## Our potential products in the future...



- Our supplier's focus is on medical related application
- They have developed antifungal/bacterial drugs and dressings for burns and scalds.
- Continue to work with Burn Surgery Department of Changhai Hospital, affiliated to the Second Military Medical University on antifungal/bacterial drugs.
- Various work on anti-virus effort. Work with Macau University of Science and Technology and under a panel of distinguished professors including Nobel Price winner.

#### Antibacterial medicine for burns & scalds

#### There is no cure for fungal infection wounds

Working with Professor Zhu Shihui to jointly develop antifungal/bacterial drugs and dressings for burns and scalds;

Apply for "the establishment of major projects during the 14th Five-Year Plan"



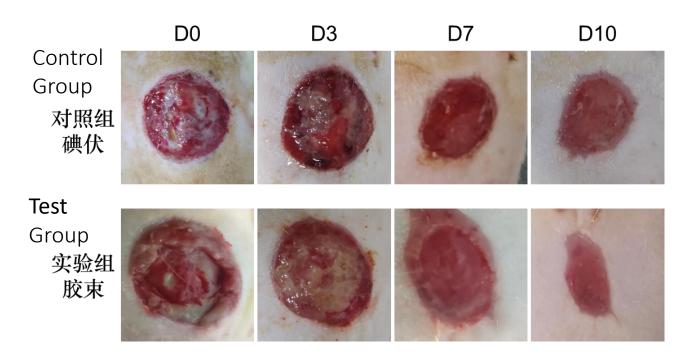
#### 朱 世 辉 教 授

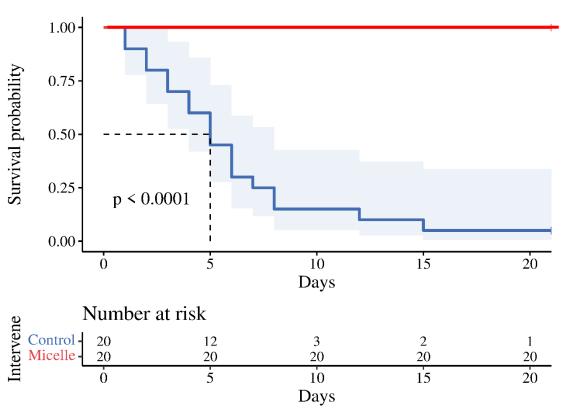
Executive director of the Burn Surgery Department of Changhai Hospital Affiliated to the Second Military Medical University, chief physician, professor, and doctoral supervisor.



- Vice President of the Burn Branch of the Chinese Medical Doctor Association,
- Vice Chairman of the Burn Treatment and Rehabilitation Professional Committee of the Chinese Association of Rehabilitation Medicine,
- Deputy Director of the PLA Burn Institute,
- Vice Chairman of the Shanghai Burn Surgery Branch of the Chinese Medical Association, and
- Shanghai Emergency Burn Center deputy director.
- Won the National Science and Technology Progress Award several times.

# Farmour – Antibacterial Mechanism





Intervene — Control — Micelle

#### Control wound infection & promote wound healing

Full-thickness defect infected wound in mice

The wounds in the D10 Test Group have basically healed

Infection was effectively controlled in the wounds of the Test Group

# Control wound infection & reduce sepsis mortality

- Control group day 20, mortality rate 95%
- Micelle group (test group) day 20, no deaths

#### 治疗慢性伤口 — 非手术治疗原则

Treating Chronic Wounds—Principles of Non-Surgical Treatment

**Farmour -** The transmembrane effect effectively penetrates the biofilm, eliminating debridement surgery, controlling infection and promoting healing.

Source:海军军医大学暨长海医院 朱世辉教授团队研究发现 Naval Medical University and Changhai Hospital Professor

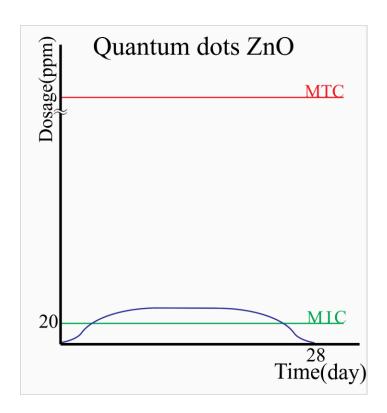


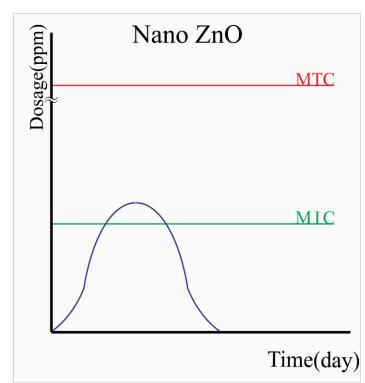


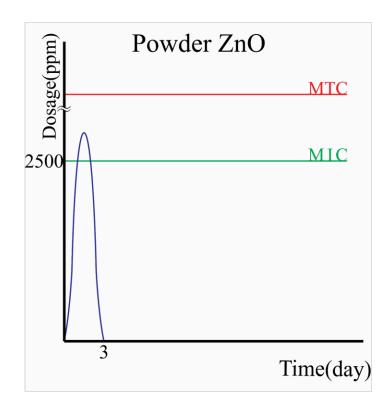




# 晶体粒径 / 剂量安全 Crystal particle size/dose safety







MTC: 最低中毒剂量 MIC: 最低有效剂量

MTC: Minimum toxic dose MIC: lowest effective dose



#### 細菌生物膜抑制傷口癒合 Bacterial biofilm inhibits wound healing

每年,僅在美國就有超過70,000例因為糖尿病相關慢性傷口感染導致的下肢截肢,而這些截肢病人中有大約一半會在手術後18個月內死亡;存活病人中有一半會在5年內失去對側肢體。

Each year, in the United States alone, there are more than 70,000 lower limb amputations due to diabetes-related chronic wound infections,

About half of these amputees will die within 18 months of surgery; And half of surviving patients will lose their limbs within 5 years - Contralateral limb.

Reference: Watters, Chase, Katrina DeLeon, Urvish Trivedi, John A. Griswold, Mark Lyte, Ken J. Hampel, Matthew J. Wargo, and Kendra P. Rumbaugh. "Pseudomonas aeruginosa biofilms perturb wound resolution and antibiotic tolerance in diabetic mice." 2013. Medical Microbiology and Immunology 202: 131-141. DOI: 10.1007/s00430-012-0277-7.

#### Farmour 有效灭活病毒 Effectively inactivates viruses

呼吸道感染病毒 Respiratory Tract Infection Virus

Coronavirus, SARS-CoV-2, Delta, Omicron BA.2, Omicron BA.5

(State Key Laboratory of Quality Research in Traditional Chinese Medicines - Macau University of Science and Technology)



State Key Laboratory of Quality Research in Chinese Medicine (Macau University of Science and Technology)
中藥質量研究國家重點實驗室 (澳門科技大學)

#### 特聘教授

#### **Distinguished Professors**

Year 1991 Nobel Physiology or Medicine Prize Winner



**埃爾文・內爾** 1991年諾貝爾獎獲得者 案爾文內爾博士生物物理與劍斯藥物實驗室主任

Erwin NEHER
Nobel Laureate in 1991

Director, Dr Neher's Biophysics Laboratory for Innovative Drug Discovery



鍾南山 中國工程院院士 ZHONG Nan-Shan Academician, Chinese Academy of Engineering



丁 健 中國工程院院士 DING Jian Academician.



楊寶峰 中國工程院院士 YANG Bao-Feng



鄭永齊 台灣中央研究院院士 CHENG Yung-Chi





The supplier sells to various manufacturers who will then research and developed into many kind of applications, including..

- i. Skin care product QUANTUM DOTS SPRAY MESOTHERAPY
- ii. Anti-fungal for cotton COTTON FIBER MODIFIER
- iii. Anti-bacterial and Anti-virus for animal supplement ZINC OXIDE
- iv. Anti-fungal and Anti-bacterial for plant protection FARMOUR
- v. Anti-bacterial for food storage,
- vi. Anti-cancer application ... etc etc

Ageless Radiance

# Skin care producers using Quantum Dot to explore new frontiers..



## 量子点喷涂水光

**QUANTUM DOTS SPRAY MESOTHERAPY** 

美白/祛斑/紧致/抗衰

Whitening / Freckle removal / Firming / Anti-Aging





### 量子点喷涂水光

#### QUANTUM DOTS SPRAY MESOTHERAPY

• 穿膜效应 — 协同运输; Transmembrane effect – delivery channel

• 美肌制剂依赖"量子点喷涂水光"穿过角质层,

渗入真皮层。

Skin-beautifying preparations rely on **QUANTUM DOTS SPRAY** to pass through the stratum corneum and penetrate into the dermis.

— Integrative medicine — 中西医结合



喷雾/涂抹 水光针 (非侵入式)

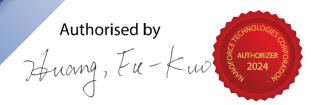
# Sports wear, Lingerie, Linen companies have embraced Quantum Dot in the new line..

# 棉纤维改性剂

**COTTON FIBER MODIFIER** 

抗起球/丝滑感/防螨 抗霉变/抗黄化/消臭

Anti-pilling/silky/anti-mite
Anti-mildew/anti-yellowing/deodorizing





#### 棉花绝大多数病害来自真菌

The majority of cotton diseases are caused by fungus.

## 皮棉久藏关键技术

Key technologies for long-term storage of lint

\_\_\_\_ 抗 真 菌 \_\_\_\_ Antifungal

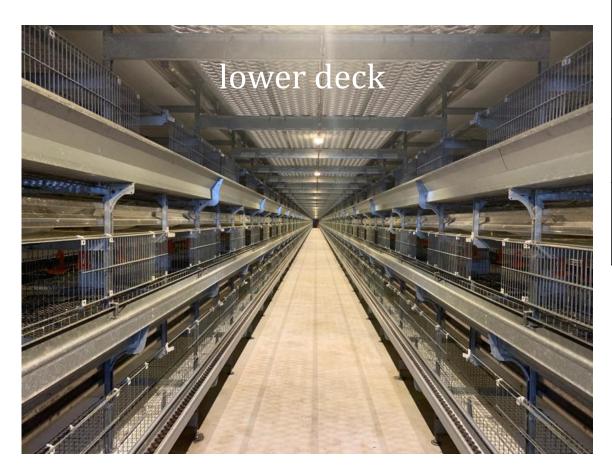


霉变造成黄化 Mildew causes yellowing

#### **Farmedic - Future product : Zinc Oxide**



# Chicken Farms in China and Taiwan area have embraced Quantum Dot in their production



	Number of	Number
	birds	of dead
Test area	55,000	4
Control area	55,000	14



#### Farmedic - Future product : Zinc Oxide

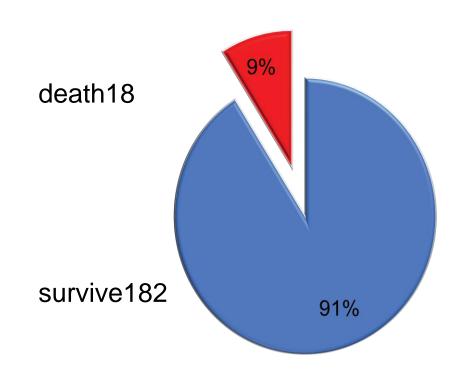


# Farms in China and Taiwan area have shown good result after using Quantum Dot to improve animal immunity..

One of the many tests result on African swine fever – test conducted in China;

#### **Conclusion**

- -200 infected pigs were treated for 17 days,
- -18 died, 182 survived,
- cure rate was **91.0%**.



#### **Farmedic - Future product : Zinc Oxide**



Misting in swiftlet farms help to produce better and "whiter" bird nest and hence, their selling price of bird nest is much higher.





After misting

Before misting