVABLES

	2022 RMB'000	2021 <i>RMB'000</i>
Bill receivables Trade receivables due from	96,794	90,876
- related parties under CNNC	57,596	37,867
 associates and joint ventures 	20,583	29,943
- third parties	3,511,727	2,819,517
	3,686,700	2,978,203
Less: loss allowance	(185,362)	(157,050)
	3,501,338	2,821,153

As at 1 January 2021, the gross amount of trade receivables arising from contracts with customers amounted to approximately RMB2,368,502,000.

Aging analysis

The aging analyses of trade and bill receivables, based on the invoice dates and net of loss allowance, are as follows:

	2022 RMB'000	2021 RMB'000
Within 1 year	3,028,761	2,520,825
1 to 2 years	384,896	231,773
2 to 3 years	66,112	54,667
Over 3 years	21,569	13,888
	3,501,338	2,821,153

The Group granted credit term on a case by case basis and trade and bills receivables are required to be settled in accordance with credit terms as stipulated in the contract and invoice due to issuance.

11. TRADE PAYABLES

	2022 RMB'000	2021 RMB'000
Trade payables due to		
 related parties under CNNC 	32,236	43,675
 associates and joint ventures 	2,769	3,711
associates and joint venturesthird parties	453,283	290,470
	488,288	337,856

(a) Aging analysis

As of the end of the reporting period, the aging analyses of trade payables, based on the invoice dates, are as follows:

	2022 RMB'000	2021 RMB '000
Within 1 year 1 to 2 years	444,316 36,536	311,583 18,777
2 to 3 years over 3 years	4,576 2,860	7,496
	488,288	337,856

All of the trade payables are usually for settlement within one year or are repayable on demand.

MANAGEMENT DISCUSSION AND ANALYSIS

The Group is primarily engaged in the research, development, manufacturing and sale of diagnostic and therapeutic radiopharmaceuticals and radioactive source products for medical and industrial applications, the provision of irradiation service for sterilization purpose and engineering, procurement and construction ("EPC") service for the design, manufacturing and installation of gamma ray irradiation facilities and the provision of services such as nuclear medical equipment and independent clinical laboratory services to hospitals and other medical institutions.

BUSINESS REVIEW

For the year ended 31 December 2022, we operated five business segments, namely pharmaceuticals, radioactive source products, irradiation, radiation therapy equipment and related services and other business. In 2022, we continued to increase our market development efforts and achieved faster growth in economic benefits. Revenue achieved for 2022 was RMB6.146 billion, representing a year-on-year increase of 19.49%. Net profit for the year was RMB755 million, representing a year-on-year increase of 12.11%, and net profit attributable to the parent company was RMB392 million, representing a year-on-year increase of 16.64%.

Business Segments

1. Pharmaceuticals

The Group is a leading manufacturer of diagnostic and therapeutic radiopharmaceuticals in China, primarily engaged in the research, development, manufacturing and sale of a wide range of imaging diagnostic and therapeutic radiopharmaceuticals, UBT kits and analyzers and in vitro diagnostic reagents and kits in the domestic market.

During the Reporting Period, the Group adhered to the strategic development plan of each business segment. In respect of pharmaceutical segment, it provided a stable supply of radiopharmaceuticals to domestic medical institutions and strengthened the promotion of nuclear medicine diagnosis and treatment technology to clinical departments and other market development work through supporting the work of the nuclear medicine unit of Chinese Medical Association, continue to promote the development of the existing industry. The clinical study on the efficacy and safety evaluation of strontium-89 chloride injections was conducted to promote the application of strontium-89 chloride injections in the treatment of bone metastases for thyroid cancer, providing a safe and effective drug for clinical tumor patients and expanding the market capacity of radiopharmaceuticals, and further improved its competitiveness in the market by integrating the sales of Iodine-125 sealed sources products of its subsidiaries HTA and Ningbo Junan. Through academic conferences and other means, the Group promoted nuclear medicine to the general public and nuclear medicine clients, including the introduction of new products such as "therapeutic sodium iodine-131 capsule" and scientific radionuclide, thus enhancing its influence in the field of nuclear medicine. The Group vigorously promoted academic brand building of its respiratory disease testing products. We joined hands with the Society for Physical Examination to organize national science knowledge competition, actively participated in various academic promotion activities, and continued to promote the implementation of the "specialist outpatient" project.

During the Reporting Period, we recorded RMB3,923.3 million of revenue from sales of pharmaceuticals, representing a year-on-year increase of 4.5%. As for the imaging diagnostic and therapeutic radiopharmaceuticals, we recorded RMB1,459.3 million of revenue, representing an increase of 0.4% from the corresponding period in 2021. As for breath test, we recorded RMB2,346.7 million of revenue, representing a year-on-year increase of 9.0%.

2. Radioactive source products

The Group is a major manufacturer of medical and industrial radioactive source products in China and also a radioactive source producer with a most complete range of radioactive source product offerings in China, primarily engaged in the research, development, manufacturing and sale of various medical and industrial radioactive sources products as well as provision of related technical services.

During the Reporting Period, the gamma knife source achieved the best result in the past five years, and the non-destructive testing radioactive sources business remained at a historically high level; the source-related services contracts achieved RMB30 million; the nuclear technology services of international companies were developed, and the import revenue achieved RMB16 million; the Group was invited to participate in the Quality Development Forum for the Special Equipment Industry (特種設備行業高質量發展論壇) and joined China Association of Special Equipment Inspection, laying the foundation for the extension of the industry. The supporting radioactive source developed by the Group for the Shenzhou XIV manned spacecraft has contributed to the successful recovery of the spacecraft and ensured the successful completion of the Shenzhou XIV manned mission. The Group promoted the launch of strategic cooperation in the neutron source business in nuclear power, helping CNNC to set up its identity of "China Nuclear Power". The newly-developed Krypton-85 thickness gauge sources, which is exclusive in China, has greatly relieved the situation of source tension in the energy storage industry. The decommissioning and reuse of medical gamma knife source has greatly reduced the volume of solid radioactive waste.

During the Reporting Period, the Group recorded RMB580.9 million of revenue from sales of radioactive source products, representing a year-on-year increase of 11.7%.

3. Irradiation

In the field of irradiation processing, the Group mainly aimed at providing the manufacturers of medical devices, food, traditional Chinese medicine and cosmetics for sterilization in China, and meanwhile EPC services related to the design, manufacturing and installation of irradiation facilities is also accessible.

The Group actively explored the irradiation product market, and achieved record sales of new irradiation products with sales revenue reaching over RMB27 million. Overcoming the impact of the COVID-19, BINE, a subsidiary of the Company, completed the installation and commissioning of the Malaysian irradiation station project as scheduled and signed another contract for the supply of cobalt source irradiation facilities design and equipment in Malaysia. The integrated management platform for irradiation operations has officially launched, enabling information-based traceability management of the entire irradiation processing and significantly improving the level of informatization and standardization of the irradiation business.

During the Reporting Period, the Group recorded RMB164.7 million of revenue from irradiation-related business, representing a year-on-year increase of 14.3%.

4. Radiation therapy equipment and related services

During the Reporting Period, the Group accelerated the nationalization of high-end radiotherapy equipment, and Tomo C, a high-end radiotherapy equipment, overcame the impact of the epidemic and obtained the Notice of Acceptance of Registration of Pharmaceutical Product from the National Medical Products Administration. The Group accelerated the research and development of two core components to make a strategic layout for the promotion of Tomo C nationalization. The Smart Cobalt-60-based Cone Beam Focused Stereotactic Therapy System project was completed with the installation of the first clinical trial equipment and successfully applied for Shaanxi Provincial Key Research and Development Program "Smart Gamma Knife" project, which was granted RMB1.5 million funding support by Science and Technology Department of Shaanxi Province. The SPECT/ CT research and development project was completed with prototype development and passed third-party inspection. The Group set up a joint venture, Jiangsu Gaotong Equipment Co., Ltd., committing to technological advancement in the field of medical equipment and technology research and development in the field of high-end intelligent manufacturing and providing systematic solutions for high-end equipment and intelligent manufacturing. The Group successfully won the tender for the centralized procurement project of "Helical Tomotherapy System and Radiosurgery Robot" of the National Health Commission, including 7 sets of Category A equipment with a tender amount of nearly RMB300 million and 11 sets of Category B equipment with a tender amount of RMB385 million.

During the Reporting Period, the Group recorded RMB732.2 million of revenue from radiation therapy equipment and related services, representing a year-on-year increase of 87.7%.

5. Other businesses

In order to provide users with a full range of services, we also provide services such as trade and independent clinical laboratory services for nuclear technology industry applications and medical product applications. We primarily provide users with trade services for imported radioactive source, medical nuclides, imported radiopharmaceuticals, nuclear instruments and devices, medical equipment and other products. The Group is promoting the cooperation with international pharmaceutical companies to introduce advanced radiopharmaceuticals, intensive management services for hospital consumables, and import agency sales of medical devices.

During the Reporting Period, revenue from trade services and other businesses of the Group was RMB745.1 million, representing a year-on-year increase of 121.7%.

The table below sets forth our revenue by business segment in 2022 and 2021:

	Year end December		Year ended 31 December 2021		
(RMB in million, except for percentage)	Amount	%	Amount	%	
Pharmaceuticals	3,923.3	63.8	3,753.4	73.0	
Radioactive source	580.9	9.5	520.2	10.1	
Irradiation	164.7	2.7	144.1	2.8	
Radiation therapy equipment and					
related services	732.2	11.9	390.0	7.6	
Other businesses	<u>745.1</u>	12.1	336.0	6.5	
Total	6,146.2	100.0	5,143.7	100.0	

Marketing

During the Reporting Period, the Group continued to promote its brand building efforts. The Group organized and held the China-ASEAN Forum for Peaceful Use of Nuclear Technology (中國-東盟和平利用核技術論壇), supported important national industry exchange events such as the 2022 China Isotope and Radiation Industry Summit, China Atomic Energy Authority's Third Quarter Nuclear Technology Forum and Carbon Emission Peak and Carbon Neutrality Yantai International Forum, as well as nearly 100 professional academic conferences and salons, and worked with industry partners to build an open and collaborative development ecosystem, promoting the popularization and application of isotopes and radiotherapy technologies and implementing the "Medium and Long-term Development Plan for Medical Isotopes (2021- 2035)" (《醫用同位素中長期發展規劃(2021-2035年)》).

Meanwhile, the Group actively promoted the marketing of products such as strontium-89 chloride injections. We hosted the "Xiangshan Forum on Targeted therapy for bone metastases (香山論道——骨轉移瘤靶向治療論壇)" to help experts from Beijing Nuclear Medicine Branch (北京核醫學分會) and CSCO Expert Committee on Nuclear Medicine (CSCO 核醫學專家委員會) to conduct academic seminars. The National Professional Quality Control Center for Health Examination and Management (國家健康體檢與管理專業質控中心) under National Health Commission and the Digestive Endoscopy Improvement System (消化內鏡專業質控中心) jointly compiled and published the Quality Control Specification for the Application of UBT Technique in Health Examination (Trial) (《健康體檢應用尿素呼氣試驗技術質控規範(試行)》). The headquarters, together with its subsidiary CNNC Headway and subsidiary joint venture CNNC Accuray continued working on online platforms such as "Isotope&Radiation Technology Lecture Hall", "Headway Health Lecture Hall" and "Accuray Lecture Hall", and invited experts of their respective fields to conduct online teaching and academic promotions activities.

The "Demonstration base construction projects for the promotion of nuclear medicine application for medical diagnosis" was launched in two medical institutions throughout the year, and the project acceptance and awarding work was completed in two other medical institutions. As of 31 December 2022, the Group and the Nuclear Medicine Branch of the Chinese Medical Association commenced the project start-up work for 65 hospitals, accelerating the popularization of nuclear medicine with the applications in clinical diagnosis and treatment, which effectively helped us to expand the market for our products.

The Group continued to promote its "Overall Nuclear Medicine Solutions", established the Nuclear Medicine Development Center, accelerated the promotion and implementation of Overall Nuclear Medicine Solutions with the Group's resources, and initiated the arrangement and construction of intelligent nuclear medicine. In 2022, a total of 12 key projects were contracted for the Overall Nuclear Medicine Solutions.

Scientific Research and Innovation

The Group has always actively conducted research and development work on various types of imaging diagnosis and therapeutic pharmaceuticals to fill the void of various fields of medical treatment and meet the medical needs of China. As of 31 December 2022, we had a number of imaging diagnosis and therapeutic radiopharmaceuticals under research and development. Among them, sodium fluorine-18 injection was completed with clinical trials and was submitted for new drug application; iodine-131-MIBG injection was in Phase III clinical trial; technetium-99m sulfide colloidal injection, 68Ga-Dotatate injection, fluorine-18 betazine injection, fluorine-18 stamine injection, fluorine-18-L dopa injection and lutetium-177 oxyoctreotide injection were completed with pre-clinical study and awaiting approval for the clinical trial, and a variety of imaging diagnosis and therapeutic radiopharmaceuticals were in preclinical research and development stage.

Diagnostic drugs

Diagnostic drugs for tumors

- 1. Bone imaging drug: sodium fluorine-18 is a PET bone imaging drug used to diagnose lesions with altered bone activity, including bone metastases, incipient fracture, ostalgia, joint hyperplasia, etc. The Group's product under development, sodium fluorine-18 injection, was completed with clinical trials and has submitted the materials for the new drug application. It obtained the Notice of Acceptance of Registration of Pharmaceutical Product from the National Medical Products Administration on 28 December 2022.
- 2. Pheochromocytoma diagnostic drug: iodine-131-MIBG injection can be used for the diagnosis of neuroendocrine tumors such as pheochromocytoma and neuroblastoma. The Group's product under development, iodine-131-MIBG injection, was in Phase III clinical trial.
- 3. Prostate cancer diagnostic drug: PMSA is an ideal tumor marker for prostate cancer. The development of radioactive targeted PMSA diagnostic (therapeutic) drugs is currently a hot spot of interest that the domestice and foreign radiopharmaceutical companies concerned about and competed for. The combination of [18F]Florastamin and PSMA has a higher specificity and a higher safety profile. The Group has signed a joint development agreement with FutureChem in Korea to obtain the exclusive rights to develop, manufacture and market [18F]Florastamin injection in PRC. At present, the Group has completed various pre-clinical studies on [18F]Florastamin injection and submitted the clinical trial application, which was accepted by the National Medical Products Administration on 29 December 2022.
- 4. Breast cancer sentinel lymph nodes imaging drug: technetium-99m sulfide colloid is the first technetium-marked radiocolloid for lympha imaging, which is used for the location and tracing of breast cancer sentinel lymph nodes. The Group's product under development, sulfide colloid kit and technetium-99m sulfide colloidal injection, was completed with various pre-clinical studies and submitted the clinical trial application, which was accepted by the National Medical Products Administration on 10 October 2022.

Diagnostic drugs for neurodegenerative diseases

1. Alzheimer (AD) diagnostic drug: \(\beta\)-Amyloid (A\(\beta\)) is an important target for early diagnosis of AD. The development of positron emission tomography (PET) imaging agents with high affinity and selectivity with A\(\beta\) protein can realize early non-invasive diagnosis of such disease. [18F]Florbetazine injection is an A\(\beta\)-PET imaging agent jointly developed by the Group and the Key Laboratory of the Ministry of Education for Radiopharmaceuticals of Beijing Normal University, which has independent intellectual property rights and good imaging properties, and is a domestic Class I innovative drug. The Group's product under development, [18F]Florbetazine injection, was completed with various pre-clinical studies and submitted the clinical trial application, which was accepted by the National Medical Products Administration on 29 December 2022.

2. Parkinsonism diagnostic drug: 6-fluorine-18-L dopa injection is used clinically for the diagnosis of nervous system diseases such as parkinsonism, schizophrenia and AD, and has clinical value for early diagnosis of disease, assessment of disease severity and cell transplantation detection. The Group's product under development, 6-fluorine-18-L dopa injection, was completed with various pre-clinical studies and the preparation of the application materials, and submitted the clinical trial application at the end of December 2022.

Therapeutic drug for tumor

Therapeutic drug for prostate cancer. Palladium-103 sealed source is an in vivo implant for brachytherapy, suitable for the permanent implantation of solid tumors with low to neutral sensitivity to radiation, both for superficial, intra-thoracic and intra-abdominal solid tumors such as prostate cancer, pancreatic cancer, lung cancer, head and neck cancer, as well as for residual diseases and recurrent tumors after external radiation therapy. The Group's product under development, palladium-103 sealed source, was completed with various pre-clinical studies.

Integrated drug for diagnosis and treatment

Integrated drug for diagnosis and treatment for neuroendocrine tumor. Internationally, the use of 68Ga-DOTATATE for PET/CT of neuroendocrine tumor has become the gold standard in imaging. 68Ga-DOTATATE can also be used to evaluate the treatment effect of patients with neuroendocrine tumor. 177Lu-DOTATATE is an effective drug in the treatment of neuroendocrine tumor. The Group's product under development, 68Ga-DOTATATE injection and kits, were completed with various pre-clinical studies and submitted the clinical trial application, which was accepted by the National Medical Products Administration on 9 December 2022. The product under development, lutetium-177 oxyoctreotide injection, was completed with various pre-clinical studies and the preparation of the application materials during the Reporting Period, and submitted the clinical trial application at the end of December 2022.

During the Reporting Period, the Group achieved remarkable results in the work on intellectual properties, with a total of 174 patents applied, 134 patent authorizations obtained, including 1 foreign patent authorization obtained, achieving a breakthrough of zero overseas patent authorization for the Group. As of 31 December 2022, we had 678 active licensed patents, among which there were 105 invention patents, and our technological strength was continuously strengthened.

During the Reporting Period, there were 16 registered trademarks, 38 registered copyrights, 2 group standards issued, and 4 nuclear industry standards and 9 group standards under preparation.

In terms of scientific and technological awards and honors, the patent of "Components of heavy water reactor cobalt", which was jointly applied by the Group and Shanghai Nuclear Engineering Research and Design Institute, won the Silver Award of the 23rd China Patent Award, the implementation of which has filled the gap in China's technology of mass production of cobalt-60 radioactive source for heavy water reactor. The project has been exported to Canada, the United Kingdom, Thailand, Vietnam and Malaysia, with a total volume of over 10 million curies, greatly enhancing the Group's voice in the international radioisotope market.

The project "UBT[13C/14C] kits automatic production line" of Shenzhen Zhonghe Headway Bio-Sci & Tech Co., Ltd. won the second prize of the Science and Technology Award of the CNNC, with the overall technology of the project reaching the international advanced level and generating good social benefits.

The project "Research and development of new krypton-85 thickness gauge sources" of HTA Co., Ltd. won the third prize of the Science and Technology Award of the CNNC, with the overall technology of the project reaching the international advanced level and breaking the situation of relying on imported krypton-85 thickness gauge sources for the past ten years. It is expected to fully satisfy the demand for krypton-85 thickness gauge sources for paper, plastic film and lithium battery production lines in China in the future, and the products have been exported to open up the international market.

The project "Research on the irradiation and sterilization process standards for medical protective clothing materials" jointly conducted by China Isotope & Radiation Corporation and Beijing Atomic High-Tech Jinhui Radiation Technology Application Co., Ltd. won the third prize of the Science and Technology Award of the CNNC.

The Group has a well-developed R&D system, with the CIRC Institute established at the Group level and the "1+N" model of R&D platform construction. The Group now has five internal R&D platforms and 11 provincial and ministerial R&D platforms, with research covering in vitro diagnostics, radiopharmaceuticals, stable isotope and breath test, radioactive sources and industrial application, irradiation application, medical equipment and other industrial fields, providing technical support for industry development.

Internal platforms

Name of platform

In Vitro Diagnostic Technology R&D Center Radiopharmaceuticals R&D Center Stable Isotope and Breath Test Technology R&D Center Radioactive Sources and Industrial Application R&D Center

Irradiation Application Technology R&D Center

Research field

In vitro diagnosis
Radiopharmaceuticals
Stable isotope and breath test
Radioactive sources and
industrial application
Irradiation application

External platforms

Research field
Radiopharmaceuticals
Radiopharmaceuticals
In vitro diagnostic reagent
Radioisotopes
Medical equipment
Radiopharmaceuticals
Radiopharmaceuticals
Stable isotope
Carbon isotope
Breath test
Radiopharmaceuticals

In terms of industry-academia-research cooperation, the Group has actively established research cooperation with industry-advantaged research institutes, universities and hospitals such as National Institute of Metrology, Shanghai Institute of Materia Medica of Chinese Academy of Sciences, China Institute for Radiation Protection, Harbin Institute of Technology, Sichuan University, Beijing Normal University, Peking Union Medical College Hospital and 301 Hospital, and strengthened academic exchanges and research talent cultivation through the establishment of joint laboratories, research and development centers and collaborative innovation centers to achieve comprehensive cooperation in technological innovation.

The Group has a long-standing commitment to building a system of high-level talents, with 12 national-level talents, 14 provincial and ministerial level talents, 5 chief experts, 16 technology leaders, and a scientific research team of 538 research and development personnel focusing on extensive researching and optimizing production technologies, developing new products and the safety and efficacy upgrading of existing products to jointly promote technological innovation in various industrial fields of the Group. In addition, the Group has set up a post-doctoral research workstation of MOHRSS, a post-doctoral innovation practice base in Shenzhen, a post-graduate workstation for radiopharmaceuticals in Jiangsu Province and a post-graduate workstation for irradiation application in Suzhou University to actively develop post-doctoral and post-graduate training and continuously strengthen the construction of talent teams.

International Business

During the Reporting Period, the Group actively explored the international market and exported cobalt sources, breath test kits, radioimmunity kits, COVID-19 test kits and other anti-epidemic materials as well as other products to dozens of countries and regions such as Indonesia, Kenya, Brazil, Peru, Colombia, Ecuador, India, Bangladesh, Singapore and Canada, realizing a total export revenue of RMB198 million. Although the demand for anti-epidemic medical supplies decreased in 2022 compared to 2020 and 2021, the international revenue of our regular products and other products still achieved significant growth. During this period, breakthroughs were made in our international business: following the export of a cobalt source irradiation station in 2013, we exported the overall solution for irradiation stations to Malaysia for the fourth time, bringing about a good brand effect in the irradiation industry in Southeast Asia. We actively explored the South American market, grasped the opportunities and successfully fulfilled the contracts and the product shipping, and expanded into new market. As the world's third largest supplier of cobalt sources, the Group continued to carry out the cobalt-60 radioactive source export business, successfully exported the domestic CN-101 type cobalt-60 radioactive source to Malaysia, achieving a breakthrough in the revenue of the export of radioactive sources, the Group signed a cooperation agreement with Argentina's leading company in nuclear technology applications, laying the foundation for deeper cooperation between both parties in the future in the field of nuclear technology. We co-organized the human resources training program of Ministry of Commerce and participated in a number of world-class industry exhibitions and academic conferences to enhance our brand awareness in overseas markets. In addition, the Group actively promoted internal and external business synergies, expanded international channels, sent staff to work at IAEA, improved export risk management mechanisms, conducted business training, and continued to strengthen internal management and business system construction, which helped the Group to further improve its internationalized operation.

Capital Operation

During the Reporting Period, the Group has entered into agreement to acquire an enterprise with a total planned investment of RMB30.16 million.

S/N	Acquired enterprise	Agreement Execution Date	Acquisition Completion Date	Acquisition amount (RMB in million)	Principal businesses	Shareholding percentage
1	Guangzhou HTA Pharmaceutical Technolog Co. (廣州原子高科醫藥科技有限公司, formerly known as Guangzhou Zhongda Zhongshan Medical Technology Development Co., Ltd.) (廣州中大中山醫科技開發有限公司)	,	2022.10	30.16	Science and technology information consulting services; technology project agency services; medical research and experimental development; pharmaceutical research and development; chemical products wholesale (except hazardous chemicals); instrument wholesale; electronic components wholesale; chemical products retail (except hazardous chemicals); electronic components retail; trade agency; house leasing	

As of 31 December 2022, the Company's actual amount paid to Tongfu Fund was RMB444 million, and the total actual amount paid to the Fund was RMB1.48 billion, so the Company's proportion accounted for 29.97%. After evaluation, the net assets of Tongfu Fund measured at fair value as of 31 December 2022 are RMB1,581.9 million. The value of the Company's share of Tonghu Fund's net asset was RMB474.1 million, accounted for 4.1% of the Group's total assets. In 2022, the Company's investment income in Tongfu Fund was RMB17.5 million, and the Company received dividends of RMB4.0 million.

Production Capacity

In order to meet the growing demand for radiopharmaceuticals in China in a timely manner, in the past year, we vigorously practiced the "CIRC speed" and accelerated the national layout of our pharmaceutical centers. In 2022, three pharmaceutical centers in Nanchang, Yichang and Taiyuan were completed and in operation, bringing the cumulative number of centers in operation to 23. Three production lines of positron drugs in Hefei, Qingdao and Nanchang were completed and in operation, bringing the cumulative number of companies that can supply positron drugs to 15. Nine pharmaceutical centers have entered the production certification stage, five were under construction and three were in the pre-project phase, with the network layout of national pharmaceutical centers improving day by day.

In order to further enhance the R&D and production capacity of CIRC in the fields of radiopharmaceuticals and radioactive sources, we have been vigorously promoting the construction of R&D and production bases of isotopes and their products in recent years. At present, the diagnostic and therapeutic radiopharmaceuticals manufacturing bases were mainly located in four regions (i.e. Beijing, Ningbo, etc.), and the medical bases in North China and Shanghai that are newly planned and laid out were progressing in an orderly manner. The UBT kits and analyzers manufacturing bases were located in Shenzhen and Tongcheng. The radioactive source manufacturing bases were located in Beijign and Leshan. The newly planned research, development and production base for radioactive sources was also being actively promoted. The in vitro immunoassay diagnostic reagents and kits manufacturing bases were located in Beijing. In 2022, the CNNC Qinshan isotope production base project commenced officially, which will become the largest isotope production base in China after completion and is of great significance to enhance China's isotope nationalization capability.

Future Development

2023 is the opening year of the comprehensive implementation of the spirit of the 20th National Congress of the CPC, the key year of the implementation of the "14th Five-Year Plan", and also the 40th anniversary of the establishment of CIRC and the 5th anniversary of its listing. Looking back at the past, CIRC has grown from scratch, from small to large, step by step to become the industry leader, and made positive contributions to the nuclear industry's strong foundation, leapfrog development, overall improvement of system capability, and accelerating catch-up from big to strong. Looking ahead, CIRC will adhere to the principle of "helping people's livelihood and benefiting society", give full play to the unique advantages of nuclear medicine in the diagnosis and treatment of major diseases such as neurodegenerative diseases, cardiovascular and cerebrovascular diseases and malignant tumors, and provide quality products, services and integrated solutions to better protect people's lives and health and facilitate the construction of "Healthy China".

In 2023, the Company will closely focus on the goals and tasks of the "14th Five-Year Plan", with standardized operation, lean management, change and innovation, high efficiency and quality. In addition, we will continue to deepen lean management, pay more attention to innovation, make every effort to stabilize growth, seek innovation, promote reform, expand market by all means, strengthen and make up for the chain and optimize the layout, build up the momentum and strengthen management, and promote the integration of Party building. Besides, we will firmly guard the bottom line of the quality of the safety and environmental protection, as well as compliance operation, and promote the development of a bigger, stronger and better business as a whole, and strive to exceed the annual target of the plan.

All efforts are to made to stabilize growth. Since the publication of the "Medium and Long-term Development Plan for Medical Isotopes (2021-2035)" (《醫用同位素中長期發展規劃(2021-2035年)》), there has been a significant increase in concern and awareness of medical isotopes and related industries from all walks of life, and the top echelons of our country are particularly concerned about the innovative development of radiopharmaceuticals. The Ministry of Industry and Information Technology, the State Administration of Science, Technology and Industry for National Defence, and the National Medical Products Administration and other competent departments have attached great importance to and initiated relevant policy research and formulation. China's nuclear technology application industry is set to enter the "fast lane" of development under the impetus of favorable policies. CIRC will firmly grasp the development opportunities and make every effort to maintain the good growth momentum. In 2023, we will strive to achieve new highs in operating indicators such as operating income and net profit.

We will be determined to forge ahead for innovation. CIRC will adhere to innovation-led development, unswervingly place scientific and technological innovation at the core of the overall development, and make every effort to promote new breakthroughs in the research and development of medical isotopes, radiopharmaceuticals, high-end nuclear medical equipment and other fields. At the same time, CIRC will continue to optimize the institutional mechanism of scientific and technological innovation, vigorously construct national technology centers, increase scientific research investment through multiple channels, continuously improve the scientific and technological innovation capacity of R&D platforms at all levels, improve incentives for major scientific and technological achievements, and strengthen medium and long-term incentives for scientific and technological innovation.

The real deal is pushing for reform. CIRC will not waver in its belief in reform and further release the innovative vitality and development potential of the Company through deepening reform. We will push forward the special reform of "Science and Technology Reform Demonstration Enterprise", accelerate to improve the shortcomings and weaknesses and make every effort to build a model of state-owned science and technology-based enterprise reform and a leader of independent innovation. We will deepen the special project of "upgrading management against world-class standards", successively promote the achievement and establishment of standards, accelerate the creation of leading enterprises in science and technology, high-tech enterprises and specialized, refined, special and novel enterprises, and continuously enhance the value creativity and industry competitiveness of enterprises.

We will expand the market by all means. CIRC will firmly grasp the development opportunities brought by the strategy of expanding domestic demand, and make full efforts in the market and investment side. We will actively implement the national plan and accelerate the implementation of the "One County, One Department" program of CNNC. We will innovate marketing models and promote sales of key products through multiple channels. We will continue to improve our investment map, use the "listed company + industry fund" model to carry out strategic mergers and acquisitions, and strive to complete a number of capital operations in medical diagnostics, irradiation applications, medical devices and other areas that are important to support the industry. We will make every effort to promote our nuclear technology products and services, focus on key projects, deeply plough key countries and promote the implementation of nuclear medicine, radiotherapy and irradiation application solutions.

We will strengthen and make up for the chain and optimize the layout. In order to meet the growing demand of domestic users for medical isotopes and their products in a timely manner, we will vigorously promote capacity enhancement, fully promote the construction of key projects such as medical isotopes, radiopharmaceuticals and radioactive source research and development and production bases, and promote the national layout of pharmaceutical centers in succession, striving to put into operation a total of 25 pharmaceutical centers by 2023.

We will build up the momentum and strengthen management. CIRC will keep pace with the times and plan for the future, carry out the mid-term evaluation and revision of the "14th Five-Year Plan", more accurately grasp the laws of the sub-sector, highlight the new journey, new starting point and new mission, and focus more on high level and quality. We will continue to deepen lean management, accelerate the establishment of lean benchmark workshops for radiopharmaceuticals, radioactive sources, irradiation applications and other business modules, and give full play to the driving effect of benchmark workshops. We will strengthen the construction of talent pool, carry out special projects to improve the quality of scientific and technological talents and skilled personnel, focus on key areas, major projects and major tasks in the near and long term, and increase the introduction of high-level talents. We will organize and carry out the work of "CIRC Work Plan for Improving the Quality of Listed Companies" 《中國同輔提高上市公司質量工作方案》,and continuously improve the core competitiveness and market influence of listed companies. We will continuously promote the development of standardized production safety and strive to improve the safety management level in key areas. We will strengthen the construction of compliance system, explore the construction of compliance management and legal, internal control and risk management synergistic operation mechanism, and improve the effectiveness of compliance management.

The "14th Five-Year Plan" is a strategic opportunity period for the development of the nuclear technology application industry. We will closely focus on the objectives of the "14th Five-Year Plan", unify our ideology and understanding, maintain our strategic determination, practice the "CIRC speed", make every effort to promote the implementation of the key tasks of the "14th Five-Year Plan", and accelerate the establishment of an internationally renowned isotope and radiation technology application products and services supply group.

Principal Risks and Uncertainties

The Group's financial condition, results of operations, and business prospects may be affected by a number of risks and uncertainties directly or indirectly pertaining to the Group's businesses. To the best of knowledge and belief of the Directors, the Directors consider that the following are the principal risks and uncertainties identified by the Group as at the date of this announcement.

Market Risk

Market risk is the risk that deteriorates profitability or affects ability to meet business objectives arising from the movement in market prices, like foreign exchange rates and interest rates. The management of the Group manages and monitors these exposures to ensure appropriate measures are implemented on a timely and effective manner.

Foreign Exchange Risk

The Group mainly operates in the PRC with most of the transactions settled in Renminbi. During the year ended 31 December 2022, other than those mentioned above, the Group did not carry out any other hedging activity against foreign currency risk. Any substantial exchange rate fluctuation of foreign currencies against Renminbi is less likely to have a financial impact on the Group.

Interest Rate Risk

For interest-sensitive products and investments, the Group analyses the interest rate exposure on a dynamic basis and considers managing this risk in a cost-effective manner when appropriate, through variety of means.

Liquidity Risk

Liquidity risk is the potential that the Group will be unable to meet its obligations when they fall due because of an inability to obtain adequate funding or liquidate assets. In managing liquidity risk, the Group monitors cash flows and maintains an adequate level of cash and cash equivalent to ensure the ability to finance the Group's operations and reduce the effects of fluctuation in cash flows.

Operational Risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. Responsibility for managing operational risks basically rests with every function at divisional and departmental levels. Key functions in the Group are guided by their standard operating procedures, limits of authority and reporting framework. The management will identify and assess key operational exposures regularly so that appropriate risk response can be taken.

Investment Risk

Investment risk can be defined as the likelihood of occurrence of losses relative to the expected return on any particular investment. Key concern of investment framework will be balancing risk and return across different investments, and thus risk assessment is a core aspect of the investment decision process. Proper authorization system has been set up and detailed analysis will be made before approving investments. Regular updates on the progress of the investments of the Group would be submitted to the Board.

Economic Environment

Most of the Group's facilities, operations and its revenue are located in and derived from mainland China and Hong Kong. The Group's results of operations and financial condition therefore depend on the economies of mainland China and Hong Kong. The economy of Hong Kong is significantly affected by the developments in mainland China and the Asia-Pacific region. Mainland China's economy may experience negative economic developments, and other regional economies may also deteriorate.

The Group also has significant business across the PRC and part of its growth strategy is to expand into new regions. These regions have also been adversely affected by the global economic slowdown and any continued slowdown may have an adverse effect on the Group's existing operations in, and planned expansion into, these regions.

Impact of the COVID-19

In 2022, a number of important market areas in China have seen a cluster of epidemics, and the prevention and control of the epidemic has had a direct impact on the production, operation and marketing of CIRC. With the optimal adjustment of China's epidemic prevention and control policies and the successive liberalization of controls across the country, the impact of the epidemic on economic and social development will gradually diminish in the long run. The economic operation is expected to pick up in general in 2023, and the general environment for the development of the nuclear technology application industry is expected to continue to improve.

In the long run, the COVID-19 pandemic has also brought opportunities for the development of the nuclear technology application industry. Irradiation technology has played an irreplaceable role in fighting against the pandemic, shortening the sterilization periods of disposable medical products from 14 days originally to less than 1 day, which has been fully affirmed by all sectors of society, and China has further increased its emphasis on the nuclear technology application industry. At the same time, the outbreak of the COVID-19 pandemic has prompted the country to pay more attention to health issues, and people's demand for living in good health and preventing and treating disease has grown day by day, providing an important opportunity for the development of industries such as radiopharmaceuticals, medical diagnosis and high-end nuclear medical equipment. We will fully grasp the opportunities brought by the pandemic, and taking the planning initiative and following the trend, make every effort to promote the accelerated development of related industries.

FINANCIAL REVIEW

Revenue

We derived our revenue mainly from five major business segments: (1) pharmaceuticals; (2) radioactive source products; (3) irradiation; (4) radiation therapy equipment and related services; and (5) other businesses.

Our revenue increased by 19.5% from RMB5,143.7 million in 2021 to RMB6,146.2 million in 2022, which was mainly due to an increase in revenue from our pharmaceuticals, radiation therapy equipment and related services and other business segments.

Cost of Sales, Gross Profit and Gross Margin

Our cost of sales increased by 38.4% from RMB1,901.8 million in 2021 to RMB2,631.5 million in 2022, which was mainly due to an increase in cost of sales of radiation therapy equipment and related services and other business segments with higher revenue.

Our gross profit increased by 8.4% from RMB3,241.9 million in 2021 to RMB3,514.7 million in 2022 and our gross margin decreased from 63.0% to 57.2%. The decrease in gross profit was primarily due to the lower gross margin in the radiation therapy equipment and related services and other business segments, which experienced large revenue growth, pulling down the overall gross profit growth.

Other Income, Gains and Losses

Our other income increased by 48.1% from RMB61.6 million in 2021 to RMB91.2 million in 2022, mainly due to the increase in government subsidies in 2022.

Selling and Distribution Expenses

Our selling and distribution expenses decreased by 1.8% from RMB1,820.5 million in 2021 to RMB1,788.0 million in 2022. This is mainly due to (i) the decrease in sales promotion services due to the pandemic, and (ii) the decrease in sales service fees due to the changes in pharmaceuticals sales policies.

As a percentage of revenue, selling and distribution expenses decreased from 35.4% in 2021 to 29.1% in 2022.

Administrative Expenses and Credit Impairment Losses

Our administrative expenses and credit impairment losses increased by 28.4% from RMB705.2 million in 2021 to RMB905.2 million in 2022, mainly due to (i) the increased research and development expense resulting from more investments in research and development, and (ii) the increased employee compensation.

As a percentage of revenue, administrative expenses and credit impairment losses increased from 13.7% in 2021 to 14.7% in 2022.

Finance Costs

Our finance costs decreased 3.9% from RMB35.8 million in 2021 to RMB34.4 million in 2022.

Share of Profits less Losses of Associates and Share of Profits of Joint Ventures

Our share of profits less losses of associates increased 23.8% from RMB7.0 million in 2021 to RMB8.6 million in 2022. Our share of profits of joint ventures decreased by 37.5% from RMB53.7 million in 2021 to RMB33.5 million in 2022, mainly due to (i) the decrease in profit of our joint venture, Shanghai GMS Pharmaceutical Co., Ltd.* (上海欣科醫藥有限公司), and (ii) the year-on-year decrease in the appreciation of the investment projects of our joint venture, Tongfu Innovation Fund (同輻創新基金).

* For identification purposes only

Profit before Tax

As a result of the foregoing, our profit before tax increased by 14.7% from RMB802.7 million in 2021 to RMB920.5 million in 2022.

Income Tax Expense

Our income tax expense increased by 28.0% from RMB129.6 million in 2021 to RMB165.9 million in 2022.

Our effective tax rate was 16.2% and 18.0% in 2021 and 2022, respectively.

Profit for the Year

As a result of the foregoing, our profit for the year increased by 12.1% from RMB673.0 million in 2021 to RMB754.6 million in 2022.

FINANCIAL POSITION

Overview

For the year ended 31 December 2022, the total assets of the Group increased. The total assets, the total liabilities and the total equity were RMB11,685.5 million, RMB5,132.3 million and RMB6,553.2 million, respectively.

Net Current Assets

The table below sets forth our current assets, current liabilities and net current assets as at the dates indicated:

RMB in million

	31 December 2022	31 December 2021
Inventories	677.6	691.9
Contract assets	27.4	29.4
Trade and bill receivables	3,501.3	2,821.2
Deposits and other receivables	146.5	153.7
Prepayments	236.7	212.4
Cash at bank and on hand	2,923.2	2,748.2
Total Current Assets	7,512.7	6,656.8
Bank loans	18.2	118.1
Corporate bond	_	500.0
Trade payables	488.3	337.9
Accruals and other payables	3,270.7	2,816.4
Lease liabilities	28.5	53.4
Provisions	86.3	76.5
Income tax payable	95.8	69.4
Total Current Liabilities	3,987.8	3,971.7
Net Current Assets	3,524.9	2,685.1

Our net current assets increased by 31.3% from RMB2,685.1 million as of 31 December 2021 to RMB3,524.9 million as of 31 December 2022, which was mainly due to the increase in the Company's trade receivables.

Adjusted Net Gearing Ratio and Quick Ratio

Our adjusted net gearing ratio (adjusted net debt (interest-bearing debt plus unaccrued proposed dividends) divided by adjusted equity (total equity attributable to equity shareholders of the Company less unaccrued proposed dividends)) was 24.1% and 23.7% as of 31 December 2021 and 31 December 2022, respectively.

Our quick ratio (total current assets excluding inventories divided by total current liabilities as of the same date) was 1.5 times and 1.7 times as of 31 December 2021 and 31 December 2022, respectively.

Trade and Other Receivables

Trade and other receivables are stated at amortized cost using the effective interest method less allowance for credit losses. As of 31 December 2022, our trade and other receivables (net of bad debt allowance of RMB195.8 million) were RMB3,647.8 million.

Trade and Other Payables

Our trade and other payables mainly consist of trade payables and accruals and other payables, which include receipts in advance, other taxes payables, deposits from promoters, payables to promoters, payables for staff-related costs, dividends payables and other accruals and payables. As of 31 December 2022, our trade and other payables were RMB3,759.0 million.

Bank Loans and Pledge of Assets

As of 31 December 2022, the unsecured long-term bank loans mainly included:

- (i) A loan principal of RMB500.0 million borrowed by the Group in 2022 at an interest rate of 2.7%.
- (ii) A loan principal of RMB95.0 million borrowed by a subsidiary of the Group in 2022 at an interest rate of 2.7%.
- (iii) A loan principal balance of RMB1.5 million of a subsidiary of the Group in 2022 at an interest rate of 3.9%.
- (iv) A loan principal balance of RMB5.3 million of a subsidiary of the Group in 2022 at an interest rate of 4.8%, for which was guaranteed by Chengdu Gaotong Isotope Co., Ltd (成都中核高通同位素股份有限公司).

As of 31 December 2022, the secured long-term bank loans mainly included:

(i) A loan principal of RMB6.7 million borrowed by a subsidiary of the Group at an interest rate of 5.1%, with a carrying amount of RMB6.4 million in 2022, and the assets with total carrying amount of RMB16.4 million were pledged.

As of 31 December 2022, the unsecured short-term bank loans mainly included:

(i) A loan principal of RMB8.0 million borrowed by a subsidiary of the Group in 2022 at an interest rate of 3.9%, for which was guaranteed by a financing guarantee company.

Capital Expenditures

Our capital expenditures mainly comprise additions to plant and equipment and intangible assets. In 2022, our capital expenditures were RMB530.1 million.

Contingent Liabilities

As of 31 December 2022, we did not have any material contingent liabilities.

Foreign Exchange and Foreign Exchange Risk

During the year ended 31 December 2022, the Group was exposed to currency risk primarily through bank deposits denominated in foreign currency, which were primarily Hong Kong dollars. The Group monitors foreign exchange movements and determines exchange when necessary. The Group currently has no foreign exchange hedging policy.

Credit Risk

In order to minimize the credit risk, we have policies in place to monitor the exposures to these credit risks on an ongoing basis. Before accepting any new customer requiring credit over a certain credit amount, we carry out research into their creditability and assess their credit quality and define credit limits for that customer. Our individual credit evaluations focus on the customer's historical payment records, and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates.

We normally do not require collateral from customers. Therefore, our exposure to credit risk is influenced mainly by the individual characteristics of each customer rather than the industry in which the customer operates. The significant concentration of credit risk primarily arises when we rely heavily on individual customers. We will, however, perform periodic credit evaluation on our customers and monitor the compliance of credit terms by them. We believe we do not have any significant concentration of credit risk as the trade and bill receivables involve a large number of customers across diverse industries and geographical areas.

Liquidity Risk

Our policy is to regularly monitor current and expected liquidity requirements to ensure that we maintain sufficient reserves of cash and adequate commitment funds from major financial institutions to meet both short-term and long-term liquidity requirements. Our Directors believe that there is no significant liquidity risk, as we have sufficient monetary capital to fund our operations.

DIVIDEND POLICY

When the Board recommends the declaration of cash dividends to shareholders of the Company (the "Shareholder(s)") at a general meeting, the decision to declare any dividends and the amount of dividends will depend on, among other things:

- our results of operations and cash flows;
- our financial position;
- overall performance;
- our future prospects;
- statutory, regulatory and contractual restrictions on the payment of dividends by us; and
- other factors that the Board deems relevant.

NO MATERIAL ADVERSE CHANGE

The Directors have confirmed that there was no material adverse change in our financial and trading position or prospects as of 31 December 2022.

SUBSEQUENT EVENTS

Save as disclosed above, the Company did not have any significant subsequent events to be disclosed after the Reporting Period to the date of this announcement.

USE OF PROCEEDS FROM THE INITIAL PUBLIC OFFERING

On 6 July 2018, H shares of the Company became listed on the Main Board of the Stock Exchange of Hong Kong Limited (the "Stock Exchange") (stock code: 1763). Based on the offer price of HKD21.60 per H share and upon the partial exercise of the over-allotment option (100 Shares), the net proceeds that the Group received from the Global Offering were approximately HKD1,690.0 million after deduction of the underwriting commissions and other estimated expenses in relation to the Global Offering. As at 31 December 2022, current assets of approximately RMB268.1 million were used and approximately RMB536.1 million were used in selective mergers and acquisitions.

In accordance with the requirements of paragraph 11(8) of Appendix 16 of the Rules Governing the Listing of Securities on the Stock Exchange (the "Listing Rules"), the use of proceeds will be updated to provide the use of proceeds from the initial public offering for 2022 (including the expected timeline of full utilization of the balance), which is set out below:

RMB in million

Use	Initial Allocation of the net proceeds	Revised Allocation of the net proceeds	Amount Utilised as of 31 December 2018	Amount Utilised as of 31 December 2019	Amount Utilised as of 31 December 2020	Amount Utilised as of 31 December 2021		Balance as of 31 December 2022	Expected time of full utilisation of balance
Investment in imaging diagnostic and therapeutic radiopharmaceuticals manufacturing and research and									
development bases Establishment of	597.3	460.0	0.0	29.5	200.0	251.5	427.0	33.0	In 2023
production and distribution subsidiaries	67.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Establishment of new production facilities Investment in the research and development of various imaging diagnostic and therapeutic radiopharmaceuticals, raw materials of radioactive source products, medical radioisotopes, and UBT	84.5	50.0	0.0	50.0	50.0	50.0	50.0	0.0	
products and related raw materials	253.6	118.3	0.0	76.6	101.2	105.4	105.5	12.8	In 2023
Investments/selective (mergers) acquisitions Working capital and general corporate	286.5	536.1	51.4	529.9	536.1	536.1	536.1	0.0	
purposes	143.3	268.1	71.7	232.5	268.1	268.1	268.1	0.0	
Total	1,432.5	1,432.5	123.1	918.5	1,155.4	1,211.2	1,386.7	45.8	

Note: The investment in the research and development in the use of proceeds is under preparation due to certain research and development projects to be newly launched. There may be differences between the actual and expected timeline for utilizing the proceeds for investment in research and development. The specific timeline of utilization of the proceeds for the investment in the research and development is subject to the actual timeline of utilization of the projects. The Company will fulfill the disclosure obligations in accordance with the relevant requirements according to the progress of the projects.

EMPLOYEES AND REMUNERATION POLICY

The Group had a total of 3,366 (as at 31 December 2021: 3,120) employees as at 31 December 2022. During the year ended 31 December 2022, our staff costs were approximately RMB795.7 million (for the year ended 31 December 2021: RMB 663.4 million). The remuneration policy of the Group is to motivate and retain excellent staff so as to realize the long-term enterprise goals and objectives of the Group. The employee remuneration policy of the Group is determined after taking into account the overall salary level in the industry, employees' performance and other factors. The management regularly reviews the employee remuneration policy and arrangement of the Group.

We provide our employees with salaries and bonuses, as well as employee benefits, including employee retirement benefit schemes, medical and vocational injury insurance schemes and housing provident fund schemes. Our employees located in China are covered by the mandatory social security schemes defined by PRC local practice and regulations, which are essentially defined contribution schemes.

We provide training to all of our employees to have them equipped with the necessary skills to perform their jobs competently and to give them the opportunities to realize their personal career goals and aspirations. We are also committed to providing individuals with management and leadership training that will improve our capability to achieve our vision, mission and growth objectives. We realize the importance of developing individual career paths that will help employees develop their full potential. Development opportunities are provided as a result of on-the-job training and formal training programs.

HEDGING ACTIVITIES

During the year ended 31 December 2022, the Group had not entered into any hedging transaction in relation to foreign exchange risks or interest risks.

FUTURE PLANS FOR MATERIAL INVESTMENTS OR CAPITAL ASSETS

The Group will actively explore investment opportunities in and outside the PRC to diversify its source of income, which may or may not include any acquisition or disposal of assets and/or business by the Group. Any such plans will comply with the applicable requirements under the Listing Rules (where appropriate).

CORPORATE GOVERNANCE AND OTHER INFORMATION

Compliance with the Corporate Governance Code

The Company has adopted and applied the principles and provisions of the Corporate Governance Code set out in Appendix 14 to the Listing Rules.

During the Reporting Period, the Company has complied with the mandatory code provisions of the Corporate Governance Code. The Group has always been committed to enhancing its corporate governance level and deems the corporate governance as an integral part of the value created for shareholders of the Company. The Group has, with reference to the code provisions of the Corporate Governance Code set out in Appendix 14 to the Listing Rules, established a modern corporate governance structure effectively balanced and independently operated by the general meeting, the Board, the supervisory committee and senior management of the Company. The Company has also adopted the Corporate Governance Code as the corporate governance practices of the Company.

Compliance with the Model Code for Securities Transactions

The Group has adopted a set of code with the standard no less favorable than that of the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 of the Listing Rules (the "Customized Code") as its own code of conduct regarding securities transaction by all Directors, supervisors (the "Supervisors") and the relevant employees of the Company.

Having made specific enquiry to the Directors and Supervisors, all Directors and Supervisors confirmed that they had complied with the required standards as set out in the Customized Code during the Reporting Period. No incident of non-compliance with the Customized Code by the relevant employees was noted by the Company.

Audit and Risk Management Committee

The audit and risk management committee of the Company (the "Audit and Risk Management Committee") consists of two independent non-executive Directors and one non-executive Director, namely Mr. Hui Wan Fai (chairman), Mr. Lu Chuang and Mr. Chen Shoulei, which terms of reference comply with the Listing Rules.

The Audit and Risk Management Committee has considered and reviewed the accounting principles and practice adopted by the Group and has discussed the relevant internal control and financial reporting matters with the management, including reviewing the consolidated financial results of the Group for the year ended 31 December 2022.

On 30 March 2023, the Audit and Risk Management Committee reviewed and confirmed the annual results announcement of the Group for the year ended 31 December 2022, annual report of 2022 and the consolidated financial information for the year ended 31 December 2022.

Scope of Work of Auditor

The figures in respect of the Group's consolidated statement of financial position, consolidated statement of profit or loss and other comprehensive income and the related notes thereto for the year ended 31 December 2022 as set out in this preliminary announcement have been agreed by the Group's auditor, SHINEWING (HK) CPA Limited, to the amounts set out in the Group's audited consolidated financial statements for the year. The work performed by SHINEWING (HK) CPA Limited in this respect did not constitute an assurance engagement in accordance with Hong Kong Standards on Auditing, Hong Kong Standards on Review Engagements or Hong Kong Standards on Assurance Engagements issued by the Hong Kong Institute of Certified Public Accountants and consequently no assurance has been expressed by SHINEWING (HK) CPA Limited on this preliminary announcement.

Purchase, Sale or Redemption of the Listed Securities of the Company

Neither the Company nor any of its subsidiaries has purchased, sold or redeemed any of the Company's listed securities during the year ended 31 December 2022.

2022 Annual General Meeting

The 2022 annual general meeting of the Company (the "AGM") will be held on Friday, 30 June 2023, and the notice of the AGM will be published and despatched to Shareholders in due course.

2022 Final Dividend

The Board resolved to declare a final cash dividend of RMB0.4407 per Share (inclusive of tax) for the year ended 31 December 2022 (the "2022 Final Dividend") to Shareholders whose names appear on the register of members of the Company on 12 July 2023, with a total cash dividend to be distributed of RMB140,968,868.43 (inclusive of tax). The 2022 Final Dividend is expected to be declared and paid in RMB to holders of Domestic Shares and, whereas dividends payable to holders of H shares will be declared in RMB and payable in Hong Kong dollars before 31 August 2023. Exchange rate between RMB and Hong Kong dollar will be the arithmetic mean of the median of the exchange rates of Hong Kong dollars against RMB as quoted by the People's Bank of China for the five business days preceding the date of the dividend payment (inclusive). The above dividend distribution proposal is subject to the review and approval by Shareholders at the AGM to be held on 30 June 2023. Details of the dividend distribution will be published after the AGM.

According to the "Enterprise Income Tax Law of the People's Republic of China" and its implementing rules, which came into effect on 1 January 2008, and other relevant rules, the Company is required to withhold 10% enterprise income tax before distributing the proposed 2022 Final Dividend to non-resident enterprise Shareholders whose names appear on the register of members of the Company. Any H Shares registered in the name of non-individual registered Shareholders, including but not limited to HKSCC Nominees Limited, other nominees, trustees or other groups and organizations, will be treated as being held by non-resident enterprise Shareholders and therefore will be subject to the withholding of enterprise income tax.

According to the letter titled the "Tax arrangements on dividends paid to Hong Kong residents by mainland companies" issued by the Stock Exchange to the issuers on 4 July 2011 and a circular (Guo Shui Han [2011] No. 348) issued by the State Administration of Taxation on 28 June 2011, and relevant laws and regulations, if individual holders of H Shares are residents of Hong Kong or Macau or countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of 10%, the Company will withhold and pay individual income tax at the rate of 10% on behalf of such Shareholders. If individual holders of H Shares are residents of countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of less than 10%, the Company will nonetheless withhold and pay individual income tax at the rate of 10% on behalf of such Shareholders. In such a case, if the relevant Shareholders would like a refund of the additional amount withheld, the Company will apply for the agreed preferential tax treatment provided that information required by the applicable tax treaty notice(s) is submitted to the Company's H Share registrar in Hong Kong, Computershare Hong Kong Investor Services Limited. If individual holders of H Shares are residents of countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of more than 10% but less than 20%, the Company will withhold and pay individual income tax at the actual tax rate stipulated in the relevant tax treaty. If individual holders of H Shares are residents of countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of 20%, or countries which have not entered into any tax treaty with the PRC, or under any other circumstances, the Company will withhold and pay individual income tax at the rate of 20% on behalf of such Shareholders.

The Company assumes no responsibility and will not entertain any claim arising from any delay in, or inaccurate determination of, the tax status or tax treatment of Shareholders or any dispute over tax(es) withheld. Shareholders are recommended to consult their tax advisers regarding the PRC, Hong Kong and other tax effects involved in their holding and disposal of H Shares.

Closure of Register of Members

The Company will hold the AGM on Friday, 30 June 2023. The register of members of the Company will be closed from Tuesday, 27 June 2023 to Friday, 30 June 2023 (both dates inclusive) and from Thursday, 6 July 2023 to Wednesday, 12 July 2023 (both dates inclusive). Shareholders whose names appear on the register of members of the Company on Friday, 30 June 2023 will be entitled to attend and vote at the AGM. Shareholders whose names appear on the register of members of the Company on Wednesday, 12 July 2023 will be entitled to receive the 2022 Final Dividend. For the purpose of determining members who are qualified as Shareholders to attend and vote at the AGM, Shareholders of the Company must lodge all transfers documents accompanied by the relevant share certificates with the Company's H Share Registrar, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong (for holders of H Shares) or the Company's registered office at Room 418, South 4th Floor, Building 1, No. 66 Changwa Middle Street, Haidian District, Beijing, China (for holders of Domestic Shares) for registration no later than 4:30 p.m. on Monday, 26 June 2023. For the purpose of determining members who are qualified as Shareholders to receive the 2022 Final Dividend (subject to the approval by Shareholders at the AGM), Shareholders must lodge all transfers documents accompanied by the relevant share certificates with the Company's H Share Registrar (see the address above) (for holders of H Shares) or the Company's registered office (see the address above) (for holders of Domestic Shares) for registration no later than 4:30 p.m. on Wednesday, 5 July 2023.

Publication of Results Announcement and Annual Report

This announcement has been published on the websites of the Stock Exchange (www.hkexnews.hk) and the Company (www.circ.com.cn). The Company will despatch the annual report for the year ended 31 December 2022 to the Shareholders of the Company in due course, which is available on the aforesaid websites.

By order of the Board

China Isotope & Radiation Corporation

Wang Suohui

Chairman

Beijing, the PRC, 30 March 2023

As at the date of this announcement, the Board comprises Mr. Wang Suohui, Mr. Xu Hongchao and Mr. Du Jin as executive Directors; Mr. Chen Shoulei, Mr. Dai Shuquan, Ms. Chang Jinyu, and Ms. Liu Xiuhong as non-executive Directors; Mr. Hui Wan Fai, Mr. Tian Jiahe, Ms. Chen Jingshan and Mr. Lu Chuang as independent non-executive Directors.