MEDBOT™

2021 Annual Presentation

March 2022

Strictly Private and Confidential

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Business highlights in 2021

Product

Laparoscopic

- **Toumai®1st** received **NMPA approval** in Jan 2022
- **Toumai®2rd** completed enrollment of registrational clinical trial covering indications including **gynecologic, thoracic and general surgery**
- **Toumai® single-arm** completed **first human clinical trial (FIM)** of single port laparoscopy cholecystectomy completed in Dec 2021
- **DFVision®** received **NMPA approval**

Natural orifice

- **Trans-bronchial surgical robot** completed the **FIM clinical trial** in Mar 2022

Orthopedic

- **Honghu** submitted NMPA registration application for TKA in Jul 2021
  submitted FDA registration application for TKA in Dec 2021

Panvascular

- **R-ONE®** commenced the enrollment of the **NMPA registrational clinical** in Nov 2021

Percutaneous

- **Mona Lisa™** commenced the enrollment of the **NMPA registrational clinical** in Nov 2021, with **most trial surgeries completed** as of reporting date

Commercialization

- **Training**:
  - Established **10+** training centers nationwide in 2021, mainly through collaboration with reputable hospitals
  - Provided trainings for nearly **300** surgeons[1]
  - **Toumai® Mobile Platform** launched in Dec 2021
- **Sales**:
  - DFVision® started to **contribute sales** from Nov 2021
- **Team:**
  - A well-trained and experienced marketing team, providing hospitals with training, maintenance for robots, equipment adjustment and other comprehensive services

R&D

- **Five foundation technologies**: robot ontology, control algorithms, electrical engineering, image-based navigation and precision imaging
- **Largest surgical robot R&D team** in China
- **4 R&D centers** – Shanghai, Shenzhen, Singapore and Boston
- **500+ patents** granted or in application globally - **No.1** in domestic industry[1]

IPO

- Successful listed on the Main Board of HKEX on 2 Nov 2021 - **First China surgical robot company listed on HKEX**
- Raised USD231mm in HK IPO
- Included in **Hang Seng Composite Index** in Mar 2022

Note: [1] as of Dec 31, 2021

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Only surgical robot company world-wide covering all 5 major and fast-growing surgical specialties

	1 Laparoscopic	2 Orthopedic	3 Panvascular	4 Natural Orifice	5 Percutaneous
China Market Opportunities (2026E)	**US$2,315mm** (20A-26E CAGR: 39%)	**US$451mm** (20A-26E CAGR: 48%)	**US$180mm** (22E[1]-26E CAGR: 151%)	**US$129mm** (23E[1]-26E CAGR: 161%)	**US$264mm** (20A-26E CAGR: 53%)

Major Global / Domestic Listed Peers[2]	Overview of Surgical Specialties Coverage				
MEDBOT™	✓	✓	✓	✓	✓
Intuitive Surgical	✓			✓	
CMR Surgical	✓				
Stryker / Mako		✓			
Medtronic / Mazor	✓	✓			
Zimmer Biomet / Rosa		✓			
Siemens			✓		
Johnson & Johnson		✓		✓	
WEGO (威高)	✓				
TINAVI (天智航)		✓			

Source: Frost & Sullivan analysis
Notes: [1] Expect to have first commercialized surgical robot product in that year; 2 Refers to peers with market cap of over US$1bn

Laparoscopic surgical robot

Flagship product – Toumai® Laparoscopic Surgical Robot

Toumai® 1st Generation

Patient-side Cart | 3DHD Vision System | Surgeon's Console | Instruments and Accessories

- **Four robotic** arms compatible with highly complex surgeries
- **Reduce surgical wounds, incidences of post-surgical complications for faster recovery**
- Robotic arms with **high degrees of freedom**
- **Tremor-filtered instrument movement**
- Immersive **3DHD visualization**
- **Reduced surgeon fatigue** through natural hand-eye alignment

Toumai® 1st Generation

- **2018** Completed the design for Toumai® 1st Generation
- **2018** Admitted to NMPA Green Path
- **May 2021** The first Chinese-developed surgical robot that had completed registrational clinical trial for complex urologic surgeries
- **Jan 2022** Obtained NMPA approval

Toumai® 2nd Generation

- **Oct 2021** Initiated patient enrollment for registrational clinical trial in gynecologic, thoracic and general surgeries

- **Jan 2022** Completed enrollment for multidisciplinary, multicenter-registered clinical trails

Toumai® Single-arm

- **Dec 2021** Completed the First human clinical trial (FIM) of single port laparoscopy cholecystectomy

First of its kind completed with a Chinese-developed laparoscopic surgical robot

RALRP[1] (removal of the entire prostate)	Dongfang Hospital in Shanghai (Nov 2019)
RAPN[2]	Zhejiang Provincial People's Hospital in Hangzhou (Dec 2020)
Extraperitoneal RALRP[1]	Zhongshan Hospital in Shanghai (Dec 2020)
RAPN[2] adopting a retroperitoneal approach	Zhongshan Hospital in Shanghai (Dec 2020)
Single-port RAPN[2]	Zhejiang Provincial People's Hospital in Hangzhou (Dec 2020)

Note: [1] Robot-assisted laparoscopicradical prostatectomy;
[2] Robot-assisted partial nephrectomy

Laparoscopic surgical robot (cont'd)

Toumai® 2rd generation – clinical trial milestone surgeries

First and **only domestic** laparoscopic surgical robot to conduct clinical trial on all **4 indications**

2nd globally & 1st domestic laparoscopic surgical robot to accomplish **all** types of **complex** surgeries

Full application of clinical specialties in **thoracic, laparoscopic and pelvic cavity surgeries**

Clinical trial centers coverage

11 Oct 2021
- Completed first patient enrolment **of the multi-specialty, multi-center clinical study**

26 Oct 2021
- Completed a Radical resection of distal gastric cancer(远端胃癌根治术), marked important progress made in **clinical application of general surgery**

18 Nov 2021
- **First domestic four-arm robot assisted total** hysterectomy and bilateral adnexectomy (全子宫及附件切除术)

14 Dec 2021
- **First radical gastrectomy for gastric cancer** (胃癌根治术) assisted by Toumai in Southeast China

29 Dec 2021
- **First domestic robot assisted** Choledochoscopic Cholecystectomy and Choledocholithotomy (联合胆道镜胆囊切除及胆总管取石术)

22 Jan 2022
- Completed patient enrollment for gynecologic, thoracic, general surgery – **completed patient enrollment for Toumai® 2nd generation**

Oct 2021 | **Nov 2021** | **Dec 2021** | **Jan 2022**

25 Oct 2021
- Completed a Right lung lower lobe resection(右肺下叶切除术) - important progress in **clinical application of thoracic surgery**

11 Nov 2021
- **First domestic four-arm robot assisted** radical resection of sigmoid colon cancer(乙状结肠癌根治术) in Jiangxi province

26 Nov 2021
- **First domestic robot assisted** Sleeve Gastrectomy Gastric Volume Reduction Surgery(袖状胃切除胃减容手术)

03 Dec 2021
- **First domestic robot assisted gynecological operation in East China -** total hysterectomy with double adnexectomy (全子宫双附件切除术)

9 Dec 2021
- **First domestic robot assisted** Radical resection of right colon cancer (右半结肠癌根治术) in East China

28 Dec 2021
- **First domestic robot assisted clinical trial in gynecologic surgery in Northeast China -** total hysterectomy (全子宫切除术)

Laparoscopic surgical robot (cont'd)

Flagship product – DFVision® 3D Electronic Laparoscope

- **The first Chinese-developed** 3D electronic laparoscope admitted to the **NMPA Green Path** in Apr 2019
- **The first surgery completed** with **Chinese-developed** 3D electronic laparoscope in China in Oct 2019
- ***DFVision® - I*** received **NMPA approval** in Jun 2021
- ***DFVision® - II*** at prototype testing stage, will **submit NMPA application in 2022E**

Light weight

- *DFVision®*'s dual objective lenses are placed at the tip of the borescope
- **Easier for surgeons to manipulate precisely**, particularly in small surgical fields

3D electronic laparoscope

Image processor (3DHD vision system)

Stereo visualization

- The natural depth of field allows the surgeon to have **intuitive observation**

High-definition, real-time image transmission

- Strong image transmission and processing capabilities
- High magnification feature enables surgeons to **zoom in the view smoothly**, **observe minute blood vessels clearly** and **operate with greater precision**

Commercialization Progress

Kicked off **marketing campaigns** for *DFVision®* in 2H 2021

Commercial launch with sales contribution since 4Q 2021 and promote product awareness among target hospitals and surgeons

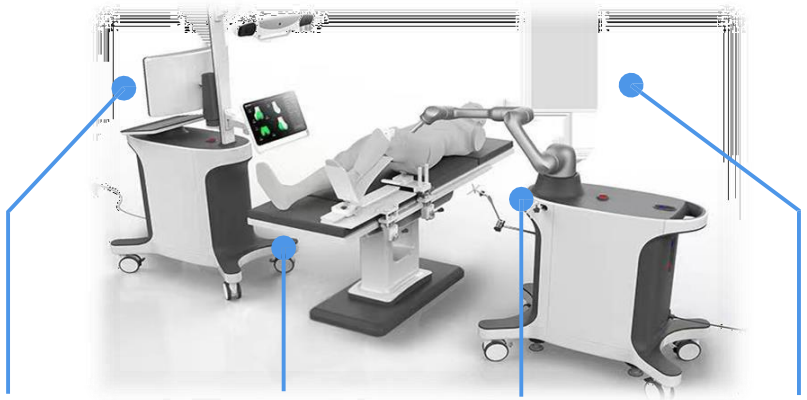
To **help surgeons gain familiarity** with the product and **collect feedbacks**

Orthopedic surgical robot

Flagship product – Honghu Orthopedic Surgical Robot

The only Chinese-developed joint replacement surgical robot with a **self-developed robotic arm.**

Expected to be the **first Chinese-developed surgical robot to obtain FDA approval**



3D image-based preoperative plan to define the optimal implant size according to the patient's anatomy

Significantly **decreased radiation exposure** and improved **cost-efficiency**

Precise bone cutting and implant placement to reduce surgical complications and facilitate patients' recovery

Innovative and novel navigation and positioning to optimize postoperative outcome

May 2020 – Green Path

Entered the NMPA **Green Path** in May 2020

Sep 2020 – Clinical trial

Honghu commenced a **registrational clinical trial in China for TKA** with ~100 patients enrolled in Sep 2020

Jan 2021 – Patient enrollment

Patient enrollment for Honghu's registrational clinical trial for TKA completed in Jan 2021

Jul 2021 – Registration application

Completed registrational clinical trial and submitted NMPA registration application for TKA in Jul 2021

Dec 2021 – Registration application

Submitted FDA registration application for TKA in Dec 2021

Next step – Indication expansion

To commence a **clinical trial for THA** in China by the end of 2022

Natural Orifice Surgical Robot

Robot-assisted natural orifice surgery

Surgery application

- Natural orifice surgical robots refer to robots that deliver surgical instruments to the target anatomy through natural pathways of the human body and control them for diagnosis or surgery
- Natural orifice surgical robots are applied in natural orifice transluminal laparoscopic surgeries, such as

Bronchoscopy (examination of the lungs)	Colonoscopy (examination of the bowel)	Gastroscopy (examination of the stomach)

Competitive landscape

- Globally there are only 3 FDA approved natural orifice surgical robots
- In China, there is no NMPA approved natural orifice surgical robots

Product	**Trans-bronchial Surgical Robot** 
Features / Technology	■ Leverage the power of flexible robotics which uses a camera and tools to enter the lungs through their natural airways ■ Precisely guide a biopsy instrument to those hard-to-reach nodules
Indication application	Trans-bronchial diagnosis and treatment
Clinical status	■ Completed **FIM clinical trial** in Mar 2022 **– First trial surgery completed by domestic trans-bronchial surgical robot** ■ Registrational clinical trial (2023) ■ NMPA registration application (2024)

Panvascular Surgical Robot

R-ONE® Vascular Interventional Surgical Robot

Robot-assisted panvascular surgery

Surgery application

- Panvascular surgical robots are used to treat diseases of the vasculature or related organs in the heart, the brain or the peripheral vascular system
- Panvascular robots not only move surgeons outside the operating room, but more importantly achieve better precision and controllability of operations

Competitive landscape

- Globally there are only 4 panvascular surgical robots approved by FDA or obtained CE Marking
- In China, there is no NMPA approved panvascular surgical robots

Product	**R-ONE® Vascular Interventional Surgical Robot ("R-ONE®")** CE Marking 
Features / Technology	■ Designed to operate with precision and perform specific movements ■ Facilitate and enhance the interventional procedures performed on the patient
Indication application	Coronary angioplasty
Clinical status	■ Commenced the **enrollment of the NMPA registrational clinical trial** in Nov 2021 - marking a field of vascular milestone of the Company in the intervention ■ **Expect to submit NMPA registration application in 2022E**

Note: [1] Transcatheter aortic valve replacement

Percutaneous Surgical Robot

Mona Lisa Robotic Transperineal Prostate Biopsy System

Robot-assisted percutaneous surgeries

Surgery application

- Percutaneous surgical robots are indicated for percutaneous surgeries, which are primarily procedures to collect tissue samples for diagnostic purposes, such as the detection of early-stage lung cancer, breast cancer and prostate cancer

Competitive landscape

- Globally there are only 4 percutaneous surgical robots approved by FDA or obtained CE Marking
- In China, there are only 2 NMPA approved percutaneous surgical robots

Partner/ Product

Features / Technology

Indication application

Clinical status

iSR'obot™ Mona Lisa Robotic Transperineal Prostate Biopsy System ("Mona Lisa")

CE Marking

FDA approval

- Real-time 2D ultrasound images displayed on the monitor during the biopsy procedure
- The surgeon manually inserts the needle into the prostate to collect the biopsy cores

Transperineal prostate biopsy[1]

Expect to cooperate with Toumai®, providing integrated solutions in urology

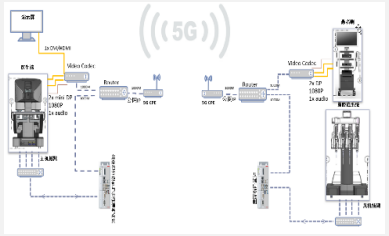
- **FDA approval & CE Marking (2017)**
- **China:**
  - Completed **most trial surgeries of the NMPA registrational clinical trial** as of the reporting date – **1st robotic assisted prostate puncture biopsy clinical trial** in China
  - Expect to **submit NMPA registration application in 2022E**

Note: [1] A diagnostic procedure in which the surgeon passes the biopsy needle through the perineal skin and into the prostate

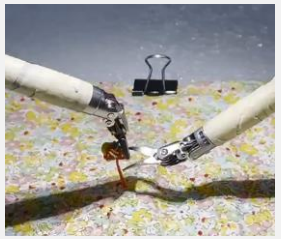
Cutting-edge technology

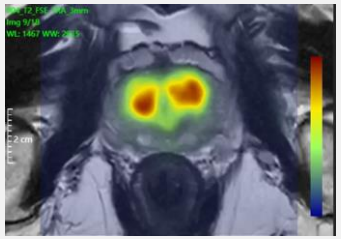
Technology

Remote surgery



Automatic operation





Characteristic

- 5G dedicated network, low delay operation
- Multilevel safety mechanism for remote surgery to ensure the safety
- Real-time communication by multi-patry
- Remote control, core parameter return

- **Intelligence image diagnosis** – Automatic cutting, diagnosis and positioning
- **Intelligence surgery planning** – Automatic learning to avoid key autonomy structure and establish safe & efficient surgery planning
- **Automatic precision treatment** – precision control of equipment to drive surgery operation and completed automatic surgery closed loop

Progress

- **Toumai®**
  - Completed the first 5G Remote animal experiment at three locations

- **Honghu**
  - Completed the first 5G Remote Joint Replacement Surgery

- Successfully conducted animal testing using unmanned, fully automated surgical platform **Madame Curie™** in Dec 2021

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Experienced team and well-planned strategies for commercialization

Dedicated specialized team

Surgeon training and clinical support

Patient education

After-sales service

Specialized commercialization team

- **100+** professionals, covering sales and marketing, surgeon training, clinical support and after-sales services
- Specialized commercialization team with **extensive experience of the sales of da Vinci** surgical robots in China

Academic promotion / surgeon training and clinical support

- Target **surgeon education and training** to increase the adoption rate of our surgical robots
- Provide **tailored solutions** based on **surgeons' feedback**
- **Co-develop** next-generation surgical robots

Increase awareness of surgical robots among patients

- Mass **media promotion**
- Clinical performance
- Potential **medical insurance** coverage

Sustainable after-sales service for hospital

- **One-stop solutions** covering multiple surgical departments with robot-assisted surgery needs
- **Global service network** comprising surgical robot trainers, clinical support personnel and after-sales service engineers

Strong industrial operation capabilities for surgical robots

Largest surgical robot R&D team in China, covering **8 major functions**

- Electrical engineering
- Mechanical engineering
- Software development
- Testing
- Vision imaging development
- IP management
- Algorithm development
- Fund management

R&D

- **Most of** R&D team members hold **a master's or higher degree**
- **Globally-located R&D centers** in Shanghai, Shenzhen, Boston and Singapore
- Collaboration with **top-tier institutions**
- **500+ patents** granted or in application globally

Clinical trial & registration

- Completed **2 registrational clinical trials** for Toumai® and Honghu concurrently
- Completed enrollment of **Toumai®-II registrational clinical trails for 3 indications in ~3 months**
- Collaboration with **top-tier hospitals**

Standard Setting

Global

In-house

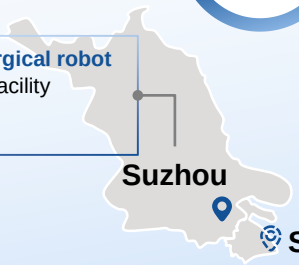
Quality control

Design & Development → Procurement → Registration

Quality management system in accordance with ISO13485 standard covering every aspect of operations

Services → Promotion → Manufacturing

Supply chain



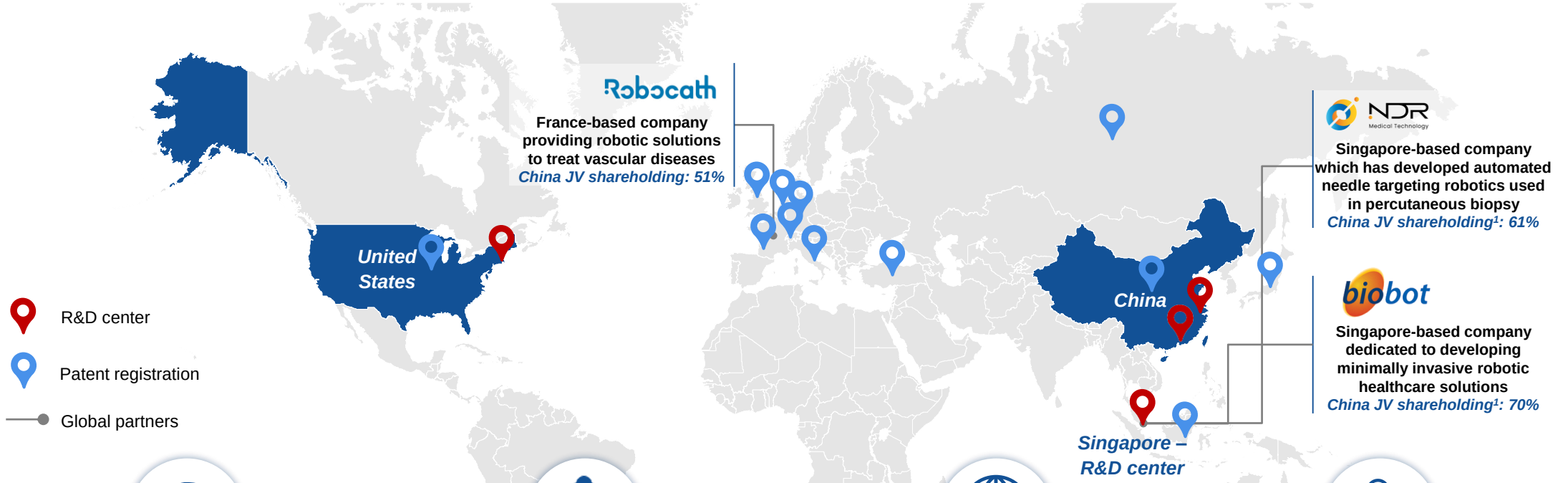
Orthopedic surgical robot manufacturing facility

- ✓ **Laparoscopic surgical robot** manufacturing facility
- ✓ Establishing **a second laparoscopic surgical robot manufacturing facility** in Shanghai

In-house manufacturing and supply chain team

Over **100** selected suppliers from **13** countries

Clear global vision and established footprint



Robocath

France-based company providing robotic solutions to treat vascular diseases

China JV shareholding: 51%

NDR Medical Technology

Singapore-based company which has developed automated needle targeting robotics used in percutaneous biopsy

China JV shareholding[1]: 61%

biobot

Singapore-based company dedicated to developing minimally invasive robotic healthcare solutions

China JV shareholding[1]: 70%

Singapore – R&D center

Global expansion starting form R&D

Potential product launch overseas and global supply chain management

Strategic investment and collaborations with global partners to co-develop next-generation product

159 patents granted, 344 patents pending application approval globally[2]

Note: [1] Including shares held by MicroPort MedBot and ESOP [2] As of Dec 31, 2021

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Successful product launch, funding future and adequate cash balance

Successful product launch

Primarily from the sales of DFVision since its approval by NMPA in Jun 21

Funding future

Net loss of 584.5m with oper. performance loss 452.8m, YoY 134%, around 70% of which invested in R&D

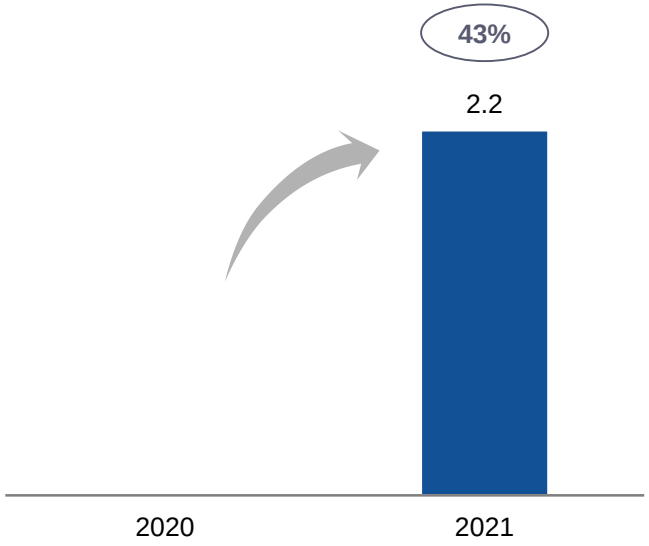
Adequate cash for opportunities

1,940.8m at 21YE, YoY 30%

- Net IPO and over-allotment +1,375m
- Strategic partnership investment (263m)

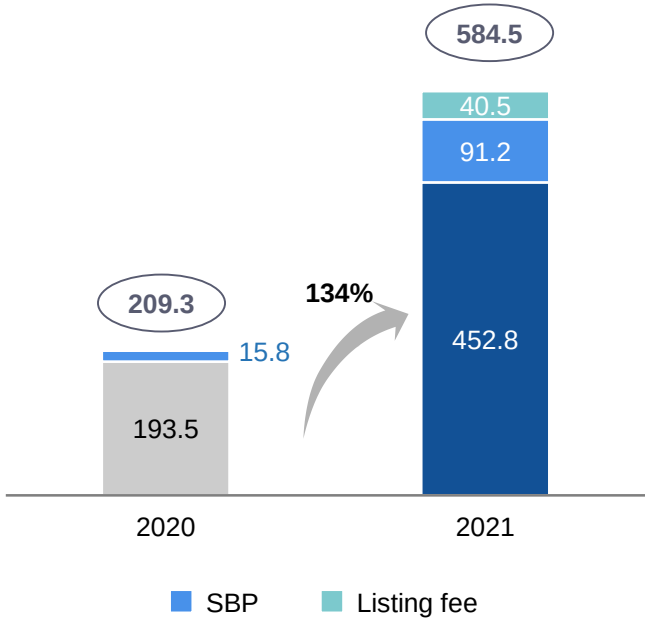
Revenue

(RMB million)



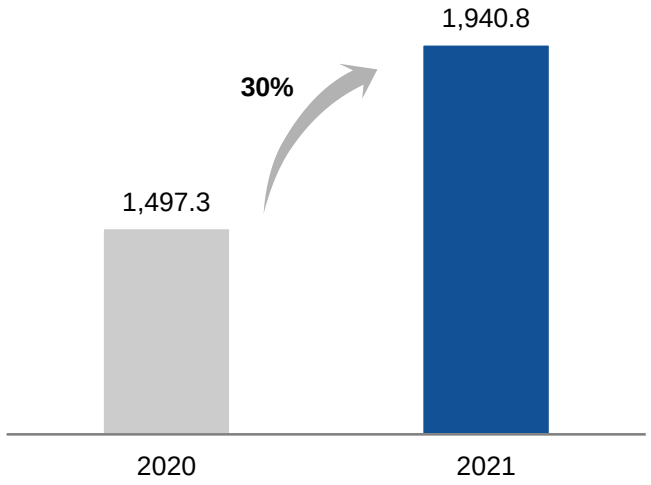
Operating performance

(RMB million)



Cash Balance

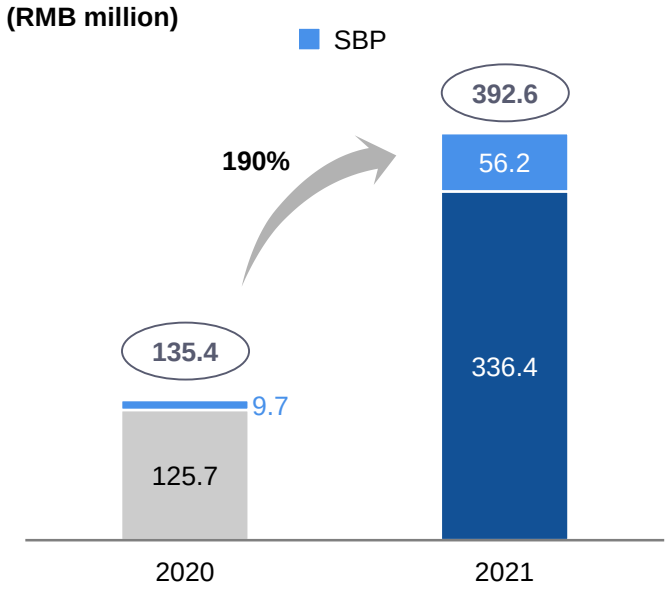
(RMB million)



Investment on future – Operating Expenses

Invest for sustainable growth

R&D Cost

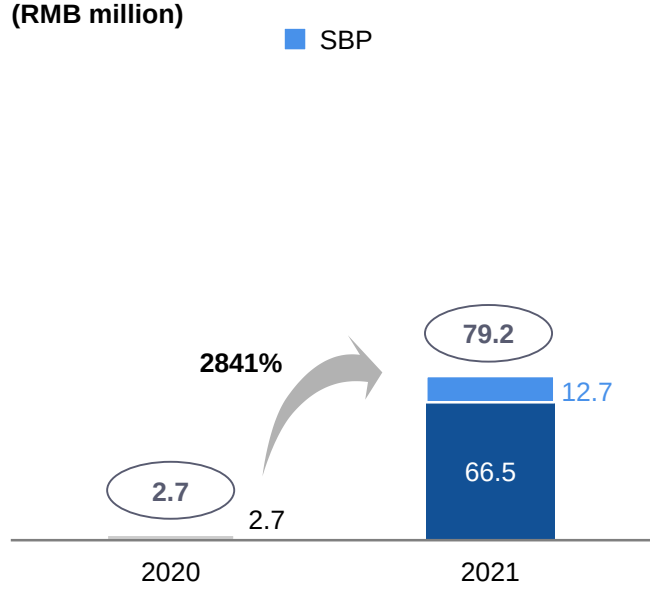


R&D 392.6m, +257m / 190% YoY, on-going and new projects

- Personnel costs +130m, incl. SBP +47m
- Consumable +67m

Prepare for sales ramp-up

S&M Expenses

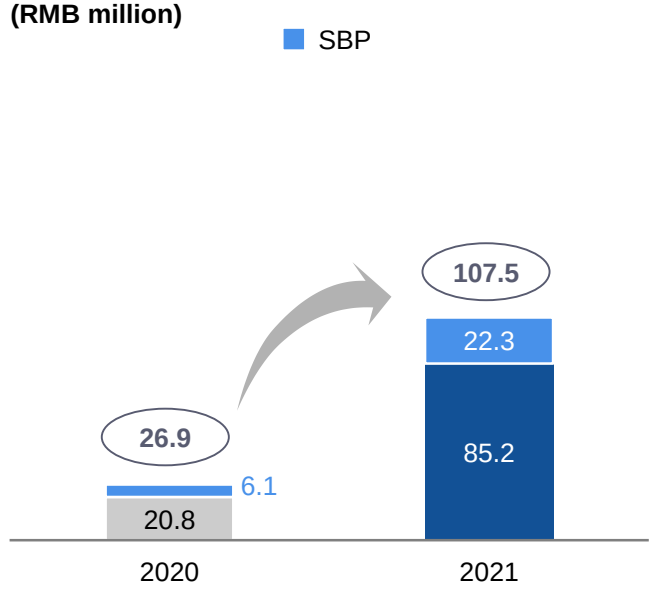


S&M 79.2m, +77m / 2841% YOY

- The expansion of specialized commercial team
- Expenses for training surgeons

Support overall business growth

Administrative Expenses

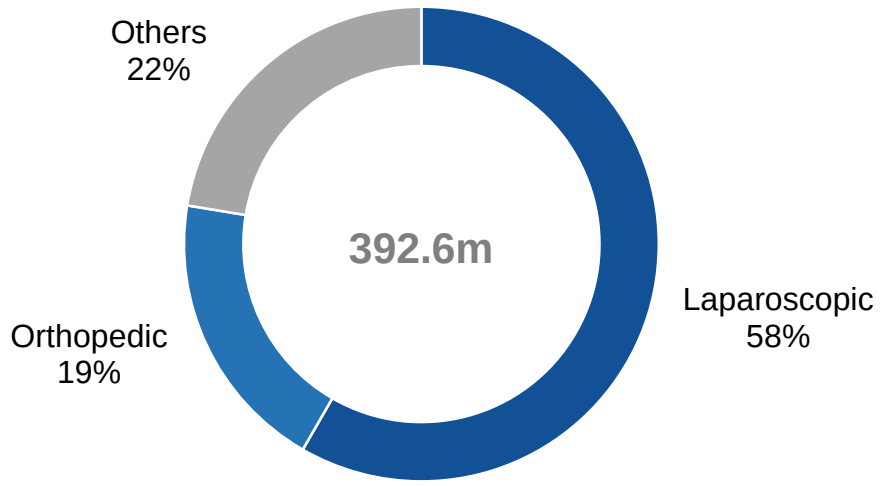


G&A 107.5M, increased by 300% YOY

- Increase of mgt & admin staff costs
- Consulting and service fee
- Office rental expenses

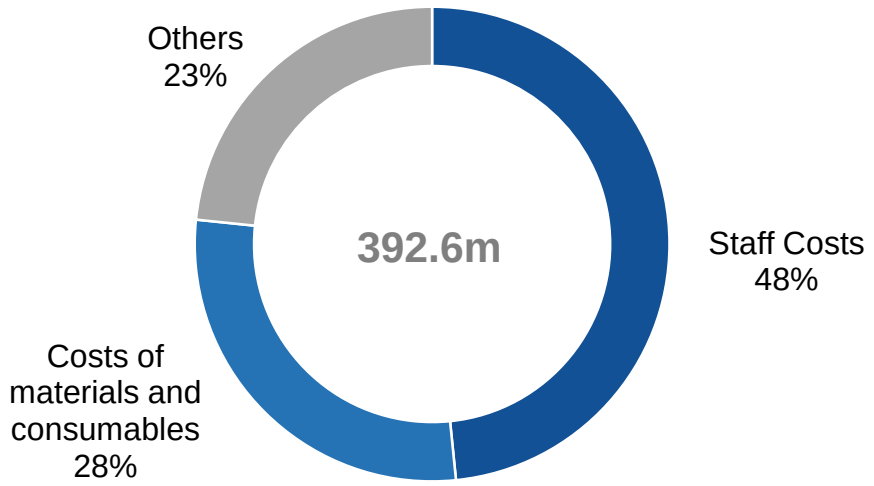
Research and Development Cost

Fund pipeline products



- **Laparoscopic**: **Toumai®1st** received NMPA approval in Jan 22; **Toumai®2rd** completed enrollment of registration clinical trial**;** **Single-arm** completed FIM
- **Orthopedic**: Submitted NMPA & FDA registration application for TKA
- **Others**: Natural orifice and other products

Invest in foundation technologies



- Staff Costs – the largest surgical robot R&D team in China
- Cost of materials and consumables, 4 R&D centers, foundation tech platform and cutting-edge technology progression

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Financial Statement – P&L

Unit: RMB'000	2021	2020	Var.
Revenue	2,150	-	
Cost of sales	(1,231)	-	
Gross profit	**919**	**-**	
Other net income	24,675	9,777	152%
Selling and marketing expenses	(79,188)	(2,693)	2841%
Administrative expenses	(107,477)	(26,884)	300%
Research and development costs	(392,649)	(135,378)	190%
Net gain/(loss) on financial instruments carried at fair value through profit or loss (FVPL)	45,523	(3,250)	-1501%
Other operating costs	(43,498)	-	
Loss from operations	**(551,695)**	**(158,428)**	**248%**
Finance costs	(5,435)	(49,187)	-89%
Share of losses of equity-accounted investees	(27,377)	(1,675)	1534%
Loss before taxation	**(584,507)**	**(209,290)**	**179%**
Income tax	-	-	
Loss for the year	**(584,507)**	**(209,290)**	**179%**
Attributable to:			
Equity shareholders of the Company	(582,921)	(208,874)	179%
Non-controlling interests	(1,586)	(416)	281%
Loss for the year	**(584,507)**	**(209,290)**	**179%**
Loss per share (RMB)			
Basic and diluted (RMB)	(0.63)	(0.27)	133%

Financial Statement – Balance Sheet

Unit: RMB'000	31 Dec 2021	31 Dec 2020	Var.
Non-current assets			
Property, plant and equipment	361,000	38,710	833%
Intangible assets	3,074	565	444%
Goodwill	1,482	1,482	0%
Equity-accounted investees	123,537	85,430	45%
Financial assets measured at FVPL	136,586	38,366	256%
Derivative financial instruments	-	12,676	-100%
Other non-current assets	71,979	12,075	496%
Total Non-current assets	**697,658**	**189,304**	**269%**
Current assets			
Derivative financial assets	8,958	-	
Inventories	109,881	-	
Trade and other receivables	24,955	16,742	49%
Pledged deposits	9,607	982	878%
Cash and cash equivalents	1,940,825	1,497,326	30%
Total Current assets	**2,094,226**	**1,515,050**	**38%**
Current liabilities			
Trade and other payables	181,510	221,620	-18%
Provisions	96	-	
Lease liabilities	52,863	7,288	625%
Total Current liabilities	**234,469**	**228,908**	**2%**
Non-current liabilities			
Contract liablities	102	-	
Provisions	397	-	
Lease liabilities	151,813	11,593	1210%
Deferred income	14,951	22,401	-33%
Total Non-current liabilities	**167,263**	**33,994**	**392%**
NET ASSETS	**2,390,152**	**1,441,452**	**66%**

Unit: RMB'000	31 Dec 2021	31 Dec 2020	Var.
CAPITAL AND RESERVES			
Share capital	958,594	900,000	7%
Reserves	1,434,548	542,856	164%
Total equity attributable to equity shareholders of the Company	**2,393,142**	**1,442,856**	**66%**
Non-controlling interests	(2,990)	(1,404)	113%
TOTAL EQUITY	**2,390,152**	**1,441,452**	**66%**

MEDBOT™

Thanks!

微创机器人
（服务号）

MedBot Surgical
（订阅号）