

益生菌市場前景 Probiotics market outlook

- ✓ 受惠於消費者健康意識提高和各年齡層的廣泛接受,全球益生菌市場持續擴大 Benefiting from rising consumer health awareness and broad acceptance across all age groups, the global probiotics market continues to expand.
- ✓ 隨技術進步往不同健康領域延伸開發 With technological advancements, development is extending into diverse health fields.
 - -不僅限於腸道保健,已跨足精神健康、改善記憶力、輔助癌症治療、中風、三高、口腔健康、皮膚護理、動物健康等領域
 Beyond gut health, it has expanded into mental health, memory improvement, adjuvant therapy, cardiovascular protection
 - Beyond gut health, it has expanded into mental health, memory improvement, adjuvant therapy, cardiovascular protection, metabolic balance, oral health, skincare, and animal health.
- ✓多元化的產品創新應用 Diversified Product Innovation and Applications
 - -結合創新成分概念(後生元、益生元),不斷推出複合型配方滿足市場需求
 By combining innovative ingredients such as postbiotics and prebiotics, the company is able to continuously launch complex formulas that meet market needs.

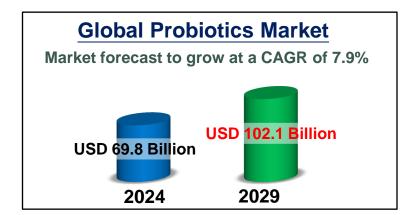


全球益生菌市場穩定成長

Global Probiotics Market on a Steady Growth Path

全球市場分析報告顯示,預計2029年全球益生菌市場約為1021億美元。

The global market analysis report shows that the global probiotic market is expected to be about 102.1 billion US dollars in 2029.



資料來源:

https://www.bccresearch.com/pressroom/fod/global-probiotics-market?srsltid=AfmBOopzWDg52E2Dtu7TQU4__szqUU2JEMAFObc9ZzvMDmMp Hg2lpBx

全球益生菌市場應用

Global probiotics market by product application

- *市場分布 MARKET SHARE
- 功能性食品 Functional food
- 保健食品與藥品 Health food and medicine
- ── 益生菌原料 Probiotics raw material





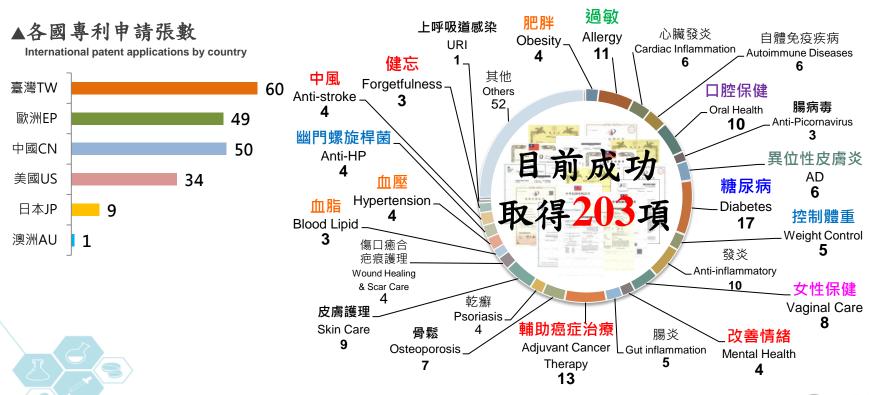
2025年度研究成果介紹

The Annual Research Presentation 2025

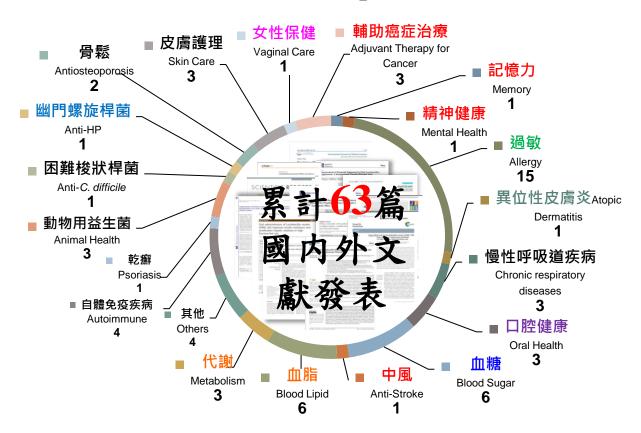


203項研發專利

Patents over the world



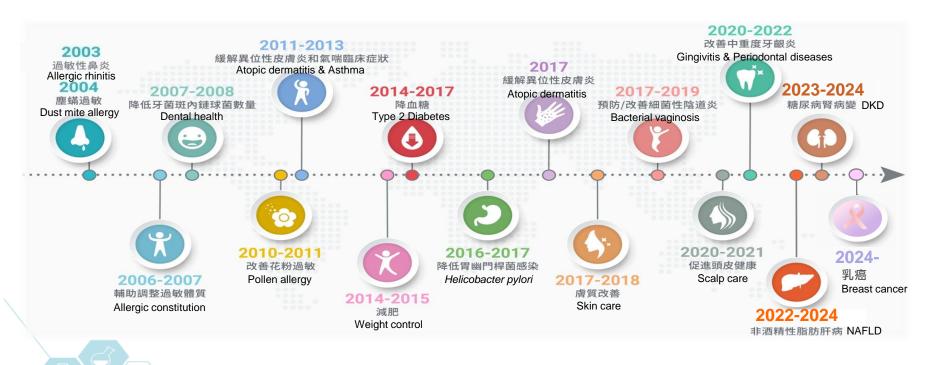
63篇文獻發表 Published Papers



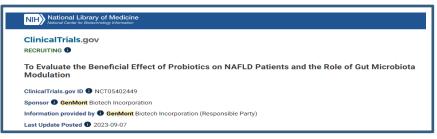


人體臨床試驗列表

Human clinical trials







Brief Summary

In this study, the improvement of the clinical status of early-stage non-alcoholic fatty liver disease (NAFLD) patients after the probiotic (*L. reuteri* GMNL-263 (heat-killed)+GMNL-89 (alive)+*L. rhamnosus* GMNL-74 (alive)) intervention will be assessed. And the mechanism of probiotics to prevent the progression of illness would be investigated. The chronic inflammation status, systemic oxidative stress, metabolism of carbohydrates and lipid, and gut microbiota of NAFLD patients will also be analyzed.

Results

- ✓ <u>Modulate the gut microbiota</u>

 ↑ Parabacteroides distasonis ` Lactobacillus reuteri
- ✓ Improve Liver health ↓ GOT 、 GPT 、 r-GT
- **✓** Reduce waist circumference

評估益生菌對於非酒精性脂肪肝病患者的 效益以及腸道微生物所扮演的調節角色

試驗型態: 隨機分派的對照雙盲試驗

摘要:

以早期非酒精性脂肪肝病患者食用6個月複合益生菌粉 (熱滅活羅伊氏乳桿菌GMNL-263+羅伊氏乳桿菌GMNL-89+鼠李糖乳桿菌GMNL-74)的臨床試驗結果,分析慢性 發炎情形、全身性氧化壓力、碳水化合物和脂肪代謝, 以及腸道微生態等指標,評估益生菌對於非酒精性脂肪 肝病的改善作用和預防惡化的機制。

結論:



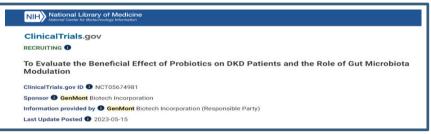


√調節腸道菌相

↑狄氏副擬桿菌、 ↑羅伊氏乳桿菌

- ✓<mark>改善肝功能</mark> ↓GOT、GPT、r-GT
- ✓降低腰圍





Brief Summary

To evaluate the efficacy of probiotics in the treatment of diabetic kidney disease, this study is designed to explore after consumption of probiotics *L. reuteri* ADR-1 and *L. rhamnosus* GM-020 composite strain powder sachets for 6 months, whether the improvement of blood sugar, kidney related indicators can further improve the course of diabetic kidney disease. The clinical trial predicted that probiotics can improve diabetic kidney disease by changing the intestinal flora by inhibiting harmful bacteria, reduction of systemic oxidative stress, balance carbohydrate and fat metabolism, further preventing the progress of diabetic kidney disease.

Results

Improve kidney health↓ BUN ↑ eGFR



Regulate blood sugar

↓ Fasting blood sugar

Lower blood lipids

↓ LDL/HDL

Reduce systemic inflammation

↓ hsCRP

評估益生菌對於糖尿病腎病變患者的效益 以及腸道微生物發揮的調節作用

試驗型態:隨機分派的對照雙盲試驗

摘要:

進行為期6個月的臨床試驗,讓糖尿病腎病變患者食用複合益生菌粉(羅伊氏乳桿菌ADR-1+鼠李糖乳桿菌GM-020)

,並監測血糖和腎功能相關指標。預期實驗結果,複合益生菌粉將經由抑制有害菌來改變腸道微生態,減少全身性氧化壓力和平衡碳水化合物與脂肪的代謝來改善糖尿病腎病變疾病,並進一步阻止糖尿病腎病變的惡化。

結論:

改善腎功能

降低血液尿素氮增加腎絲球過濾率 降低血液胱抑素C 降低血液肌酐酸

調節血糖

降低空腹血糖

降低血脂

降低血液LDL/HDL

减少全身發炎

降低血液hsCRP



評估益生菌在乳癌患者的臨床 效益

摘要:

化療相關的副作用會影響治療效果、生活質量, 且對乳癌患者造成永久性傷害。因此透過本研究來探討在乳癌化療時,服用複合益生菌粉包6 個月後,是否能減輕化療副作用,進而幫助患 者順利完成療程。

試驗開始時間: 2024年4月8日預計完成時間: 2026年4月1日

預計收案人數:70人

試驗型態:隨機分派的對照雙盲試驗

入案條件:

- -20~80歲成年人/老人
- -有接受anthracycline和taxane化學治療的1~3期 乳癌患者(不限於化學治療/手術前後)
- $-BMI > 18 \text{ kg/m}^2$
- -經醫師評估且自願參加者





Brief Summary

Chemotherapy-associated side-effects would affect therapeutic effect, quality of life, and cause permanent harm to breast cancer patients. This study is designed to explore after consumption of probiotics of lactobacillus composite strain powder sachets for 6 months in breast cancer chemotherapy, and whether the improvement of meliorate the side effects, further assists patients completing the chemotherapy.

Study Start (Actual): 2024-04-08 Study Completion (Estimated): 2026-04-01

Enrollment (Estimated): 70

Study Type: Interventional (Parallel Assignment, Randomized Controlled Trial)

Masking: Double (Participant, Investigator)

Eligibility Criteria

- -Ages Eligible for Study: 20 Years to 80 Years (Adult, Older Adult)
- -Inclusion Criteria:
- •Stage I-III breast patients using anthracycline-based and taxane-based chemotherapy (not limited before or after chemotherapy/surgery)
- •BMI >18 kg/m²
- •Patients judged by physicians to participate in this trial and who are willing



乳酸桿菌功效研究 Efficacy studies of Lactobacillus

題目:複合乳酸菌改善慢性阻塞性肺病小鼠的肺部發炎情形

Article: A Lactobacillus Combination Ameliorates Lung Inflammation in an Elastase LPS-induced Mouse Model of COPD 摘要:由於常見的肺部疾病-慢性阻塞性肺病 (COPD),尚無有效且具體的臨床治療策略,因此以COPD小鼠模型來探討複合乳酸菌組合 (GMNL®-89 + GMNL®-133) 在降低肺部發炎和肺氣腫的作用。實驗結果顯示,複合乳酸菌可減少COPD小鼠的肺氣腫和肺組織的促發炎細胞激素 (IL-1 β , IL-6, TNF- α),且幫助恢復腸道中的雙歧桿菌屬和Akk菌含量以及肺部中減少的 α 微生物多樣性。此外也能增加腸道中短鏈脂肪酸含量,尤其是盲腸中的乙酸和丙酸。綜上所述,複合乳酸菌可經由恢復腸道和肺部菌相,來改善COPD小鼠肺氣腫和發炎情形,具有應用於輔助治療COPD的潛力。



Abstract: Chronic obstructive pulmonary disease (COPD) is the world's leading lung disease and lacks effective and specific clinical strategies. Probiotics are increasingly used to support the improvement of the course of inflammatory diseases. In this study, we evaluated the potential of a lactic acid bacteria (LAB) combination containing *L. reuteri* GMNL-89 and *L. paracasei* GMNL-133 to decrease lung inflammation and emphysema in a COPD mouse model. The results showed that the LAB combination decreased lung emphysema and reduced inflammatory cytokines (IL-1β, IL-6, TNF-α) in the lung tissue of COPD mice. Microbiome analysis revealed that *Bifidobacterium* and *Akkermansia muciniphila*, reduced in the gut of COPD mice, could be restored after LAB treatment. Microbial α-diversity in the lungs decreased in COPD mice but was reversed after LAB administration. Furthermore, LAB-treated COPD mice exhibited increased levels of short-chain fatty acids, specifically acetic acid and propionic acid, in the cecum. In conclusion, the combination of *L. reuteri* GMNL-89 and *L. paracasei* GMNL-133 demonstrates beneficial effects on pulmonary emphysema and inflammation in experimental COPD mice, correlating with changes in gut and lung microbiota, and providing a potential strategy for future adjuvant therapy.

乳酸桿菌功效研究 Efficacy studies of Lactobacillus

題目: 益生菌通過腸-脾-腦軸線來輔助治療缺血性腦中風

Article: Prophylactic use of probiotics as an adjunctive treatment for ischemic stroke via the gut-spleen-brain axis

摘要: 許多研究顯示,腦-脾軸是減輕中風期間神經受損的潛在關鍵。加上已知補充益生菌能有效維持微生態平衡、保護腸黏膜和血腦屏障 (BBB)、增強腸道和全身免疫功能,因此以小鼠永久性中大腦動脈阻塞模型,測試羅伊氏乳桿菌GMN L®-89 (G89) 和副乾酪乳桿菌GMNL®-133 (G133) 的神經保護作用及其機制。結果顯示,補充G89和G133能顯著減少腦部梗塞區域和改善神經功能、恢復腸道屏障功能和菌相、增加短鏈脂肪酸,且降低BBB通透性以減少中風引起發炎反應。同時調節脾臟毒殺型T細胞含量,平衡輔助性T細胞反應。綜上所述,G89和G133可經由腸-脾-腦軸線的調節路徑,對缺血性中風情形發揮明顯的改善效益。



Abstract: A growing body of research has focused on the effect of the brain-spleen axis, which mat be a potential target for mitigating neuronal damage during stroke. Several studies have suggested that probiotic supplements hold promise as a strategic approach to maintaining a balanced intestinal microecology, protecting the intestinal mucosal and blood–brain barrier, enhancing both intestinal and systemic immune functions. In this study, we explored the neuroprotection and the underlying mechanisms of *L. reuteri* GMNL-89 (G89) and *L. paracasei* GMNL-133 (G133) supplementation in C57BL/6 mice subjected to permanent middle cerebral artery occlusion. Our results revealed that oral treatment G89 and G133, significantly decreased the infarct volume and improved the neurological function, preserved the tight junction integrity of gut barrier, improved the gut dysbiosis and significantly increased the concentration of short-chain fatty acids, and decreased the BBB permeability, and thereby significantly attenuated stroke-induced local and systemic inflammatory responses. Additionally, G89 and G133 regulated cytotoxic T cells, and the balance between T helper 1 cells and T helper 2 cells in the spleen following ischemic stroke. In conclusion, our findings suggest that G89 and G133 may be used as nutrient supplements, holding promise as a prospective approach to combat ischemic stroke by modulating the gut-spleen-brain axis.

乳酸桿菌功效研究

Efficacy studies of Lactobacillus

題目: 植物乳桿菌GMNL®-661改善困難梭狀桿菌感染,並調節腸道菌相

Article: *L. plantarum* GMNL-661 Ameliorates *C. difficile* Infection and Reconfigures Intestinal Microbiota in a Murine Model

摘要:困難梭狀桿菌感染 (CDI) 嚴重影響民眾健康,目前治療方式如萬古黴素,雖然有效,卻須面臨復發、腸道菌相被破壞和治療價格高昂等問題,而益生菌可從調節腸道菌相來發揮有效的治療潛力。經由CDI小鼠模型驗證,GMNL®-661透過增加腸道屏障基因和減少促發炎細胞激素IL-1和IL-18,有效降低CDI引起的體重減輕、腸道發炎和屏障損害,且顯著改善腸道菌相。另外,從全基因解序得知,在抗生素抗藥性和毒力因子方面的安全疑慮極低,又進一步分析發現,GMNL®-661本身即擁有較多特殊的抗CDI的抗菌肽。綜合上述,在抗CDI的臨床應用上,有效且安全性高的GMNL®-661將有機會成為治療新選擇。



Abstract: *C. difficile* infection (CDI) is a significant global health threat. Current treatments, such as vancomycin, are effective but can cause subsequent relapses, further microbiota disruption, and high treatment costs. Probiotics offer a promising microbiota-based therapeutic strategy. In a CDI mice model, GMNL-661 effectively alleviated CDI, which caused weight loss, gut inflammation, and mucin depletion. It also alleviated CDI symptoms through increased gut barrier genes and downregulated IL-1 and IL-18, and dramatically improved the microbiome. Genome analysis of GMNL-661 revealed minimal safety concerns in antibiotic resistance and virulence genes. Antimicrobial peptide (AMP) prediction on GMNL-661 genome suggested a strong potential candidate for anti-CD antimicrobial peptides. These findings highlighted *L. plantarum* GMNL-661 as an effective and highly safe therapeutic agent against CDI in clinical.

財務狀況 Financial status

※母公司財報-景岳生技 Separate Financial Statements-GenMont

單位:千元 In Thousands of New Taiwan Dollars	111年母公司財報 (Year 2022 Single)	112年母公司財報 (Year 2023 Single)	113年母公司財報 (Year 2024 Single)
營業收入NET REVENUE	368,546	309,445	345,164
營業毛利GROSS PROFIT	258,019	211,231	234,549
營業費用OPERATING EXPENSES	(131,953)	(135,011)	(132,634)
營業利益INCOME(LOSS) FROM OPERATIONS	126,066	76,220	101,915
營業外損益NON-OPERATING INCOME AND EXPENSES	(50,291)	(37,497)	(27,696)
税前淨利INCOME(LOSS) BEFORE INCOME TAX	75,775	38,723	74,219
稅後淨利NET INCOME(LOSS)	56,978	32,991	57,251

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財務狀況 Financial status

※合併財報 Consolidated Financial Statements

單位:千元	112年合併	113年合併	114年前二季合併
In Thousands of New Taiwan Dollars	(Year 2023 Consolidated)	(Year 2024 Consolidated)	(Year 2025 H1 Consolidated)
營業收入NET REVENUE	318,015	385,373	211,623
營業毛利GROSS PROFIT	211,192	238,179	133,467
營業費用OPERATING EXPENSES	(204,204)	(197,545)	(96,204)
營業利益INCOME(LOSS) FROM OPERATIONS	6,988	40,634	37,263
營業外損益NON-OPERATING INCOME AND EXPENSES	21,175	24,085	(31,730)
稅前淨利INCOME(LOSS) BEFORE INCOME TAX	28,163	64,719	5,533
稅後淨利NET INCOME(LOSS)	22,431	47,751	3,383
停業單位損益Income (Loss)from Discountinued Operations	0	0	0
本期淨利NET INCOME(LOSS)	22,431	47,751	3,383

GenMont®

ESG企業永續

Sustainability Report in 2024

永續績效亮點 Sustainable Performance Highlights



經濟面 Economic aspect

公司治理與誠信 經營

Corporate governance and integrity in operations

- ▶ 完成2024年永續報告書發布,建立永續發展推動小組。
- ▶ 董事與高階主管完成誠信經營政策宣導,員工參與率達98%。
- ▶ 2024年無重大違規紀錄,亦無發生貪腐或不當利益收送事件。
- > Completed the release of the 2024 sustainability report and establish a sustainable development promotion team.
- ➤ Directors and senior executives have completed the promotion of integrity management policies, with an employee participation rate of 98%.
- There were no major violations recorded in 2024, nor any incidents of corruption or improper benefits received.

產品面Product Aspect

產品安全與技術 創新

Product safety and technological innovation

- ▶ 與長庚大學合作發表益生菌改善記憶力的研究成果。
- ▶ 每批原料均進行內部檢測,並至少每年進行一次第三方檢驗,確保產品安全。
- Collaborated with Chang Gung University to publish research results on probiotics improving memory.
- Each batch of raw materials undergoes internal testing, and at least once a year, a third-party inspection is conducted to ensure product safety.

※完整版永續報告書請至景岳官網查詢(2025/8月發布)

For the complete sustainability report, please check the www.genmont.com.tw (Released in August 2025)



感謝聆聽 Thanks For Your Attention



Q & A