

113年度法人說明會



科妍生物科技股份有限公司
SciVision Biotech Inc.

陳俊彰 博士

免責聲明

本簡報及同時發佈之相關訊息所提及之預測性資訊包括營運展望、財務狀況以及業務預測等內容，乃是建立在本公司從內部與外部來源所取得的資訊基礎。本公司未來實際所可能發生的營運結果、財務狀況以及業務成果，可能與這些明示或暗示的預測性資訊有所差異。其原因可能來自於各種因素，包括但不限於價格波動、競爭情勢、國際經濟狀況、匯率波動、市場需求以及其他本公司無法掌控之風險等因素。

本簡報中對未來的展望，反應本公司截至目前為止對於未來的看法。對於這些看法，未來若有任何變更或調整時，本公司並不負責隨時再度提醒或更新。

大綱

1. 公司與產品介紹
2. 營運現況

科妍生技



SciVISION
BIOTECH INC.

- 2001年公司成立
- 2013年臺灣證交所掛牌上市（股票代號1786）
- 公司定位為專業醫藥級透明質酸高階醫療器材研發生產公司
- 位於臺灣高雄市前鎮區南一路1號與南六路9號
- 通過醫療器材品質管理系統準則(QMS)、醫療器材品質管制系統標準(ISO 13485)審查，並遵循美國食品藥物管理局(US FDA)及國際醫藥品稽查協約組織(PIC/s GMP)等之規範。



科妍核心技術

透明質酸交聯平台 (Crosslinked Hyaluronic Acid Platform, CHAP®)

應用CHAP技術可做成各種型態及應用範疇之產品



CHAP智權保護

US09371402B2

(12) **United States Patent**
Chen et al.

(10) **Patent No.:** US 9,371,402 B2
(45) **Date of Patent:** Jun. 21, 2016

(54) **METHOD FOR PRODUCING CROSS-LINKED HYALURONIC ACID**

(75) **Inventors:** **Tor-Chern Chen, Kuo-Shiang (TW); Li-Se Chen, Kuo-Shiang (TW)**

(73) **Assignee:** **SCIVISION BIOTECH INC., K.E.P.Z. (TW)**

(*) **Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 351 days.

(21) **Appl. No.:** 13/316,840
(22) **Filed:** Dec. 12, 2011
(65) **Prior Publication Data**
US 2012/0095286 A1 Apr. 19, 2012

Related U.S. Application Data
(63) Certification of part of application No. 12/385,502, filed on Apr. 9, 2009, now abandoned.

(51) **Int. Cl. Class.** **C08B 37/08** (2006.01)
(52) **U.S. Cl. Class.** **C08B 37/0972** (2013.01)
(58) **Field of Classification Search**
CPC — C08B 37/09, C08B 15/00; A61K 8/73; CPC — C08B 37/09, C08B 15/00; A61K 31/715
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS

Tord, A. A. & Frutkinson, G. H. (2009). The science of hyaluronic acid-derived fillers. *Journal of Cosmetic and Laser Therapy*, 11(3), 35-42.*
Y. Tokita et al., Hydrolytic Degradation of Hyaluronic Acid, *Polymer Degradation and Stability*, 1995, pp. 269-273, vol. 48.
Hans J.C.P. Nolis et al., A Sensitive Fluorimetric Procedure for the Determination of Aliphatic Epoxides under Physiological Conditions, *Analytical Biochemistry*, 1981, pp. 151-157, vol. 115.
European Search Report for 09045618.2-1115, which is a corresponding application, that cites US2002/090291, and U.S. Pat. No. 4,716,154, EP 1183844, US 2006/246177, EP 0929206, Imbibi et al., Characteristics of Hyaluronic Acid, *Journal of Polymer Science: Part A: Polymer Chemistry*, 1998, pp. 1-10, vol. 36, No. 1.
Tomihata K. et al., Preparation of low water content, cross-linked by polyethylene glycol of hyaluronic acid, *Journal of Polymer Science: Part A: Polymer Chemistry*, 1998, pp. 1-10, vol. 36, No. 1.
Tomihata K. et al., Preparation of low water content, cross-linked by polyethylene glycol of hyaluronic acid, *Journal of Polymer Science: Part A: Polymer Chemistry*, 1998, pp. 1-10, vol. 36, No. 1.
CPC — C08B 37/09, C08B 15/00; A61K 8/73; CPC — C08B 37/09, C08B 15/00; A61K 31/715
See application file for complete search history.

美國

發明專利說明書 公告本

(本說明書格式、欄位及款項，皆係根據專利法規定辦理)

新申請案號：97136520 C08B37/08 (2006.01)

新申請日期：97.09.23 IPC 分類：C08B

一、發明名稱：(中文/英文)
交聯透明質酸之製造方法
METHOD FOR PRODUCING CROSS-LINKED HYALURONIC ACID

二、申請人：(共 1 人)
姓名或名稱：(中文/英文)
科新生物科技股份有限公司
SCIVISION BIOTECH INC.

代表人：(中文/英文)
韓開啟
HAN, KAI-CHENG

住居所或營業所地址：(中文/英文)
高雄市806南橋區高華加工出口區南六路9號
9, SOUTH 6TH RD., K.E.P.Z., TAIWAN, R.O.C.

圖 籍：(中文/英文)
中華民國 R.O.C.

台灣

發明專利說明書 公告本

(本說明書格式、欄位及款項，皆係根據專利法規定辦理)

新申請案號：97136520 C08B37/08 (2006.01)

新申請日期：97.09.23 IPC 分類：C08B

一、發明名稱：(中文/英文)
交聯透明質酸之製造方法
METHOD FOR PRODUCING CROSS-LINKED HYALURONIC ACID

二、申請人：(共 1 人)
姓名或名稱：(中文/英文)
科新生物科技股份有限公司
SCIVISION BIOTECH INC.

代表人：(中文/英文)
韓開啟
HAN, KAI-CHENG

住居所或營業所地址：(中文/英文)
高雄市806南橋區高華加工出口區南六路9號
9, SOUTH 6TH RD., K.E.P.Z., TAIWAN, R.O.C.

圖 籍：(中文/英文)
中華民國 R.O.C.

日本

(12) 發明專利

發明專利說明書 公告本

新申請案號：97136520 C08B37/08 (2006.01)

新申請日期：97.09.23 IPC 分類：C08B

一、發明名稱：(中文/英文)
交聯透明質酸之製造方法
METHOD FOR PRODUCING CROSS-LINKED HYALURONIC ACID

二、申請人：(共 1 人)
姓名或名稱：(中文/英文)
科新生物科技股份有限公司
SCIVISION BIOTECH INC.

代表人：(中文/英文)
韓開啟
HAN, KAI-CHENG

住居所或營業所地址：(中文/英文)
高雄市806南橋區高華加工出口區南六路9號
9, SOUTH 6TH RD., K.E.P.Z., TAIWAN, R.O.C.

圖 籍：(中文/英文)
中華民國 R.O.C.

中國

EUROPEAN PATENT APPLICATION

(1) **Date of publication:** 06.10.2019 **Revised:** 201606

(2) **Applicant number:** 09040018

(3) **Date of filing:** 06.02.2009

(4) **Designated Contracting States:** AT BE BG CH CY CZ DE DK EE ES FR GB GR HU IE IT LI LU NL PL PT RO SE SK TR
Designated Extension States: AL BA RS

(5) **Inventor:**
• Chen, Tor-Chern
Fengsheng City
Fengsheng (TW)
• Chen, Li-Se
Hanzhi District (TW)

(6) **Applicant:** Scivision Biotech Inc.
Kuo-Shiang Export Processing Zone
Gao-Shan District (TW)

(7) **Representative:** Hawk Patent and Rechtsanwalte
Hauer Wolf 90
20254 Hamburg (DE)

(54) **Method for producing cross-linked hyaluronic acid**

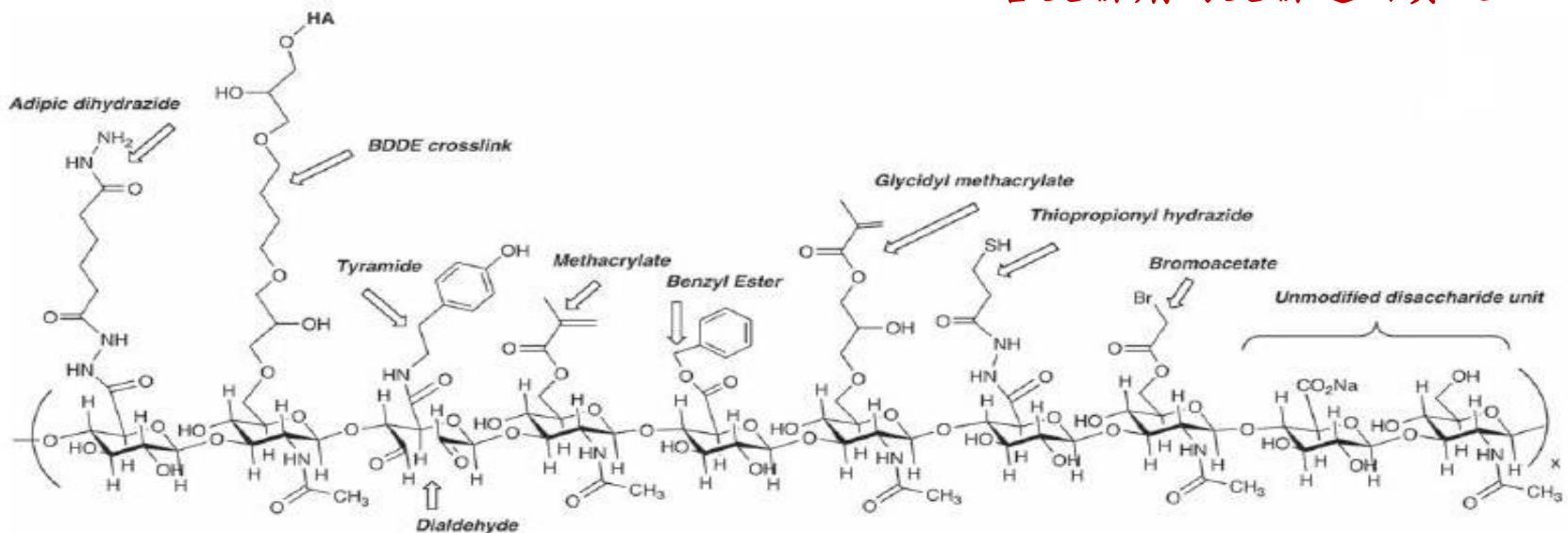
(57) **A method for producing cross-linked hyaluronic acid comprising cross-linking one or more polymers of a base temperature from 195-30 °C for a reactor time greater than 48 hours under basic conditions with a cross-linking agent to form a cross-linked hyaluronic acid, wherein the polymer is selected from the group consisting of hyaluronic acid, hyaluronate, derivatives thereof and a functionalized. Whereby, a cross-linking agent selected as a product of the method is decreased as the product does not require purification.**

歐盟

新世代透明質酸(玻尿酸)交聯技術的誕生

本公司取得「製造自體交聯透明質酸凝膠之方法及其產物」之台灣專利，成為全球唯一不添加任何化學物質，即能有效產出具醫療能力玻尿酸的企業。

傳統透明質酸的交聯方式



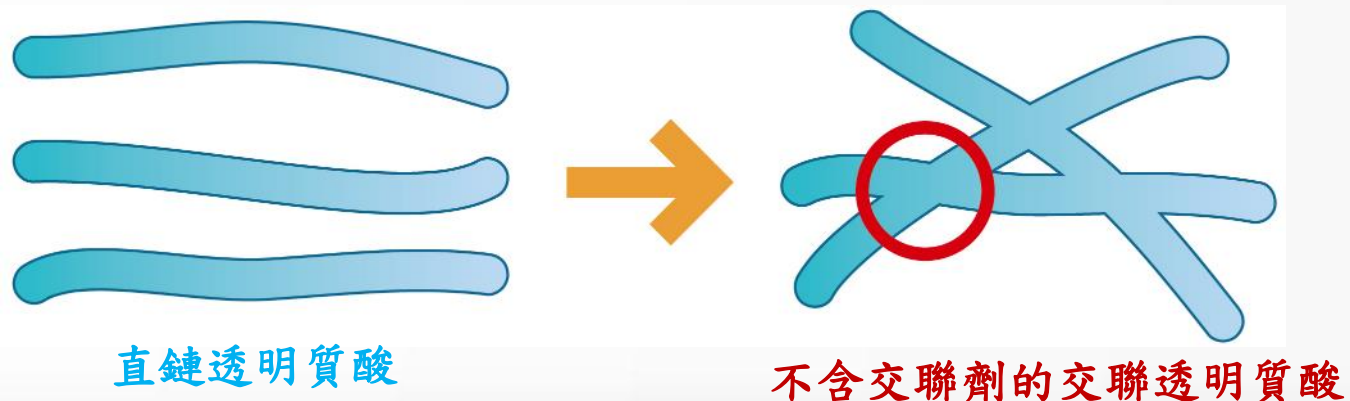
常見交聯劑

交聯技術的比較 I

傳統透明質酸交聯技術



科妍自體透明質酸交聯技術

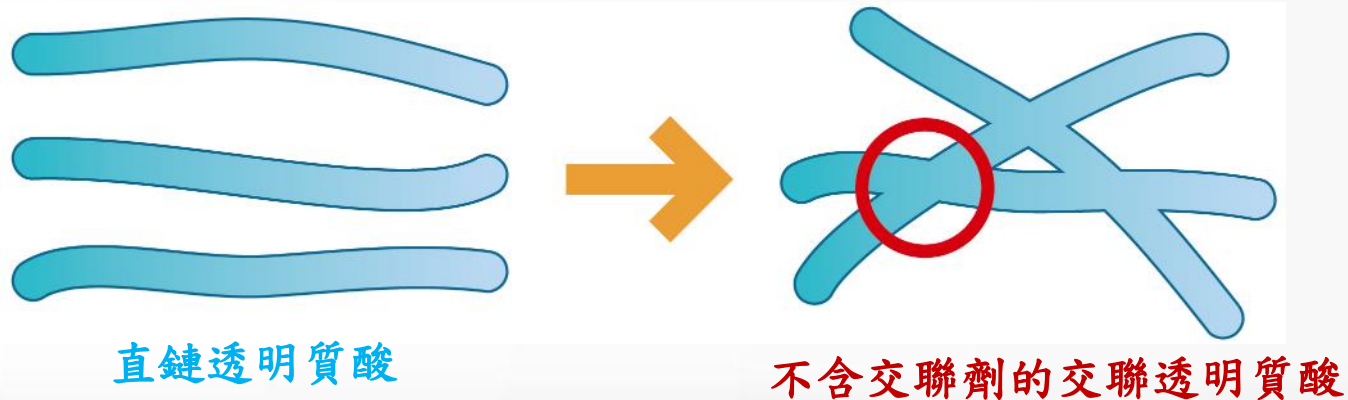


交聯技術的比較 II

先前自體透明質酸交聯技術



科研自體透明質酸交聯技術

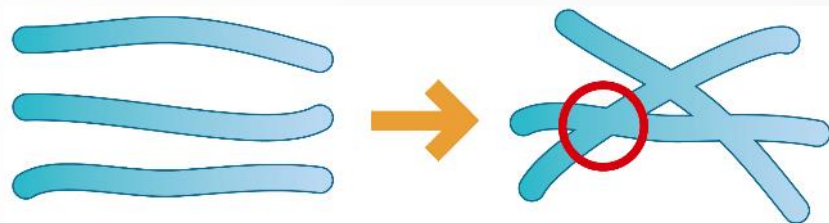


優勢

1. 安全
2. 環保
3. 效率
4. 精準

新世代透明質酸(玻尿酸)交聯技術的應用

科妍自體透明質酸交聯技術



直鏈透明質酸

不含交聯劑的交聯透明質酸

術後防沾黏

藥物釋放系統

骨再生與缺陷

組織工程

糖尿病

皮下填充

關節疾病

科妍自體交聯透明質酸產品

婦科骨盆腔手術外科用
防沾黏凝膠



產品優勢

- ✓ 生物相容性高
- ✓ 操作方便迅速
- ✓ 黏附性高

韌帶、周邊神經、關節
手術外科用防沾黏凝膠






產品優勢

- ✓ 生物相容性高
- ✓ 操作方便迅速
- ✓ 黏附性高
- ✓ 有效保護時間長

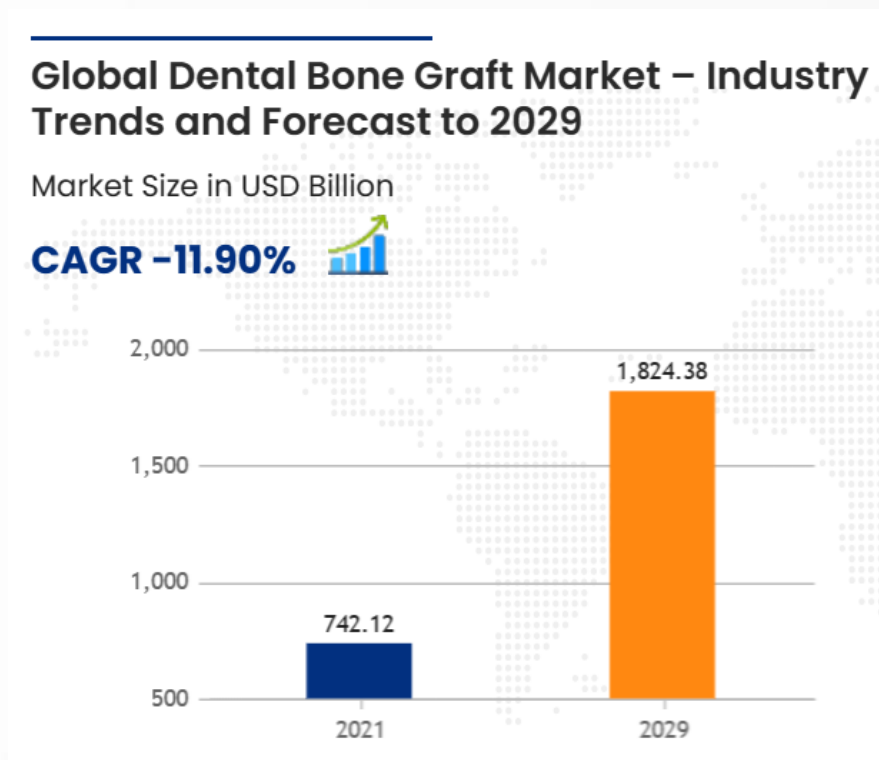
科妍自體交聯透明質酸的未來應用 I

骨再生：大鼠顱骨缺損模式結合微電腦斷層掃描分析

項目	控制組	科妍自體交聯 透明質酸	市售天然骨材
新生骨佔比 (%)	21.15 ± 4.22	60.64 ± 4.63	44.66 ± 4.46
新生骨密度 (g/cm ³)	0.914 ± 0.019	0.832 ± 0.018	0.848 ± 0.012
μCT剖面圖			

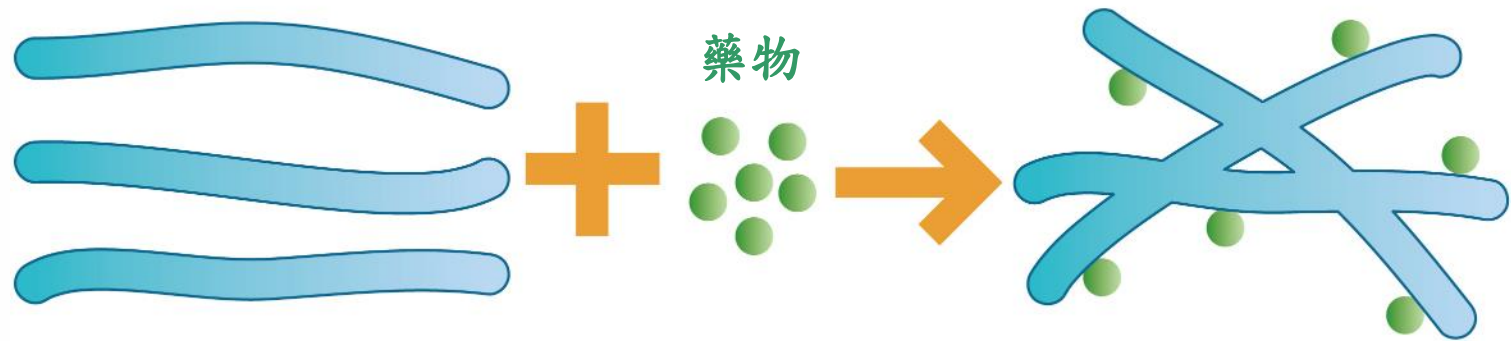
骨再生全球市值與成長率之市調

2021 年全球牙科骨移植市場價值 7.4212 億美元
預計到 2029 年將達到 18.2438 億美元
在 2022-2029 年的預測期內複合年增長率為 11.9%。



科妍自體交聯透明質酸的未來應用 II

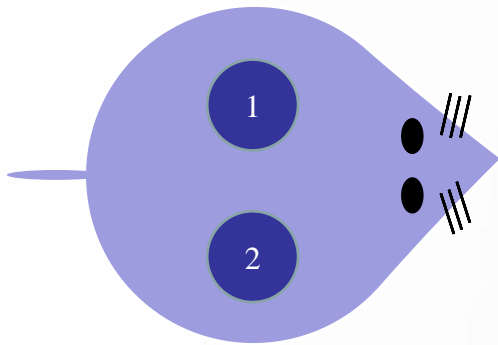
藥物釋放系統



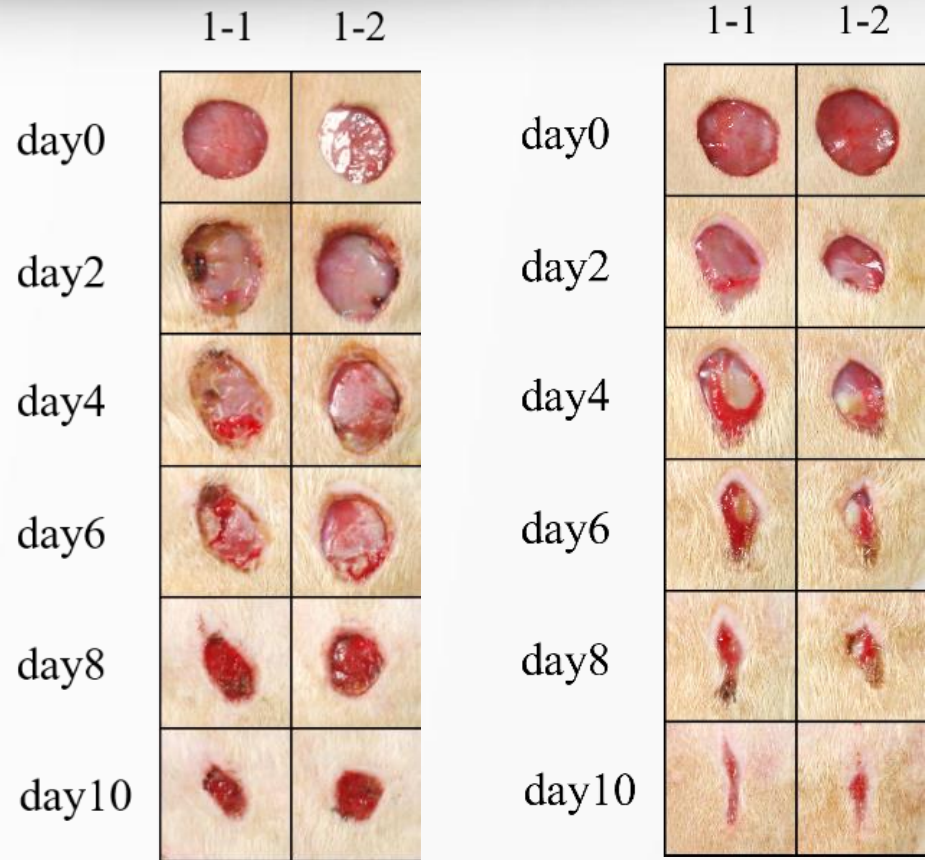
進入體內後
可控性的釋放

科妍自體交聯透明質酸的未來應用 II

藥物釋放系統



糖尿病大鼠
傷口示意圖



控制組

科妍自體交聯
透明質酸複合物

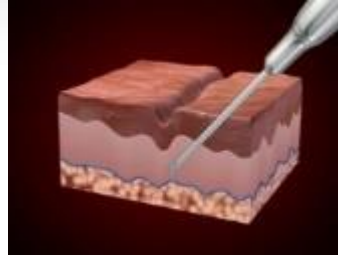
糖尿病治療全球市值與成長率之市調

糖尿病足潰瘍(DFU)的全球市場規模在2018年為66億美元
年複合成長率為6.8%，2026年市場預估約為110億美元



**Diabetic Foot Ulcer Treatment
Market Worth \$11.16 Billion at 6.8%
CAGR; Rise in Clinical Trials to
Augment Market, says Fortune
Business Insights™**

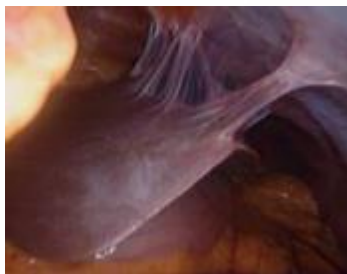
科妍 核心產品



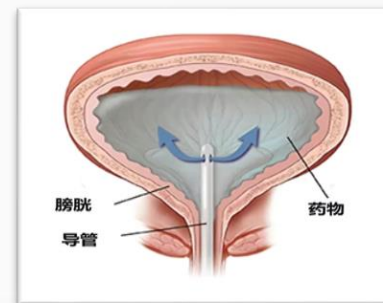
整形美容



老年照護



手術外科



泌尿系統

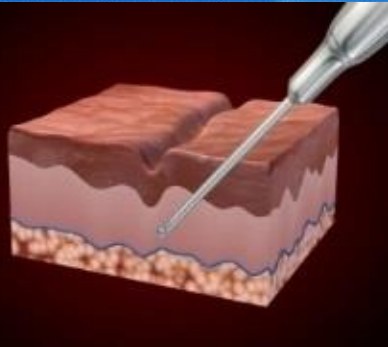


全球市值與成長率之市調

應用領域	項目	2023年全球市值	年複合成長率
整形美容	皮下填補劑	56 億美元	15.5 % (膠原蛋白增生劑台灣及中國市場年複合成長率:28%、31.2%)
老年照護	關節腔注射劑	43 億美元	8.97 %
手術外科	防沾黏凝膠	41億美元	9.8 %
泌尿系統	膀胱灌注液	13億美元	5.3 %

1. GLOBAL DERMAL FILLERS MARKET 2024 BY MANUFACTURERS, REGIONS, TYPE AND APPLICATION, FORECAST TO 2030 ;頭豹研究院:2023年中國醫美再生注射劑行業蓋覽 2024/1
2. Viscosupplementation Market, Size, Global Forecast 2024-2030, Industry Trends, Share, Growth, Insight, Impact of Inflation, Company Analysis
3. Increasing Awareness & Rising Adoption by Surgeons to Drive Growth in the Global Anti-Adhesion Products Market, According to New Report by Global Industry Analysts, Inc.
4. Interstitial Cystitis Drugs Global Market Report 2024 - Market Size, Trends, And Global Forecast 2024-2033

科妍核心產品 I - 整形美容



透明質酸皮下填充劑



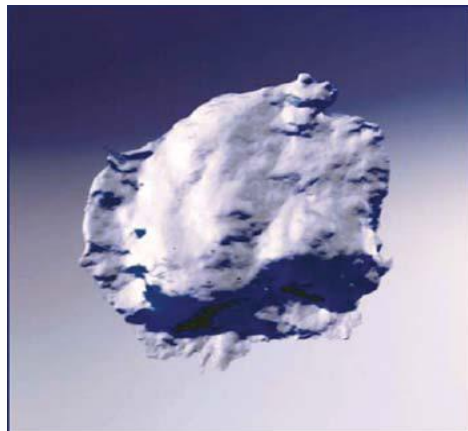
刺激膠原蛋白增生劑

整形美容 – 透明質酸皮下填補劑類別

凝膠 VS 顆粒

透明質酸皮下填補劑，依照產品的膠體型態可分為單相(monophasic, 凝膠型)與雙相(biphasic, 顆粒型)，各別代表的產品是Allergan的Juvederm與Galderma的Restylane。

Allergan的Juvederm與Galderma的Restylane也是透明質酸皮下填補劑市場的兩大龍頭產品。



單相(凝膠型) –
Allergan的Juvederm



雙相(顆粒型) –
Galderma的Restylane

科妍透明質酸皮下填補劑

單相(凝膠型)



產品優勢

- ✓ 安全性高
- ✓ 膠體柔順效果自然
- ✓ 輕鬆操作不費力

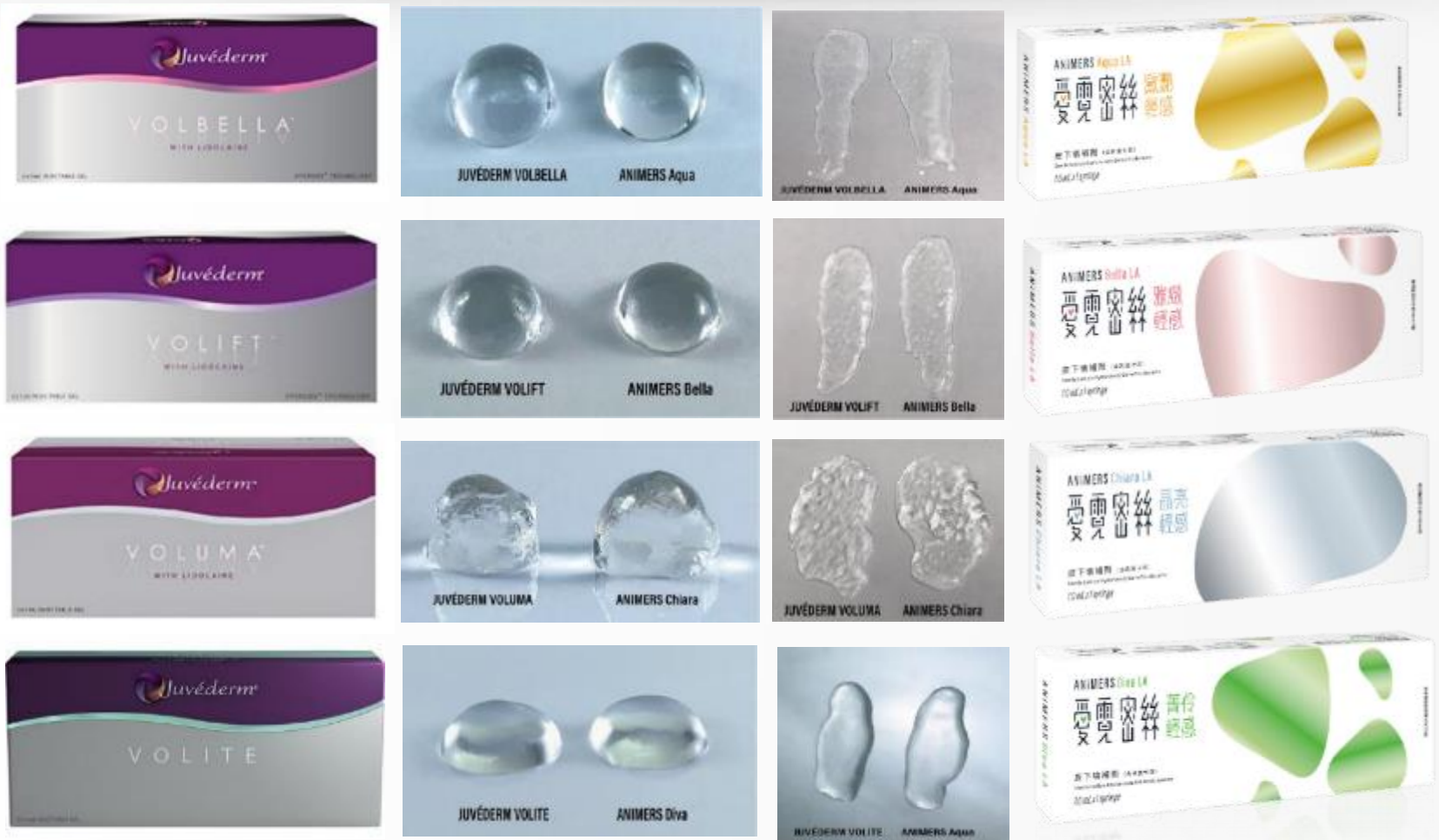
雙相(顆粒型)



產品優勢

- ✓ 安全性高
- ✓ 膠體結構堅固
- ✓ 不易位移
- ✓ 優異粘彈性
- ✓ 有效成分足
- ✓ 抗降解能力佳

ANiMERS膠體質地與Juvederm類似



ANiMERS與Juvederm膠體皆呈現滑順的絲慕昔質感

科妍雙相透明質酸皮下填補劑



CHAP專利玻尿酸交聯
平台科技
創造術品體絕佳支撐性

舊式顆粒型玻尿酸
無法有效支撐架構

凝膠式玻尿酸
柔軟無支撐性



科妍產品 人體臨床試驗與國際期刊發表

1. A Guide to Cheek Augmentation: Single-Point Deep Injection of Hyaluronic Acid Filler at Midface in Close Proximity to Medial Suborbicularis Oculi Fat (SOOF) Area. *Journal of Cosmetics, Dermatological Sciences and Applications*. 2016 Jan 06(01):1-8.
2. Use of High-Resolution Ultrasound (HRU) in the Assessment of Deep Injections of CHAP-Hyaluronic Acid (CHAP-HA) Fillers for Midface Lift. *Journal of Cosmetics, Dermatological Sciences and Applications*. 2018 Jan 08(03):126-132.
3. Dual-Plane Injection Technique With Microscale Tumescant Solution for Asian Rhinoplasty. *Dermatol Surg*. 2021 Jul 1;47(7):1015-1016.
4. CHAP-hyaluronic acid (CHAP-HA) filler as an optimal candidate for forehead filler augmentation using a 3-point injection technique. *Journal of Cosmetics, Dermatological Sciences and Applications*. 2021 Jan 11(02):76-83.
5. A Comprehensive Review of Long-Term Safety and Effectiveness of FACILLE Modified Sodium Hyaluronate Gel for Injection over 3 Years. *Journal of Cosmetics, Dermatological Sciences and Applications*. 2023 Mar 13(1):1-15.

眼周注射安全有效
使用者滿意度高



Figure 5. Before (upper) and immediately after (lower) single point deep injection of HA filler (1ml on each side) for cheek augmentation using 27 G sharp needle. Satisfactory results were noted with minimal bruising. Left: Case 2, Right: Case 7.

產品與人體組織相容性高

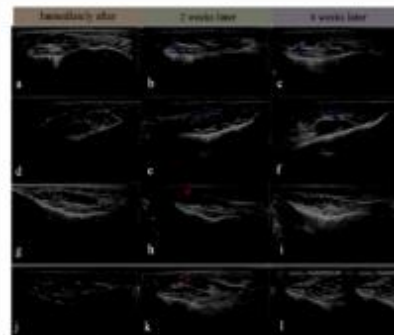
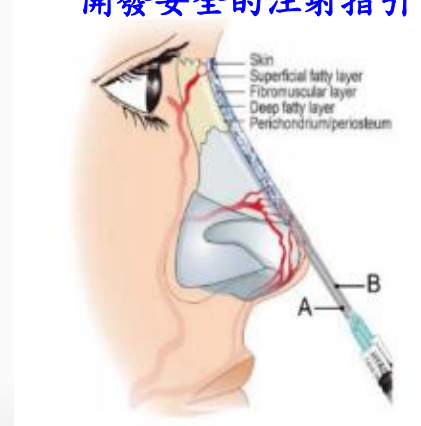
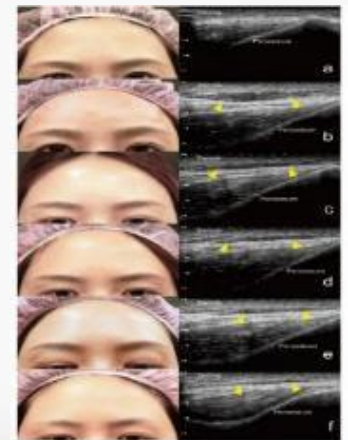


Figure 5. High-resolution ultrasound imaging immediately after HA injection (a, b, g, j), at 2-Week (d, e, h, k) and 4-week (c, f, i, l) follow up. Hydration of the HA would occur (arrows), and the ha would appear to be more heterogeneous and hyperechoic (arrowheads) and may become completely undetectable with the surrounding tissues in the 4th week follow up (c, j).

針對高風險部位
開發安全的注射指引



額頭注射的指引



科妍刺激膠原蛋白增生劑

可麗媞植入劑

產品說明

可麗媞是一種聚左旋乳酸 (poly-L-lactic acid) 植入劑，無菌，非熱原性之產品，使用時需將無菌注射用水注入無菌乾粉調配成懸浮液。此懸浮液中含有具生物相容性與生物可分解性之聚左旋乳酸，可刺激自體膠原蛋白及彈性纖維增生。本產品在體內可代謝為二氧化碳、水及葡萄糖被人體吸收。

許可證-衛部醫器製字第008137號

適應症

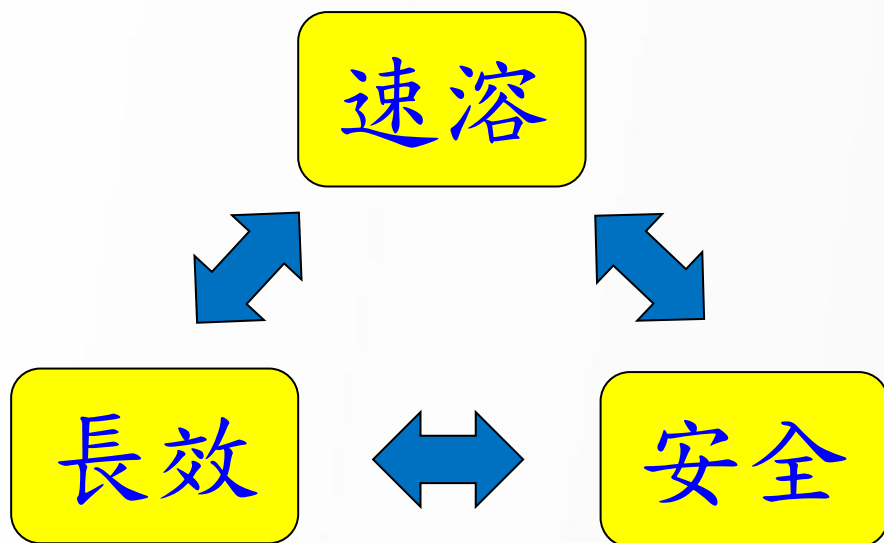
本產品適用於填充臉部凹陷區域的體積，尤其是矯正皮膚的凹陷，例如：皮膚皺褶、皺紋、摺痕、疤痕與皮膚老化。本產品也適用於有臉部脂肪流失(脂肪萎縮)徵兆的大範圍矯正。



可麗媞的類似品為 Galderma sculptra

可麗媞植入劑特色

可麗媞的PLLA微球體具速溶特性，產品製備快速均勻，並可長效安全地刺激纖維母細胞新生膠原蛋白與細胞外基質。



產品比較

產品名稱	CREATEFILL 可麗媿	SCULPTRA 舒顏萃	AestheFill 艾麗斯	VIVABELLA 薇貝拉
產地與製造商	Taiwan (SciVision)	Italy (Galderma)	Korea (Regen)	Korea (VAIM)
主成分	Poly-L-lactic acid (PLLA)	Poly-L-lactic acid (PLLA)	Poly-D, L-lactic acid (PDLLA)	Poly-D, L-lactic acid (PDLLA)
賦型劑	CMC, Mannitol	CMC, Mannitol	CMC	Linear HA
誘發發炎反應 ¹	較輕微	較輕微	較嚴重	較嚴重
膠原蛋白增生效果 ¹	較佳	較佳	較差	較差
PLA顆粒維持時間 ²	較長	較長	較短	較短
包裝	Vial瓶	Vial瓶	Vial瓶	Vial瓶

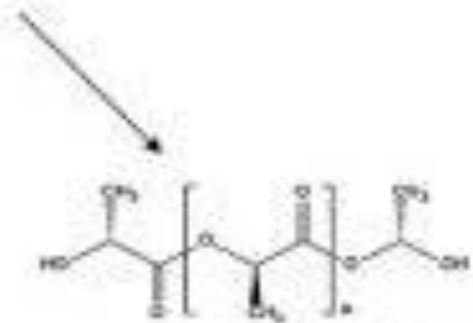
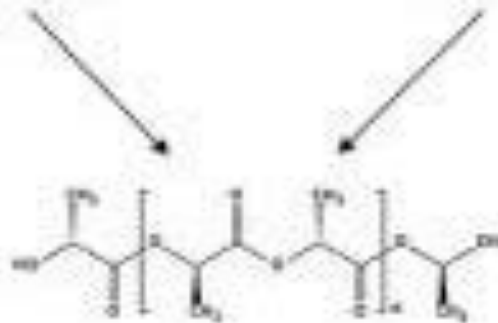
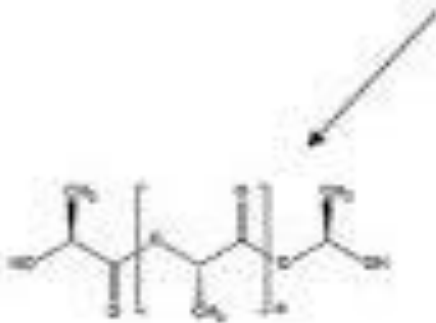
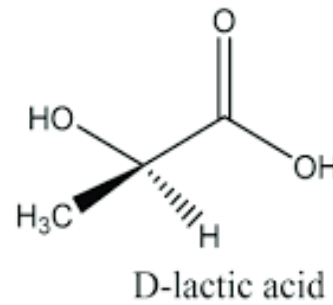
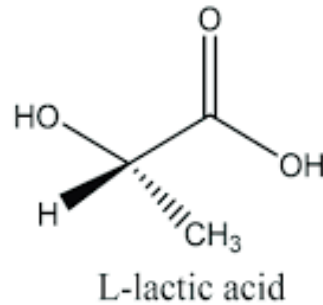
1. Chinese Chemical Letters 32 (2021) 577 – 582

2. Journal of Chemical and Pharmaceutical Research, 2015, 7(12):51-63

lactic acid鏡像異構物

乳酸在人體是以L型式存在，為常見的代謝物質之一。

D型乳酸為微生物發酵後的產物，對人體有毒性



poly-L-lactic acid
(PLLA)

poly-D,L-lactic acid
(PDLLA)

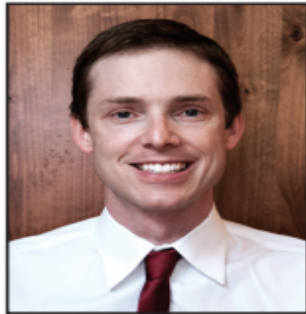
poly-D-lactic acid
(PDLA)

D-Lactic Acidosis (D-乳酸酸中毒症)

NUTRITION ISSUES IN GASTROENTEROLOGY, SERIES #145

Carol Rees Parrish, M.S., R.D., Series Editor

D-Lactic Acidosis: More Prevalent Than We Think?



Luke White

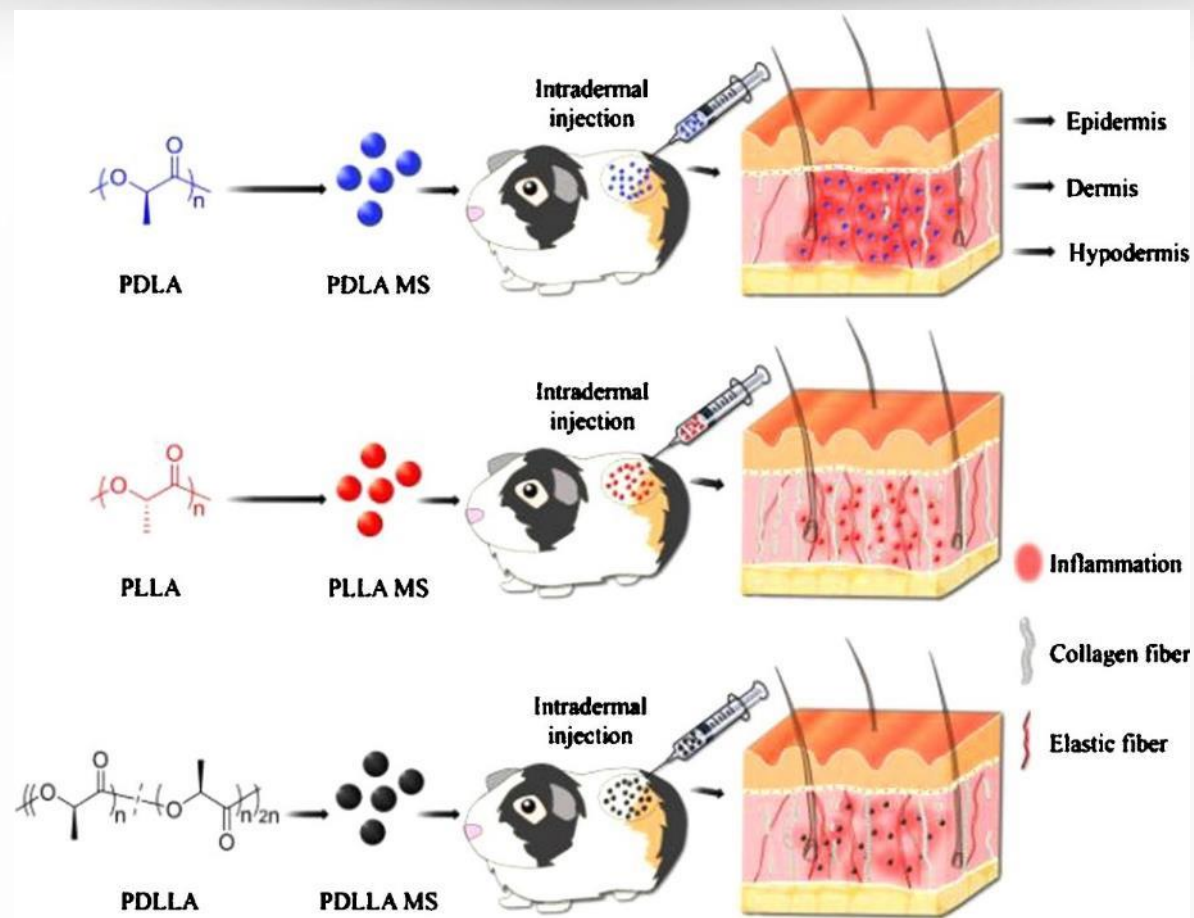
D-lactate acidosis, in which the D-isomer of lactate accumulates, may be more prevalent than once thought. This uncommon disorder has been reported in the setting of short bowel syndrome, and in particular, with high carbohydrate diets in children. Mental status changes and gait instability, the classic symptoms of D-lactate buildup, may not immediately lead the clinician to consider this uncommon disorder. The purpose of this article is to present information about D-lactate that will increase the readers' level of vigilance for this disorder, which affects a broader group of patients than initially thought.

PLA鏡像異構物之物理性質比較

Table 1. Chemical and physical properties of polylactic acid derivatives[17]

Properties	PLLA	PDLA	PDLLA
Melting temperature (T_m)/ °C	180	180	Variable
Crystalline structure	Hem crystalline	Crystalline	Amorphous
Decomposition temperature/°C	200	200	180-200
Glass transition temperature(T_g)/ °C	55-60	50-60	Variable
Elongation at break/ (%)	20-30	20-30	Variable
Half-life in 37°C normal saline	4-6 months	4-6 months	2-3 months
Breaking strength/ (g/d)	5.0-6.0	4.0-5.0	Variable

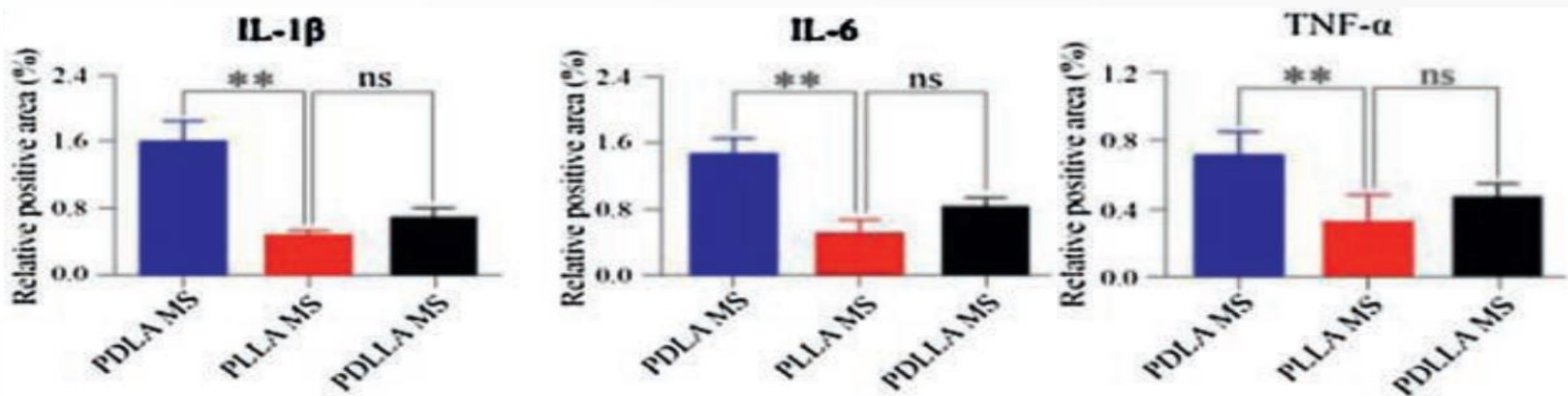
PLA鏡像異構物生物活性之比較



Scheme 1. Schematic illustration of different chiral PLA microspheres used in dermal fillers.

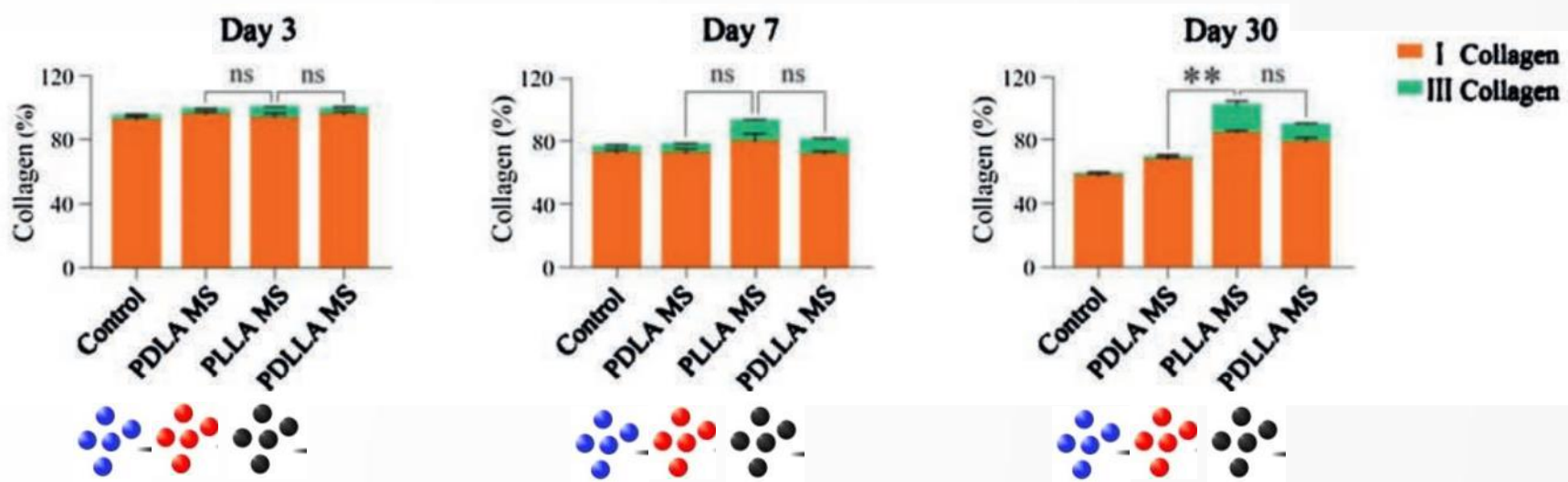
PLA鏡像異構物 安全性比較

誘發發炎因子之比較



PLA鏡像異構物 功效性比較

刺激膠原蛋白生成之比較



美國FDA核准的皮下填補劑成分

FDA-Approved Dermal Fillers

Absorbable (temporary) materials

- **Hyaluronic acid:** Hyaluronic acid is a type of sugar (polysaccharide) that is present in body tissues, such as in skin and cartilage. It is able to combine with water and swell when in gel form, causing a smoothing/filling effect. Sources of hyaluronic acid used in dermal fillers can be from bacteria or rooster combs (avian). In some cases, hyaluronic acid used in dermal fillers is chemically modified (crosslinked) to make it last longer in the body. The effects of this material last approximately 6 – 12 months.
- **Calcium hydroxylapatite:** Calcium hydroxylapatite is a type of mineral that is commonly found in human teeth and bones. For wrinkle filling in the face or for the hand, calcium hydroxylapatite particles are suspended in a gel-like solution and then injected into the wrinkle in the face or under the skin in the back of the hand. The effects of this material last approximately 18 months. While in the body, calcium hydroxylapatite will be visible in x-rays and may obscure underlying features.
- **Poly-L-lactic acid (PLLA):** PLLA is a biodegradable, biocompatible man-made polymer. This material has wide uses in absorbable stitches and bone screws. PLLA is a long lasting filler material that is given in a series of injections over a period of several months. The effects of PLLA generally become increasingly apparent over time (over a period of several weeks) and its effects may last up to 2 years.

美國FDA核准可作為可吸收皮下填補劑的成分

1. Hyaluronic acid
2. Calcium hydroxylapatite
3. Poly-L-lactic acid (PLLA)

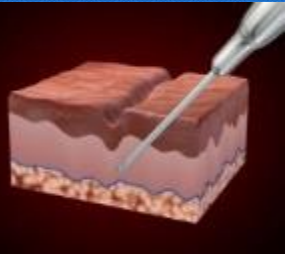
<https://www.fda.gov/medical-devices/aesthetic-cosmetic-devices/fda-approved-dermal-fillers>

產品比較

產品名稱	CREATEFILL 可麗媞	SCULPTRA 舒顏萃	AestheFill 艾麗斯	VIVABELLA 薇貝拉
產地與製造商	Taiwan (SciVision)	Italy (Galderma)	Korea (Regen)	Korea (VAIM)
主成分	Poly-L-lactic acid (PLLA)	Poly-L-lactic acid (PLLA)	Poly-D, L-lactic acid (PDLLA)	Poly-D, L-lactic acid (PDLLA)
成分	CMC, Mannitol	CMC, Mannitol	CMC	Linear HA
誘發發炎反應 ¹	WIN 較輕微	WIN 較輕微	中等	中等
膠原蛋白增生效果 ¹	WIN 較佳	WIN 較佳	中等	中等
PLA顆粒維持時間 ²	WIN 較長	WIN 較長	中等	中等
包裝	Vial瓶	Vial瓶	Vial瓶	Vial瓶

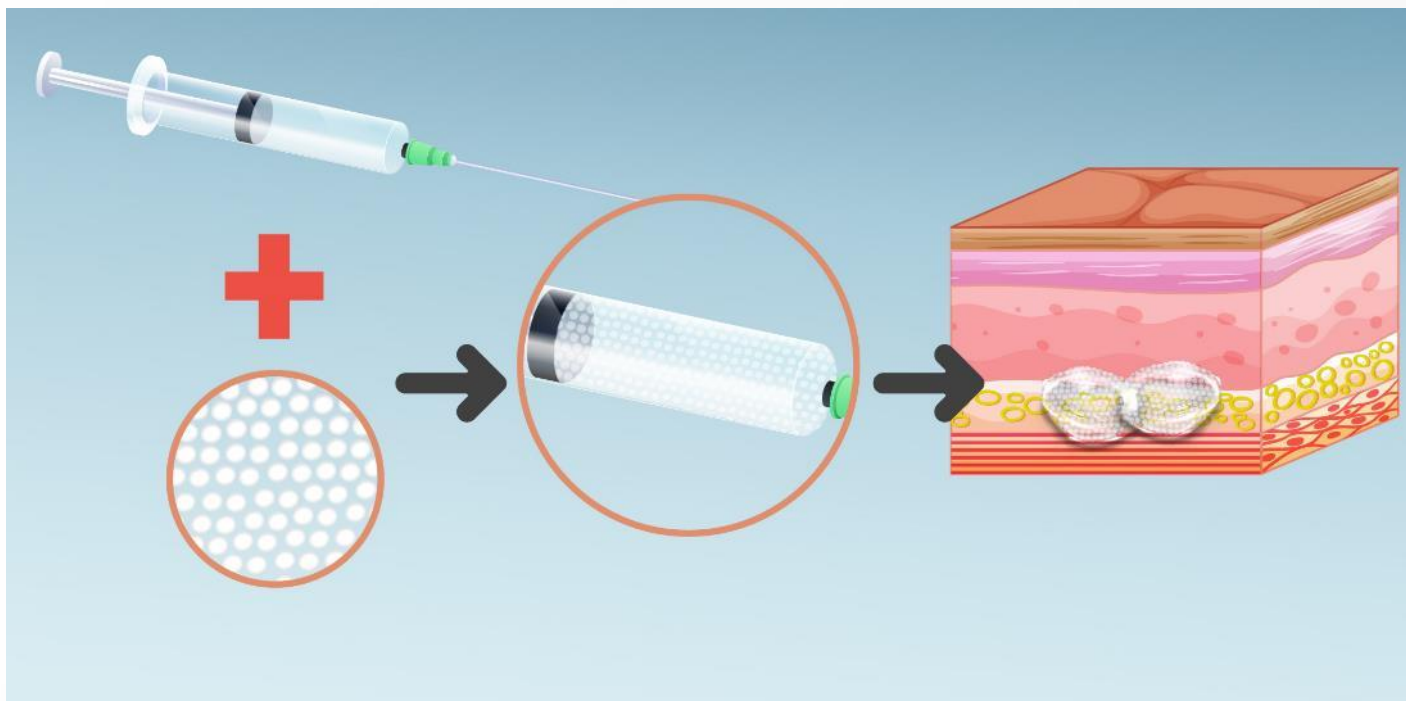
1. Chinese Chemical Letters 32 (2021) 577 – 582

2. Journal of Chemical and Pharmaceutical Research, 2015, 7(12):51-63



整形美容 未來研發方向

交聯透明質酸複合刺激膠原蛋白增生劑

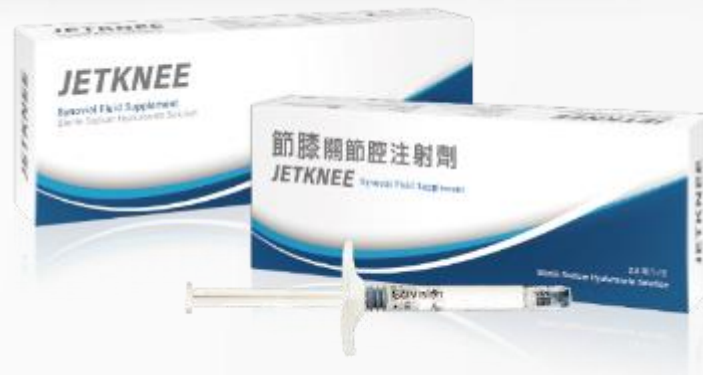


未來將持續開發交聯透明質酸複合產品，以擴展產品多元性。

科妍核心產品 II - 老年照護



一針一年超長效型關節腔注射劑



一針半年抗自由基保護型關節腔注射劑



一針半年長效型關節腔注射劑



三針劑型關節腔注射劑

關節腔注射劑類型

產品類型

療程說明

全球療程數
年複合成長率

科妍產品

1針劑型
(長效型)

打1劑，療效可
維持半年以上

10.2 %



3針劑型

連續施打3周，
每周打1劑，療
效可維持半年

5.9 %



5針劑型

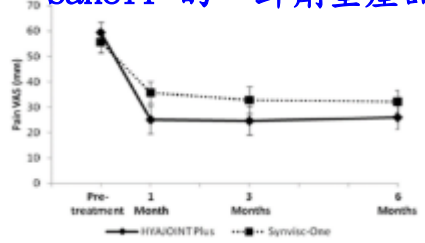
連續施打5周，
每周打1劑，療
效可維持半年

5.5 %

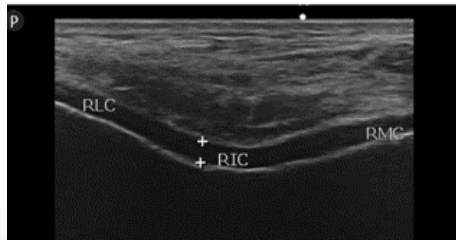
科妍產品 人體臨床試驗與國際期刊發表

1. The effect of three weekly intra-articular injections of hyaluronate on pain, function, and balance in patients with unilateral ankle arthritis. *J Bone Joint Surg Am.* 2011 Sep 21;93(18):1720-6.
2. Changes of synovial fluid protein concentrations in supra-patellar bursitis patients after the injection of different molecular weights of hyaluronic acid. *Exp Gerontol.* 2014 Apr;52:30-5.
3. Comparison of Single Intra-Articular Injection of Novel Hyaluronan (HYA-JOINT Plus) with Synvisc-One for Knee Osteoarthritis: A Randomized, Controlled, Double-Blind Trial of Efficacy and Safety. *J Bone Joint Surg Am.* 2017 Mar 15;99(6):462-471.
4. Origin and Efficacy of Hyaluronan Injections in Knee Osteoarthritis: Randomized, Double-Blind Trial. *Med Sci Monit.* 2018 Jul 9;24:4728-4737.
5. Improvement of self-reported functional scores and thickening of quadriceps and femoral intercondylar cartilage under ultrasonography after single intra-articular injection of a novel cross-linked hyaluronic acid in the treatment of knee osteoarthritis. *J Back Musculoskelet Rehabil.* 2018;31(4):709-718.
6. Safety and efficacy of single CHAP Hyaluronan injection versus three injections of linear Hyaluronan in pain relief for knee osteoarthritis: a prospective, 52-week follow-up, randomized, evaluator-blinded study. *BMC Musculoskelet Disord.* 2021 Jun 23;22(1):572.
7. Comparing efficacy of intraarticular single crosslinked Hyaluronan (HYAJOINT Plus) and platelet-rich plasma (PRP) versus PRP alone for treating knee osteoarthritis. *Sci Rep.* 2021 Jan 8;11(1):140.
8. Efficacy of Intra-Articular Injection of Biofermentation-Derived High-Molecular Hyaluronic Acid in Knee Osteoarthritis: An Ultrasonographic Study. *Cartilage.* 2022 Jan-Mar;13(1):19476035221077404.
9. Single Injection of Cross-Linked Hyaluronate in Knee Osteoarthritis: A 52-Week Double-Blind Randomized Controlled Trial. *Pharmaceutics.* 2022 Aug 25;14(9):1783.

減緩疼痛的效果優於
Sanofi 的一針劑型產品



患者在術後3個月和6個月時，在股四頭肌和軟骨的厚度上均顯著改善



療效可維持一年以上，患者滿意度高

Table 3 Patient satisfaction in time interval

Time	CHAP-HA (N=71)	Linear-HA (N=69)	P value
4th week	66.4 ± 22.4	68.4 ± 24.7	0.622
12th week	73.2 ± 23.4	71.1 ± 25.2	0.601
26th week	73.4 ± 22.7	63.5 ± 26.5	< 0.018 [#]
39th week	72.3 ± 22.4	52.1 ± 23.2	< 0.001 [#]
52th week	61.7 ± 22.0	37.5 ± 23.1	< 0.001 [#]

[#] indicates a significant difference between groups (P < 0.05)



老年照護 未來研發方向

含藥型關節腔注射劑

快速消炎止痛

加強修補
受損軟骨

加強身體組織保護
延長產品功效

科妍核心產品 III - 手術外科

術後沾黏



婦科骨盆腔手術外科後
所形成的沾粘



韌帶、周邊神經、關節手術後
所形成的沾粘

科妍核心產品 III - 手術外科

婦科骨盆腔手術外科用 防沾黏凝膠



產品優勢

- ✓ 生物相容性高
- ✓ 操作方便迅速
- ✓ 黏附性高

韌帶、周邊神經、關節 手術外科用防沾黏凝膠



產品優勢

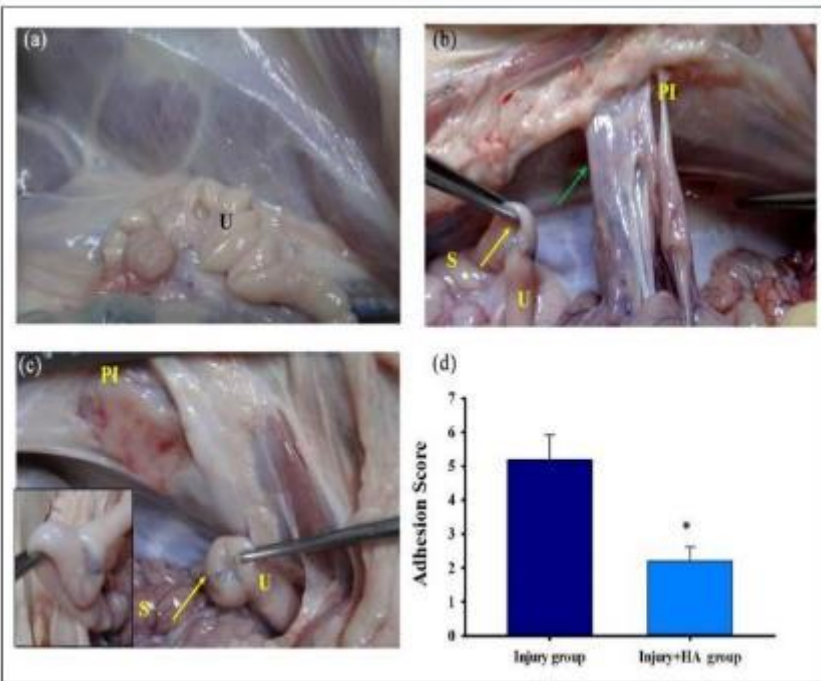
- ✓ 生物相容性高
- ✓ 操作方便迅速
- ✓ 黏附性高
- ✓ 有效保護時間長

科妍產品 人體臨床試驗與國際期刊發表

1. A resorbable hyaluronic acid hydrogel to prevent adhesion in porcine model under laparotomy pelvic surgery. *J Appl Biomater Funct Mater*. Jan-Dec 2021;19.
2. Crosslinked Hyaluronic Acid Gels for the Prevention of Intrauterine Adhesions after a Hysteroscopic Myomectomy in Women with Submucosal Myomas: A Prospective, Randomized, Controlled Trial. *Life*. 2020 May 15;10(5):67.
3. Efficacy of Applying Hyaluronic Acid Gels in the Primary Prevention of Intrauterine Adhesion after Hysteroscopic Myomectomy: A Meta-Analysis of Randomized Controlled Trials. *Life*. 2020 Nov 15;10(11):285.

可有效避免或減緩術後沾黏的發生

可有效避免或減緩術後沾黏的發生，且顯著優於競品



	科妍 CHA-P Gel (n = 24)	它牌 CHA Gel (n = 23)	No (n = 23)	p-Value
Intrauterine Adhesion				
No	22 (91.7%) ^a	19 (82.6%) ^a	14 (60.9%)	0.031
Yes	2 (8.3%) ^a	4 (17.4%) ^a	9 (39.1%)	
Modified AFS Stage				
0	22 (91.7%) ^b	19 (82.6%) ^b	14 (60.9%)	0.014
I (mild)	2 (8.3%) ^b	3 (13.0%) ^b	1 (4.3%)	
II (moderate)	0 ^b	1 (4.3%) ^b	4 (17.4%)	
III (severe)	0 ^b	0 ^b	4 (17.4%)	

The data are presented as number (percentage). CHA-P (PROTAHERE absorbable adhesion barrier[®], SciVision Biotech Inc., Kaohsiung, Taiwan); CHA gel (Hyalobarrier[®] gel, Baxter, Pisa, Italy). No: no anti-adhesive agent gel treatment. AFS: American Fertility Society. ^a and ^b: The comparison between the CHA-P gel and CHA gel (^a: p-value = 0.352, ^b: p-value = 0.497).



手術外科 未來研發方向

複合型傷口照護與防沾黏產品

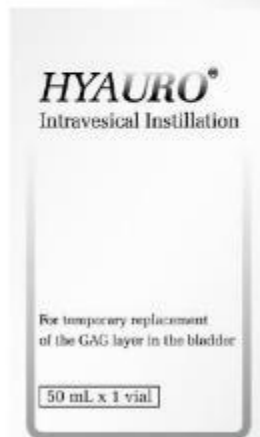
適應症的擴增

身體功能的復原

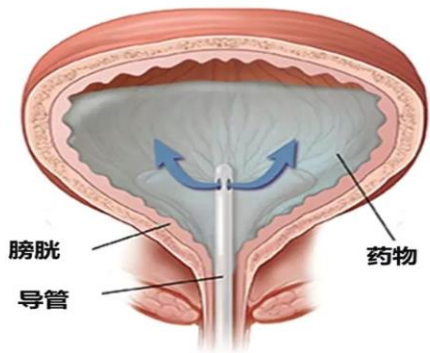
加強身體組織保護

科妍核心產品IV - 泌尿系統

HYAURO[®] Intravesical Instillation



海優樂膀胱灌注液



產品規格

容量：50毫升/瓶

主成分：40毫克的透明質酸鈉鹽

產品用途

膀胱內腔表面的葡萄糖胺多醣層被認為是第一道防護機制，葡萄糖胺多醣層的不足會降低其保護機制。本產品能暫時性補充缺損之葡萄糖胺多醣層，保護膀胱過渡上皮組織，避免尿液中的微生物、有害物質或刺激物穿透過表皮層引起膀胱發炎造成傷害。

適應症

本產品適用於葡萄糖胺多醣層不足之膀胱炎，如間質性膀胱炎及因感染、外傷、尿結石、尿液滯留、腫瘤及放射線引起之膀胱炎。





泌尿系統 未來研發方向

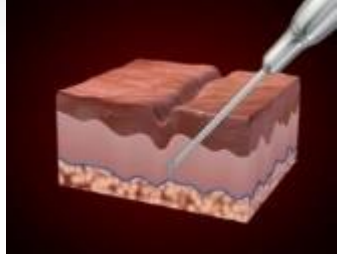
含藥複合型產品

療效快

效果持久

減少復發機會

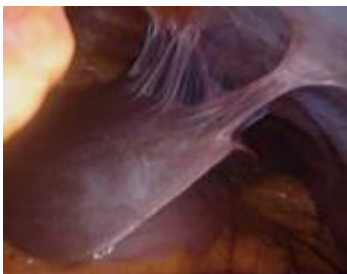
科妍 核心產品



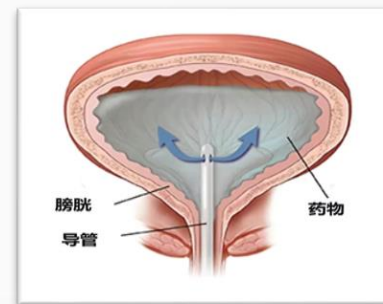
整形美容



老年照護



手術外科



泌尿系統



大綱

1. 公司與產品介紹

2. 營運現況

合併損益表

合併綜合損益表

單位:新台幣仟元

(除每股盈餘外)

營業收入

營業成本

營業毛利

營業費用

營業淨利

營業外收(支)

稅前淨利

稅後淨利

加權平均流通在外股數(仟股)

每股盈餘(新台幣元)

112年1~12月

(查核)

712,988 100%

(200,494) -28%

512,494 72%

(312,856) -44%

199,638 28%

10,359 1%

209,997 29%

177,900 25%

2.66

111年1~12月

(查核)

557,348 100%

(185,481) -33%

371,867 67%

(237,256) -43%

134,611 24%

38,939 7%

173,550 31%

141,716 25%

2.14

年成長

27.9%

8.1%

37.8%

31.9%

48.3%

-73.4%

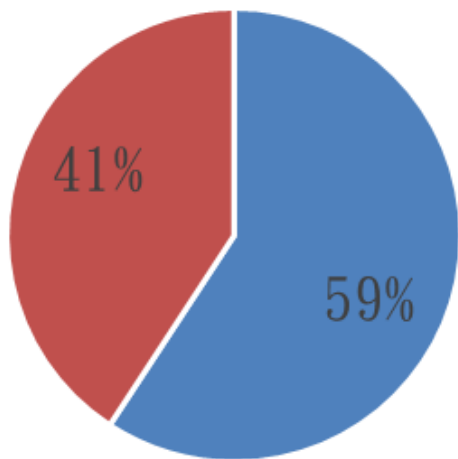
21.0%

25.5%

內外銷比重

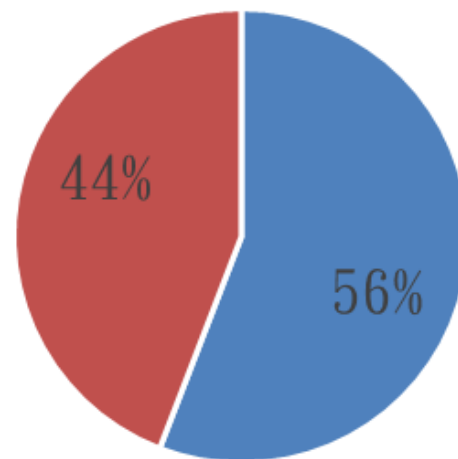
112年1~12月及111年1~12月

112/01/01~112/12/31



■ 內銷 ■ 外銷

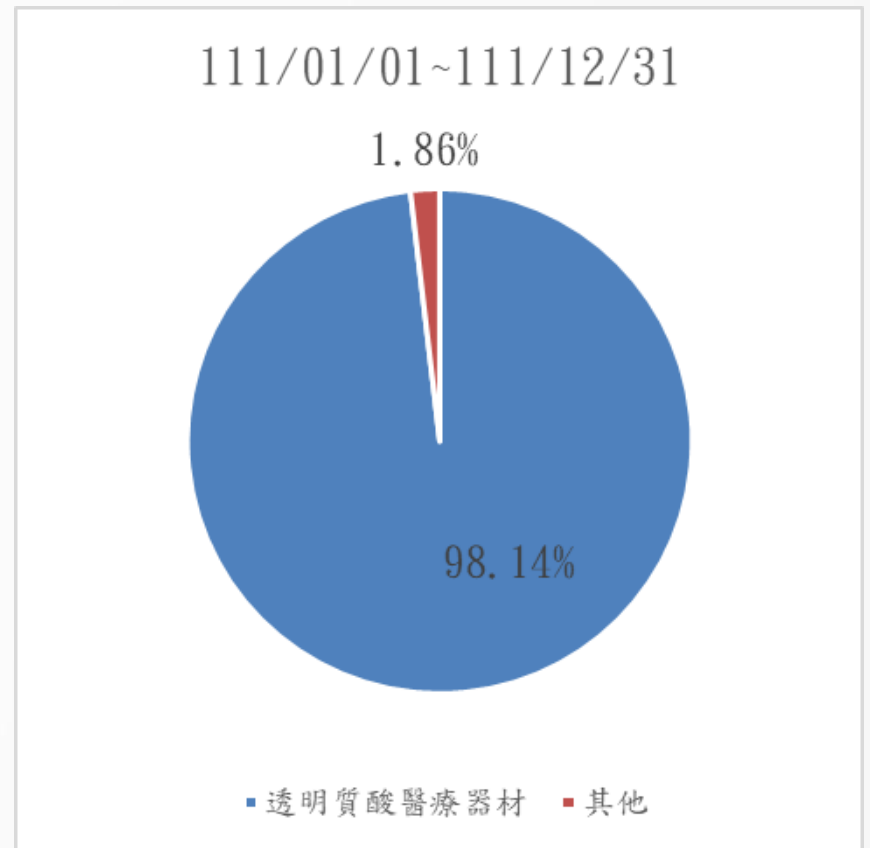
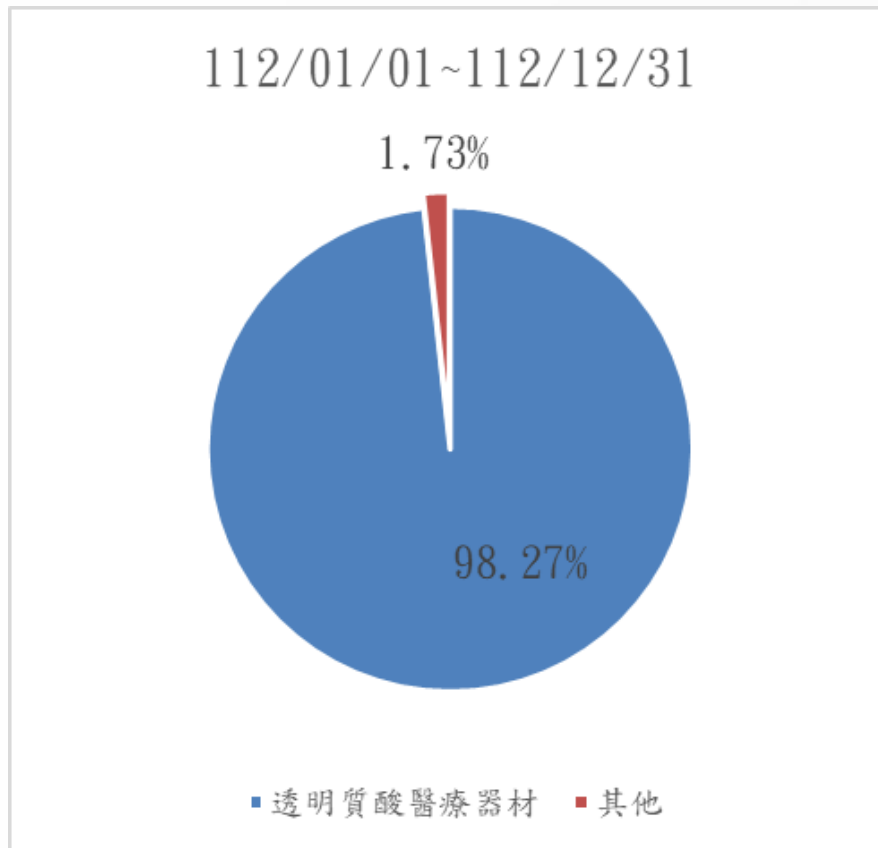
111/01/01~111/12/31



■ 內銷 ■ 外銷

產品別營收與比重

112年1~12月及111年1~12月



合併資產負債表

合併資產負債表

單位：新台幣仟元

	112年12月31日 (查核)		111年12月31日 (查核)	
現金及約當現金	511,101	23%	587,017	28%
應收帳款	94,691	4%	90,296	4%
存貨	87,252	4%	95,868	5%
透過損益按公允價值 衡量之金融資產	59,055	3%	56,160	3%
按攤銷後成本衡量之 金融資產	233,900	11%	30,710	1%
不動產、廠房及設備	1,112,585	52%	1,160,194	56%
其他流動及非流動資產	61,586	3%	77,991	3%
資產總額	2,160,170	100%	2,098,236	100%
流動負債	144,992	7%	128,083	6%
長期負債及其他負債	388,673	18%	459,222	22%
負債總額	533,665	25%	587,305	28%
股東權益總額	1,626,505	75%	1,510,931	72%
重要財務指標				
平均收現日數	47.34		55.21	
平均銷貨日數	166.66		175.48	
流動比率(倍)	692.39%		687.86%	
稅後純益率(%)	24.95%		25.43%	

合併現金流量表

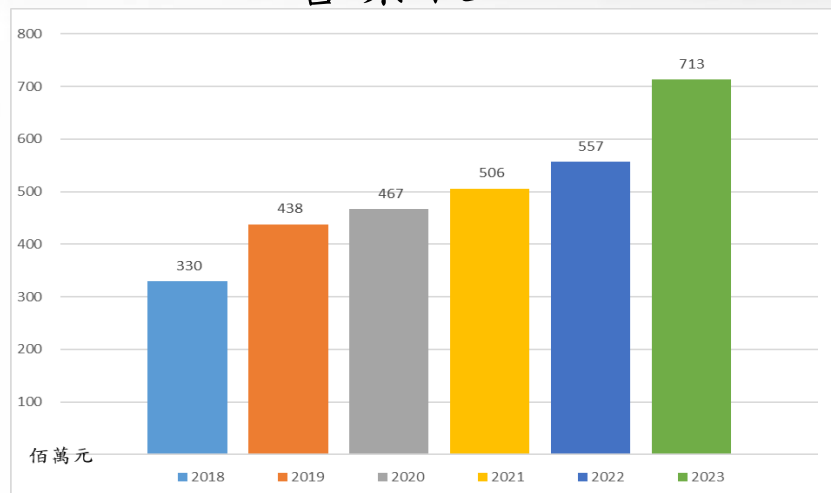
合併現金流量表

單位：新台幣仟元

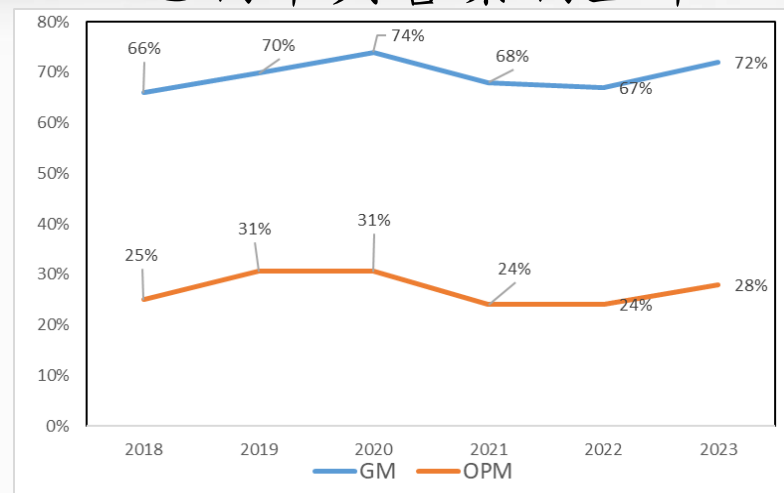
	112年1~12月 (查核)	111年1~12月 (查核)
營業活動之現金流入	271,979	182,003
稅前淨利	209,997	173,550
折舊	62,504	61,338
營運資金變動及其他	(522)	(52,885)
投資活動之現金流出	(213,365)	45,811
取得按攤銷後成本衡量之金融資產	(201,790)	9,644
取得不動產、廠房及設備	(14,734)	(14,964)
投資資金變動及其他	3,159	51,131
籌資活動之現金流入(出)	(134,530)	(299,714)
發行公司債	0	400,000
償還公司債	0	(304,523)
償還長期借款	0	(300,000)
籌資資金變動及其他	(134,530)	(95,191)
本期現金及約當現金減少(增加)數	(75,916)	(71,900)
期初現金及約當現金餘額	587,017	658,917
期末現金及約當現金餘額	511,101	587,017
自由現金流量	257,245	167,039

獲利逐步提升、現金流健康

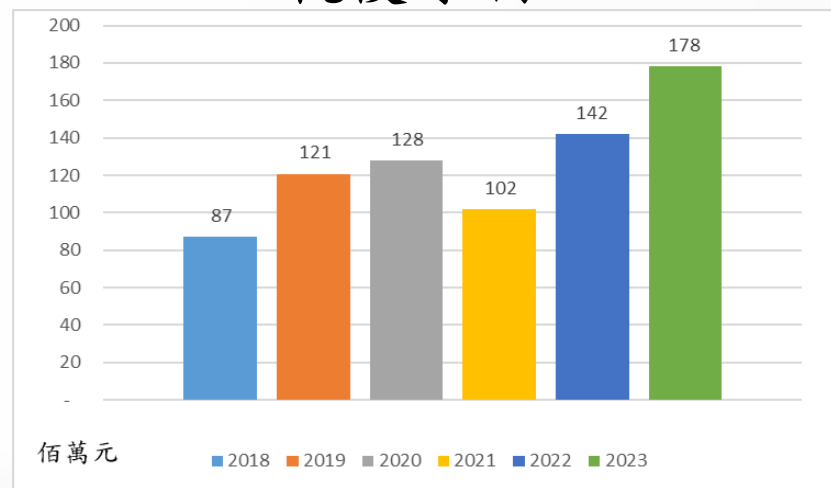
營業收入



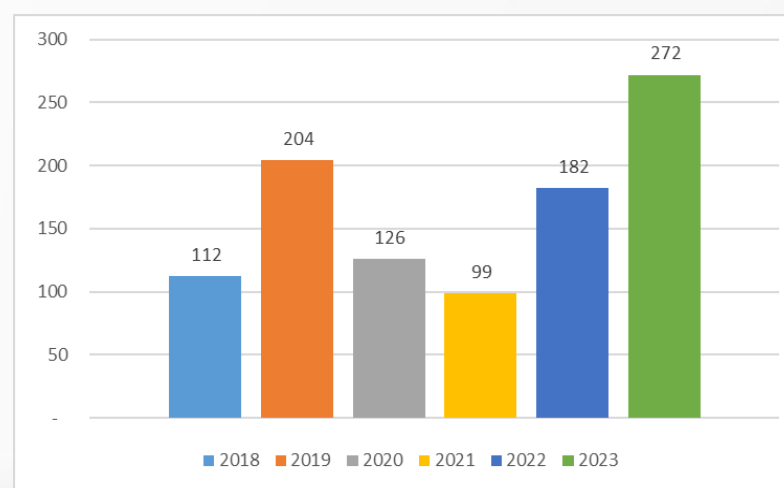
毛利率與營業利益率



稅後淨利



營業產生之現金流入



科妍願景



Science Creates Better Visions