CHINA ISOTOPE & RADIATION CORPORATION
中國同輻股份有限公司

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

(Stock Code: 1763)

ANNOUNCEMENT OF INTERIM RESULTS FOR THE SIX MONTHS ENDED 30 JUNE 2019

RESULTS HIGHLIGHTS

The board of directors (the "**Board**") of China Isotope & Radiation Corporation (the "**Company**", together with its subsidiaries, the "**Group**" or "**we**") is pleased to announce the unaudited condensed consolidated financial statements of the Group for the six months ended 30 June 2019 (the "**first half of 2019**" or the "**Reporting Period**") together with unaudited comparative figures for the same period of 2018, as follows:

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

For the six months ended 30 June 2019 – unaudited

*(Expressed in Renminbi ("**RMB**"))*

	Note	Six months ended 30 June	
		2019	2018 *(Note)*
		RMB'000	*RMB'000* (restated)
Revenue	*3*	**1,654,979**	1,373,440
Cost of sales		**(464,730)**	(401,810)
Gross profit		**1,190,249**	971,630
Other income	*4*	**18,584**	10,896
Selling and distribution expenses		**(678,276)**	(541,493)
Administrative expenses		**(201,331)**	(158,544)
Profit from operations		**329,226**	282,489
Finance costs	*5(a)*	**(6,027)**	(2,826)
Share of profits less losses of associates		**1,559**	(2,341)
Share of profits of a joint venture		**12,532**	11,083
Profit before taxation	*5*	**337,290**	288,405
Income tax	*6*	**(56,034)**	(55,906)
Profit for the period		**281,256**	232,499
Attributable to:			
Equity shareholders of the Company		**147,827**	117,533
Non-controlling interests		**133,429**	114,966
Profit for the period		**281,256**	232,499
Earnings per share	*7*		
Basic and diluted (RMB)		**0.46**	0.49

Note: The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, comparative information is not restated. See Note 2. Comparative information is restated due to a business combination under common control.

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the six months ended 30 June 2019 – unaudited

(Expressed in RMB)

	Note	**Six months ended 30 June**	
		2019	2018
			(Note)
		RMB'000	*RMB'000*
			(restated)
Profit for the period		**281,256**	232,499
Other comprehensive income for the period (after tax and reclassification adjustments):			
Items that may be reclassified subsequently to profit or loss:			
exchange differences on translation of share of profits less losses of an associate		**421**	822
Items that will not be reclassified to profit or loss:			
remeasurement of defined benefit liability		**(1)**	(3,045)
equity investments at fair value though other comprehensive income – net movement in fair value reserve (non-recycling)		**382**	(249)
Other comprehensive income for the period		**802**	(2,472)
Total comprehensive income		**282,058**	230,027
Attributable to:			
Equity shareholders of the Company		**148,629**	115,433
Non-controlling interests		**133,429**	114,594
Total comprehensive income for the period		**282,058**	230,027

Note: The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, comparative information is not restated. See Note 2. Comparative information is restated due to a business combination under common control.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION
At 30 June 2019 – unaudited
(Expressed in RMB)

	Note	**At 30 June 2019** **RMB'000**	At 31 December 2018 *(Note)* *RMB'000* (restated)
Non-current assets			
Property, plant and equipment	*8*	**1,521,576**	1,339,798
Investment properties		**14,013**	14,526
Right-of-use assets	*9*	**169,814**	–
Lease prepayments		**–**	115,925
Intangible assets		**89,718**	48,928
Goodwill		**41,942**	5,670
Interests in associates		**69,328**	85,510
Interest in a joint venture		**32,097**	42,917
Long-term receivables		**32,995**	32,206
Unquoted equity investments		**126,000**	125,491
Deferred tax assets		**212,187**	206,263
		2,309,670	2,017,234
Current assets			
Inventories		**414,270**	343,723
Trade and bill receivables	*10*	**1,950,074**	1,728,435
Prepayments, deposits and other receivables		**283,528**	198,597
Cash at bank and on hand	*11*	**2,331,122**	2,615,757
		4,978,994	4,886,512
Current liabilities			
Borrowings		**150,000**	–
Trade payables	*12*	**146,042**	169,838
Accruals and other payables		**2,000,032**	1,876,732
Lease liabilities		**21,279**	–
Provisions		**69,598**	67,994
Income tax payable		**58,161**	79,652
		2,445,112	2,194,216
Net current assets		**2,533,882**	2,692,296
Total assets less current liabilities		**4,843,552**	4,709,530

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)
At 30 June 2019 – unaudited (continued)
(Expressed in RMB)

	Note	**At 30 June 2019**	At 31 December 2018 *(Note)*
		RMB'000	*RMB'000* (restated)
Non-current liabilities			
Borrowings		**99,410**	150,000
Deferred income		**45,079**	45,625
Defined benefit retirement obligation		**44,727**	44,596
Deferred tax liabilities		**13,382**	8,347
Lease liabilities		**33,110**	–
Provisions		**116,045**	113,286
Long-term payables		**10,041**	9,283
		361,794	371,137
Net assets		**4,481,758**	4,338,393
Capital and reserves			
Share capital		**319,875**	319,875
Reserves		**3,243,981**	3,182,178
Total equity attributable to equity shareholders of the Company		**3,563,856**	3,502,053
Non-controlling interests		**917,902**	836,340
Total equity		**4,481,758**	4,338,393

Note: The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, comparative information is not restated. See Note 2. Comparative information is restated due to a business combination under common control.

NOTES TO THE UNAUDITED INTERIM FINANCIAL REPORT

(Expressed in RMB unless otherwise indicated)

1 BASIS OF PREPARATION

This interim financial report has been prepared in accordance with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, including compliance with International Accounting Standard ("**IAS**") 34, *Interim financial reporting*, issued by the International Accounting Standards Board ("**IASB**"). It was authorised for issue on 30 August 2019.

The interim financial report has been prepared in accordance with the same accounting policies adopted in the 2018 annual financial statements, except for the accounting policy changes that are expected to be reflected in the 2019 annual financial statements. Details of any changes in accounting policies are set out in Note 2.

The preparation of an interim financial report in conformity with IAS 34 requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses on a year to date basis. Actual results may differ from these estimates.

This interim financial report contains condensed consolidated financial statements and selected explanatory notes. The notes include an explanation of events and transactions that are significant to an understanding of the changes in financial position and performance of the Company and its subsidiaries (collectively referred to as the "**Group**") since the 2018 annual financial statements. The condensed consolidated interim financial statements and notes thereon do not include all of the information required for a full set of financial statements prepared in accordance with IFRSs.

The interim financial report is unaudited, but has been reviewed by KPMG in accordance with Hong Kong Standard on Review Engagements 2410, *Review of interim financial information performed by the independent auditor of the entity*, issued by the Hong Kong Institute of Certified Public Accountants.

2 CHANGES IN ACCOUNTING POLICIES

The ISAB has issued a new IFRSs, IFRS 16, *Leases* and a number of amendments to IFRSs that are first effective for the current accounting period of the Group.

Except for IFRS 16, *Leases*, none of the developments have had a material effect on how the Group's results and financial position for the current or prior periods have been prepared or presented in this interim financial report. The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

IFRS 16, *Leases*

IFRS 16 replaces IAS 17, *Leases*, and the related interpretations, IFRIC 4, *Determining whether an arrangement contains a lease*, SIC-15, *Operating leases – incentives*, and SIC-27, *Evaluating the substance of transactions involving the legal form of a lease*. It introduces a single accounting model for lessees, which requires a lessee to recognise a right-of-use asset and a lease liability for all leases, except for leases that have a lease term of 12 months or less ("**short-term leases**") and leases of low value assets. The lessor accounting requirements are brought forward from IAS 17 substantially unchanged.

The Group has initially applied IFRS 16 as from 1 January 2019. The Group has elected to use the modified retrospective approach and has therefore recognised the cumulative effect of initial application as an adjustment to the opening balance of equity at 1 January 2019. Comparative information has not been restated and continues to be reported under IAS 17.

Further details of the nature and effect of the changes to previous accounting policies and the transition options applied are set out below:

(a) Changes in the accounting policies

(i) New definition of a lease

The change in the definition of a lease mainly relates to the concept of control. IFRS 16 defines a lease on the basis of whether a customer controls the use of an identified asset for a period of time, which may be determined by a defined amount of use. Control is conveyed where the customer has both the right to direct the use of the identified asset and to obtain substantially all of the economic benefits from that use.

The Group applies the new definition of IFRS 16 only to contracts that were entered into or changed on or after 1 January 2019. For contracts entered into before 1 January 2019, the Group has used the transitional practical expedient to grandfather the previous assessment of which existing arrangements are or contain leases.

Accordingly, contracts that were previously assessed as leases under IAS 17 continue to be accounted for as leases under IFRS 16 and contracts previously assessed as non-lease service arrangements continue to be accounted for as executory contracts.

(ii) Lessee accounting

IFRS 16 eliminates the requirement for a lessee to classify leases as either operating leases or finance leases, as was previously required by IAS 17. Instead, the Group is required to capitalise all leases when it is the lessee, including leases previously classified as operating leases under IAS 17, other than those short-term leases and leases of low-value assets. As far as the Group is concerned, these newly capitalised leases are primarily in relation to property, plant and equipment.

Where the contract contains lease component(s) and non-lease component(s), the Group has elected not to separate non-lease components and accounts for each lease component and any associated non-lease components as a single lease component for all leases.

When the Group enters into a lease in respect of a low-value asset, the Group decides whether to capitalise the lease on a lease-by-lease basis. For the Group, low-value assets are typically laptops or office furniture. The lease payments associated with those leases which are not capitalised are recognised as an expense on a systematic basis over the lease term.

Where the lease is capitalised, the lease liability is initially recognised at the present value of the lease payments payable over the lease term, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, using a relevant incremental borrowing rate. After initial recognition, the lease liability is measured at amortised cost and interest expense is calculated using the effective interest method. Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability and hence are charged to profit or loss in the accounting period in which they are incurred.

The right-of-use asset recognised when a lease is capitalised is initially measured at cost, which comprises the initial amount of the lease liability plus any lease payments made at or before the commencement date, and any initial direct costs incurred. Where applicable, the cost of the right-of-use assets also includes an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, discounted to their present value, less any lease incentives received.

The right-of-use asset is subsequently stated at cost less accumulated depreciation and impairment losses.

The lease liability is premeasured when there is a change in future lease payments arising from a change in an index or rate, or there is a change in the Group's estimate of the amount expected to be payable under a residual value guarantee, or there is a change arising from the reassessment of whether the Group will be reasonably certain to exercise a purchase, extension or termination option. When the lease liability is premeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right- of-use asset has been reduced to zero.

(iii) Lessor accounting

The Group leases out a number of items of properties as the lessor of operating leases. The accounting policies applicable to the Group as a lessor remain substantially unchanged from those under IAS 17.

(b) Critical accounting judgements and sources of estimation uncertainty in applying the above accounting policies

(i) Determining the lease term

As explained in the above accounting policies, the lease liability is initially recognised at the present value of the lease payments payable over the lease term. In determining the lease term at the commencement date for leases that include renewal options exercisable by the Group, the Group evaluates the likelihood of exercising the renewal options taking into account all relevant facts and circumstances that create an economic incentive for the Group to exercise the option, including favourable terms, leasehold improvements undertaken and the importance of that underlying asset to the Group's operation. The lease term is reassessed when there is a significant event or significant change in circumstance that is within the Group's control. Any increase or decrease in the lease term would affect the amount of lease liabilities and right-of-use assets recognised in future years.

(c) Transitional impact

At the date of transition to IFRS 16 (i.e. 1 January 2019), the Group determined the length of the remaining lease terms and measured the lease liabilities for the leases previously classified as operating leases at the present value of the remaining lease payments, discounted using the relevant incremental borrowing rates at 1 January 2019. The weighted average of the incremental borrowing rates used for determination of the present value of the remaining lease payments was 4.75%.

To ease the transition to IFRS 16, the Group applied the following recognition exemption and practical expedients at the date of initial application of IFRS 16:

(i) the Group elected not to apply the requirements of IFRS 16 in respect of the recognition of lease liabilities and right-of-use assets to leases for which the remaining lease term ends within 12 months from the date of initial application of IFRS 16, i.e. where the lease term ends on or before 31 December 2019;

(ii) when measuring the lease liabilities at the date of initial application of IFRS 16, the Group applied a single discount rate to a portfolio of leases with reasonably similar characteristics (such as leases with a similar remaining lease term for a similar class of underlying asset in a similar economic environment); and

(iii) when measuring the right-of-use assets at the date of initial application of IFRS 16, the Group relied on the previous assessment for onerous contract provisions as at 31 December 2018 as an alternative to performing an impairment review.

The following table reconciles the operating lease commitments as at 31 December 2018 to the opening balance for lease liabilities recognised as at 1 January 2019.

	1 January 2019
	RMB'000
Operating lease commitments at 31 December 2018	41,136
Less: commitments relating to leases exempt from capitalisation:	
– short-term leases and other leases with remaining lease term ending on or before 31 December 2019	(908)
	40,228
Less: total future interest expenses	(4,360)
Total lease liabilities recognised at 1 January 2019	35,868

The right-of-use assets in relation to leases previously classified as operating leases have been recognised at an amount equal to the amount recognised for the remaining lease liabilities, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the statement of financial position at 31 December 2018.

So far as the impact of the adoption of IFRS 16 on leases previously classified as finance leases is concerned, the Group is not required to make any adjustments at the date of initial application of IFRS 16, other than changing the captions for the balances. Accordingly, instead of "obligations under finance leases", these amounts are included within "lease liabilities", and the depreciated carrying amount of the corresponding leased asset is identified as a right-of-use asset. There is no impact on the opening balance of equity.

The Group presents right-of-use assets that do not meet the definition of investment property in "right-of-use assets" and presents lease liabilities separately in the statement of financial position.

The following table summarises the impacts of the adoption of IFRS 16 on the Group's consolidated statement of financial position:

	Carrying amount at 31 December 2018 *RMB'000* (restated)	Capitalisation of operating lease contracts *RMB'000*	Reclassification of lease prepayments *RMB'000*	**Carrying amount at 1 January 2019** ***RMB'000***
Line items in the consolidated statement of financial position impacted by the adoption of IFRS 16:				
Right-of-use assets	–	35,868	115,925	**151,793**
Lease prepayments	115,925	–	(115,925)	**–**
Total non-current assets	2,017,234	35,868	–	**2,053,102**
Lease liabilities (current)	–	13,430	–	**13,430**
Current liabilities	2,194,216	13,430	–	**2,207,646**
Net current assets	2,692,296	(13,430)	–	**2,678,866**
Total assets less current liabilities	4,709,530	22,438	–	**4,731,968**
Lease liabilities (non-current)	–	22,438	–	**22,438**
Total non-current liabilities	371,137	22,438	–	**393,575**
Net assets	4,338,393	–	–	**4,338,393**

The analysis of the net book value of the Group's right-of-use assets by class of underlying asset at the end of the reporting period and at the date of transition to IFRS 16 is as follows:

	At 30 June 2019 ***RMB'000***	At 1 January 2019 *RMB'000*
Ownership interests in leasehold land held for own use, carried at depreciated cost	**120,398**	115,925
Buildings and plants, carried at depreciated cost	**47,238**	33,760
Equipment and others, carried at depreciated cost	**2,178**	2,108
	169,814	151,793

(d) Lease liabilities

The remaining contractual maturities of the Group's lease liabilities at the end of the reporting period and at the date of transition to IFRS 16 are as follows:

	At 30 June 2019		At 1 January 2019	
	Present value of the minimum lease payments	**Total minimum lease payments**	Present value of the minimum lease payments	Total minimum lease payments
Within 1 year	**21,279**	**22,565**	13,430	14,211
After 1 year but within 2 years	**16,925**	**17,398**	10,180	11,269
After 2 years but within 5 years	**15,539**	**19,250**	11,119	13,236
After 5 years	**646**	**815**	1,139	1,512
	33,110	**37,463**	22,438	26,017
	54,389	**60,028**	35,868	40,228
Less: total future interest expenses		**(5,639)**		(4,360)
Present value of lease liabilities		**54,389**		35,868

(e) Impact on the financial result, segment results and cash flows of the Group

After the initial recognition of right-of-use assets and lease liabilities as at 1 January 2019, the Group as a lessee is required to recognise interest expense accrued on the outstanding balance of the lease liability, and the depreciation of the right-of-use asset, instead of the previous policy of recognising rental expenses incurred under operating leases on a straight-line basis over the lease term. This results in a positive impact on the reported profit from operations in the Group's consolidated statement of profit or loss, as compared to the results if IAS 17 had been applied during the year.

In the cash flow statement, the Group as a lessee is required to split rentals paid under capitalised leases into their capital element and interest element. These elements are classified as financing cash outflows, similar to how leases previously classified as finance leases under IAS 17 were treated, rather than as operating cash outflows, as was the case for operating leases under IAS 17. Although total cash flows are unaffected, the adoption of IFRS 16 therefore results in a significant change in presentation of cash flows within the cash flow statement.

The following tables may give an indication of the estimated impact of adoption of IFRS 16 on the Group's financial result, segment results and cash flows for the six months ended 30 June 2019, by adjusting the amounts reported under IFRS 16 in these interim financial statements to compute estimates of the hypothetical amounts that would have been recognised under IAS 17 if this superseded standard had continued to apply to 2019 instead of IFRS 16, and by comparing these hypothetical amounts for 2019 with the actual 2018 corresponding amounts which were prepared under IAS 17.

	2019				2018
	Amounts reported under IFRS 16	**Add back: IFRS 16 depreciation and interest expense**	**Deduct: Estimated amounts related to operating lease as if under IAS 17** ***(Note 1)***	**Hypothetical amounts for 2019 as if under IAS 17**	Compared to amounts reported for 2018 under IAS 17
	(A)	**(B)**	**(C)**	**(D=A+B-C)**	
	RMB'000	***RMB'000***	***RMB'000***	***RMB'000***	*RMB'000* (restated)
Financial result for the six months ended 30 June 2019 impacted by the adoption of IFRS 16:					
Profit from operations	**329,226**	**9,090**	**8,971**	**329,345**	282,489
Finance costs	**(6,027)**	**992**	**–**	**(5,035)**	(2,826)
Profit before taxation	**337,290**	**10,082**	**8,971**	**338,401**	288,405
Profit for the period	**281,256**	**10,082**	**8,971**	**282,367**	232,499
Reportable segment profit (gross profit) for the six months ended 30 June 2019 ***(Note 3(b))*** **impacted by the adoption of IFRS 16:**					
– Pharmaceuticals	**1,058,909**	**1,957**	**2,688**	**1,058,178**	862,763
– Radioactive source products	**100,967**	**104**	**111**	**100,960**	87,915
– Clinical medical and laboratory testing services and others	**20,300**	**780**	**819**	**20,261**	13,629
– Total	**1,190,724**	**2,841**	**3,618**	**1,189,947**	973,129

	2019			2018
	Amounts reported under IFRS 16	**Estimated amounts related to operating leases as if under IAS 17** ***(Notes 1 & 2)***	**Hypothetical amounts for 2019 as if under IAS 17**	Compared to amounts reported under IAS 17
	(A)	**(B)**	**(C=A+B)**	
	RMB'000	***RMB'000***	***RMB'000***	*RMB'000* (restated)
Line items in the condensed consolidated cash flow statement for the six months ended 30 June 2019 impacted by the adoption of IFRS 16:				
Cash generated from operations	**68,013**	**(8,971)**	**59,042**	176,940
Net cash (used in)/generated from operating activities	**(13,865)**	**(8,971)**	**(22,836)**	105,701
Capital element of lease rentals paid	**(7,794)**	**7,794**	**–**	–
Interest element of lease rentals paid	**(1,224)**	**1,177**	**(47)**	–
Net cash used in financing activities	**415**	**8,971**	**9,386**	(57,899)

Note 1: The "estimated amounts related to operating leases" is an estimate of the amounts of the cash flows in 2019 that relate to leases which would have been classified as operating leases, if IAS 17 had still applied in 2019. This estimate assumes that there were no difference between rentals and cash flows and that all of the new leases entered into in 2019 would have been classified as operating leases under IAS 17, if IAS 17 had still applied in 2019. Any potential net tax effect is ignored.

Note 2: In this impact table these cash outflows are reclassified from financing to operating in order to compute hypothetical amounts of net cash generated from operating activities and net cash used in financing activities as if IAS 17 still applied.

3 REVENUE AND SEGMENT REPORTING

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

(a) Disaggregation of revenue

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

	Six months ended 30 June	
	2019	2018
	RMB'000	*RMB'000*
		(restated)
Revenue from contracts with customers within the scope of IFRS 15		
Disaggregated by major products of service lines		
– Sales of pharmaceuticals	**1,379,369**	1,139,516
– Sales of radioactive source products	**157,913**	150,759
– Irradiation services	**31,989**	25,274
– Technical services	**32,049**	24,016
– Revenue from construction contracts	**2,652**	642
– Independent clinical laboratory services	**36,729**	29,536
– Other services	**14,278**	3,697
	1,654,979	1,373,440

Disaggregation of revenue from contracts with customers by the timing of revenue recognition is disclosed in Note 3(b).

(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 four 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 analysers, 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 sterilisation purposes, and also design, manufacturing and installation of gamma ray irradiation facilities to irradiation service providers.

- Independent clinical laboratory services and other businesses: provision of independent clinical laboratory services for customers 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 period is set out below.

	Six months ended 30 June 2019				
	Pharmaceuticals *RMB'000*	**Radioactive source products** *RMB'000*	**Irradiation** *RMB'000*	**Clinical medical and laboratory testing services and others** *RMB'000*	**Total** *RMB'000*
Disaggregated by timing of revenue recognition					
Point in time	**1,384,397**	**184,934**	**31,989**	**51,007**	**1,652,327**
Over time	**–**	**–**	**2,652**	**–**	**2,652**
Revenue from external customers	**1,384,397**	**184,934**	**34,641**	**51,007**	**1,654,979**
Inter-segment revenue	**1,196**	**10,172**	**–**	**6,331**	**17,699**
Reportable segment revenue	**1,385,593**	**195,106**	**34,641**	**57,338**	**1,672,678**
Reportable segment profit (gross profit)	**1,058,909**	**100,967**	**10,548**	**20,300**	**1,190,724**

	Six months ended 30 June 2018 (restated)				
	Pharmaceuticals *RMB'000*	Radioactive source products *RMB'000*	Irradiation *RMB'000*	Clinical medical and laboratory testing services and others *RMB'000*	Total *RMB'000*
Disaggregated by timing of revenue recognition					
Point in time	1,144,573	169,718	25,576	33,233	1,373,100
Over time	–	–	340	–	340
Revenue from external customers	1,144,573	169,718	25,916	33,233	1,373,440
Inter-segment revenue	2,127	10,283	–	4,673	17,083
Reportable segment revenue	1,146,700	180,001	25,916	37,906	1,390,523
Reportable segment profit (gross profit)	862,763	87,915	8,822	13,629	973,129

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

	Six months ended 30 June	
	2019 ***RMB'000***	2018 *RMB'000* (restated)
Reportable segment profit (gross profit)	**1,190,724**	973,129
Elimination of inter-segment profit (gross profit)	**(475)**	(1,499)
Consolidated gross profit	**1,190,249**	971,630

(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.

4 OTHER INCOME

	Six months ended 30 June	
	2019	2018
	RMB'000	*RMB'000*
		(restated)
Government grants	**3,126**	2,009
Interest income	**11,529**	4,549
Rental income from operating leases	**4,039**	3,960
Others	**(110)**	378
	18,584	10,896

5 PROFIT BEFORE TAXATION

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

(a) Finance costs

	Six months ended 30 June	
	2019	2018
		(Note)
	RMB'000	*RMB'000*
		(restated)
Interests on borrowings	**4,161**	3,662
Interests on lease liabilities	**1,234**	–
Less: interest expense capitalised into construction in progress	**(3,862)**	(3,662)
	1,533	–
Net foreign exchange loss/(gain)	**1,106**	(348)
Interest accretion on reclamation obligations, net	**1,871**	1,687
Interest cost on defined benefit retirement plans	**759**	836
Interest cost on long-term payables	**758**	651
	6,027	2,826

Note: The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, comparative information is not restated. See Note 2.

The borrowing costs have been capitalised a rate of 4.99% per annum (2018: 4.99%).

(b) Other items

	Six months ended 30 June	
	2019	2018
		(Note)
	RMB'000	*RMB'000*
		(restated)
Depreciation		
– owned property, plant and equipment	**34,372**	29,909
– investment property	**513**	471
– right-of-use assets	**11,292**	–
Amortisation		
– lease prepayments	**–**	953
– intangible assets	**3,439**	1,532
Impairment losses/(reversal of impairment losses)		
– trade and bill receivables	**10,279**	9,650
– prepayments, deposits and other receivables	**51**	(585)
Research and development costs (other than amortisation costs)	**39,496**	31,260
Increase in provisions for reclamation obligations	**1,703**	1,193
Cost of inventories	**391,610**	340,205

Note: The Group has initially applied IFRS 16 at 1 January 2019 using the modified retrospective approach. Under this approach, comparative information is not restated. See Note 2.

6 INCOME TAX

	Six months ended 30 June	
	2019	2018
	RMB'000	*RMB'000*
		(restated)
Current tax		
Provision for the period	**55,445**	53,258
Under-provision in respect of prior years	**3,241**	5,217
	58,686	58,475
Deferred tax		
Origination and reversal of temporary differences	**(2,652)**	(2,569)
	56,034	55,906

Notes:

(i) The Company and its subsidiaries established in the PRC are subject to PRC Corporate Income Tax rate of 25% (2018: 25%) for the six months ended 30 June 2019.

(ii) Certain subsidiaries of the Group are approved High and New Technology Enterprises and are subject to a preferential PRC Corporate Income Tax rate of 15% during the approved period, subject to fulfillment of recognition criteria.

(iii) A subsidiary of the Group has obtained approval from the relevant tax bureau to be taxed as an enterprise with tax incentive for development of the western region for the calendar year of 2019 and therefore enjoyed a preferential PRC Corporate Income Tax rate of 15% (2018: 15%).

7 EARNINGS PER SHARE

The calculation of basic earnings per share is based on the profit attributable to equity shareholders of the Company of RMB147,827,000 (six months ended 30 June 2018: RMB117,533,000 (restated)) and the weighted average number of ordinary shares in issue of 319,875,000 (six months ended 30 June 2018: 239,906,000) in issue during the interim period.

The Company did not have any potential dilutive shares in existence during the interim period. Accordingly, diluted earnings per share is the same as basic earnings per share.

8 PROPERTY, PLANT AND EQUIPMENT

During the six months ended 30 June 2019, the Group acquired items of plant and machinery with a cost of RMB214,228,000 (six months ended 30 June 2018: RMB157,940,000). Items of plant and machinery with a net book value of RMB1,814,000 were disposed of during the six months ended 30 June 2019 (six months ended 30 June 2018: RMB219,000), resulting in a loss on disposal of RMB634,000 (six months ended 30 June 2018: RMB39,000).

9 RIGHT-OF-USE ASSETS

As disclosed in Note 2, the Group has initially applied IFRS 16 using the modified retrospective method and adjusted the opening balances at 1 January 2019 to recognise right-of-use assets relating to leases which were previously classified as operating leases under IAS 17.

During the six months ended 30 June 2019, the Group entered into a number of lease agreements for use of land, plants and offices, and therefore recognised the additions to right-of-use assets of RMB28,838,000.

10 TRADE AND BILL RECEIVABLES

	At 30 June 2019	At 31 December 2018
	RMB'000	*RMB'000*
		(restated)
Bill receivables	**41,295**	47,777
Trade receivables due from		
– related parties under CNNC	**18,374**	19,957
– associates and a joint venture	**74,222**	65,281
– third parties	**1,974,203**	1,743,161
	2,108,094	1,876,176
Less: loss allowance	**158,020**	147,741
	1,950,074	1,728,435

All of the trade and bill receivables (net of impairment losses) are expected to be recovered within one year.

Aging analysis

As of the end of the reporting period, the ageing analysis of trade and bills receivables based on the invoice date (or date of revenue recognition, if earlier) and net of loss allowance, is as follows:

	At 30 June 2019 *RMB'000*	At 31 December 2018 *RMB'000* (restated)
Within 1 year	**1,733,636**	1,544,798
Between 1 to 2 years	**163,970**	130,336
Between 2 to 3 years	**31,018**	33,603
Over 3 years	**21,450**	19,698
	1,950,074	1,728,435

Trade and bills receivables are required to be settled in accordance with contract terms and are generally due immediately without credit period.

11 CASH AT BANK AND ON HAND

	At 30 June 2019 *RMB'000*	At 31 December 2018 *RMB'000* (restated)
Cash on hand	**68**	98
Cash at bank	**1,837,846**	1,975,010
Cash at CNNC Finance Company Ltd.	**493,208**	640,649
	2,331,122	2,615,757
Representing:		
Cash and cash equivalents in cash flow statement	**1,755,870**	2,557,524
Time deposits with original maturity over three months *(Note(i))*	**551,488**	49,401
Restricted deposits *(Note(ii))*	**23,764**	8,832
	2,331,122	2,615,757

Note:

(i) Time deposits with original maturity over three months of RMB18,000,000 as at 30 June 2019 (31 December 2018: RMB18,000,000) were pledged as security for a bank loan.

(ii) Restricted deposits mainly represent deposits for guarantee of letters of credit.

12 TRADE PAYABLES

All trade payables are expected to be settled within one year.

13 DIVIDENDS

(i) Dividends payable to equity shareholders attributable to the interim period

	2019	2018
	RMB'000	*RMB'000*
Interim dividend declared after the interim period of RMB Nil cents per share (2018: RMB15 cents per share)	**–**	47,981

(ii) Dividends payable to equity shareholders attributable to the previous financial year, approved during the interim period

	Six months ended 30 June	
	2019	2018
	RMB'000	*RMB'000*
Final dividend in respect of the previous financial year, approved during the following interim period, of RMB12.26 cents per share (six months ended 30 June 2018: RMB28 cents per share)	**39,217**	66,478

The final dividend in respect of the previous financial year proposed during the reporting period has not been paid at the end of the reporting period (2018: RMB53,456,000 paid in September 2018 and RMB 13,022,000 paid in January 2019).

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 EPC service for the design, manufacturing and installation of gamma ray irradiation facilities and the provision of independent clinical laboratory services to hospitals and other medical institutions.

Business Review

During the six months ended 30 June 2019, we operated four business segments, namely pharmaceuticals, radioactive source products, irradiation and independent clinical laboratory services and other businesses. Benefiting from medical treatment technologies and policies, the continuing deepening of the reform of the State pharmaceuticals system, the progress of the radioactive pharmaceuticals and medical treatment technologies, the further improvement of the nuclear medicine system, coupled with the aging population, the increased average longevity of people and the enhanced health and safety awareness and per-capita consumption of citizens, the isotopes and irradiation industry has widespread development and application in China. During the Reporting Period, the Group rides on the momentum to actively explore new systems of scientific and technological innovation, make efforts to promote the construction of its scientific research platform, carefully organize scientific research and production activities, and spare no effort to promote industrial strategic arrangements and market development. Revenue achieved was RMB1,655.0 million, representing a year-on-year increase of 20.5%. Net profit was RMB281.3 million, representing a year-on-year increase of 21.0%, and net profit attributable to equity shareholders of the Company was RMB147.8 million, representing a year-on-year increase of 25.8%.

Business Segments

1. Pharmaceuticals

CIRC are the 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 immunoassay diagnostic reagents and kits in China. During the Reporting Period, CIRC promoted all production and operation activities successively. Revenue from the pharmaceuticals business was RMB1,384.4 million, representing a year-on-year increase of 21.0%, among which, in the first half of 2019, revenue from sales of Technetium-99m instantly labeled pharmaceutical series increased by 21.2% compared to the first half of 2018, which was mainly due to the fact that on the one hand, CIRC increased the clinical promotion of technetium-99m-MIBI, on the other hand, some major medical centers (such as Hengdian HTA, Zhengzhou HTA, Shenyang HTA etc.) increased their marketing efforts, resulting in an increase in customer usage and customer base. Revenue from sales of strontium-89 chloride injections increased by 15.4% compared to the first half of 2018, mainly due to the preliminary results of the clinical promotion activities of strontium-89 chloride injections actively carried out by CIRC; revenue from sales of fluorine-18-FDG injections increased by 15.4% compared to the first half of 2018, and in addition to certain natural growth factors, the official operation of Hengdian HTA was also an important growth factor; in addition, pharmaceuticals centers in Wuhan and Changsha have obtained GMP certificates, which provided a solid guarantee for the subsequent sales growth of fluorine-18-FDG injections;

revenue from sales of Carbon-14 UBT kits increased by 29.3% compared to the same period of 2018, mainly due to the significant growth of UBT kits as a result of the promotion of breath test technologies by CIRC to grassroots medical institutions, the further exploration of the frontline physical examination market, the continuous conducting of academic promotion and charity clinics activities and the enhanced health awareness of frontline hospitals and the general public.

2. Radioactive source products

CIRC are one of the largest manufacturers of medical and industrial radioactive sources products in China and also a 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 successful launch of CIRC's first batch of cobalt-60 raw materials for medical use marks the mastering of the technology for production of cobalt-60 for medical use through independent research and development in the PRC, and makes CIRC the first and sole domestic supplier of cobalt-60 for medical use in China. The gamma knife, medical equipment, is about to be equipped with "China Chips" to successfully realize domestication, which provides great support for sustainable development of the gamma knife industry. During the Reporting Period, revenue from radioactive source products reached RMB184.9 million, representing a year-on-year increase of 9.0%, among which, revenue from sales of cobalt-60 gamma knife radioactive source in 2019 grew faster by 28.0% compared to the same period of last year, which was due to the short supply in the market in the previous two years; revenue from sales of meter calibration sources grew by 52.2% compared to the same period of last year.

3. Irradiation

CIRC are primarily engaged in providing irradiation service for sterilization purpose to manufacturers of medical devices, food, traditional Chinese medicine and cosmetics in China, and provide EPC services for the design, manufacturing and installation of irradiation facilities to irradiation service providers. Revenue from the irradiation segment of CIRC for the first half of 2019 was RMB34.7 million, representing a year-on-year increase of 33.7%, mainly due to the fact that during the Reporting Period, the irradiation segment further developed the market by continuously expanding the strategic layout, which realised the increase in operating income. During the Reporting Period, CNNC Isotope & Radiation (Changchun) Radiation Technology Co., Ltd. (hereinafter referred to as "**Changchun Radiation Company**"), a subsidiary of CIRC, has successfully developed PE-Xc pipes and PE-Xc pipes of high thermal conductivity for underfloor heating through the irradiation technology, which vitalizes the underfloor heating market of China. Changchun Radiation Company also actively plans for new scientific research projects, such as research on the preparation and application of radiation-modified high-performance environment-friendly natural fiber composite materials.

4. Independent clinical laboratory services and other businesses

As a downstream extension of CIRC's in vitro immunoassay diagnostic reagents and kits business, we also provide independent clinical laboratory services to hospitals and other medical institutions in China. We primarily offer independent clinical laboratory services with respect to hepatitis, endocrine, bone metabolism, cardiovascular disease, diabetes and other diseases. CIRC is promoting the chain operation of independent clinical laboratories. During the Reporting Period, laboratory centers in Chengdu and Wuhan obtained medical institution licenses, and started to accept samples. CIRC will continuously develop the independent clinical laboratory service industry, and will continuously expand the coverage of independent third-party laboratory centers, in line with medical development of China. During the Reporting Period, revenue from independent clinical laboratory services and other businesses of CIRC was RMB51.0 million, representing a year-on-year increase of 53.5%. Revenue from independent clinical laboratory services increased by 24.4% year on year, mainly due to (i) the operation of clinical laboratory service subsidiaries; (ii) the establishment of our special testing platform to overcome weaknesses in development and to promote technological upgrade and enhance our strengths; and (iii) signature of a strategic cooperation agreement with BGI (華大基因) to enter the gene testing market.

Meanwhile, arrangements are accelerated for the nuclear medical equipment business as a new industry. After the establishment of CNNC Accuray (Tianjin) Medical Technology Co., Ltd. (中核安科鋭(天津)醫療科技有限責任公司) by CNNC High Energy Equipment (Tianjin) Co., Ltd. (中核高能(天津)裝備有限公司) (hereinafter referred to as "**CNHE**"), a subsidiary of CIRC, and Accuray Asia Limited, an American company on 28 January 2019, CNHE actively participates in ChinaMed and other exhibitions, continuously promoting two international advanced radiotherapy products, namely Radixact, the fourth-generation tomotherapy system, and Cyberknife, the robotic radiosurgery system; in the first half of 2019, CNHE and Shanxi Medical University signed the framework agreement for cooperation in production and research of nuclear medicine equipment, so as to promote the localization of high-end nuclear medicine equipment.

In the field of nuclear medical treatment, CIRC updates its development philosophy to keep pace with the times, by the use of its own advantages in traditional industries, and actively expands its businesses in the market in the field of medical services, and makes great efforts to promote the development of medical service businesses including molecular imaging diagnosis.

The table below sets forth our revenue by business segment for the six months ended 30 June 2019 and 2018:

	Six months ended 30 June 2019		Six months ended 30 June 2018	
(RMB in million, except in percentage)	**Amount**	**%**	Amount (restated)	%
Pharmaceuticals	**1,384.4**	**83.7**	1,144.6	83.3
Radioactive source products	**184.9**	**11.2**	169.7	12.4
Irradiation	**34.7**	**2.1**	25.9	1.9
Independent clinical laboratory services and other businesses	**51.0**	**3.0**	33.2	2.4
Total	**1,655.0**		1,373.4	

In order to unify the market resources, expand the market size, strengthen the core business, increase the market share, and implement the policy of collectivization and commercialization, CIRC established a radiopharmaceutical marketing center, a radioactive source marketing center and a brachytherapy business division (hereinafter referred to as the "**Three Marketing Platforms**") in 2018. During the Reporting Period, the three marketing platforms operated smoothly, realizing the unified management of market resources for therapeutic radiopharmaceuticals, radioactive source and Iodine-125 sealed source and relevant sales channels, integrating the sales channels of relevant products, realizing resource sharing and coordinated development, and providing a solid support for extensive collection of market information and scientific and reasonable development of marketing strategies. Through the establishment of the three marketing centers, CIRC has gradually built a high-quality brand image.

In terms of market development, the three marketing centers continue to make intensive efforts in various market segments. The radiopharmaceutical marketing center actively carries out clinical promotion activities for Strontium-89 chloride injection and technetium-99m-MIBI, with a total of 89 academic salons for technetium-99m-MIBI products, covering 1,619 medical, technical and nursing personnel; and continuously strengthens external cooperation to enrich the product structure. During the Reporting Period, it started four demonstration base construction projects for the promotion of nuclear medicine application for medical diagnosis, and had one hospital passed the acceptance test and established. At present, there are 49 participating hospitals in the PRC. The accelerated popularization of nuclear medicine application for clinical diagnosis and treatment effectively facilitates market expansion for products of the Company. The brachytherapy business division has completed the unified management of Iodine-125 sealed sources of three brands, and has actively carried out development for industry extension. The radioactive source marketing center has basically realized the integration of sales channels of home-made non-destructive testing radioactive sources, making significant improvement in terms of sales policies and the right to speak in the industry; as the sole supplier of home-made iridium-192 after-loading therapy source, it has continuously developed the ability to carry out diversified operation.

Meanwhile, HTA is making efforts to create "overall nuclear medicine solutions", to provide overall nuclear medicine solution services to major hospitals in China, and accelerate the transformation from provision of products to provision of system solutions, thus expediting the popularization of nuclear medicine departments in medical institutions in China and promoting the development of nuclear medicine in China.

During the Reporting Period, the Company's headquarters and its members held a total of 17 publicity and exhibition activities such as various national academic conferences and trade exhibitions, thus enhancing its brand influence. It has established a nationwide product, technology and academic promotion system. Meanwhile, CIRC has actively carried out customer satisfaction survey to strengthen product safety and quality control systems and deepen service awareness; and has successfully acquired companies, such as Pet-Module, Ningbo Junan, and Leike, to expand its product lines and continuously extend its industrial coverage.

As of 30 June 2019, the Group held various marketing activities through our sales network comprising our own sales staff, promoters and distributors, covering 31 provinces, municipalities and autonomous regions in China. In addition, the Group had a broader end user base. As of 30 June 2019, the Group had a sales network covering more than 11,000 hospitals and other medical institutions, including 1,800 Class III hospitals, 5,000 Class II hospitals and 4,400 Class I hospitals in China.

The Group owns strong research and development strengths. Our research and development team comprising 203 research and development staff focuses on the extensive researching and optimization of production technologies, the development of new products and the safety and efficacy upgrading of existing products. The Group first conducts detailed market analysis and then strictly selects research and development projects according to its own advantages, industrial expertise and market demand. We have been proactively researching and developing various imaging diagnostic and therapeutic pharmaceuticals and are striving to fill in the blanks in the China therapy fields so as to meet the therapy demand. As of 30 June 2019, we owned eight imaging diagnostic and therapeutic radiopharmaceuticals under research and development, including one radiopharmaceutical pending approval for production (i.e. sodium iodine-131 capsule for therapeutic purpose), one radiopharmaceutical at the stage of clinical trial (i.e. iodine-131-MIBG injection), one therapeutic radiopharmaceutical pending application and approval for clinical trial (i.e. palladium-103 sealed source), one imaging diagnostic radiopharmaceutical pending approval for clinical trial (i.e. sodium fluorine-18 injection) and four imaging diagnostic and therapeutic radiopharmaceuticals under various stages of research and development.

In the first half of 2019, we achieved remarkable results in our work on intellectual properties with a total of 13 patents applied including 11 patents for inventions and 13 licensed patents including one patents for inventions. As of 30 June 2019, we had registered more than 240 patents and had filed applications for more than 80 patents, which further solidified our business strengths in China. As of 30 June 2019, the Group established three research and development centers under the CIRC Institute system, namely in vitro diagnosis technology, radioactive medicine, and stable isotope and breath test technology R&D centers. The Group will work with foreign and domestic advantageous enterprises and public institutions to innovate on operating systems and mechanisms, carry out product research and development through various methods including independent research and development, alliance, entrustment, introduction or acquisition and merger, and will gradually establish a high-level enterprise research and development center covering all nuclear technology application fields. In addition, the postdoctoral research workstation for nuclear technology application has been officially approved for operation, and has started the enrollment process, which provides strong support for the construction of the Group's multi-level research teams.

During the Reporting Period, the Group recorded revenue of RMB22.0 million from our export of UBT analyzers, RIA kits, cobalt sources and other products to more than 50 countries and regions, representing a year-on-year increase of 58.2%, compared to the same period of 2018; and its overseas revenue from brachytherapy particle products exceeded zero; with regard to Morocco gamma knife demonstration project, it completed equipment donation, cobalt source shipment and delivery and physician training work, and was about to start the equipment commissioning; it obtained the IAEA (International Atomic Energy Agency) supplier qualification; meanwhile, it actively undertook and participated in activities organized by IAEA, held important talks with leaders of institutions, and supported IAEA in promoting nuclear technology application in member countries. The strategy of overall nuclear medicine solutions was already paying off, with continuous improvement in overseas market development platforms and stable progress in the establishment of overseas localized operating organizations, while overall international market conditions will facilitate the stable growth of businesses in overseas markets in the second half of the year.

During the Reporting Period, the Group completed the acquisition of 5 enterprises with a total investment of RMB159.3 million.

S/N	Acquired Enterprise	Agreement Signature Date	Acquisition Amount *(RMB in million)*	Principal Businesses
1	Ningbo Junan Pharmaceuticals Technology Co., Ltd. (寧波君安藥業科技有限公司)	18 January 2019	80.0	Production and sale of Iodine-125 sealed sources and Strontium-89 chloride injections
2	Pet-Module (Beijing) Co., Ltd. (派特(北京)科技有限公司)	24 January 2019	8.4	Production and sale of FDG composite modules
3	Shanghai Eugene Biotech Co., Ltd. (上海優晶生物科技有限公司)	18 February 2019	1.4	Production and sale of POCT products
4	Xinghua Meiquan Technology Co., Ltd. (興化市美全科技有限公司)	20 March 2019	18.5	Irradiation services
5	Beijing Leike Mechatronic Engineering Technology Co., Ltd. (北京雷克機電工程技術有限公司)	29 March 2019	51.0	Production, reloading, sale and transportation of iridium-192 and selenium-75 radioactive sources, and otherwise

The production capacity, actual production volume and utilization rates for the six months ended 30 June 2019 are set out in the table below:

Imaging diagnostic and therapeutic radiopharmaceuticals:

	Six months ended 30 June 2019		
	Annual designed capacity	**Actual production volume**	**Utilization rate**
Fluorine-18-FDG injections (Ci)	11,600	2,260	19.5%
Molybdenum-99/technetium-99m generators (Ci)	32,445	5,751	17.7%
Technetium-99m instantly labeled pharmaceutical series (vial)	567,000	215,979	38.1%
Sodium iodine-131 oral solution (Ci)	21,986	5,140	23.4%
Iodine-125 sealed sources (unit)	1,000,000	398,571	39.9%
Strontium-89 chloride injections (vial)	65,000	4,548	7.0%

UBT kits and analyzers:

	Six months ended 30 June 2019 Annual designed capacity	Actual production volume	Utilization rate
Carbon-13 & 14 UBT kits (unit)	23,000,000	19,280,683	83.8%
Carbon-13 & 14 UBT analyzers (unit)	6,200	2,712	43.7%

In vitro immunoassay reagents and kits:

	Six months ended 30 June 2019 Annual designed capacity	Actual production volume	Utilization rate
RIA kits (unit)	200,000	50,126	25.1%
EIA reagents, CLIA reagents and TRFIA reagents (unit)	100,000	24,409	24.4%
Colloidal gold reagents (unit)	100,000	278	0.3%

Radioactive source products:

	Six months ended 30 June 2019 Annual designed capacity	Actual production volume	Utilization rate
Cobalt-60 source for gamma knife (Ci)	2,500,000	137,614	5.5%
Iridium-192 brachytherapy sources (Ci)	10,000	2,913	29.1%
Cobalt-60 radioactive source for irradiation service (Ci)	14,000,000	3,640,563	26.0%
Iridium-192 non-destructive testing radioactive sources (Ci)	1,200,000	62,470	5.2%
Caesium-137 radioactive sources (Ci)	55,835	1,117	2.0%
Americium-241/Beryllium neutron sources (Ci)	1,000	10	1.0%
Selenium-75 non-destructive testing radioactive source (Ci)	50,000	2,980	6.0%

Future Development

In the second half of 2019, we will continue to enhance market promotion, strengthen the "shared and diversified" business philosophy with the mission of bringing benefit to people's livelihood and the society, continuously improve the market service system and increase the sales volume of the Group's products. In the future, under the guidance of the Company's development strategy, we will further accelerate the development of production capacity, increase scientific research investment, solidly improve the corporate management level, and realize industry extension and expansion through capital operation, thus supporting the development of the Group.

In terms of capacity building, in order to meet the increasing demand for radiopharmaceuticals in China's densely inhabited districts in a timely manner, we will accelerate arrangements for the network of pharmaceuticals centers, with proposed establishment and operation of a number of pharmaceuticals centers in the second half of 2019, laying a solid foundation for the formation of a network arrangement system covering major cities in China in 2022. In addition, progress has been made in the construction of medical bases. In the first half of 2019, Guangdong medical base was officially completed and went into operation, while two new types of modern production and research bases in Hebei Province and Sichuan Province were being constructed in an orderly manner. The successive completion and operation of the medical bases will further enhance our research and development and production capacity, and help meet the requirements of standardized and large-scale production and operation of radiopharmaceuticals for imaging diagnosis and medical treatment, so as to meet the demand in China's growing radiopharmaceuticals market.

In terms of scientific research innovation, we will more clearly define the positioning of leading by science and technology, vigorously promote reform and innovation work in terms of system structure, assessment mechanism, salary system, talent introduction, incentive measures, etc., and accelerate the construction of the Group's CIRC Institute, so as to expedite the fostering of professional talents. Meanwhile, we will further strengthen cooperation with domestic and foreign colleges and universities, scientific research institutions and enterprises, carry out various technical researches, and improve the capability of research and development of new products, so as to continuously enhance our core competitiveness.

In terms of management, we will make solid progress in lean management, build a lean culture, form a lean management system, and continuously improve the management level in terms of production site, process, logistics, safety and quality, so as to reduce costs and improve quality. Meanwhile, we will accelerate the construction of informatization platforms, gradually incorporate information technologies into all processes of the corporate value chain, so as to significantly improve enterprise management and work efficiency.

In terms of capital operation, we will continuously improve the capital operation ability, actively promote the vertical and horizontal expansion and development of the industry, concentrate advantageous resources to carry out strategic capital operation supporting the industry in the fields of radioactive medicine, medical diagnosis, irradiation application, nuclear medicine equipment, etc., according to strategic positioning of various industries, and with focus on key projects. We gradually realize the transformation from sale of products to provision of services, and make efforts to build a platform of "overall nuclear medicine solutions".

In the future development, the Group will make efforts to promote the rapid development of the nuclear technology application industry, according to the market demand and with the aim of obtaining economic benefits, and strive to become a leading international supplier of nuclear technology application products and services.

FINANCIAL REVIEW

Revenue

We derived our revenue mainly from four major business segments: (1) pharmaceuticals; (2) radioactive source products; (3) irradiation; and (4) independent clinical laboratory services and other businesses.

Our revenue increased by 20.5% from RMB1,373.4 million (restated) for the six months ended 30 June 2018 to RMB1,655.0 million during the Reporting Period, which was mainly due to an increase in revenue from our pharmaceuticals segment, radioactive source products segment and independent clinical laboratory services and other businesses.

Cost of Sales, Gross Profit and Gross Margin

Our cost of sales increased by 15.7% from RMB401.8 million (restated) for the six months ended 30 June 2018 to RMB464.7 million during the Reporting Period, which was mainly due to an increase in cost of sales of our pharmaceuticals segment and independent clinical laboratory services and other businesses.

Our gross profit increased by 22.5% from RMB971.6 million (restated) for the six months ended 30 June 2018 to RMB1,190.2 million during the Reporting Period and our gross margin increased from 70.7% (restated) to 71.9%. The increase in gross margin was primarily due to higher gross margin of our pharmaceuticals segment with higher proportion of revenue in our total revenue.

Other Income

Our other income increased by 70.6% from RMB10.9 million (restated) for the six months ended 30 June 2018 to RMB18.6 million during the Reporting Period, primarily due to the increase in interest income during the Reporting Period as a result of the existence of a balance of HKD funds raised through our listing in Hong Kong.

Selling and Distribution Expenses

Our selling and distribution expenses increased by 25.3% from RMB541.5 million (restated) for the six months ended 30 June 2018 to RMB678.3 million during the Reporting Period, which was primarily due to an increase in our sales service fees and staff costs as of the expanded operational scale of our radiopharmaceuticals products.

As a percentage of revenue, selling and distribution expenses increased slightly from 39.4% (restated) for the six months ended 30 June 2018 to 41.0% during the Reporting Period.

Administrative Expenses

Our administrative expenses increased by 27.0% from RMB158.5 million (restated) for the six months ended 30 June 2018 to RMB201.3 million during the Reporting Period, mainly due to (i) the increased staff costs resulting from our expanded operational scale, (ii) the increase in depreciation and amortization charges of the Company, mainly due to the expansion of segment operations, including pharmaceuticals and independent medical tests, and investment of more fixed assets, and (iii) increased research and development expenses incurred by the Company.

As a percentage of revenue, administrative expenses increased from 11.5% (restated) for the six months ended 30 June 2018 to 12.2% during the Reporting Period.

Finance Costs

Our finance costs increased by 113.3% from RMB2.8 million (restated) for the six months ended 30 June 2018 to RMB6.0 million during the Reporting Period, mainly due to the increase in interest expenses on our lease liability and the rise in exchange losses resulting from exchange rate movement.

Share of Profits less Losses of Associates and Share of Profits of a Joint Venture

Our share of profits less losses of associates increased by RMB3.9 million from RMB-2.3 million for the six months ended 30 June 2018 to RMB1.6 million during the Reporting Period, mainly due to the decrease in losses incurred by our associate, Shenzhen CICAM, and the increase in earnings of other associates. Our share of profits of a joint venture increased by 13.1% from RMB11.1 million for the six months ended 30 June 2018 to RMB12.5 million during the Reporting Period, mainly due to an increase in profits from our joint venture, Shanghai GMS Pharmaceutical Co., Ltd.

Profit before Tax

As a result of the foregoing, our profit before tax increased by 17.0% from RMB288.4 million (restated) for the six months ended 30 June 2018 to RMB337.3 million during the Reporting Period.

Income Tax

Our income tax increased slightly by 0.2% from RMB55.9 million (restated) for the six months ended 30 June 2018 to RMB56.0 million during the Reporting Period, mainly due to the increase in our taxable income.

For the six months ended 30 June 2018 and during the Reporting Period, our effective tax rate was 19.4% (restated) and 16.6% respectively.

Profit for the Period

As a result of the foregoing, our profit for the period increased by 21.0% from RMB232.5 million (restated) for the six months ended 30 June 2018 to RMB281.3 million during the Reporting Period.

FINANCIAL POSITION

Overview

For the six months ended 30 June 2019, the total assets, the total liabilities and the total equity of the Group were RMB7,288.7 million, RMB2,806.9 million and RMB4,481.8 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
	At 30 June 2019	**At** 31 December 2018 (restated)
Inventories	**414.3**	343.7
Trade and bill receivables	**1,950.1**	1,728.4
Prepayments, deposits and other receivables	**283.5**	198.6
Cash at bank and on hand	**2,331.1**	2,615.8
Total Current Assets	**4,979.0**	4,886.5
Borrowings	**150.0**	0.0
Trade payables	**146.0**	169.8
Accruals and other payables	**2,000.0**	1,876.7
Lease liabilities	**21.3**	0.0
Provisions	**69.6**	68.0
Income tax payable	**58.2**	79.7
Total Current Liabilities	**2,445.1**	2,194.2
Net Current Assets	**2,533.9**	2,692.3

Our net current assets decreased by 5.9% from RMB2,692.3 million (restated) as of 31 December 2018 to RMB2,533.9 million as of 30 June 2019, mainly due to the rise in current liabilities as a result of the increase in current borrowings.

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 (all components of equity less unaccrued proposed dividends) was 4.4% (restated) and 6.8% as of 31 December 2018 and 30 June 2019, respectively.

Our quick ratio (total current assets excluding inventories divided by total current liabilities as of the same date) was 2.1 times (restated) and 1.9 times as of 31 December 2018 and 30 June 2019, respectively.

Analysis of Cash Flows

The following table sets forth the cash flows of the Group:

	RMB in million	
	Six months ended 30 June	
	2019	2018 (restated)
Net cash (used in)/generated from operating activities	**(13.9)**	105.7
Net cash used in investing activities	**(790.0)**	(69.9)
Net cash generated from/(used in) financing activities	**0.4**	(57.9)
Net decrease in cash and cash equivalents	**(803.5)**	(22.1)
Cash and cash equivalents at the beginning of the period	**2,557.5**	1,157.1
Effect of changes in foreign exchange rate	**1.8**	0.1
Cash and cash equivalents at the end of the period	**1,755.9**	1,135.0

Trade and Other Receivables

Trade and other receivables are stated at amortised cost using the effective interest method less allowance for credit losses. As of 30 June 2019, our trade and other receivables (net of bad debt allowance of RMB168.6 million) were RMB2,233.6 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 distributors, payables to distributors, payables for staff-related costs, dividends payables and other accruals and payables. As of 30 June 2019, our trade and other payables were RMB2,146.1 million.

Bank Loans

As of 30 June 2019, our bank loans were RMB249.4 million, among which, Headway, a subsidiary of the Group borrowed a five-year loan of RMB135.0 million which carries interest at a rate of 5.0% above the five-year benchmark lending rate per annum of the People's Bank of China ("**PBOC**"); Sanjin Electronic borrowed a five-year loan of RMB9.4 million which carried interest at an annual rate of 4.51%; HTA borrowed a short-term borrowing due within one year of RMB100.0 million which carried interest at an annual rate of 3.915%; Ningbo Junan borrowed a short-term borrowing due within one year of RMB5.0 million, of which RMB3.0 million carried interest at an annual rate of 6% and RMB2.0 million carried interest at an annual rate of 5.9%.

Capital Expenditures

Our capital expenditures mainly comprise additions to the ownership interests in leasehold land held for own use, investment properties, plant and equipment and intangible assets. During the Reporting Period, our capital expenditures were RMB229.2 million.

Contingent Liabilities

As of 30 June 2019, we did not have any material contingent liabilities.

Pledge of Assets by the Group

As at 30 June 2019, a subsidiary of the Group borrowed a five-year loan which carried interest at a rate of 5.0% above the PBOC five-year benchmark lending rate per annum and was jointly guaranteed by shareholders of the subsidiary, and the Group's certain ownership interests in leasehold land held for own use with carrying amount of RMB25.3 million, and time deposits with original maturity over three months of RMB18.0 million as at 30 June 2019 were pledged as security for such bank loan. Sanjin Electronic has pledged its ownership interests in leasehold land held for own use and properties with a carrying amount of RMB7.3 million and RMB58.8 million respectively to borrow a five-year loan of RMB9.4 million. Ningbo Junan has pledged its properties with a carrying amount of RMB3.6 million to borrow a short-term borrowing due within one year of RMB5.0 million.

Foreign Exchange and Foreign Exchange Risk

During the six months ended 30 June 2019, 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 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 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.

The Board will propose declaration of dividend, if any, in Renminbi with respect to the shares on a per share basis for shareholders' approval. We will pay such dividend in Renminbi. According to the Articles of Association of the Company, all of our shareholders are equally entitled to dividend and distribution. Holders of the shares will be proportionately entitled to all dividends and other distributions declared on a per share basis.

Interim Dividend

The Board does not recommend the payment of any interim dividend for the six months ended 30 June 2019.

No Material Adverse Change

The Directors have confirmed that there was no material adverse change in our financial and trading position or prospects since 30 June 2019.

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 related expenses in relation to the global offering. As at 30 June 2019, liquidity of approximately RMB119.9 million were used and approximately RMB206.0 million was used in selective mergers and acquisitions.

Unit: RMB in million

Use	Initial allocation of the net proceeds	Revised allocation of the net proceeds	Amount utilized as of 31 December 2018	Balance of the net proceeds allocated after the change	Amount utilized from January to June 2019	Balance
Investment in imaging diagnostic and therapeutic radiopharmaceuticals manufacturing and research and development bases	597.30	460.00	0.00	460.00	23.50	436.50
Establishment of production and distribution subsidiaries	67.30	–	0.00	–	0.00	–
Establishment of new production facilities – Headway (Tongyuan or Shenzhen)	84.50	50.00	0.00	50.00	0.00	50.00
Investment in the research and development of various imaging diagnostic and therapeutic radiopharmaceuticals, raw materials of radioactive source products, medical radioisotopes, and UBT products and related raw materials	253.60	118.30	0.00	118.30	13.55	104.75
Investments/selective (mergers) acquisitions	286.50	536.10	51.40	484.70	154.60	330.10
Working capital and general corporate purposes	143.30	268.10	71.70	196.40	48.24	148.16
Total	1,432.50	1,432.50	123.10	1,309.40	239.89	1,069.51

Employees and Remuneration Policy

The Group had a total of 2,571 employees as at 30 June 2019. During the six months ended 30 June 2019, our staff costs (including directors' remuneration but excluding contributions to any pension plan) were approximately RMB163.4 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 six months ended 30 June 2019, 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 Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (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 code 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 principles and code provisions set out in 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. 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 meetings, 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 codes ("**Customized Code**") whose standards are not lower than the Model Code for Securities Transactions by Directors of Listed Issuers (the "**Model Code**") as set out in Appendix 10 of the Listing Rules as its own code of conduct regarding securities transaction by all Directors, Supervisors and the relevant employees of the Company.

Having made specific enquiries 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. The Company was also not aware of any incidents of non-compliance with the Customized Code by the relevant employees.

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. Meng Yan and Mr. Zhou Liulai, and its terms of reference comply with the Listing Rules.

The Audit and Risk Management Committee has considered and reviewed the accounting principles and practices adopted by the Group and has discussed the relevant internal control and financial reporting matters with the management, including reviewing the unaudited interim condensed consolidated financial results of the Group for the six months ended 30 June 2019.

On 30 August 2019, the Audit and Risk Management Committee reviewed and confirmed the interim results announcement of the Group for the six months ended 30 June 2019, the 2019 interim report and the unaudited interim condensed consolidated financial information for the six months ended 30 June 2019 prepared in accordance with the IAS 34 *Interim Financial Report*.

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

During the six months ended 30 June 2019 and as of the date of this interim report, neither the Company nor any of its subsidiaries purchased, sold or redeemed any listed securities of the Company.

Material Litigation

As of 30 June 2019, the Company was not involved in any material litigation or arbitration. Nor were the Directors of the Company aware of any material litigation or claims that were pending or threatened against the Company.

Publication of Results Announcement and Interim Report

This announcement has been published on the websites of the Stock Exchange (www.hkexnews.hk) and the Company (www.china-isotope.com). The interim report for the six months ended 30 June 2019 will be despatched to the shareholders of the Company and published on the above websites in due course.

By order of the Board
China Isotope & Radiation Corporation
Meng Yanbin
Chairman

Beijing, the PRC, 30 August 2019

As at the date of this announcement, the Board comprises Mr. Meng Yanbin, Mr. Wu Jian and Mr. Du Jin, as executive Directors; Mr. Zhou Liulai, Mr. Chen Shoulei and Mr. Chen Zongyu as non-executive Directors; and Mr. Guo Qingliang, Mr. Meng Yan and Mr. Hui Wan Fai, as independent non-executive Directors.