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bonraybio®
your health, our focus

邦睿生技股份有限公司
BONRAYBIO CO., LTD.

董事長暨總經理

徐振騰 博士

簡報大綱

公司簡介 01

產品及關鍵技術 02

市場概況與行銷業務 03

營運成果 04

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股票代號 **6955**



公司簡介

01

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公司概述

	196,489千元 實收資本 股票代號6955		90 工作夥伴 研發/品管/生產/ 業務/行銷		IVD/MD 顯微鏡
90/111 申請專利 美/歐/台/中		邦睿技術 光學/電子/機構/臨床醫學/ 醫聯網/演算法/AI		男性不孕症整 體解決方案	
	 NMPA FDA 		LensHOOKE®  bonraybio®		 reddot 2017 award winner

公司沿革



董事會成員



徐振騰 先生

邦睿生技
董事長



蔡裕庚 先生

Vivo Panda Fund, L.P.
合夥人



黃椿木 先生

華廣生技
董事長



鄭勝全 先生

新鉅科技
董事長



曾惠瑾 女士

資誠聯合會計師事務所
榮譽副所長



王韶華 先生

前工研院北美公司
總經理兼任北美代表



王毓香 女士

麥格會計師事務所
所長



周天泰 先生

博泰明安法律事務所
合夥人 律師



陳階曉 先生

中國醫藥大學北港附設醫院
泌尿科暨泌尿腫瘤科
主任

經營團隊



總經理
徐振騰

- 工作資歷超過20年
- 國立中興大學化學博士
 - 美國史丹福大學醫學院訪問學者(STB計畫)
 - 華廣生技(4737)共同創辦人
 - 華廣生技研發副總經理



執行副總
廖英智

- 工作資歷超過20年
- 交通大學應用化學所碩士
 - 友達光電(股)台中廠副廠長



業務副總
莊明山

- 工作資歷超過25年
- 交通大學科技管理碩士
 - 華廣生技(股)行銷業務副總經理
 - 百丹特生醫(股)亞太區總經理



財會行政副總
楊佩真

- 工作資歷超過20年
- 東海大學會計系學士
 - 勤業眾信會計師事務所副組長
 - 健椿工業(4561)財務長



市場企劃副總
楊婉瑩

- 工作資歷超過25年
- 英國University of East Anglia 碩士(主修行銷)
 - 華廣生技(股)行銷協理
 - 百丹特生醫(股)市場行銷暨客服部協理



關鍵技術及產品

02

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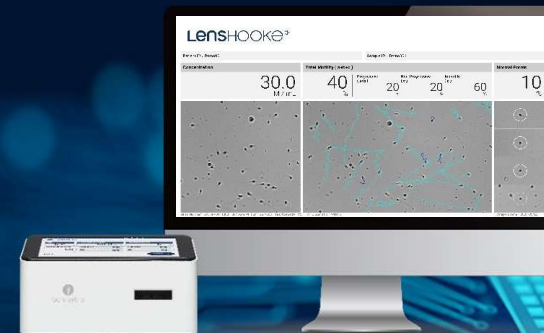
傳統人工生殖技術



- ❌ 人力
- ❌ 時間
- ❌ 精準
- ❌ 標準化
- ❌ 即時性

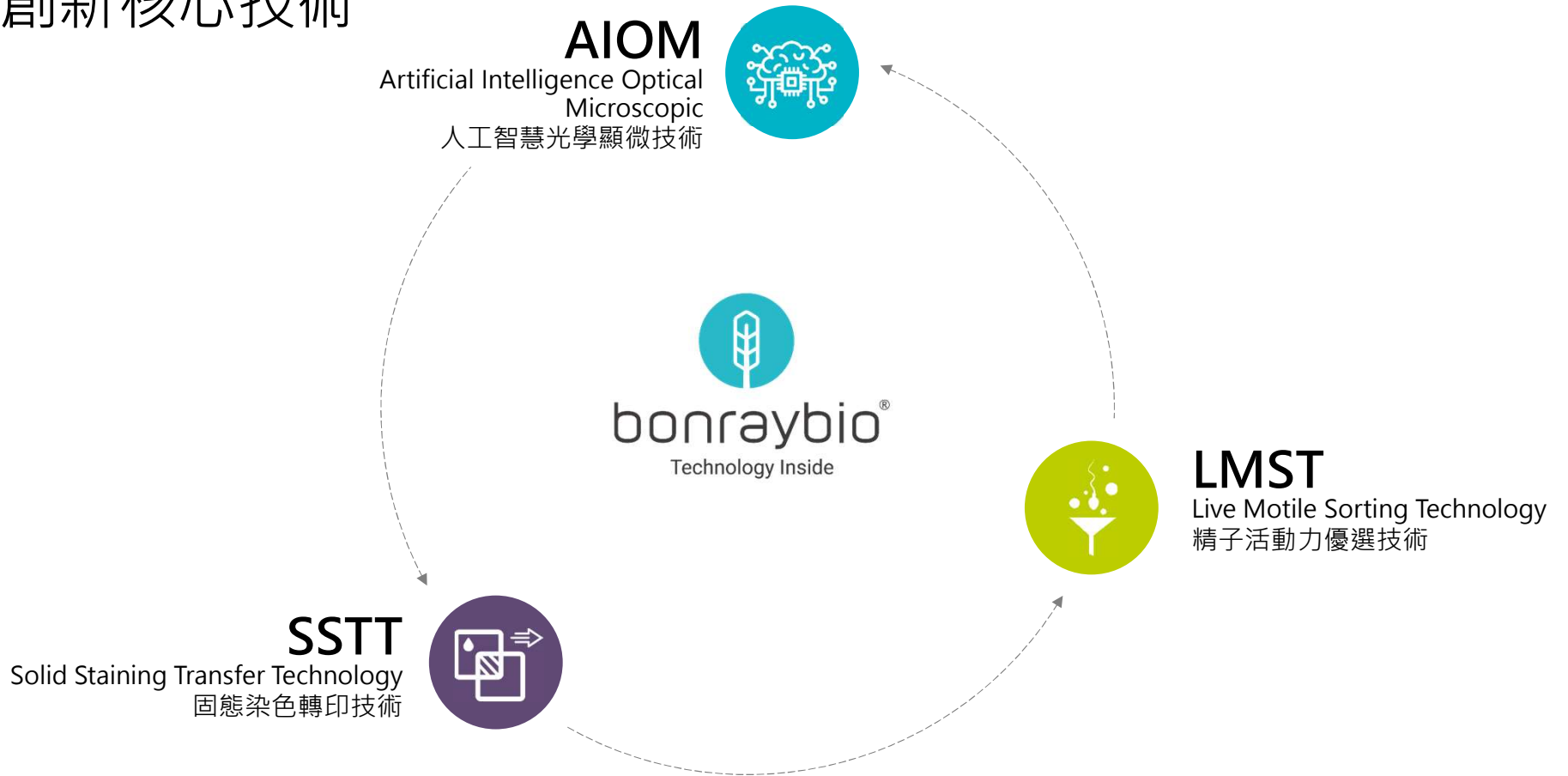


新式AI生殖技術



- ✅ 人力
- ✅ 時間
- ✅ 精準
- ✅ 標準化
- ✅ 即時性

三大創新核心技術

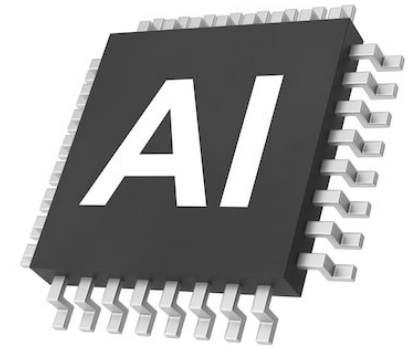
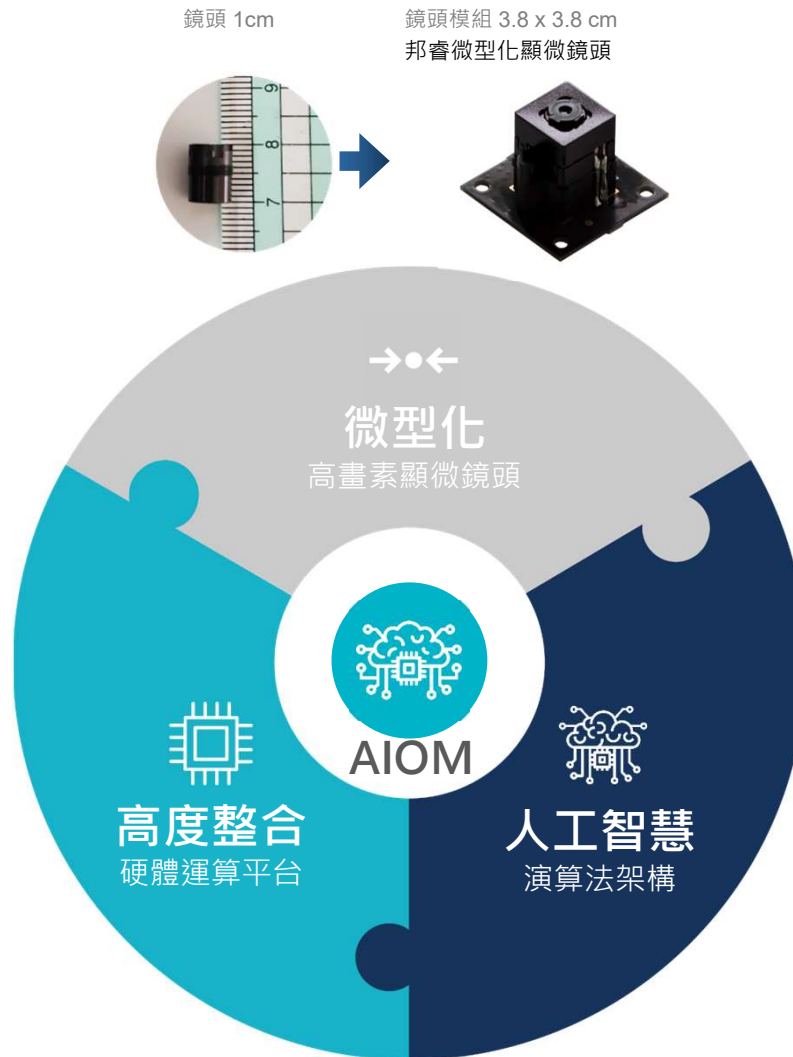
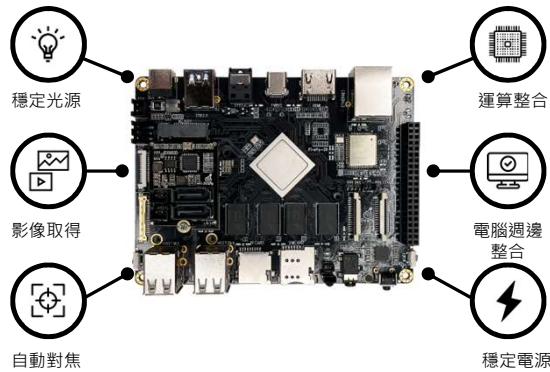


三大創新核心技術

AIOM

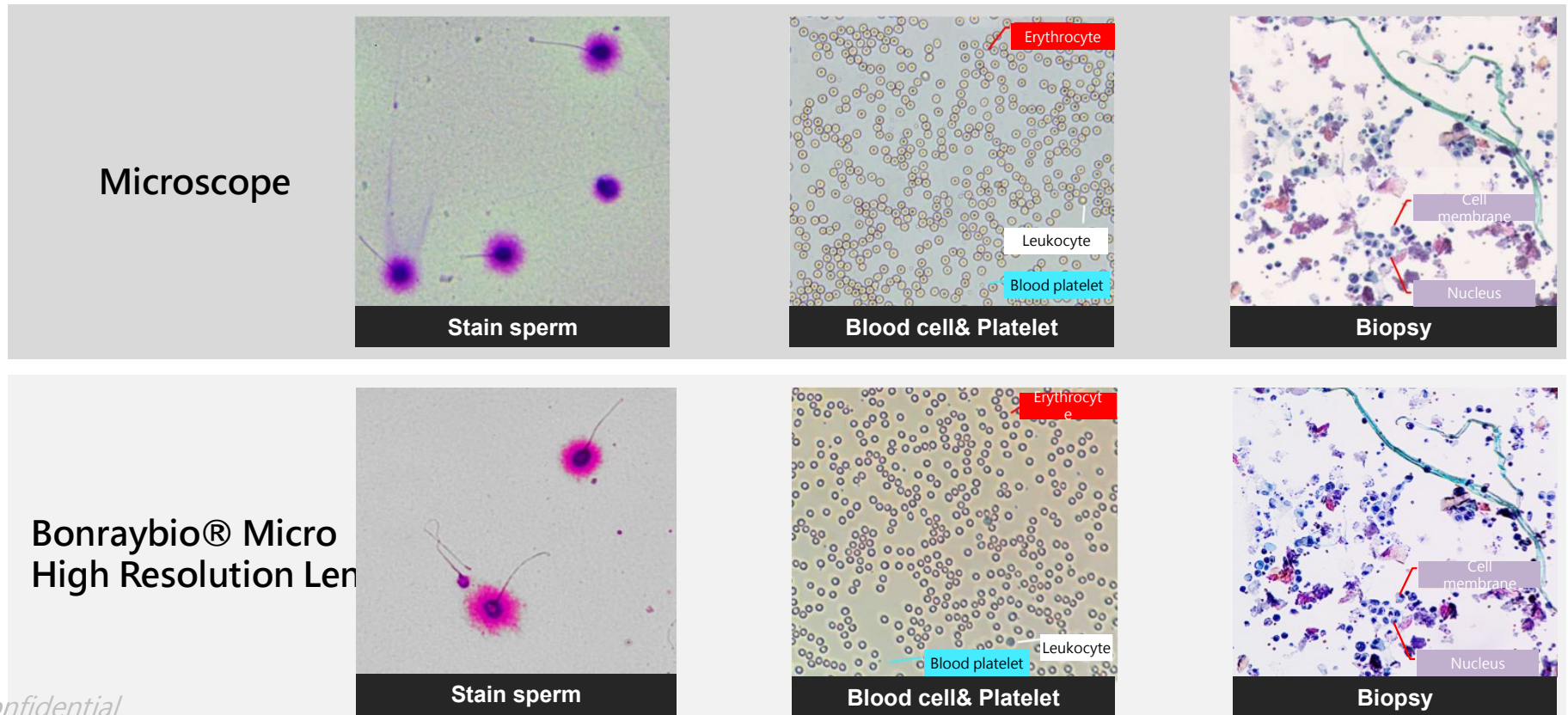
Artificial Intelligence Optical
Microscopic

人工智慧光學顯微技術



創新核心技術-AIOM

- Micro High Resolution Lens



精子基礎檢測產品

全程**3**步驟，等待**1**分鐘
即可顯示檢測結果！

快速 簡單

操作流程

滴入檢體至檢測片

01



插入檢測片

02



結果判讀

03



三大創新核心技術

AIOM

Artificial Intelligence Optical
Microscopic
人工智慧光學顯微技術



SSTT

Solid Staining Transfer Technology
固態染色轉印技術



三大創新核心技術

SSTT

Solid Staining Transfer Technology
固態染色轉印技術

時間縮短 **80%**



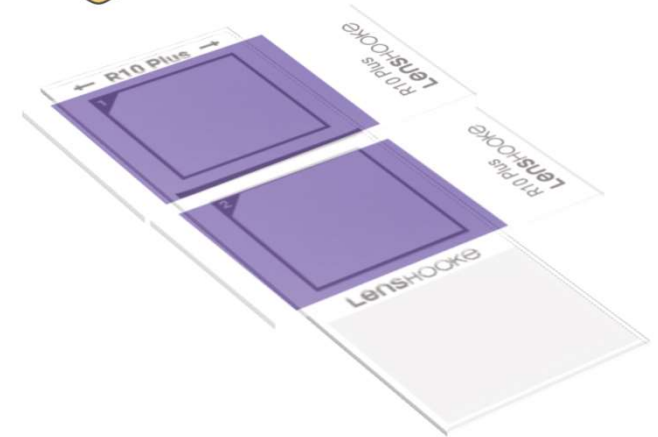
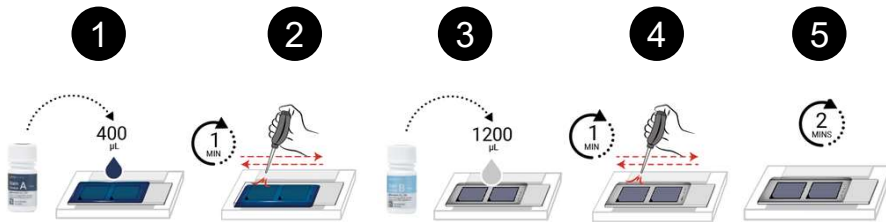
染色複雜
傳統SCD
染色法



即刻染色
LensHooke®
R10 Plus



new



三大創新核心技術

AIOM
Artificial Intelligence Optical
Microscopic
人工智慧光學顯微技術



SSTT
Solid Staining Transfer Technology
固態染色轉印技術



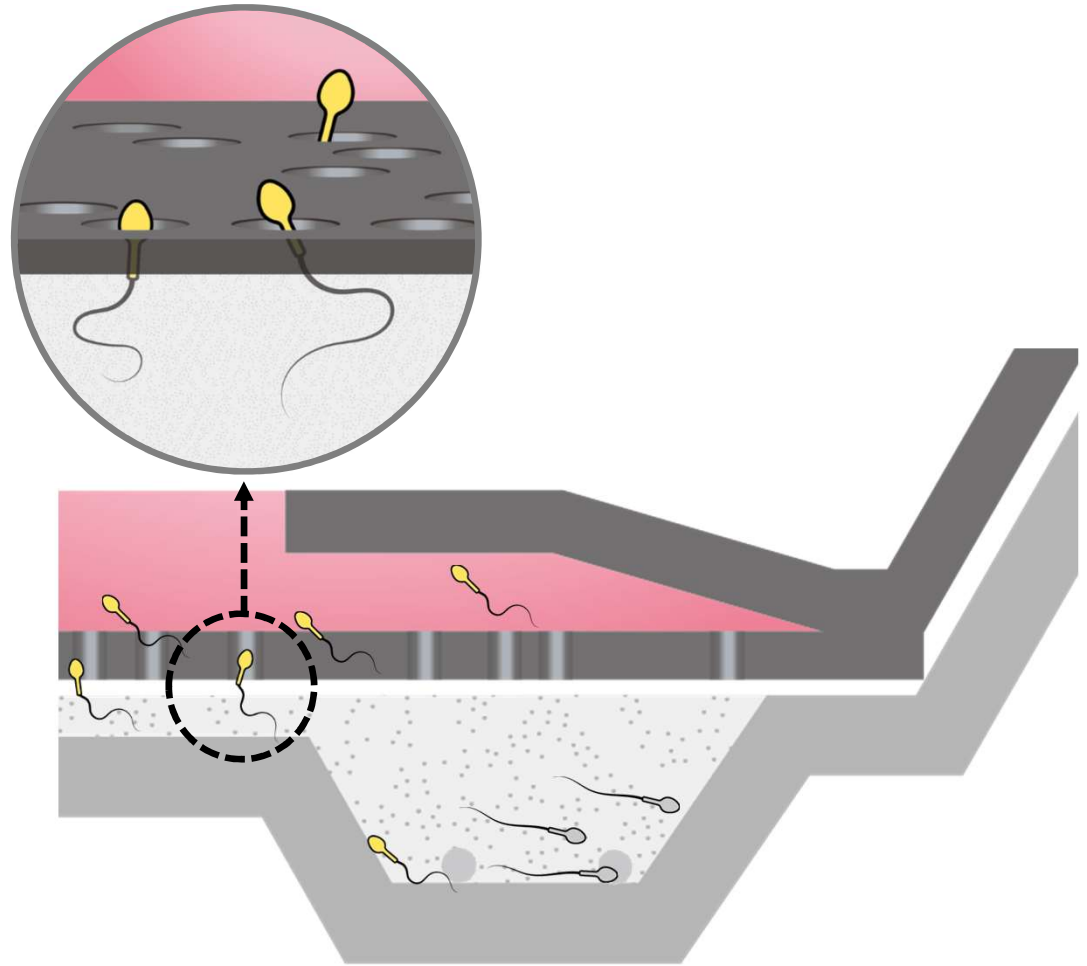
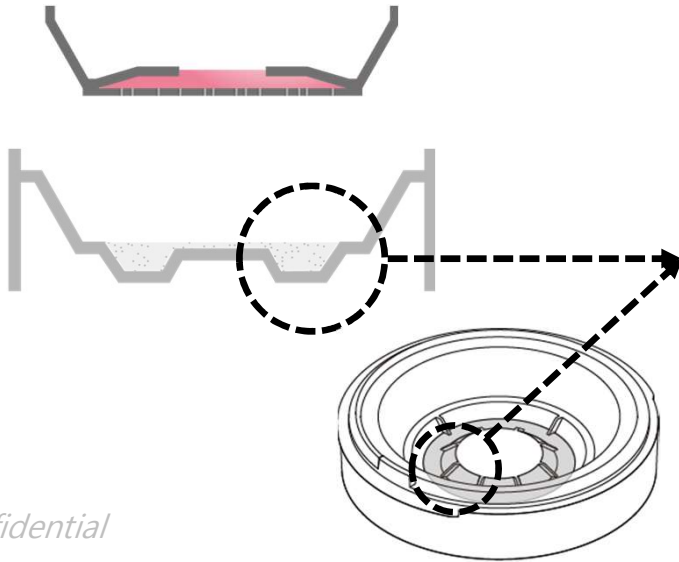
LMST
Live Motile Sorting Technology
精子活動力優選技術

三大創新核心技術

LMST

Live Motile Sorting Technology
精子活動力優選技術

精子品質提升 **50%**



創新核心技術特色



步驟簡單



操作快速



篩選優良精子

CA0/CA1 精子優選器



三大產品線

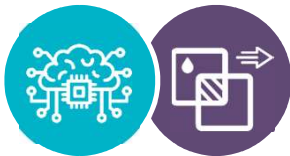
精子分析
常規檢測



LensHooke®
Male Infertility Total Solution



精子分析
高階檢測



精子優選





市場概況與行銷業務

03

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數據資料



48,500,00

伴侶
無法擁有小孩



10.5%

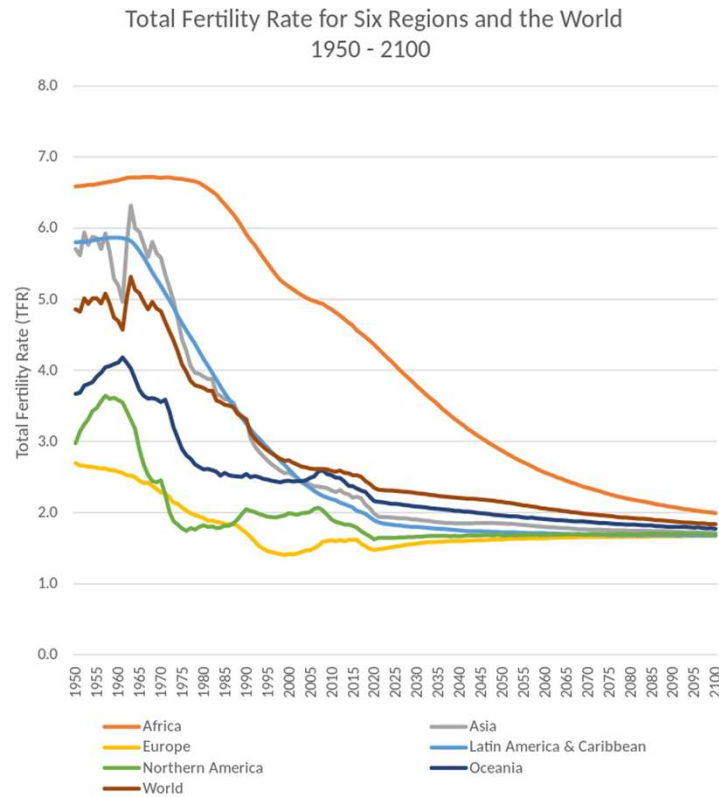
女性
無法在5年內擁有第二個小孩



40%~50

男性問題
不孕問題

背景概述



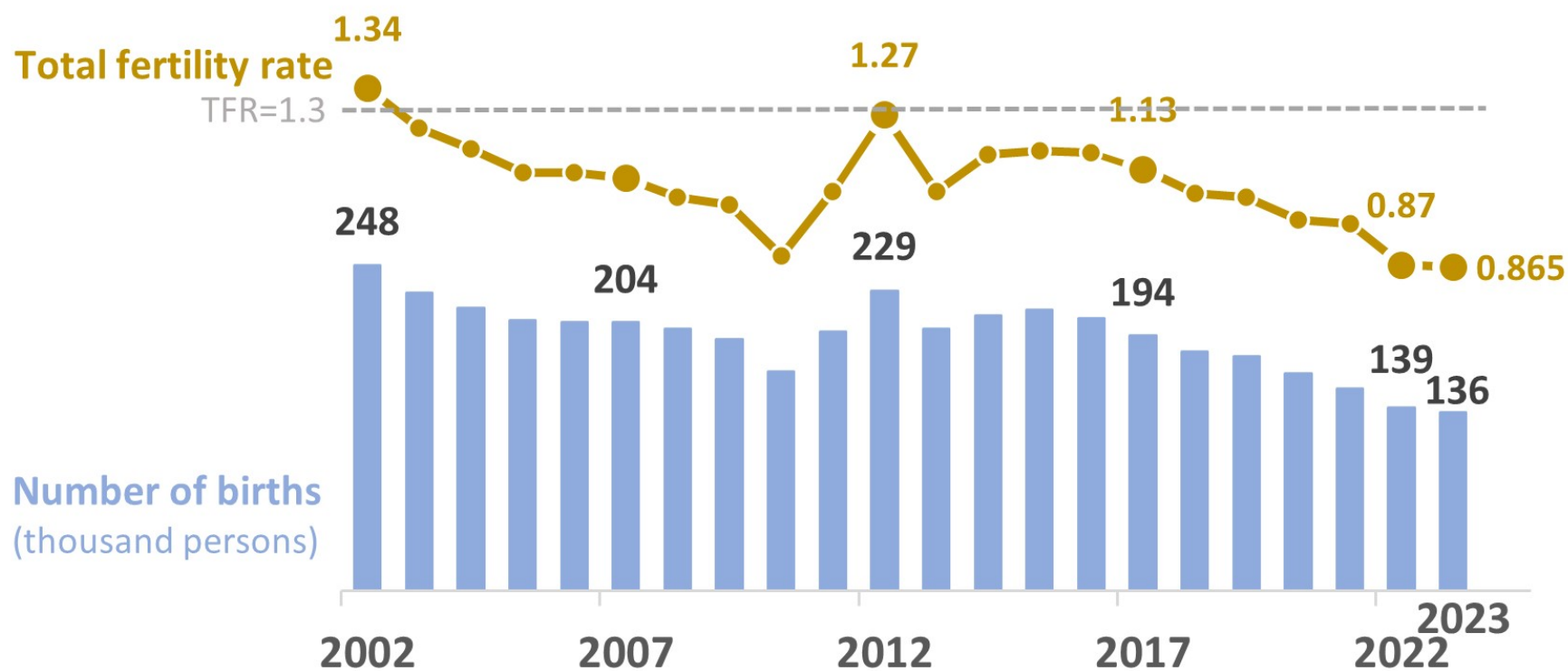
全球生育率
逐漸減少!



Total Fertility Rate (TFR) is the average number of children that would be born to a woman over her lifetime. Source of the data is the World Population Prospects 2022 report from the Population Division of the United Nations Department of Economic and Social Affairs

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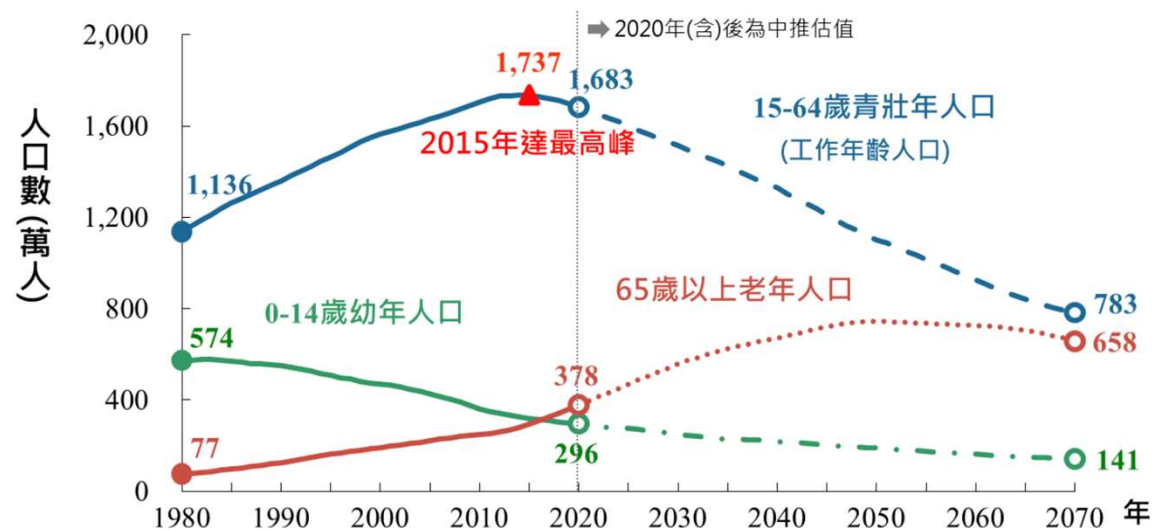
背景概述-台灣



2070年較2020年人口變動狀況

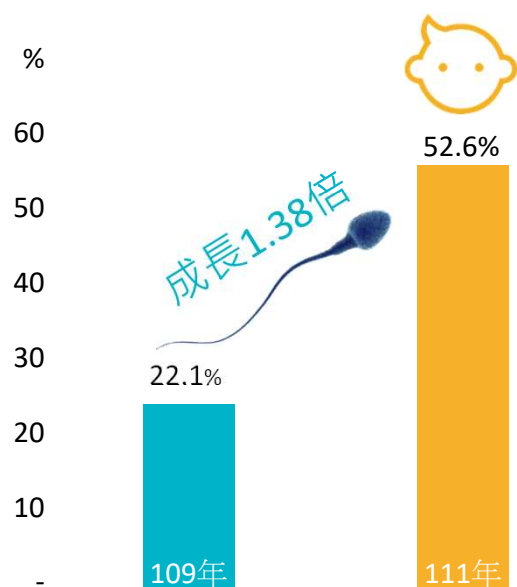
人口結構即將無法支撐經濟支出!!!

- 15-64歲**青壯年人口**已於2015年達最高峰後即逐年減少。
- 老年人口於2017年起超越幼年人口，預估**2029年**，老年人口將達幼年人口的2倍。
- 2020年，平均**2.5個青壯年**養1個老人或幼童。
- 2070年，平均**不到1個青壯年**養1個老人或幼童。



資料來源：國家發展委員會

國家補助政策擴增市場需求



109 年國內人工生殖施術結果及擴大補助後 111 年受補助施術夫妻之單一 胚胎植入率

資料來源：國健署

衛生福利部
Ministry of Health and Welfare
促進全民健康與福祉

請輸入關鍵字 進階

熱門關鍵字： COVID-19 長期照顧 防疫補償 確診

本部簡介 ▾ 最新消息 ▾ 便民服務 ▾ 法令規章 ▾ 衛教視窗 ▾ 重大事件 ▾ 本部各單位及所屬機關 ▾

111年衛生福利部新聞

12月新聞

首頁 / 最新消息 / 焦點新聞 / 111年衛生福利部新聞 / 12月新聞

試管嬰兒補助方案迄今已超過5.6萬人次不孕夫妻受惠

● 資料來源：國民健康署 ● 建檔日期：111-12-30 ● 更新時間：111-12-30

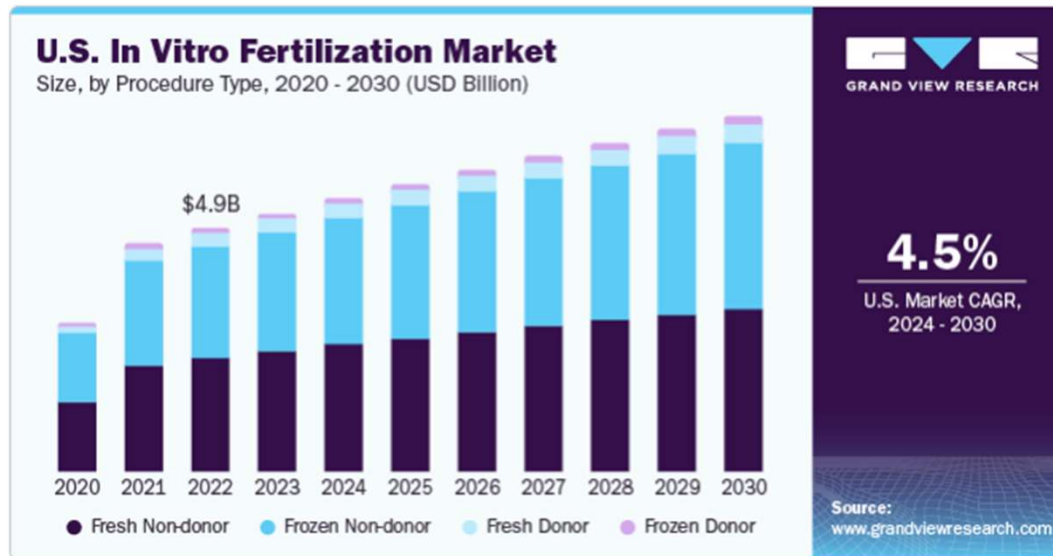
行政院自110年7月1日起，實施「擴大不孕症治療（試管嬰兒）補助方案」，以減輕不孕夫妻進行試管嬰兒之經濟負擔，補助對象為不孕夫妻至少一方具我國國籍，且妻年齡未滿45歲者，可透過98家特約人工生殖機構進行不孕症治療，並幫助接受治療的民眾線上代為申辦，既快速又便民的措施，大幅提升服務可近性。截至111年12月14日止，已有56,245件申請補助資格通過，其中39,196件已完成療程並通過補助費用審查，累計補助金額達28億981萬餘元。受補助的夫妻當中共有5,838對，已順利產下6,545名嬰兒，滿足不孕夫妻的生育期待。

IVF市場

IVF未來成長動能可期

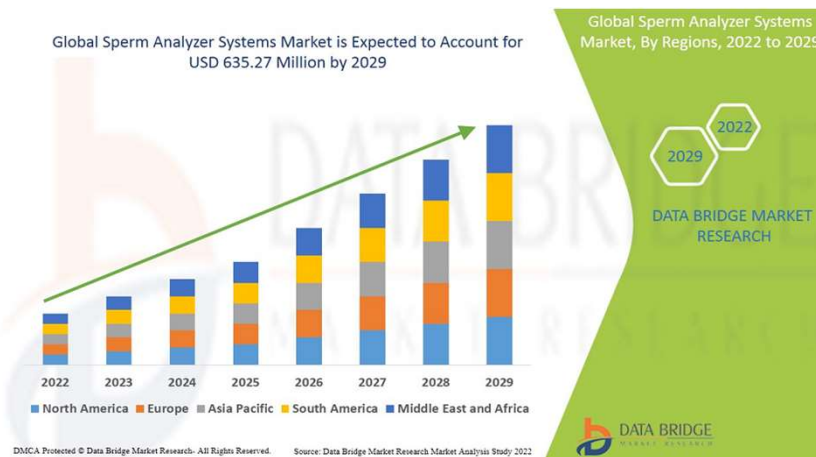
In Vitro Fertilization Market Size & Trends

The global In vitro fertilization market size was valued at USD 25.3 billion in 2023 and is expected to grow at a compound annual growth rate (CAGR) of 5.54% from 2024 to 2030. Rising reproductive tourism and increasing cases of male & female infertility are key factors driving the market growth. Infertility is one of the major health concerns faced by individuals globally. According to WHO, around 17.5% of the adult population worldwide experiences infertility. This shows necessity to enhance accessibility to affordable and top-notch fertility care globally.



全球市場規模

	人工輔助生育市場	男性不孕市場
市場規模	US\$ 25.3 Billions (2023)	US\$ 4.0 Billions (2022)
年複合成長率	5.54% (2024-2030)	4.9% (2022)
資料來源	Grand View Research	Grand View Research



Source:

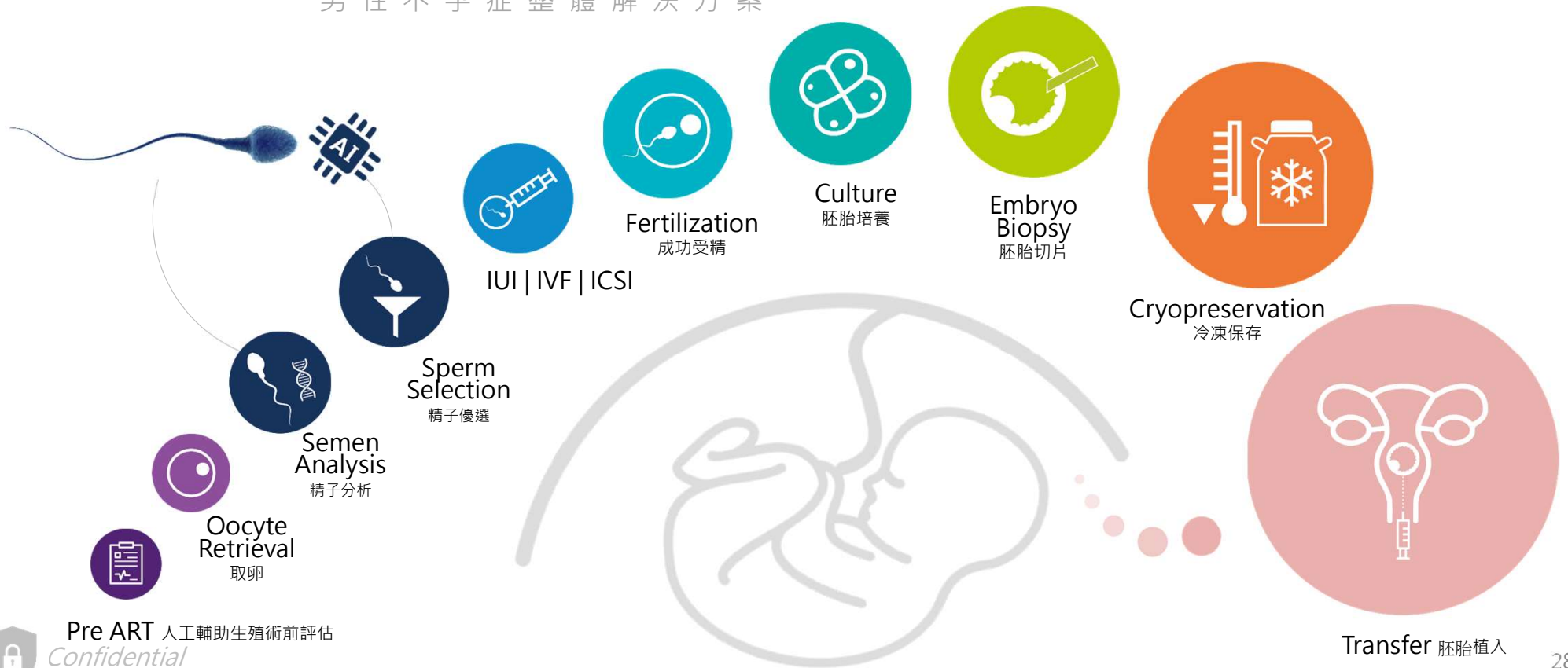
- <https://www.grandviewresearch.com/industry-analysis/in-vitro-fertilization-market>
- <https://www.grandviewresearch.com/industry-analysis/male-infertility-market#:~:text=The%20global%20male%20infertility%20market,4.9%25%20from%202023%20to%202030.>
- <https://www.marketresearchguru.com/enquiry/request-sample/22357031>
- <https://www.arizton.com/market-reports/sperm-separation-devices-market>

市場定位

LensHOOKE®

Male Infertility Total Solution

男性不孕症整體解決方案



Pre ART 人工輔助生殖術前評估

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Transfer 胚胎植入

28

市場銷售區域

America

Available *12

Mexico	Paraguay	Brazil	Colombia
USA	Argentina	Peru	Uruguay
Dominica	Bolivia	Ecuador	Panama

Europe

Available *21

Norway	Denmark	Sweden	Turkey
Finland	Estonia	Latvia	Russia
Lithuania	Czech	Slovakia	Georgia
Iceland	Germany	Hungary	Belarus
Austria	Spain	Italy	Portugal
Switzerland			

Asia

Available *14

Japan	Taiwan	Malaysia	India
Indonesia	China	Vietnam	Pakistan
Hong Kong	Thailand	Singapore	Bangladesh
Macao	Philippines		Korea

MENA

(Middle East and Africa)

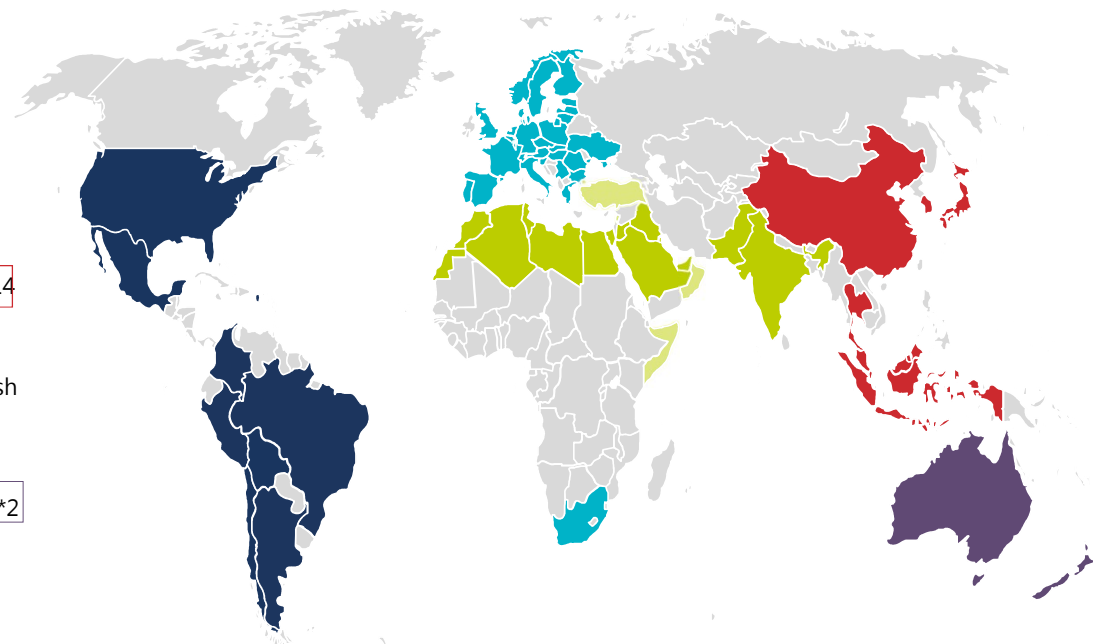
Available *4

Saudi Arabia	Bahrain	South Africa
Israel	U.A.E	Morocco
Qatar	Oman	Nigeria
Cyprus	Lebanon	Kuwait

Oceania

Available *2

Australia
New Zealand



已簽約: **53**

新品上市發表會/全球在線課程



2019

- X1 PRO 精子品質分析檢測儀



全球經銷商訓練



2019

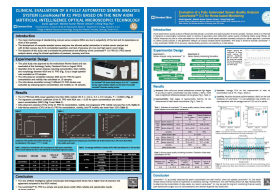
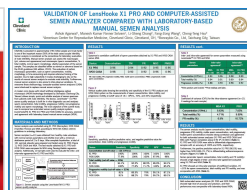
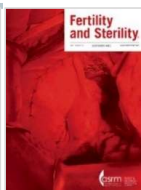


X1 PRO

2020

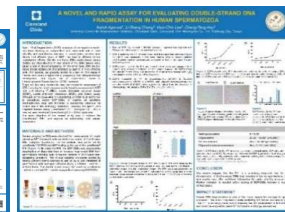


X1 PRO

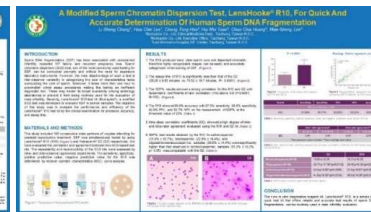


X1 PRO

2021

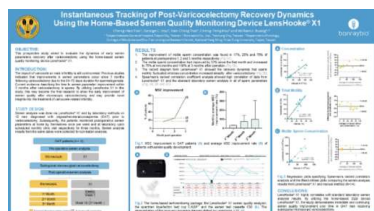


R11



R10

2022



X1

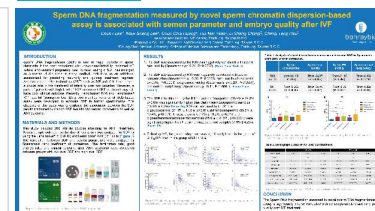


X1 PRO



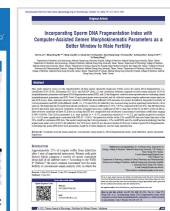
X1 PRO

2023



R10/R11

Research NCKU!



R10



X12 PRO / R10



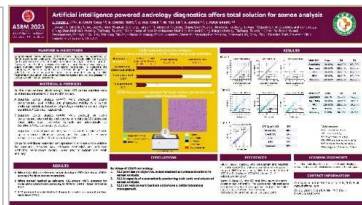
R10



2024



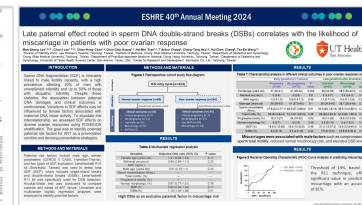
CA0



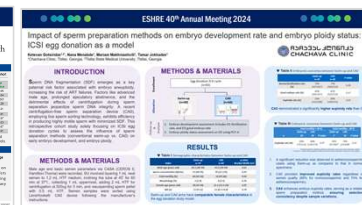
X12 PRO / R10 / CS3



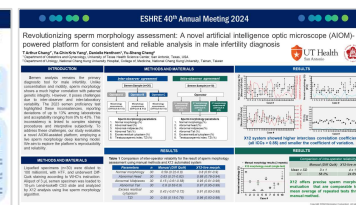
R11



R11



CA0

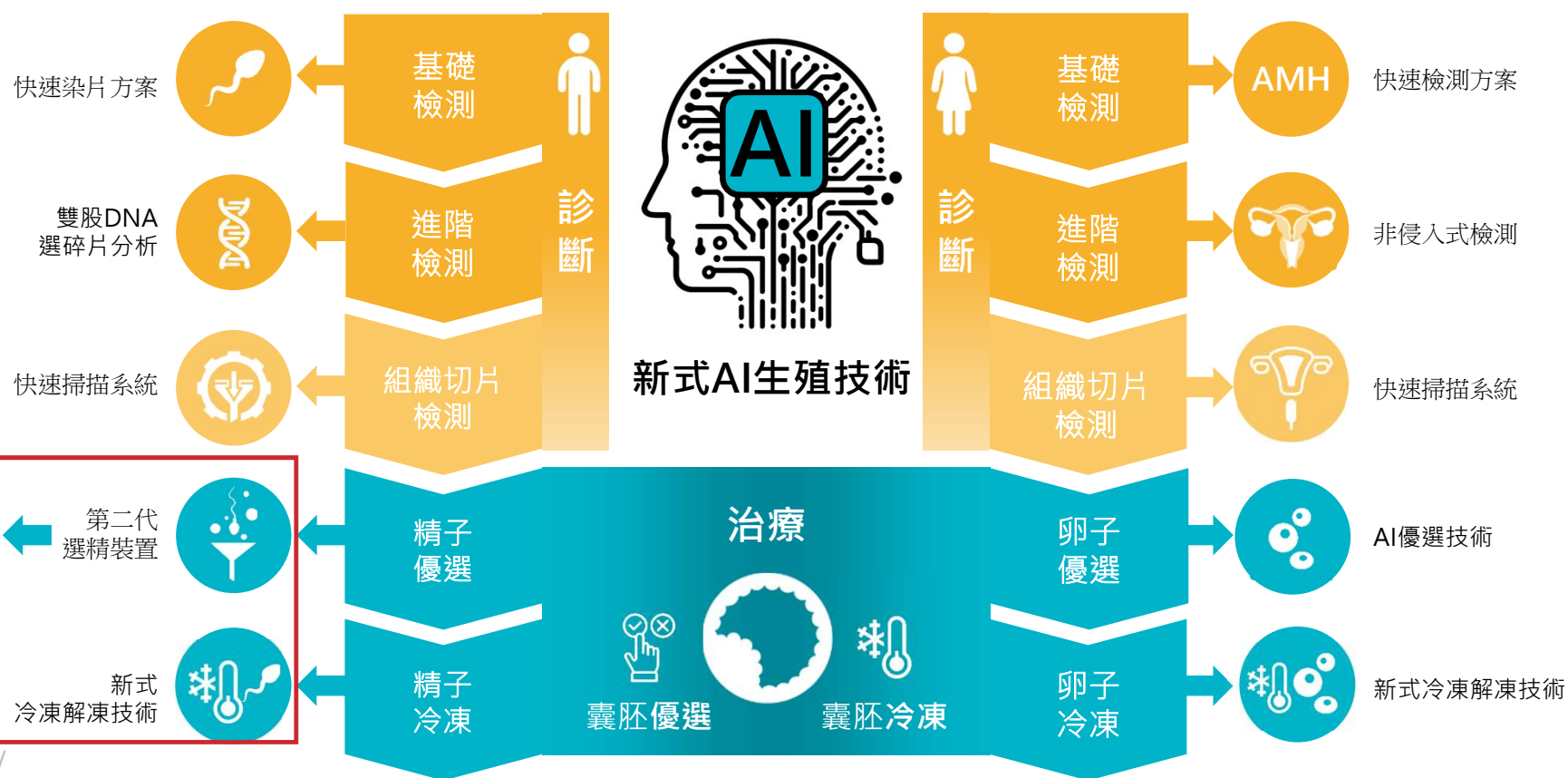


X12

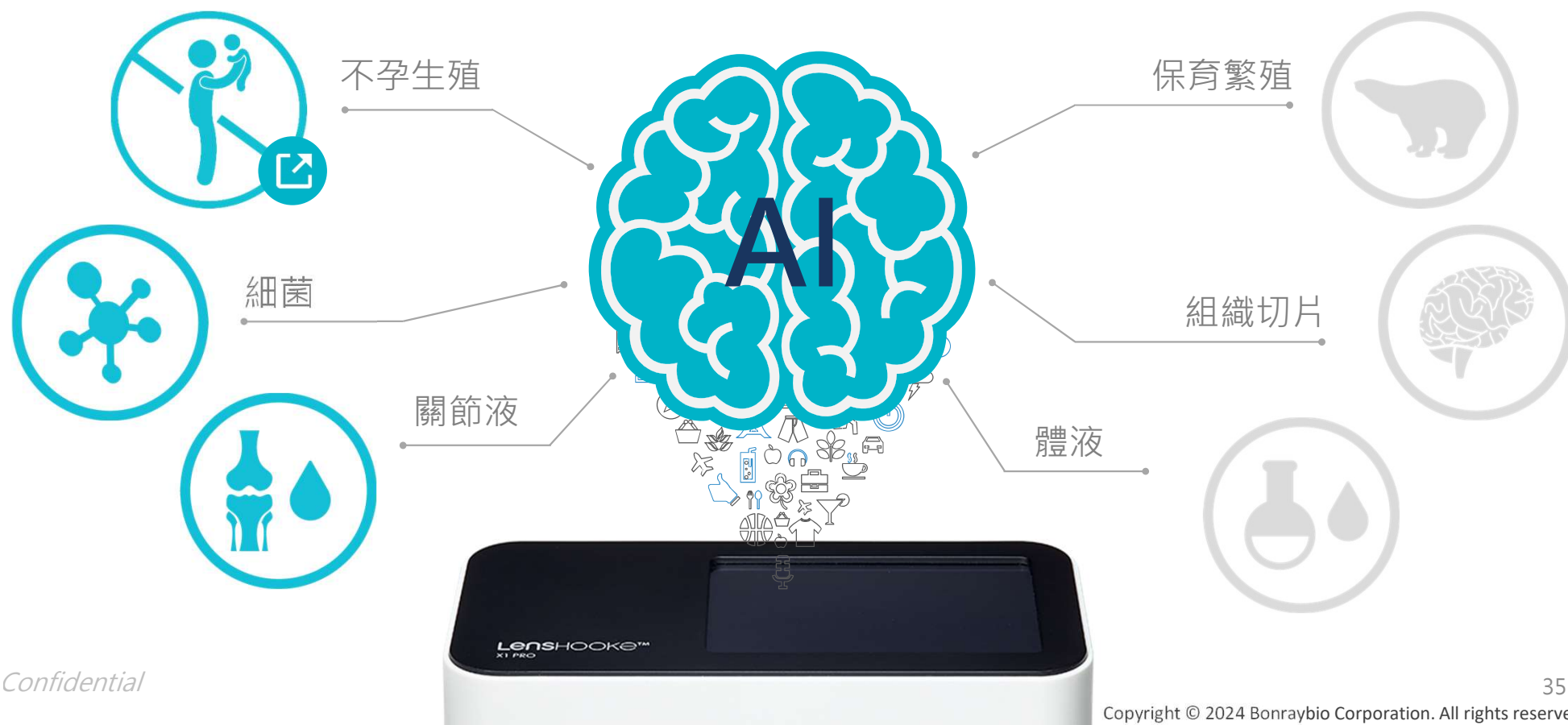
"Bonraybio® / LensHooke®" 搜尋引擎與其應用

1 Automation of human semen analysis using a novel artificial intelligence optical microscopic technology	Andrologia (2.532)
2 The effect of oxidative and reductive stress on semen parameters and functions of physiologically normal human spermatozoa	Free Radic Biol Med. (8.101)
3 Male infertility	Lancet. (202.731)
4 Simplified sperm testing devices: a possible tool to overcome lack of accessibility and inconsistency in male factor infertility diagnosis. An opportunity for low- and middle- income countries	Facts Views Vis Obgyn. (0.54)
5 Comparative study of fertility parameters in vitrified human spermatozoa in the presence or absence of EmbryoORP®: A novel antioxidant	Andrologia (2.532)
6 Validation of LensHooke® X1 PRO and Computer-Assisted Semen Analyzer Compared with Laboratory-Based Manual Semen Analysis	World J Mens Health (6.494)
7 The validity and reliability of computer-aided semen analyzers in performing semen analysis: a systematic review	Transl Androl Urol. (2.479)
8 Standardized Laboratory Procedures, Quality Control and Quality Assurance Are Key Requirements for Accurate Semen Analysis in the Evaluation of Infertile Male	World J Mens Health (6.494)
9 Incorporating sperm DNA fragmentation index with computer-assisted semen morphokinematic parameters as a better window to male fertility	Chin J Physiol. (1.568)
10 The Effectiveness of Sperm Preparation Using Density Mini-Gradient and Single-Layer Centrifugation for Oligospermia Samples	Acta Inform Med. (1.87)
11 Future of Male Infertility Evaluation and Treatment: Brief Review of Emerging Technology	Urology (2.633)
12 ALDH2 Expression, Alcohol Intake and Semen Parameters among East Asian Men	J Urol. (7.641)
13 The Association between Monthly, Yearly, and Lifetime Cannabis Use, and Semen Parameters in Asian-American Men	World J Mens Health (6.494)
14 Molecular Alterations and Severe Abnormalities in Spermatozoa of Young Men Living in the "Valley of Sacco River" (Latium, Italy): A Preliminary Study	Int J Environ Res Public Health. (4.614)
15 In vitro assessment of Prunus japonica seed extract on human spermatozoa hypermotility and intracellular alkalization	Andrologia (2.532)
16 Staining-free, Automated Sperm Analysis for In Vitro Fertilization Lab Use	J Urol. (7.641)
17 High concentration of dopamine treatment may induce acceleration of human sperm motility	Reprod. Med. Biol. (4.009)
18 Artificial intelligence in the fertility clinic: status, pitfalls and possibilities	Human Reprod. (6.353)
19 Computer software (SiD) assisted real-time single sperm selection associated with fertilization and blastocyst formation	Reprod. Biomed. Online (4.567)
20 Motility Assessment of Ram Spermatozoa	Biology (Basel)(5.168)
21 Sperm DNA integrity does play a crucial role for embryo development after ICSI, notably when good-quality oocytes from young donors are used	Biology Research (7.634)
22 Looking with new eyes: advanced microscopy and artificial intelligence in reproductive medicine	JARG (3.357)
23 Condensation and protamination of sperm chromatin affect ICSI outcomes when gametes from healthy individuals are used	Human Reprod. (6.353)
24 The MAEL expression in mitochondria of human spermatozoa and the association with asthenozoospermia	Andrologia (2.532)
25 Development and integration of LensHooke® R10 for automatic and standardized diagnosis for sperm DNA fragmentation	Andrology (4.456)
26 Future of Male Infertility Evaluation and Treatment: Brief Review of Emerging Technology	Urology (2.633)
27 Novel sperm chromatin dispersion test with artificial intelligence-aided halo evaluation: A comparison study with existing modalities	Andrology (4.456)
28 The Association between Monthly, Yearly, and Lifetime Cannabis Use, and Semen Parameters in Asian-American Men	World J Mens Health (6.494)
29 Artificial Intelligence in Andrology: From Semen Analysis to Image Diagnostics	World J Mens Health (6.494)
30 The Renaissance of Male Infertility Management in the Golden Age of Andrology	World J Mens Health (6.494)
31 Live motile sperm sorting device for enhanced sperm-fertilization competency: comparative analysis with density-gradient centrifugation and microfluidic sperm sorting	JARG (3.357)
32 High-throughput sperm DNA analysis at the single-cell and population levels	Analyst (5.227)
33 Innovative technology for evaluation of sperm DNA double-strand breaks diagnoses male factor infertility and prevents reproductive failures	Scientific Reports (4.9)
34 High concentration of dopamine treatment may induce acceleration of human sperm motility	Reprod Med Biol (4.009)
35 Small noncoding RNAs and sperm nuclear basic proteins reflect the environmental impact on germ cells	Mol. Med. (5.7)
36 Age, sexual abstinence duration, sperm morphology, and motility are predictors of sperm DNA fragmentation	Reprod Med Biol (4.009)

人工輔助生殖市場未來產品布局



AI智慧醫療自動光學顯微檢測技術





營運成果

04

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Confidential

專利組合

 總申請
111

 核准
90

 申請中
21

代號 **6955**



X1 PRO X12 PRO

- 
 - 003819614-0004
 - EP15861680.5 (Pending)
 - EP3244250B1
 - 006362836-0001
- 
 - EP3244250B1
- 
 - EP3244250B1
- 
 - EP3244250B1
 - 9003819614-0004
 - 9006362836
- 
 - CN 304284876
 - 201910363406.9 (Pending)
 - 202010554604.6A (Pending)
 - 202110783910.1 (Pending)
- 
 - US 9,958,665 B2
 - US 9,959,621 B2
 - US 10,281,386 B2
 - US 9,958,658 B2
 - US 9,664,611 B2
 - US 10,324,022 B2
 - US 10,852,290 B2
 - US 10,928,378 B2
 - US D858,790 S
 - US 11,268,947 B2
 - 17/648,887 (Pending)
 - 17/648,901 (Pending)
- 
 - I699532B
 - D186172
 - I755755
 - I572896
 - I647452
 - I808435
 - CN 106198536
 - CN 108474735

CS0 / CS1

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 - 003819614-0003
 - 006362836 (Pending)
- 
 - 006362836 (Pending)
 - 9003819614-0003
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 - US D831,224 S
 - USD912273S
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 - D186173
 - I688759
 - D202000
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 - 305466832S
 - CN 304284890 S
 - CN109943473B

檢測片

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 - 003819614-0001
 - 003819614-0002
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 - 9003819614-0001
 - 9003819614-0002
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 - USD816862S
 - USD816863S
- 
 - D186969
 - D186174
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 - CN304406612S
 - CN304328795S

CK0

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 - 003824994-0001
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 - 9003824994-0001
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 - US 10,940,479 B2
 - US D842,494 S
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 - D183283
 - I620923
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 - CN 107966327
 - CN 304326173
- 
 - EP3311753

CA0/CA1

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 - EP22188408.3 (Pending)
- 
 - 17/815,484 (Pending)
- 
 - 111110406 (Pending)
 - M634293
 - I856300
- 
 - 202210427414.7 (Pending)
 - CN218561447U
 - CN217377845U

R10

- 
 - **EP4019645B1 (12國)**
 - EP21216691.2 (Pending)
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 - US 11,644,455 B2
 - 17/643,161 (Pending)
 - 18/300,322 (Pending)
 - 18/047,242 (Pending)
- 
 - I775252
 - I777336
- 
 - 202110624213.1 (Pending)
 - 202110608571.3 (Pending)
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 - EP4019645B1

R11

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 - EP4019645B1 (12國)
 - EP21216691.2 (Pending)
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 - US 11,644,455 B2
 - 17/643,161 (Pending)
 - 18/300,322 (Pending)
 - 18/047,242 (Pending)
- 
 - I775252
 - I777336
- 
 - 202110624213.1 (Pending)
 - 202110608571.3 (Pending)

QXA

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 - US 11,754,485 B2
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 - I740420
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 - 202110053771.7 (Pending)

證書清單

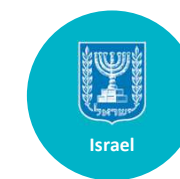
股票代號 **6955**

檢測儀

X1 PRO



檢測儀	X1 PRO X12 PRO	X1 PRO X1 PRO SE (CLIA Waiver)	X1 PRO X12 PRO	X1 PRO	X1 PRO X12 PRO	X1 PRO X12 PRO	X12 PRO	X1 PRO X12 PRO	X1 PRO
耗材	CS0 CS1 CK1 CA0 CA1 CR0 CS3 CW0	CS0 CS1 CK0 CK1 CA0 CA1 CR0 CW0	CS0 CS1 CK0 CK1 CW0 CA0 CA1 CS3 CR0	CS0 CS1 CK0	CS0 CS1 CK0 CK1	CS0 CS1 CK0 CK1 CW0 CA0 CA1 CS3 CR0	CA0	CS0 CS1 CK0 CK1 CW0 CS3	CS CK CW0
品質管控	QX0 QXA	QX0 QXA QXB	QX0 QXA QXB	QX0 QXA		QX0 QXA QXB		QX0 QXA QXB	QX0
試劑	R10 R11	R10 R11	R10 R11		R10 R11	R10 R11	R10		



檢測儀	X1 PRO	X1 PRO X12 PRO	X1 PRO	X1 PRO	X1 PRO	X1 PRO	X1 PRO	X1 PRO X12 PRO	X1 PRO X12 PRO
耗材	CS0	CS CK0 CS1	CS0 CS1 CK0	CS0 CK0	CS0 CS1 CK0 CK1 CA0 CA1	CS1 CK0 CA0 CA1 CW0	CS1 CK0	CS0 CS1 CK0 CK1 CA0 CA1 CS3 CR0	CS0 CS1 CK0 CK1 CA0 CA1 CS3 CR0 CW0
品質管控	QX0	QX0	QX0	QX0	QX0 QXA QXB	QX0 QXA	QX0 QXA	QX0 QXA QXB	QX0 QXA QXB
試劑		R10						R10 R11	R10 R11

品牌戰略



技術品牌
研發製造

LensHooke®

產品品牌
市場銷售

產品別占比

單位：新臺幣千元

年度	2022		2023		2024H1	
項目	金額	%	金額	%	金額	%
精子品質分析檢測儀器	54,939	51.70	59,874	37.51	42,228	41.08
精子品質分析檢測耗材	45,820	43.11	90,420	56.64	57,192	55.63
其他(註)	5,515	5.19	9,347	5.85	3,383	3.29
合計	106,274	100.00	159,641	100.00	102,803	100.00

註：其他主要係銷售品質管控產品、清潔棉棒與數據整合軟體及維修與勞務收入組成

地區別銷售金額

單位：新臺幣千元

地區		年度	111年		112年		113年H1	
		金額	比率	金額	比率	金額	比率	
內銷		2,354	2.22%	4,547	2.85%	3,345	3.25%	
外銷	美洲	40,290	37.91%	46,510	29.13%	29,379	28.58%	
	歐洲	17,291	16.27%	31,951	20.01%	27,493	26.74%	
	亞洲	45,910	43.20%	73,791	46.23%	40,926	39.81%	
	其他	429	0.40%	2,842	1.78%	1,660	1.62%	
合計		106,274	100.00%	159,641	100.00%	102,803	100.00%	

每月營收

 公開資訊觀測站精華版

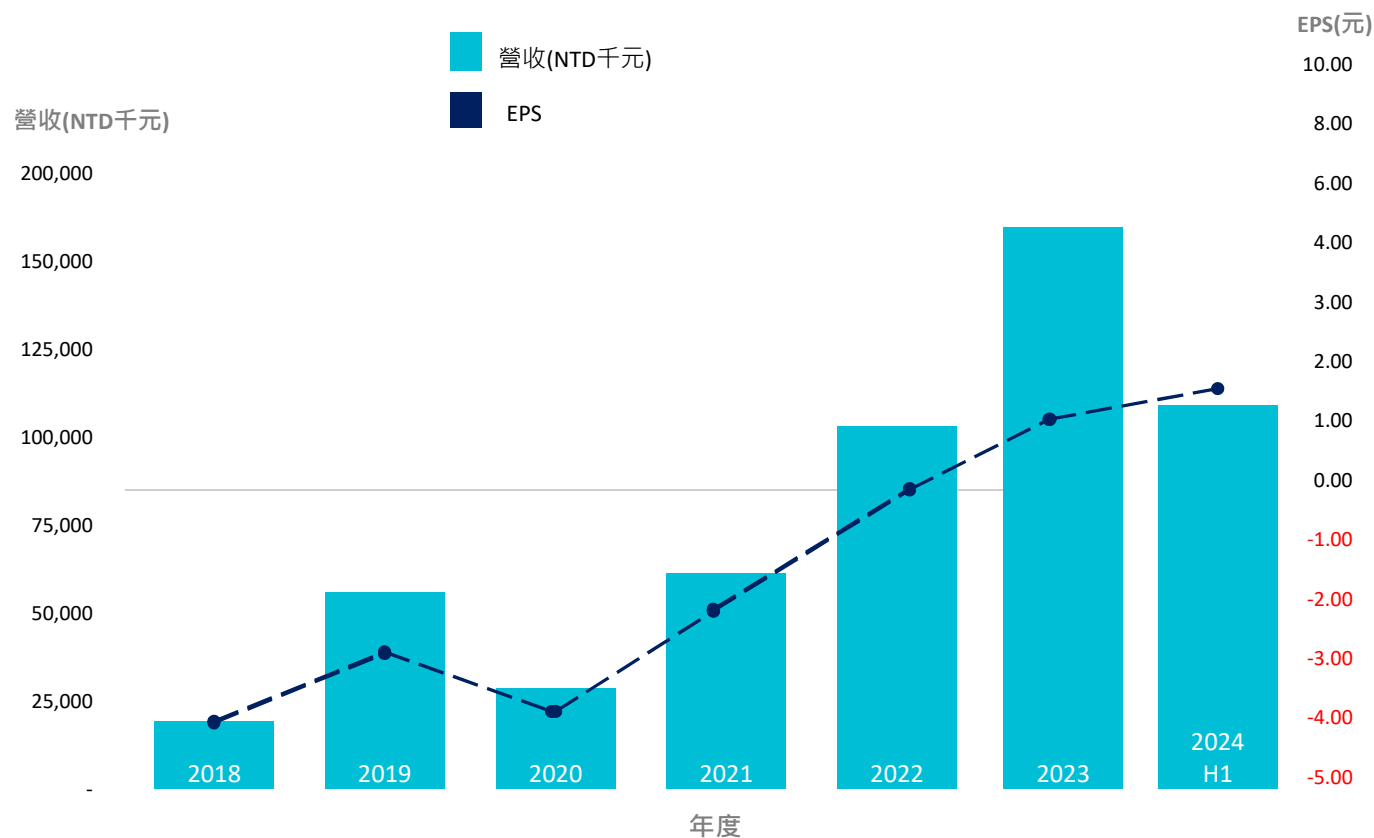
邦耆生技最近12個月份（累計與當月）營業收入統計表

(單位：千元)

年 度	月 份	營業收入			累計營業收入		
		當月營收	去年當月營收	去年同月增減(%)	當月累計營收	去年累計營收	前期比較增減(%)
113	9	19,273	16,484	16.92%	159,854	108,400	47.47%
113	8	21,409	13,041	64.17%	140,581	91,916	52.95%
113	7	16,369	14,934	9.61%	119,172	78,875	51.09%
113	6	15,550	7,842	98.29%	102,803	63,941	60.78%
113	5	22,484	15,007	49.82%	87,253	56,099	55.53%
113	4	16,596	7,326	126.54%	64,769	41,092	57.62%
113	3	17,635	15,108	16.73%	48,173	33,766	42.67%
113	2	15,050	10,404	44.66%	30,538	18,658	63.67%
113	1	15,488	8,254	87.64%	15,488	8,254	87.64%
112	12	21,449	15,705	36.57%	159,641	106,274	50.22%
112	11	15,343	7,256	111.45%	138,192	90,569	52.58%
112	10	14,449	10,009	44.36%	122,849	83,314	47.45%

獲利情形

股票代號 **6955**



年度	2018	2019	2020	2021	2022	2023	2024H1
營收(NTD千元)	22,000	54,000	26,590	56,295	106,274	159,641	102,803
稅前 EPS(NTD 元)	-3.73	-2.43	-4.00	-2.63	0.11	1.51	1.56



公司願景

your health
our focus

演進醫創 聚焦健康