wiltrom
Your Health Partner

Wiltrom Co., Ltd

Disclaimer

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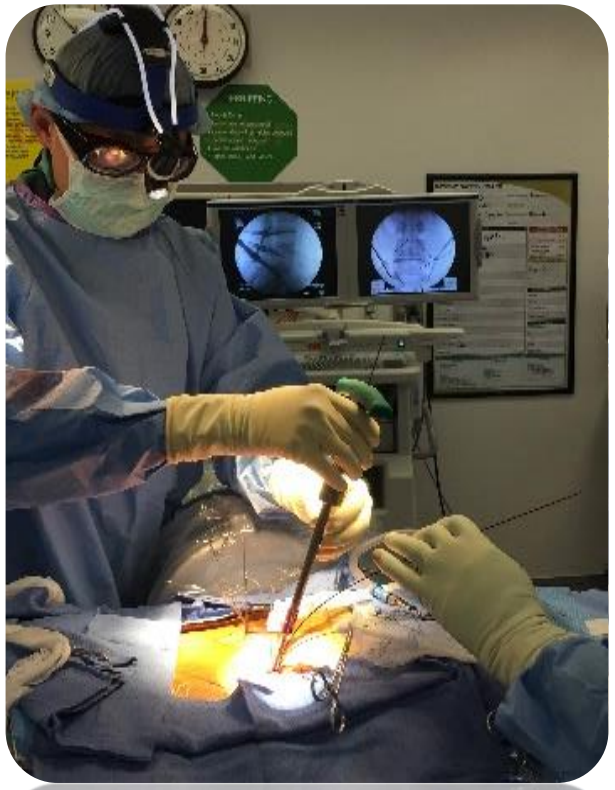
- The actual operating results, financial status and business results that the company may produce in the future may differ from predictive information. The reasons may come from various factors, including but not limited to the increase in the cost of raw materials, market demand, changes in various policies and regulations and the current financial and economic conditions, and other factors that the company cannot control.
- The information provided in this newsletter reflects the company's views on the future so far, and does not express or imply express or guarantee its correctness, completeness or reliability. For these views, if there are changes or adjustments in the future, the company is not responsible for updating or revising.

Outline



I. Company profile

II. Market overview and core technology platform

III. Business performance

VI. Business development strategy and future prospects

Company profile

Stock Num: 6767

Company Name	Wiltrom Co., Ltd
Establish Date	2009/12/18
Address	1F., No.26, Sec. 2, Shengyi Rd., Zhubei City, Hsinchu County, 30261, Taiwan (R.O.C.) +886 3 6107168
Capital	NTD$ 263,900,000
President &General Manager:	Dr. Huang-Chien Liang
Products	Spinal Fixation System, Interbody Fusion System, Vertebral Body Augmentation System, Bone Cement
Employee	43

Management Board Introduction

As of 10/31/2020

Title		Name	Curriculum Vitae
Chairman		Huang-Chien Liang	● Ph.D., in Chemical Engineering, National Tsing Hua University(NTHU) ● Researcher, Project Director, Biomedical Technology and Device Research Laboratories, ITRI
Director		Yi-Chun Su	● M.S., Life Science, National Tsing Hua University(NTHU) ● PMBA, National Taiwan University(NTU) ● Associate Researcher, Biomedical Technology and Device Research Laboratories, ITRI
Director	INTAI Technology Corporation	Chao-Yung Chung	● Junior college of AFMS ● Chairman of INTAI Technology Corporation
		Chun-Nan Lin	● MBA, University of Southern California ● Director/General Manager of INTAI Technology Corporation
Director	ABICO ASIA Capital Corporation	Yu Chih Yuan	● EMBA, National Chiao Tung University(NCTU) ● Representative director of ABICO ASIA Capital Corporation
Independent Director		Jen-Wei Ko	● MBA, University of Southern California ● Independent Director of Air Asia Company Ltd. ;CPA of Weyong International CPAs & Co.
Independent Director		Tien-Jen Liu	● School of medicine, College of medicine, Taipei Medical University ● Taipei MacKay Memorial Hospital Otolaryngology
Independent Director		Wen - Chih Chen	● MBA, University of Southern California ● Chairman/General Manager of Nova Materials Co., Ltd.

經營團隊

President&General Manager
PHD. Huang-Chien Liang

Operation Management Department, Director
Jack Su

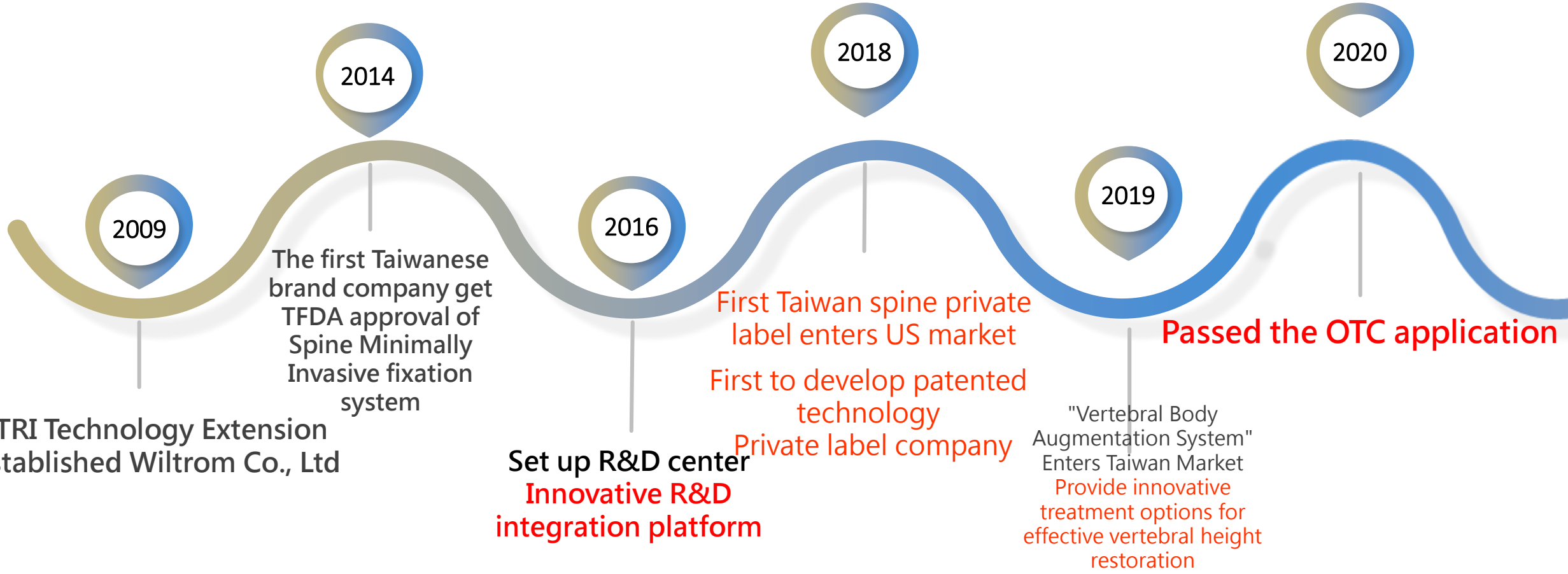
Ministry of Law Department, Director
Terry Tsai

Research and Development Department, Manager
PHD. Hung-Ying, Tai

General Administration Department, Manager
Jessica Hsiao

Sales & Marketing Department Manager
Rita Tsai

Milestone



R&D power accumulation

Value realization

International cooperation

全球布局與銷售據點

- Taiwan Headquater, Biomedical Science Park(2009)

Wiltrom Co., Ltd was established in 2009, and its products are under its own brand sales in more than 10 countries in the world. Customers in Europe, Asia, America and Africa.

Starting from Taiwan, enhancing international vision and building brand image

Company philosophy and vision

- Core Value

Innovation、Honesty、Health

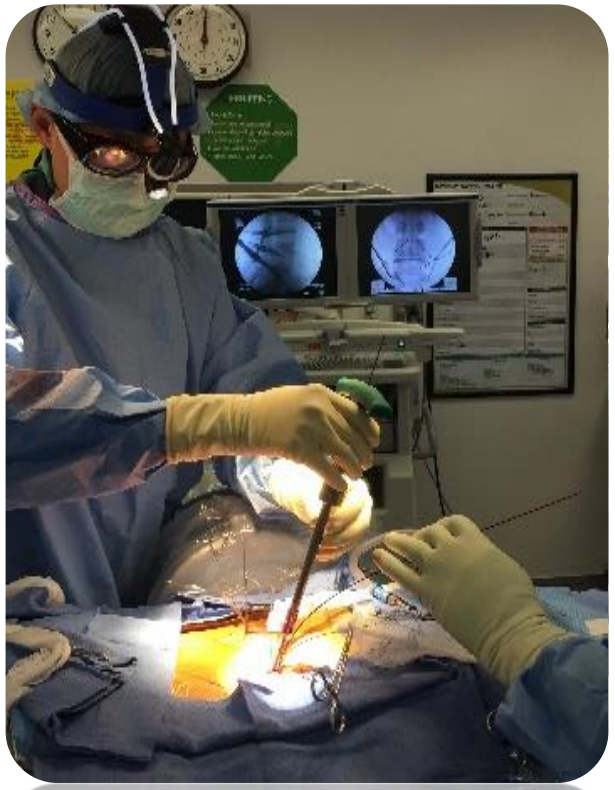
- Mission

Provide safe and effective spinal innovative treatment methods, and jointly create health and well-being

- Vision

Become a leading company to provide total solution of spinal minimally invasive surgery solutions

Outline



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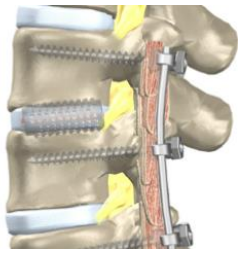
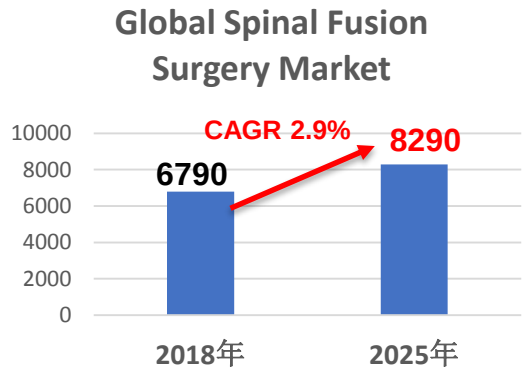
市場概況-脊椎手術相關產品市場規模

$ Million USD

8,290 Million

Spinal Fusion Surgery

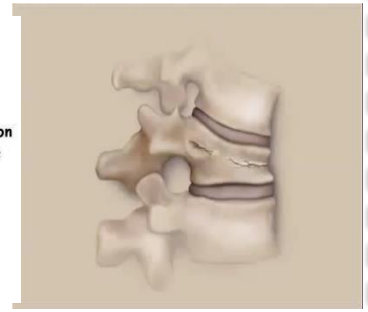


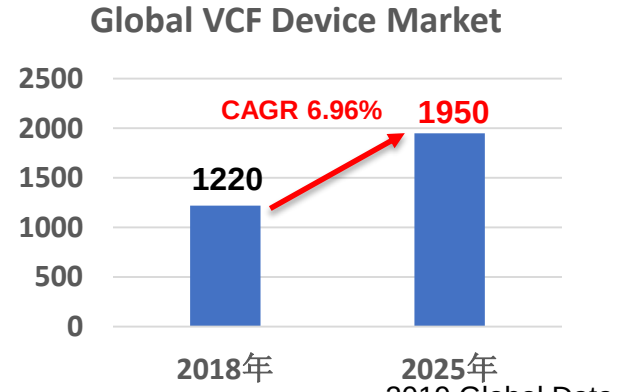


2019 GlobalData

1,950 Million

Vertebral Compression Frx Surgery

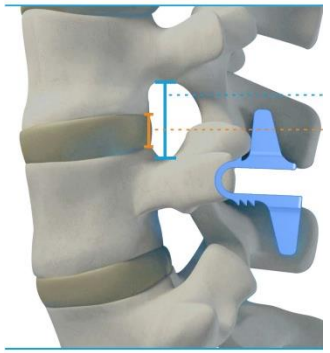


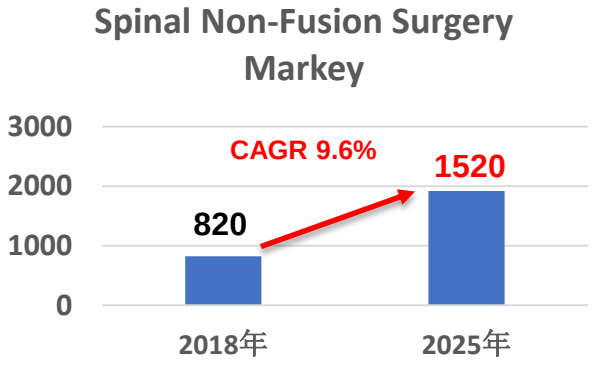


2019 Global Data

1,520 Million

Spinal Non-Fusion Surgery

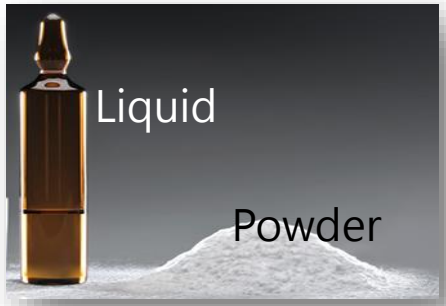


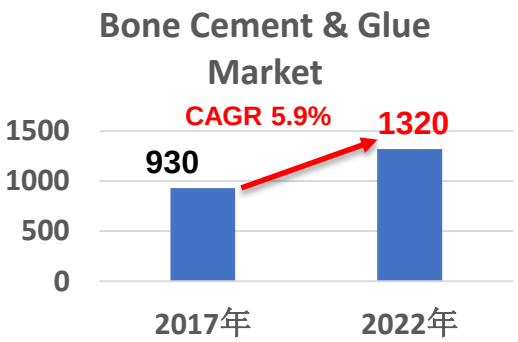


2019 Global Data

1,320 Million

Bone cement

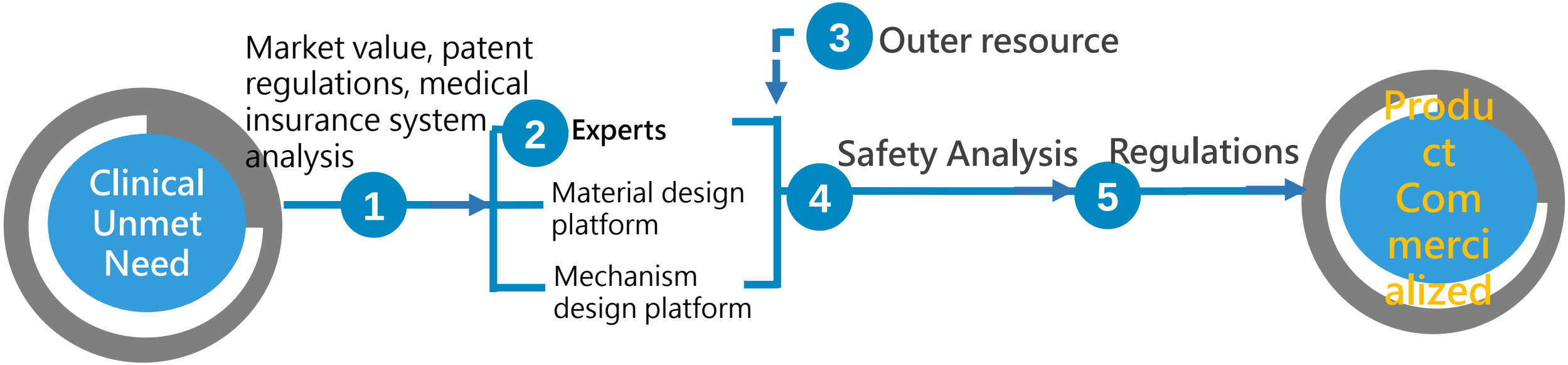




2018 Bone Cement &Glue Market

wittrom Your Health Partner

創新研發整合平台

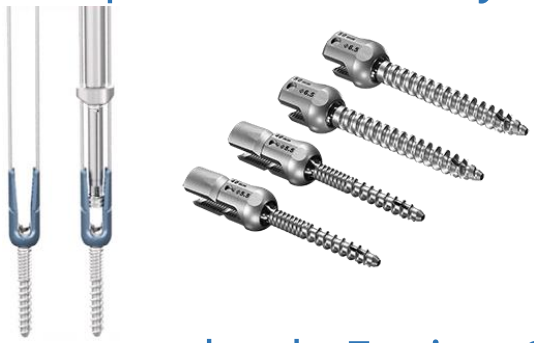


<Platform Features>
1. Continue to screen for valuable clinical unmet needs
2. Efficiently conduct R&D integration to improve product development efficiency
3. Overcome the legal barriers of various countries in advance and accelerate the distribution of products in various countries

Product Portfolio

Spinal fusion surgery

- Spinal Fixation System

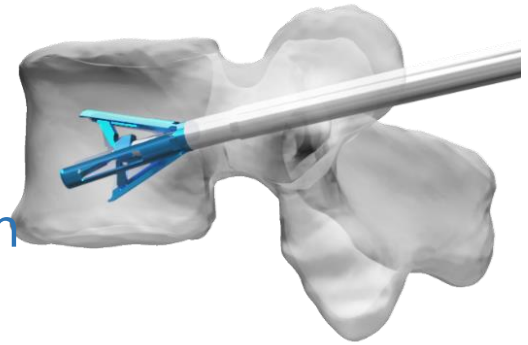


- Interbody Fusion System

- Bone Graft Substitute

Vertebral Compression Frx. Surgery

- Vertebral Augmentation System

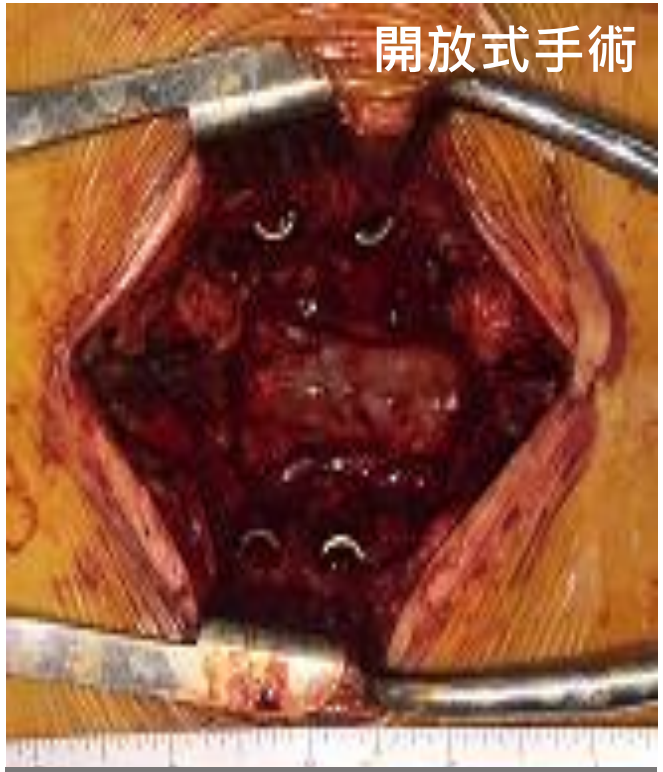


Bone Cement

- Bone Cement

Development Trend of Spinal Fixation Surgery

Currently



- Large wound (10cm)
- Bleed a lot
- Long hospital stay (10-15 days)

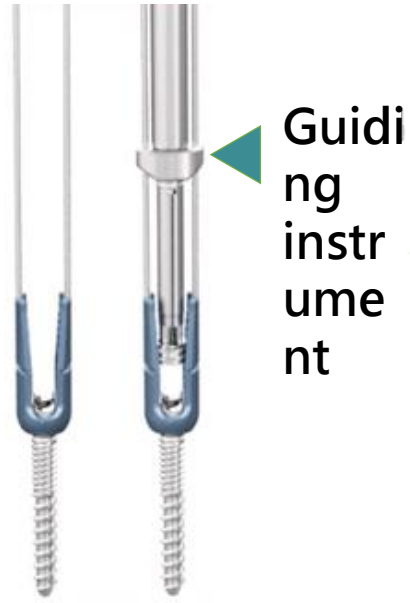
- Discontinuous small wound
- (2+2+2+2=8cm)
- Reduce bleeding
- Shorten hospital stay (3-5 days)

Clinical Unmet Need

How to complete spinal fusion surgery under a single small wound, implant spinal fixators, intervertebral fusion cages, and artificial replacement bones, shorten the patient’ s hospital stay, and improve medical resources.

MIS Single-incision spinal fixation system

The minimally invasive single-wound spinal fusion system can reduce the wound to 1.8cm, and achieve the completion of the operation under a single small wound in a limited field of view and operation area, shorten the patient's hospital stay and improve the quality of life of the patient.

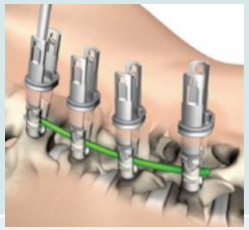


人工替代骨 Bone Graft Substitute

This technology-related patent covers a total of 17 implants and devices

植骨增量椎間融合器 Bone-filling cage

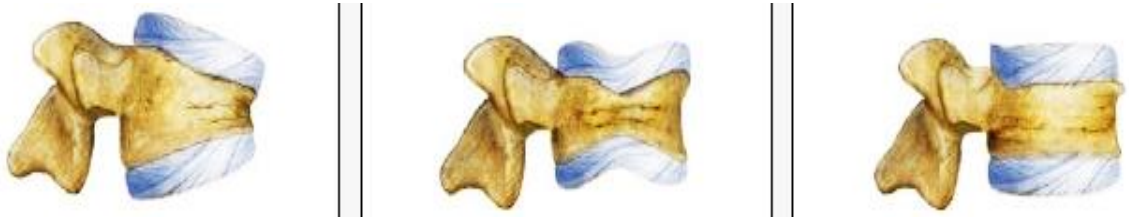
Product competition niche-spinal fusion surgery related products

Item	Wiltrom MIS Single-incision spinal fixation systehigh	S company	M company
Picture	 		
Number of incision	1	4	1
Wound	1.8-3 cm	10.7±1.5cm	7.3±0.9cm
Blood loss	50-100cc	100-500cc	360±30cc
Surgical method	Single incision	Extra incision for cage implantation	Single incision
Inpatient	1-3 days	3-6.1 days	1-12 days
Price	high	high	high

1. 本公司於中國醫藥大學執行之上市後臨床追蹤(IRB: CHUH105-REC3-030)，追蹤案例72例。
2. The Spine Journal 15 (2015) 1519–1526; Spine. 2009;34(13):1385-9; The Spine Journal 2014;14(8):1694-701，Coluna/Columna 2018;17(2); The Spine Journal 15 (2015) 1519–1526 ; Acta Neurochir (Wien). 2016 Jul;158(7):1413-20

Development Trend of Vertebral compression fracture surgery

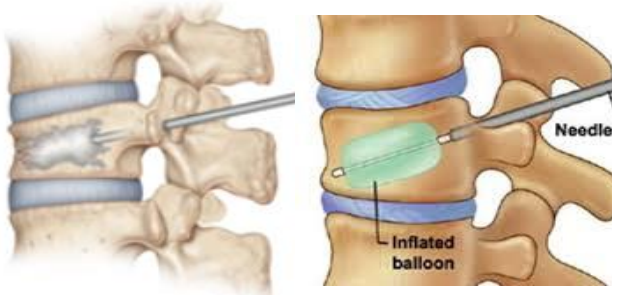
Wedge fracture Biconcave fracture Crush frature

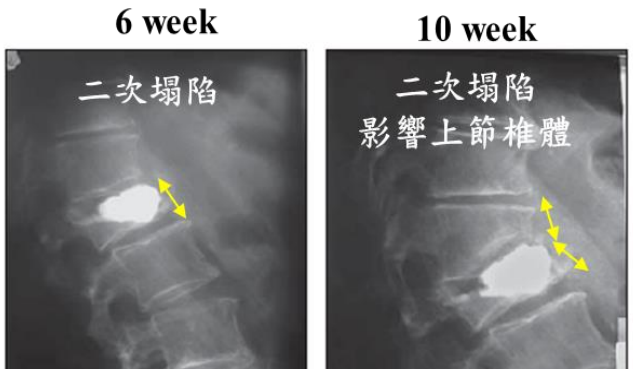


85% 13% 2%

The Spine Journal , 2015, 15, 281–289

Vertebroplasty Kyphoplasty



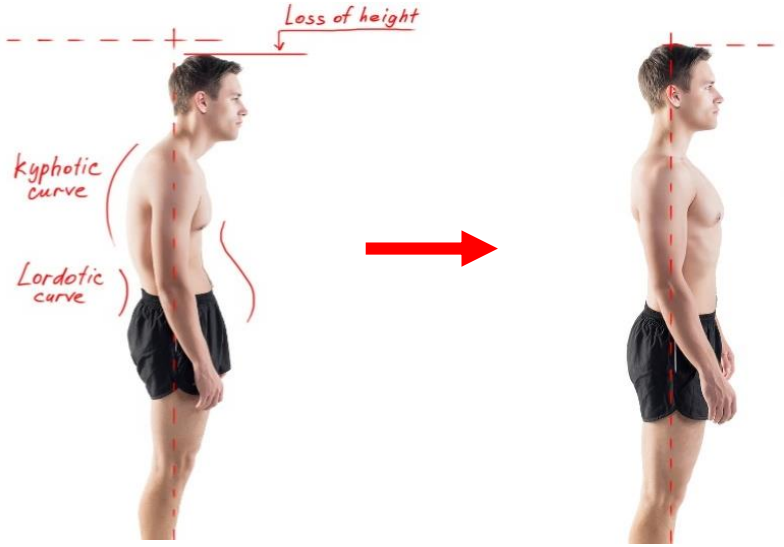


They are only purely infused with bone cement, and they do not effectively provide vertebral body reduction. About 40% of patients experience secondary collapse of the vertebral body after surgery.

J Winter Stoffwechs. 2004, 11: 604-612

Clinical Unmet NeedNeed to

effectively provide vertebral body reduction and stabilize the vertebral body

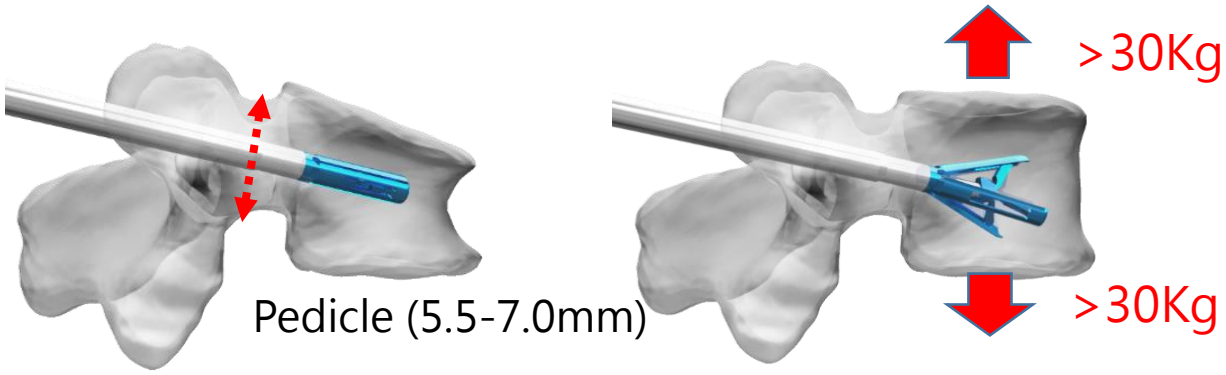


- Maintain the physiological curve of the spine and change the position of the center of gravity
- Correct the kyphosis
- Provide stable support and reduce secondary collapse of the vertebral body
- Long-term pain relief

Osteoporosis international 2016; 27: 2047-2055.
J Spine Surg. 2016; 2(1): 13–20.
Medicina 2019, 55, 426

Vertebral Body Augmentation System(Tripod-Fix)

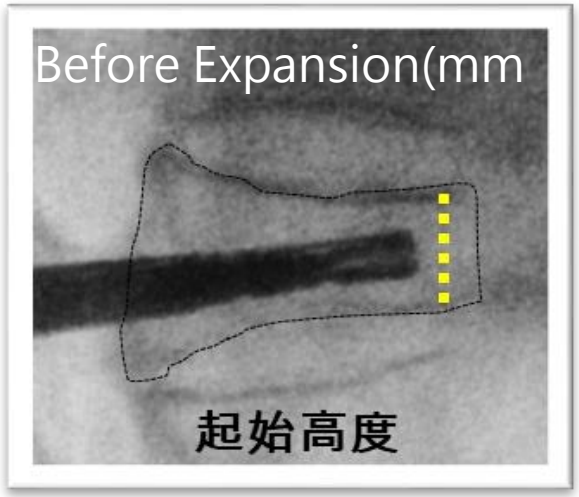
The world's first corrective reduction for front-end compression fractures, effectively providing the reduction height of the vertebral body (21.0 ± 4.4%), avoiding the continued collapse of the vertebral body, and achieving the purpose of solving back pain and correcting kyphosis.



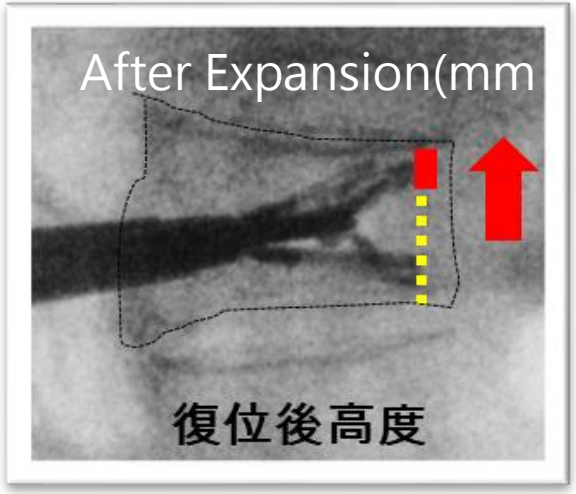
Feature & Benefit:
a. Three dimension expansion, effective result for anterior height restoration
b. The spreading process is stable
c. Rollback mechanism for patient’ s safety

	Vertebral body height restoration rate
Vertebroplasty	X
Kyphoplasty	0 ± 7 %
Tripod-Fix	21.0 ± 4.4 %

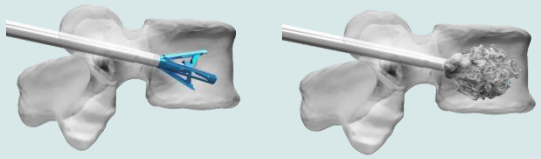
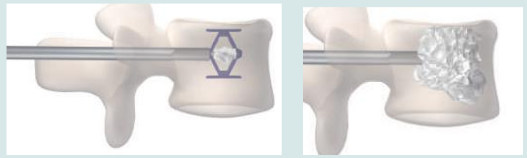
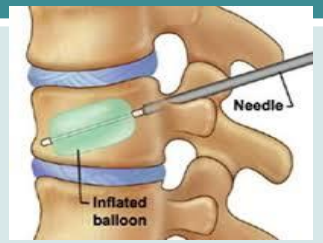
撐開前



撐開後



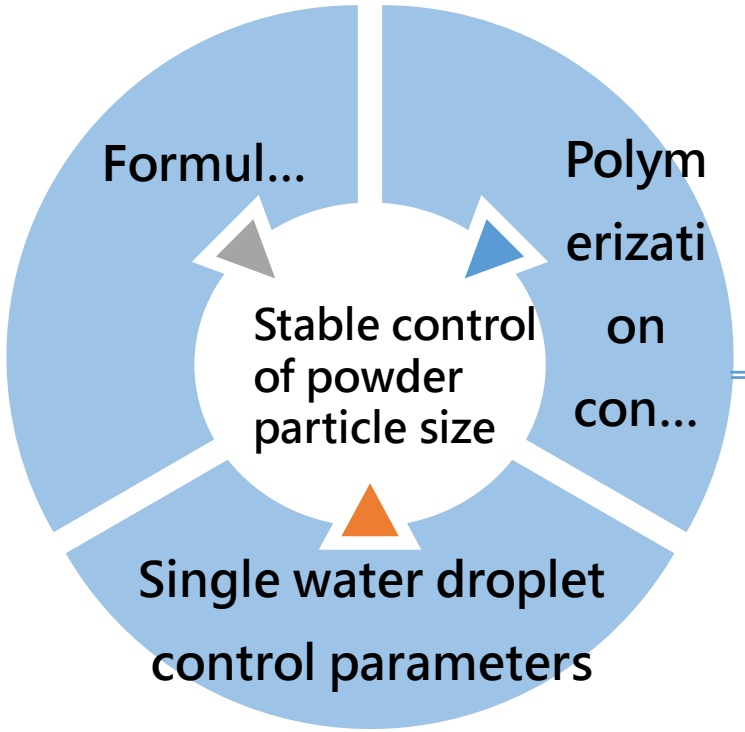
Product competition niche- Vertebral compression fracture surgery

Item	Wiltrom Tripod-Fix Vertebral Body Augmentation System	S company	M company
Picture			
Material	Titanium	Titanium	PE
Vertebral height restoration rate	21 ± 4	12 ± 13	0 ± 7
Bone cement leakage%	Low	low	medium
Recollapse %	Low	Low	high
Price	high	high	High

1. 本公司執行之上市後臨床追蹤，該數據包含中國醫藥大學(IRB: CHUH108-REC2-093)追蹤案例為10例，與花蓮慈濟醫院(IRB: IRB108-89-A)追蹤案例為13例，合計追蹤案例23例。
2. Osteoporos Int. 2016;27(6):2047-2055; Cureus. 2019;11(4):e4572; World Neurosurg. 2016;90:391-396.

Bone cement

Wiltrom uses process technology to stably control the particle size distribution of the powder, overcome the technical bottleneck of bone cement development, and sell it with vertebral spreaders to increase product penetration. It is one of the few medical equipment manufacturers in Asia that independently develop bone cement



Stable control of bone cement operation status

- Ensure that the doctor has enough time for the operation
- Ensure the product is cured to stabilize the vertebral body

Stable control of the curing temperature of bone cement

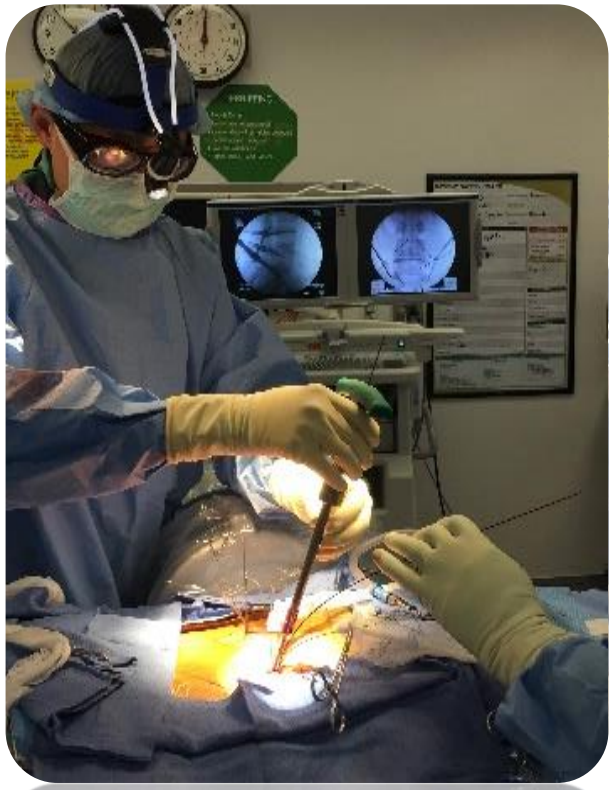
- Ensure that the curing temperature is below 70 C

Product competition niche-Bone Cement

item	Wiltrom Bone Cement	T 公司	H 公司
Visicosity	medium	medium	Medium
Temperature	60°C-65°C	70°C-75°C	60°C-70°C
Time	20-30 mins	20-30 mins	20-30 mins
Application time	10 mins	15 mins	10mins
Development effect	high	high	high
price	high	high	high

IFU

Outline



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Develop research and development results with product differentiation

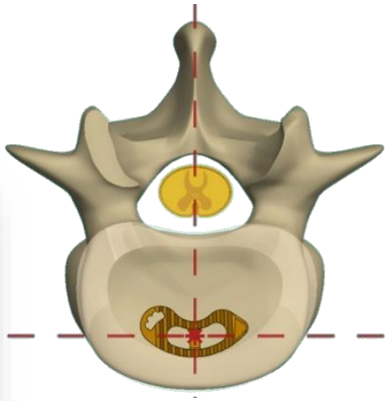
2014 2016 2017 2018 2019 2020

◆ Bone Cement

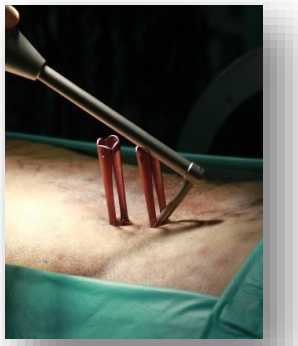
◆ Tripod-Fix

◆ Bone-filling cage

◆ Single-incision spinal fixation system



◆ Saber-tooth interbody fusion system



◆ MIS spinal fixation system

Award

No.	Awards	Time	Description
1	2012 SBIR R&D Alliance Award	101	Innovation lumbar spine fusion and fixation system product technology
2	The 11th National New Innovation Award Enterprise Group / R & D Technology	103	Non-fusion minimally invasive spinal intervertebral annulus repair technique
3	2016 Taipei Biotech Awards	105	Innovation MIS spinal fusion systme
4	24th SME Innovation Research Award	106	MIS Single-incision spinal fixation system
5	2016 SBIR Excellence Program	106	Development of minimally invasive bone delivery system
6	2016 Taiwan Excellence Awards	106	MIS Single-incision spinal fixation system
7	2017 Hsinchu Industrial Park Excellent Manufacturers Innovation Product Award	106	MIS Single-incision spinal fixation system
8	2017 Pharmaceutical Technology Research and Development Award	106	Innovation MIS spinal fusion systme
9	2018Taiwan BIO Awards	107	Potential Benchmark Award
10	2018 Pharmaceutical Technology Research and Development Award	107	MIS Single-incision spinal fixation system
11	2020Taiwan BIO Awards	109	“Tripod-Fix” Vertebral Body Augmentation System
12	The 11th National New Innovation Award Enterprise Innovation Award/Innovative Medical Materials and Diagnostic Technology	109	“Tripod-Fix” Vertebral Body Augmentation System
13	2020 Pharmaceutical Technology Research and Development Award	109	“Tripod-Fix” Vertebral Body Augmentation System

2020 Outstanding Biotechnology Industry Award-Annual Industry Innovation Award

R & D performance

61 patent acquisition and application status (as of December 18, 109)

item	patent												
	Number of Patent						Number of Patent Application						
	Invention PATENT			Other			Invention PATENT						
country	Taiwan	USA	China	Taiwan	USA	China	Taiwan	USA	China	Europe	Japan	Korea	Australia
Num	13	5	3	4	2	2	6	6	9	6	3	1	1
Total	29						32						

Sales performance

- Domestic and foreign sales ratio (108 years)-76:24
- Foreign markets: Sales to more than ten countries including the United States, China, the Philippines, Malaysia, Mexico...
- Domestic market: adopted by all major medical centers in Taiwan

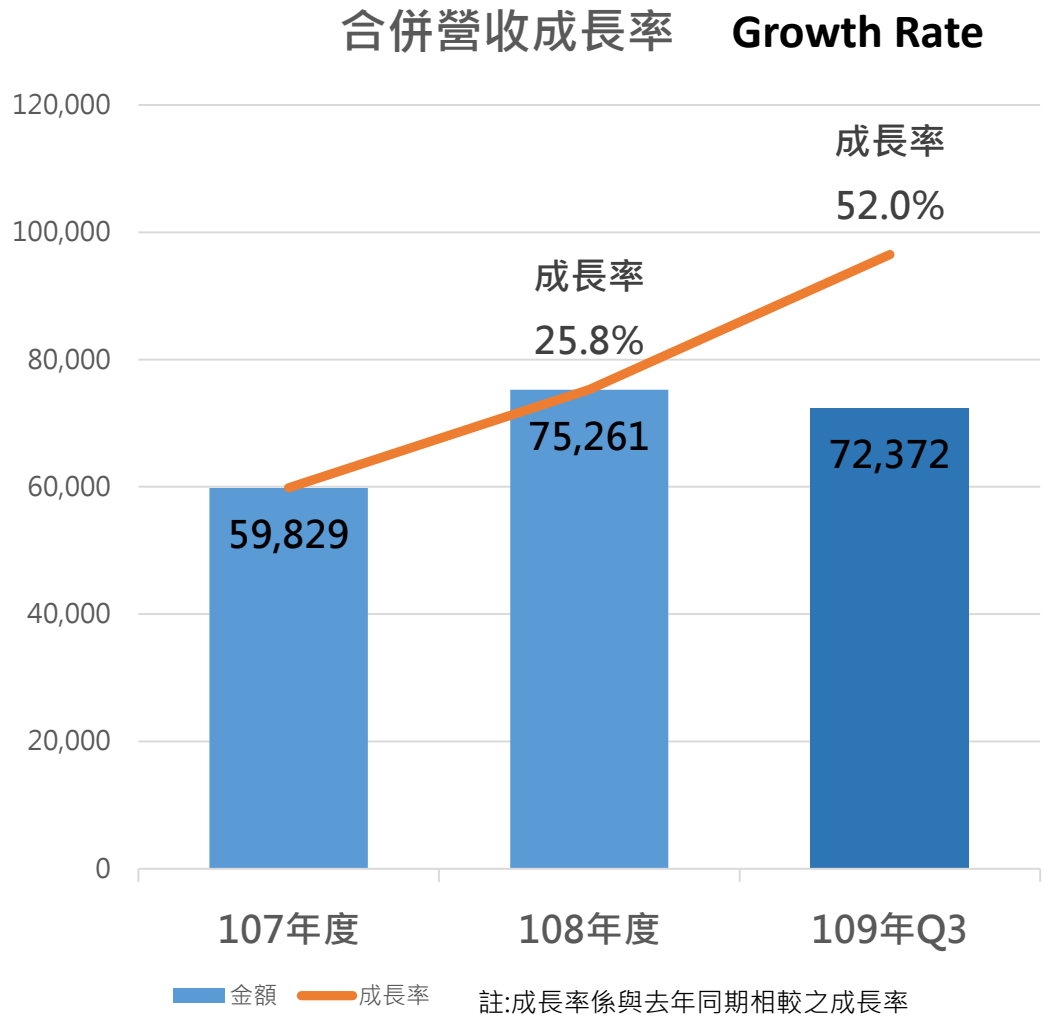
台大醫院 NTUH

長庚紀念醫院 Chang Gung Memorial

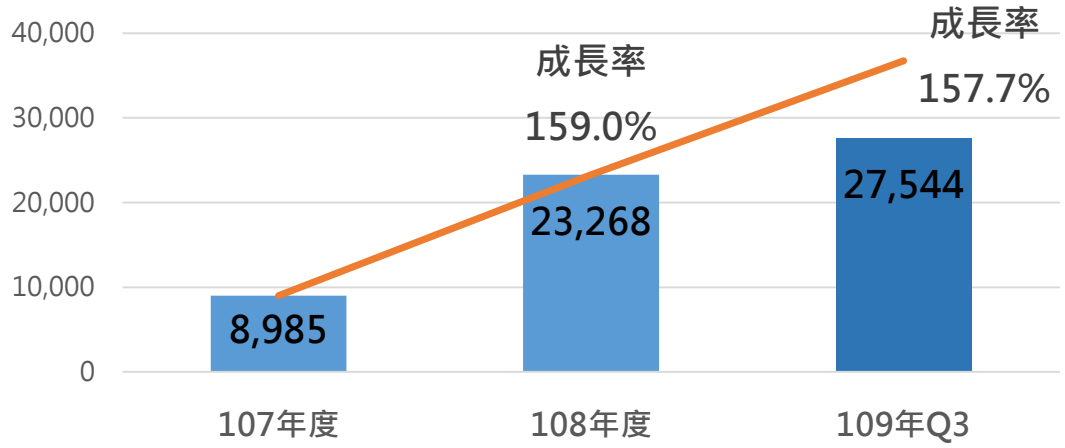
臺北市立萬芳醫院 TAIPEI MUNCIPAL WAN FANG HOSPITAL

Sales revenue and growth momentum

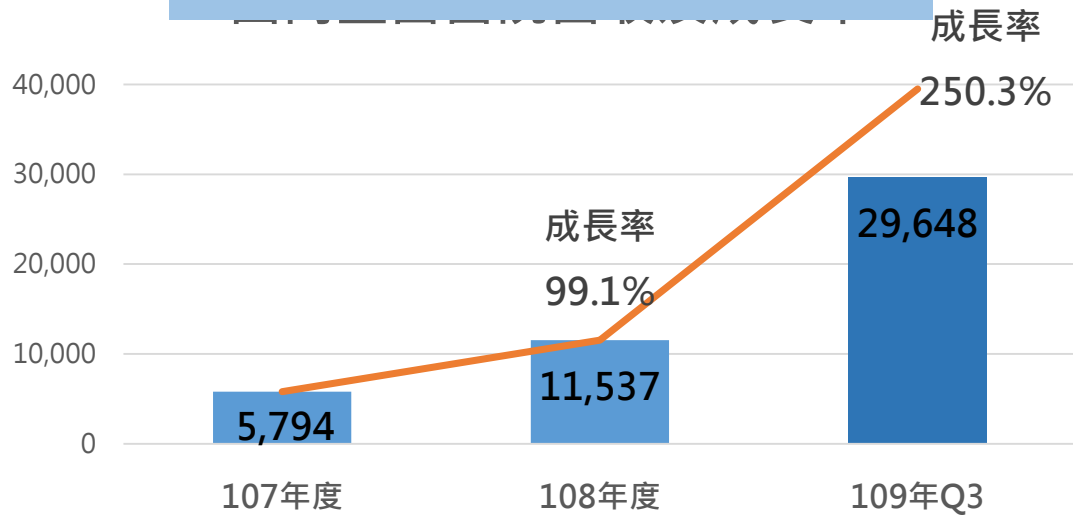
單位：新台幣仟元



Self-paid product sales revenue in TW market

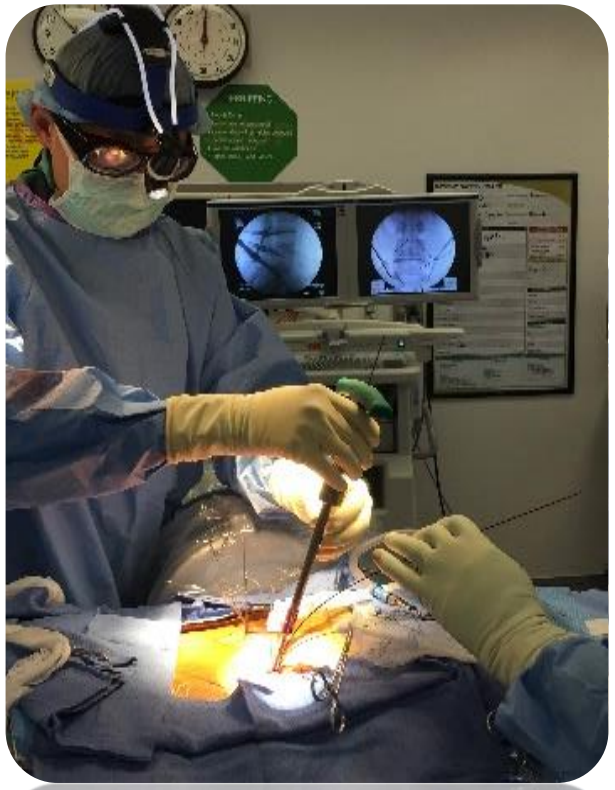


Go-direct sales revenue in TW market



Increase the import substitution rate of self-paid items and channel autonomy to strengthen the competitive niche

Outline



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VI. Business development strategy and future prospects

Global Operation Strategy (1/2)

U.S.. China. European market Technology transfer as the mainstay, and access as a supplement

For markets with higher regulatory risks in the United States, China and Europe, the marketing strategy of technology transfer authorization and joint venture companies is used to reduce the resources and risks invested by the company in order to win other income and accelerate the expression of product value.

01. Differentiated innovative products (technology transfer)

- For differentiated innovative products, clinical trials (Tripod-Fix) are required before listing
- A successful sales model in the market
- Clinical literature published to strengthen product efficacy

02. Mature products (channels)

- The US market collects clinical data to influence other interested physicians. The increase in dosage will help future technical transfer or authorization
- Cooperate with agents in the Chinese market and strive for China's orthopedic landmark hospital

Global Operation Strategy (2/2)

Taiwan, Southeast Asia,
Central and South America and other markets
Channels are the mainstay,
technology transfer is supplementary

The company's product development adheres to the principle of differentiation, focusing on Taiwan, Southeast Asia, Central and South America and other markets, focusing on cooperation with distributors in order to grasp market trends and accelerate time to market.

01. Establish brand image and value

- Participate in exhibitions of domestic and foreign medical associations
- Physician education and training activities
- Media advertising reveals
- Clinical publication

02. Provide a full range of spine surgery solutions

- Complete product line, provide differentiated and cost-effective products, enhance the willingness of distributors to cooperate, Taiwan has sold major medical centers
- Quickly enter the market to obtain verification to expand a wider range of product applications, such as: 3D printing, navigation, robotic arms, etc.

03. Key development markets

- Southeast Asia: Malaysia, Vietnam
- Central and South America: Mexico, Brazil

Future product development strategy

Spinal fusion products

Extension/continuity development products

Precision medicine (AI navigation surgical robot)

3D printing composite

Innovative R&D integration platform

Vertebral compression fracture product

Core technology extension products

New R&D product

Spinal non-fusion product

Bone Cement

Other orthopedic product

Clinical Umet Need

Thanks for your attention