ONENESS

合一生技股份有限公司

2016法人說明會

報告人: 合一生技新藥開發處處長 陳瑞青博士

2016.7.19

Safe Harbor Statement

The statements and contents included in this presentation that are not historical in nature are “forward-looking statements”. These forward-looking statements, which may include statements regarding our future results of operations, performance, financial condition, development or marketing of our products or business prospects, are subject to risks and uncertainties and are based on our current expectations. Actual results may differ materially from those expressed or implied in these forward-looking statements for a variety of reasons. Please be cautioned not to place undue reliance on these forward-looking statements which are based on information currently available. Our forward-looking statements at this time does not create any duty of disclosure beyond that which is imposed by law, and we expressly disclaim any obligation to publicly update or revise any forecasts or forward-looking statements, whether as a result of new information, future events or otherwise.

Company Overview

Information

- Oneness Biotech was formed in June 2008
- Capital: NTD 194.5M

Core Products

- ON101 (DFU)-Phase III (USFDA/TFDA)
- OB318 (HCC)-Phase I (USFDA/TFDA)

Core Technology

- Good Agriculture Practice (GAP)
- Bioactivity-guided fractionation

Manufacturing Facilities

- PIC/s GMP Pharmaceutical Plant (under construction)
- GAP Cultivation Farm in Pintung (over 19 hectares)


Innovative Solution for
Diabetic Foot Ulcer
ON101

ON101 (DFU)

1. **Drug Background**
2. Updated Phase III Clinical Trial Data
3. Quality Control of Raw Materials and Drug Product
4. Pharmacological Studies & MOA
5. Global Market & Patents

ON101 (DFU)

- **The First Botanical Drug for Diabetic Foot Ulcer**
- **Fulfill the Global Unmet Medical Need in DFU**
- **Clinical Status: Phase III Interim Analysis (2016)**
- **Establish 3 Cultivation Sites of the Raw Material Following the Principles of GAP for Consecutive 10 years**
- **Following Guidance for Industry Botanical Drug Product (FDA 2004.6)**
- **The estimated DFU market size will exceed USD 93.3 billion.**

Diabetic Foot Ulcer (DFU)

Unmet Medical Need for Decades

The most common complication related to chronic diabetes

415 million Diabetics World-wide, 15% of diabetes suffers from DFU

DFU precedes 84% of lower extremity amputations

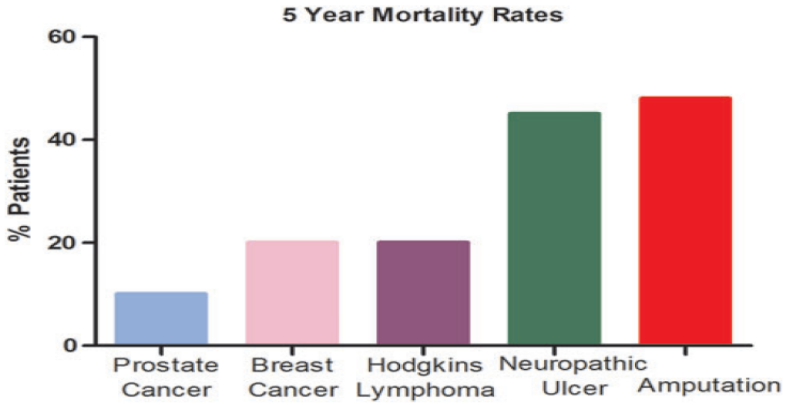
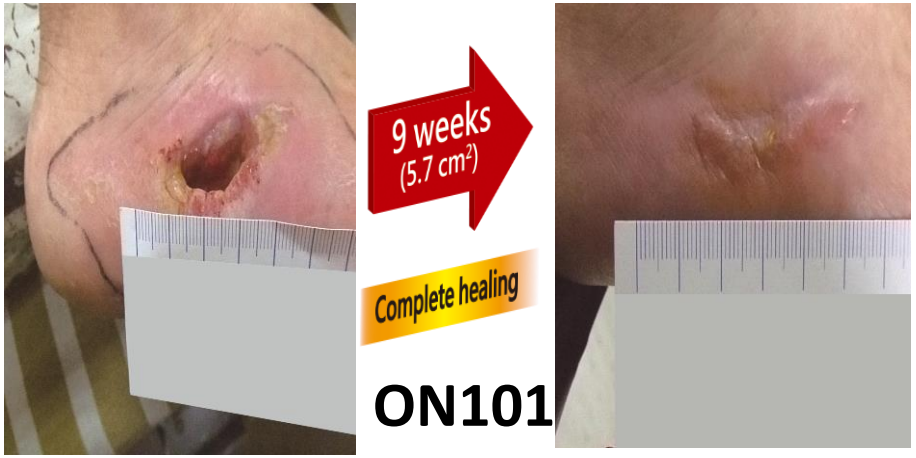


Figure 2. Five-year mortality rates associated with amputation. The 5-year survival rate associated with amputation secondary to a DFU is very low compared with other common chronic diseases, such as breast and prostate cancer. To see this illustration in color, the reader is referred to the web version of this article at www.liebertpub.com/wound



Reference: Advances in Wound Care, 2015 Jun 1;4(6):339-345

USFDA Phase III Trial-DFU

Drug	Pharma
Bemiparin	Rovi Pharmaceuticals
Pedyphar Ointmen	European Egyptian Pharmaceutical
rhEGF	European Egyptian Pharmaceutical Industries
rhEGF	Bio-Manguinhos
SBG	Biotec Pharmacon ASA
MSI-78	MacroChem Corporation
Pexiganan cream	Dipexium Pharmaceuticals, Inc.
Tigecycline	Pfizer
Trafermin 0.01% spray	Olympus Biotech Corporation
WH-1 ointment	Oneness Biotech Co., Ltd.
DSC127	Derma Sciences, Inc
Sitagliptin	Wolfgang-Michael Franz
BioChaperone PDGF-BB	Adocia
Granexin gel	FirstString Research, Inc
Gentamicin Collagen sponge	Innocoll

- DFU is absolutely a global UNMET MEDICAL NEEDS which require urgent medical care.

Diabetic Foot Ulcer (DFU)

Unmet Medical Need for Decades

Regranex Gets Black Box Warning in 2008

FDA U.S. Food and Drug Administration U.S. Department of Health and Human Services

FDA Home Page | Search FDA Site | FDA A-Z Index | Contact FDA | FDA Centennial

5-fold increased risk for cancer mortality

FDA News

FOR IMMEDIATE RELEASE
June 6, 2008

Media Inquiries:
Rita Chappelle, (301) 827-6242
Consumer Inquiries: 888-INFO-FDA

FDA Announces New Labeling Changes for Regranex
Product to carry boxed warning

The U.S. Food and Drug Administration today announced the addition of a boxed warning to the label of Regranex Gel 0.01% (becaplermin) to address the increased risk of cancer mortality in patients who use 3 or more tubes of the product. Regranex is a topical cream indicated for the treatment of leg and foot ulcers that are not healing in diabetic patients.

The WARNINGS section of the product has been updated to include a BOXED WARNING and a description of the epidemiologic data that is the basis for the revised label. These data come from a retrospective study that compared cancer incidence and cancer mortality among 1,622 patients exposed to Regranex to 2,809 otherwise similar patients who were not exposed. The results were consistent with no overall increase in cancer incidence among the patients exposed to Regranex. However, there was a five-fold increased risk of cancer mortality in the group exposed to three or more tubes of Regranex.

Diabetic Foot Ulcer (DFU)

Unmet Medical Need for Decades

Recent Phase III Clinical Trial Failures in DFU			
Company	**Derma Sciences**	**Macrocure**	**CytoTools**
Drug Product	**DSC-127**	**CureXcell**	**DermaPro**
Drug Category	Peptide Drug	Cell-derived Products	Small Molecules
Date	November-2015	October-2015	November-2015
MOA	pro-genitor proliferation、vascularization、collagen deposition、re-epithelialization	contains primed/activated Monocytes, Neutrophils and Lymphocytes	stimulating skin growth、disinfection
	DERMASCIENCES A TISSUE REGENERATION COMPANY	MACROCURE	CytoTools

ON101 (DFU)

1. Drug Background
2. **Updated Phase III Clinical Trial Data**
3. Quality Control of Raw Materials and Drug Product
4. Pharmacological Studies & MOA
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ON101 Phase III Interim Analysis

試驗設計

試驗設計	1. 隨機、活性對照、開放性、多中心 2. 隨機分派 236 位受試者 (ON101：118；Aquacel：118)
受試族群	Wagner系統分級第一級或第二級慢性糖尿病足患者
試驗期	16周治療期 +12周追蹤期
主要評估指標	治療結束時兩治療組目標潰瘍完全癒合率之比較結果
主要療效評估方式	由獨立的盲性評估者判讀傷口癒合情形

ON101 Phase III Interim Analysis

納入條件

1. 參與研究前簽署受試者同意書
2. 至少20歲且小於80歲的男/女患者
3. 第1型或第2型糖尿病男女患者且於篩選期間(或加入試驗前三個月內)確知糖化血紅素<12%
4. 踝動脈與肱動脈比(ABI)≧0.80
5. 受試者之足部潰瘍需有以下特性：
   a. Wagner系統分級分數為1或2
   b. 潰瘍位置發生於腳踝以下(包含腳踝骨處)
   c. 無感染或已經感染控制
   d. 傷口面積經清創後介於1至25平方公分
   e. 持續4週以上之足部潰瘍
6. 有可能懷孕之婦女於篩選期之血液驗孕檢測呈陰性且於試驗期間無懷孕意願或無哺乳需要之婦女
7. 能夠且願意配合試驗返診及試驗流程之受試者

ON101 Phase III Interim Analysis

排除條件

1. 清創後傷口仍有壞死，化膿或廔管；
2. 臨床(及/或經X光診斷)確認罹患急性Charcot's神經病變；
3. 加入本臨床試驗前4週內，曾接受過血管再造術；
4. 營養不良患者(白蛋白< 2.5 g/dL)；
5. 肝功能指數異常(麩草醋醯轉胺酶或麩丙酮醯轉胺酶>正常值上限3倍)；
6. 腎功能異常(血清肌酐酸>正常值上限2倍)；
7. 於加入試驗前4週內接受類固醇治療、免疫抑制劑、化學療法或放射線治療；
8. 於加入試驗前4週內使用其他試驗藥物或治療；
9. 由患者病史得知，患有精神疾病、或有慢性酒精或藥物成癮患者，經主持人判斷會影響試驗順從性之患者；
10. 試驗醫師認定不適宜參加本試驗者。

ON101 Phase III Interim Analysis

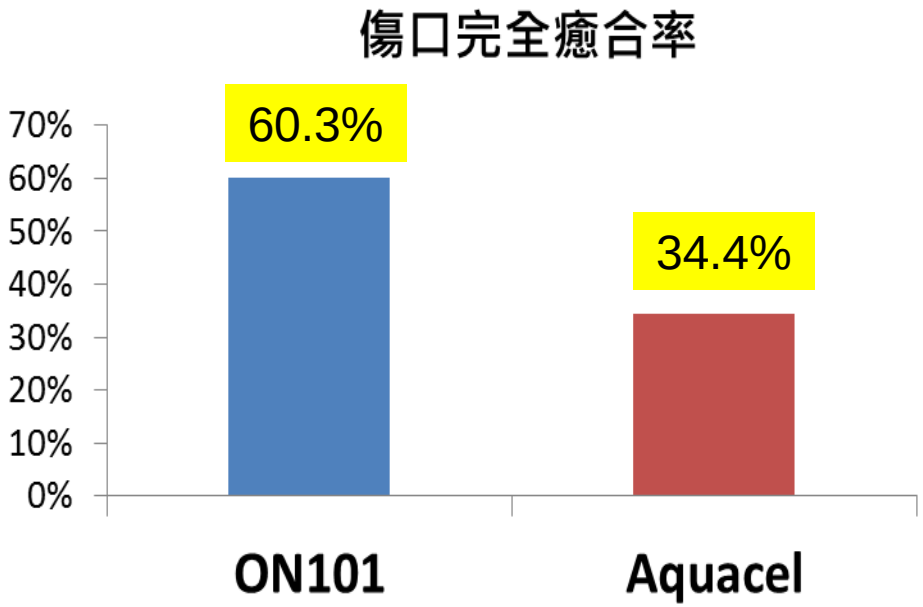
參與之試驗中心

1. 中國醫藥大學附設醫院
2. 台灣大學醫學院附設醫院
3. 台北馬偕紀念醫院
4. 三軍總醫院
5. 台北慈濟
6. 林口長庚
7. 奇美醫院
8. 中國附醫_北港分院
9. 淡水馬偕紀念醫院
10. 高雄長庚

ON101 Phase III Interim Analysis

主要評估指標期中分析結果-1

- 全分析數據集(FAS)群體：



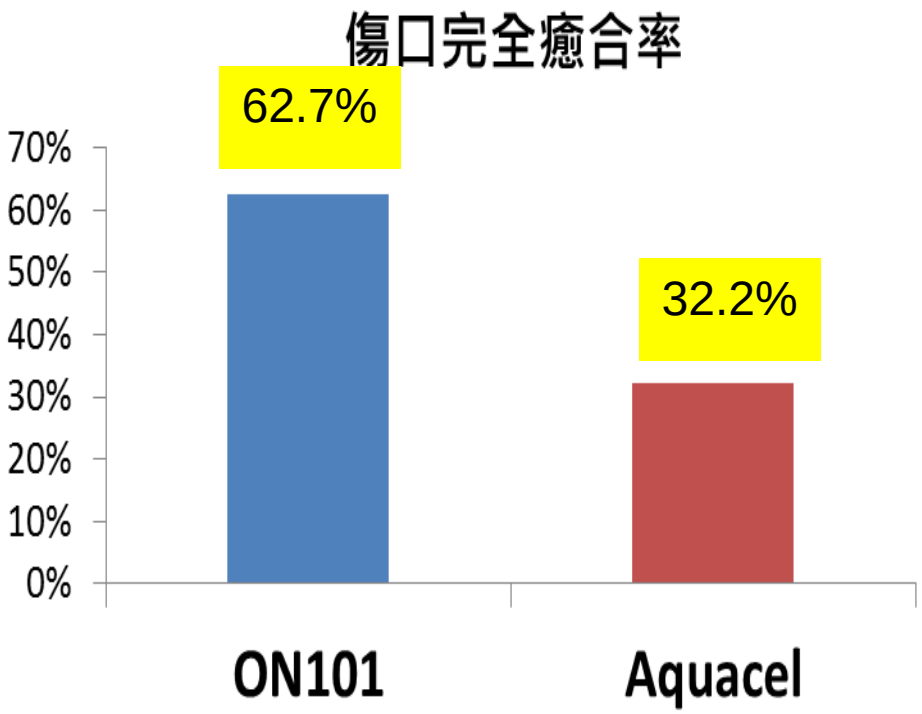
	ON101	Aquacel
隨機分派人數	63	61
完全癒合人數	38 (60.3%)	21 (34.4%)
勝差= 25.9% (p=0.004)		

FAS :被隨機分派之受試者，不論有無接受試驗藥物，皆被納入主要評估指標分析

ON101 Phase III Interim Analysis

主要評估指標期中分析結果-2

- 修正型意圖治療(mITT)族群：



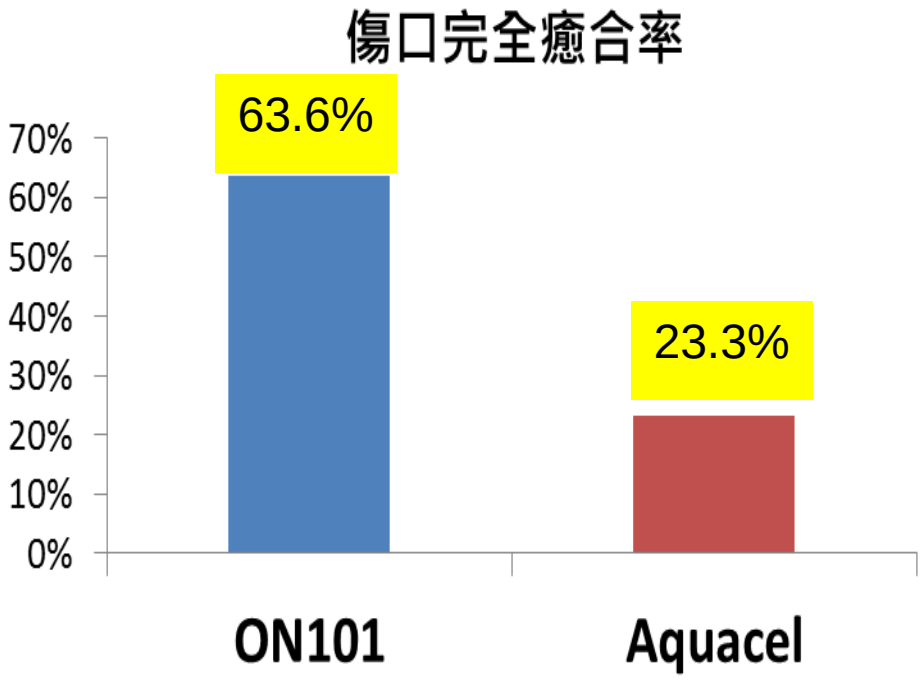
	ON101	Aquacel
隨機分派人數	59	59
完全癒合人數	37 (62.7%)	19 (32.2%)
勝差= 30.5% (p<0.001)		

mITT: 被隨機分派之受試者，不論有無接受試驗藥物，其目標潰瘍皆需符合計畫書條件者，始得納入主要評估指標分析

ON101 Phase III Interim Analysis

主要評估指標期中分析結果-3

■ 傷口位於足底 - 次族群



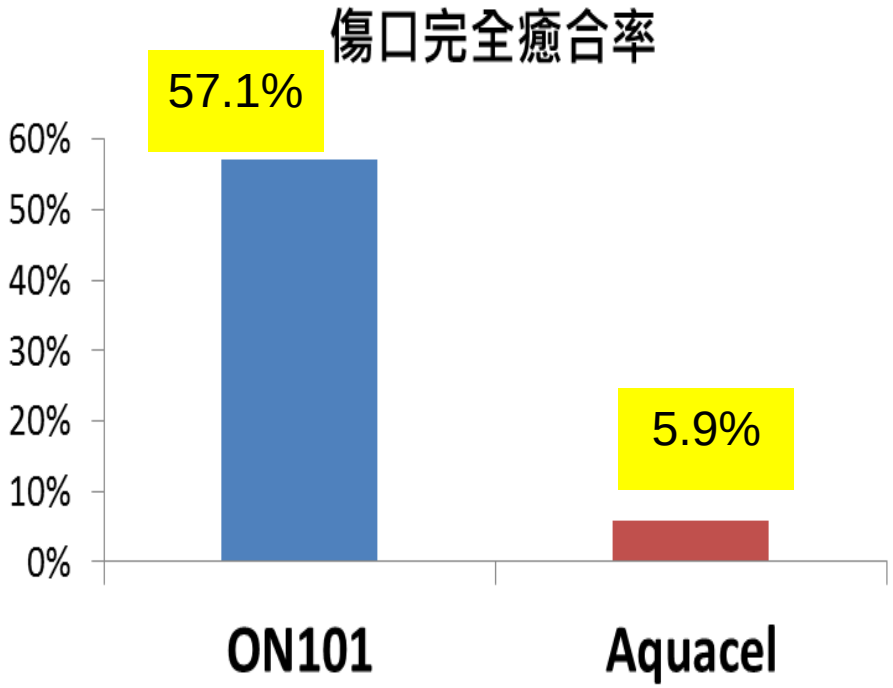
	ON101	Aquacel
隨機分派人數	33	30
完全癒合人數	21 (63.6%)	7 (23.3%)

勝差 = 40.3% (p=0.001)

ON101 Phase III Interim Analysis

主要評估指標期中分析結果-4

- 傷口大於5 cm^2 - 次族群



	ON101	Aquacel
隨機分派人數	14	17
完全癒合人數	8 (57.1%)	1 (5.9%)

勝差= 51.2% (p=0.002)

ON101提出優先審查

- 依照TFDA公布的「新藥查驗登記優先審查程序適用要件」，合一ON101符合藥事法第七條所定義的新藥
- 評估所治療之適應症，糖尿病足潰瘍屬國人嚴重疾病，目前台灣也沒有針對此適應症的藥品可使用
- 主要評估指標期中分析結果，顯示ON101臨床上的優勢，可望滿足糖尿病潰瘍患者的醫療迫切需求
- 合一計畫依目前之數據，向TFDA提出優先審查申請及NDA許可

ON101 (DFU)

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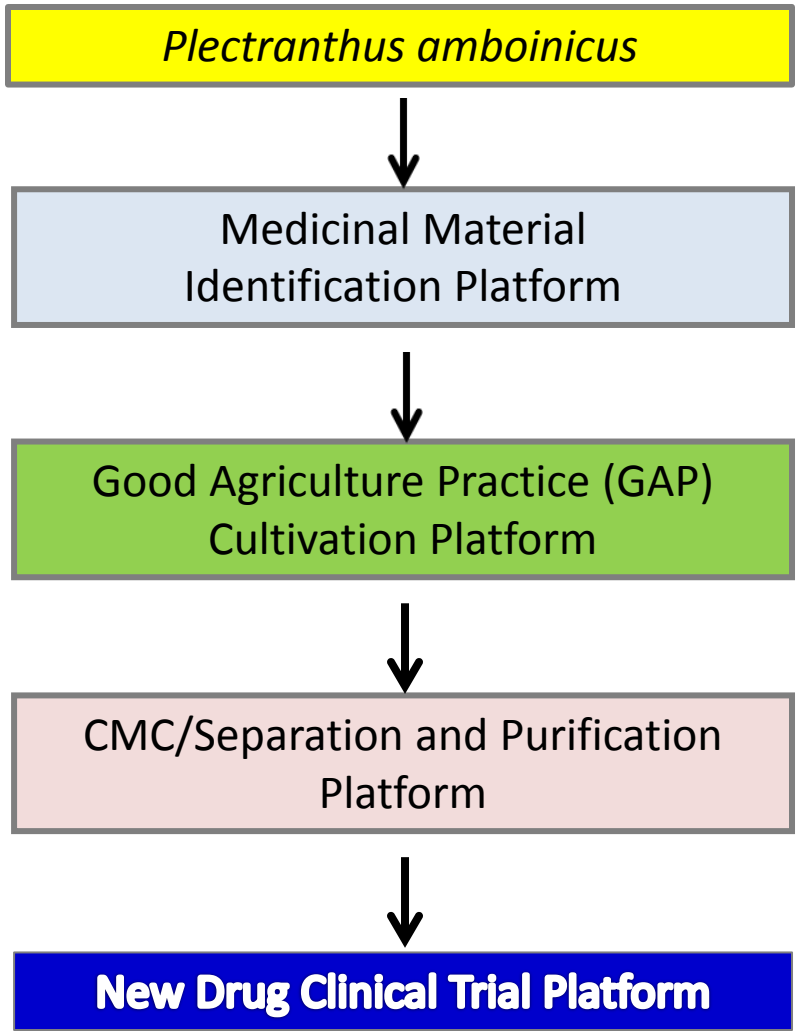
Quality Control of Raw Materials

Drug Development Platform

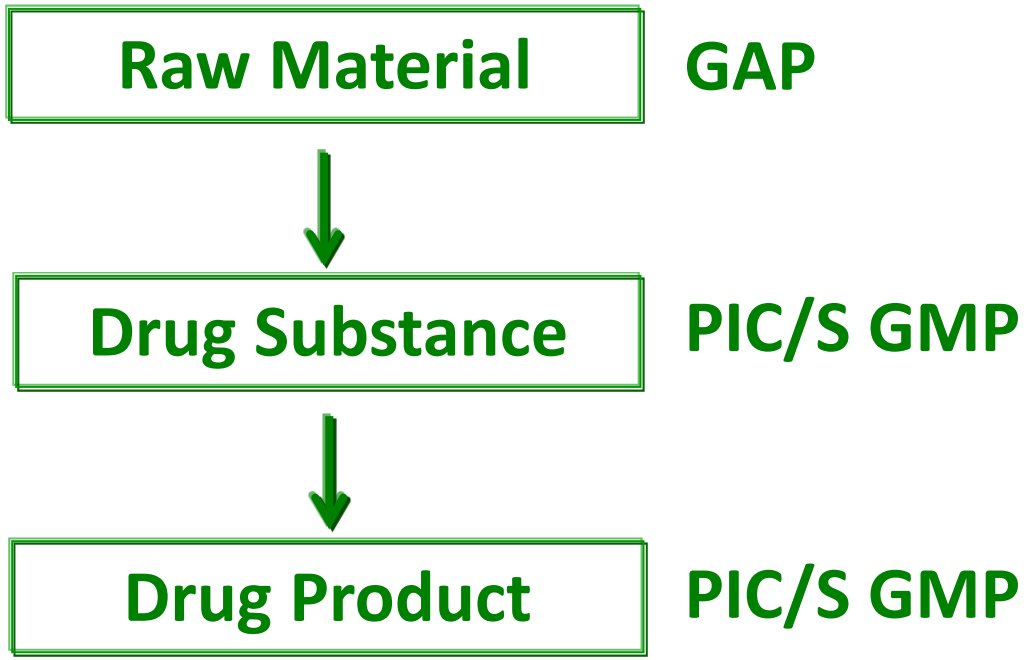


- Long recorded history of human use
- DNA molecular identification
- Utilizing the quality and efficacy technique in ecological environmental study, original plant identification, seedlings preservation, nursing and standardized cultivation.
- Quality control, safety and clear effect
- Audit control management
- Clinical trial team
- Project management

Quality Control of DS & DP

Quality Control

- Compliance with the FDA Regulation.
- Every batch of ON101 production is under GMP control



U.S. Department of Health and Human Services
FDA Food and Drug Administration

FDA

CFDA
CFDA 国家食品药品监督管理总局
China Food and Drug Administration

Quality Control of DS & DP

Quality Control

- **Stability Tests:**
  - Long-term Stability Study (~ 4 years on June, 2016)
  - Accelerated Stability Study (6 months)
  - In-use Stability Study
- **All QC assays are in compliance to ICH guidelines, USP and ChP, *etc.***
- **Bioassays are used to control the CMC of DS and DP**

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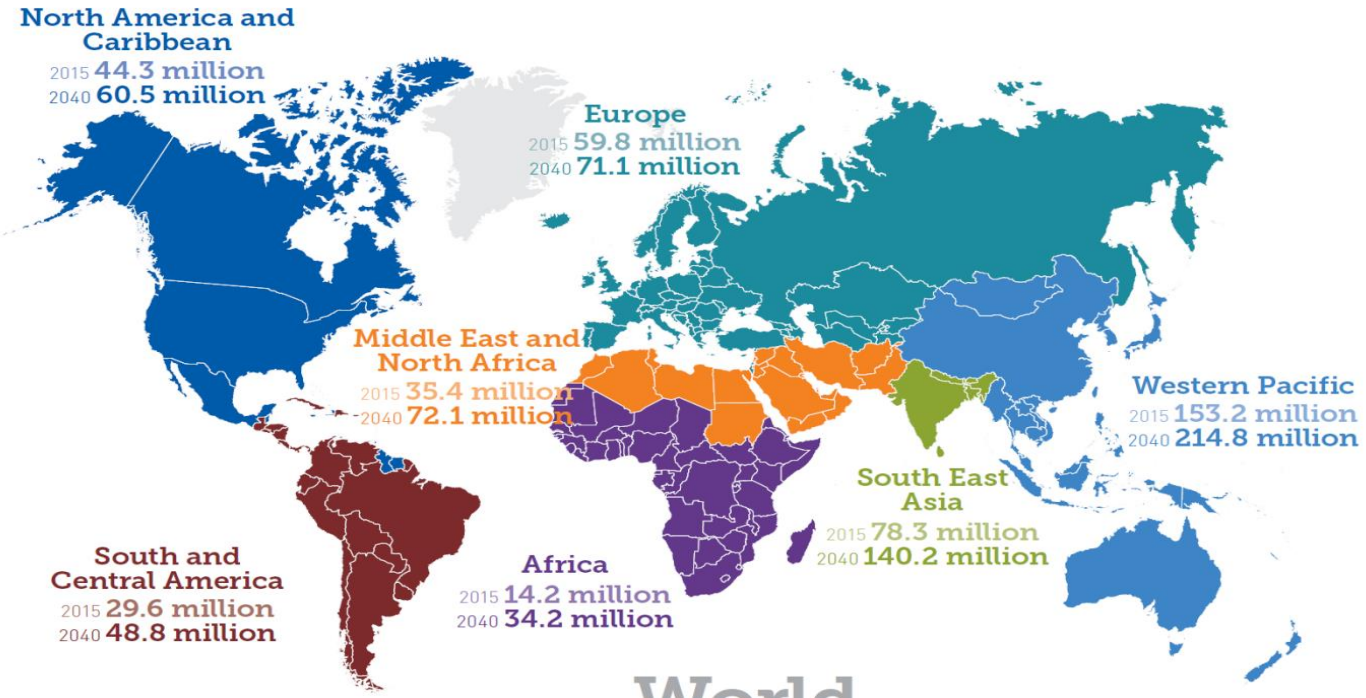
ON101 Global Market

- Estimated number of people with diabetes worldwide and per region in 2015 and 2040 (20-79 years)



International Diabetes Federation

World
2015 415 million
2040 642 million

IDF Diabetes Atlas · Seventh Edition

ON101 Global Market (cont'd)

- Top ten countries/territories for number of people with diabetes (20-79 years) in 2015 and 2040
- China is the country with most diabetes patients in 2015 and 2040.

Rank	Country/territory	2015 Number of people with diabetes
1	China	109.6 million (99.6-133.4)
2	India	69.2 million (56.2-84.8)
3	United States of America	29.3 million (27.6-30.9)
4	Brazil	14.3 million (12.9-15.8)
5	Russian Federation	12.1 million (6.2-17.0)
6	Mexico	11.5 million (6.2-13.7)
7	Indonesia	10.0 million (8.7-10.9)
8	Egypt	7.8 million (3.8-9.0)
9	Japan	7.2 million (6.1-9.6)
10	Bangladesh	7.1 million (5.3-12.0)

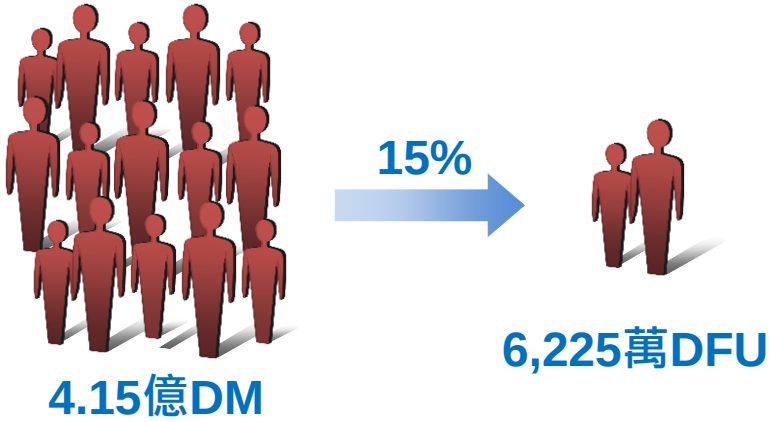
Rank	Country/territory	2040 Number of people with diabetes
1	China	150.7 million (138.0-179.4)
2	India	123.5 million (99.1-150.3)
3	United States of America	35.1 million (33.0-37.2)
4	Brazil	23.3 million (21.0-25.9)
5	Mexico	20.6 million (11.4-24.7)
6	Indonesia	16.2 million (14.3-17.7)
7	Egypt	15.1 million (7.3-17.3)
8	Pakistan	14.4 million (10.6-20.4)
9	Bangladesh	13.6 million (10.7-24.6)
10	Russian Federation	12.4 million (6.4-17.1)

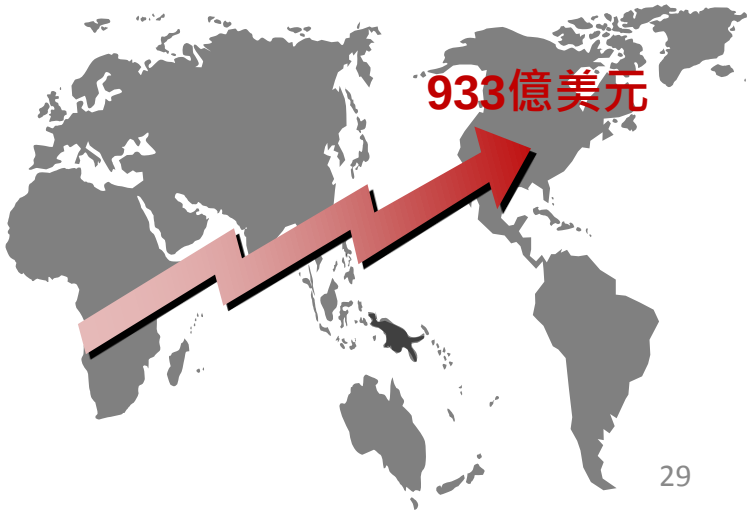
ON101 Global Market (cont'd)

- **Wound Care Market: Prevalence of Chronic Wounds (Global), 2007-2016**

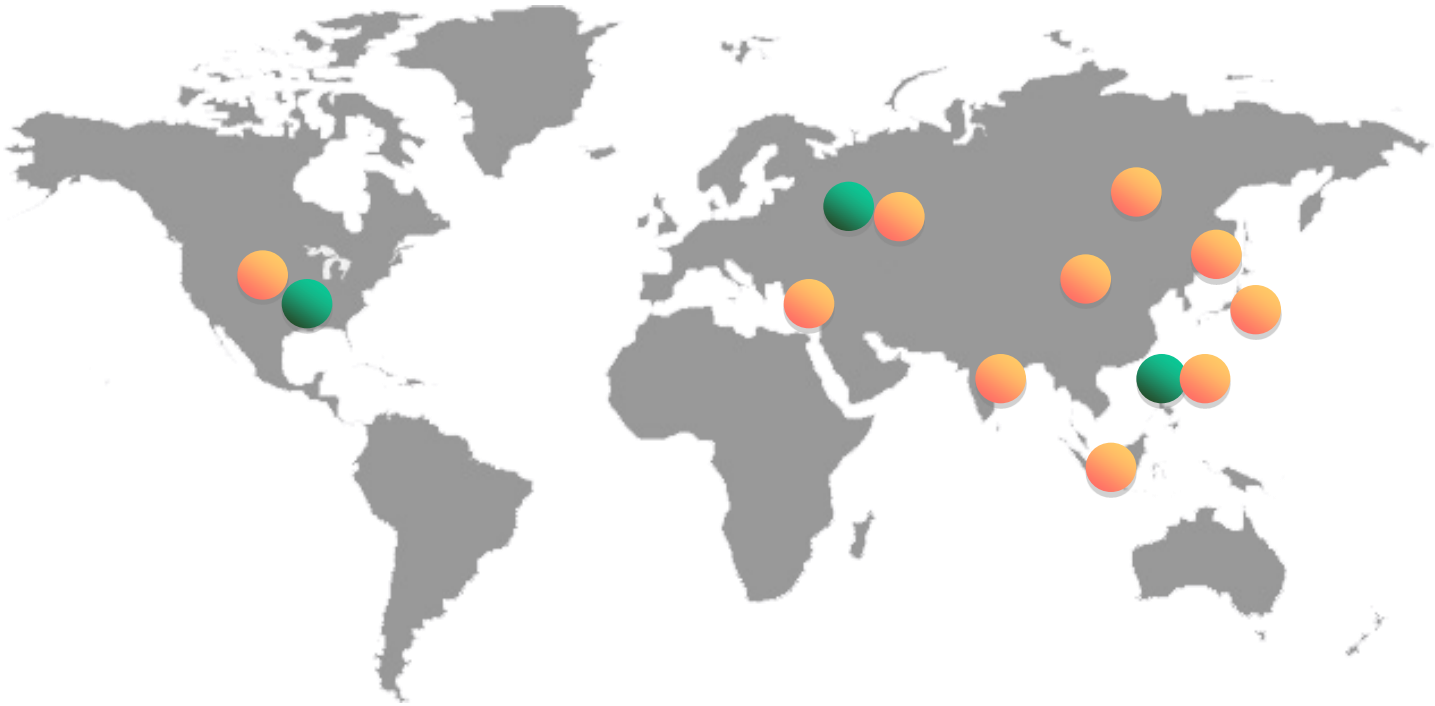
Wound Type	CAGR 2007-2016 (%)
Surgical wounds	3.6
Traumatic wounds	1.7
Lacerations	1.2
Burn wounds (outpatient)	1.0
Burn wounds (medically treated)	1.3
Burn wounds (hospitalized)	1.1
Pressure ulcers	6.9
Venous ulcers	6.7
Diabetic ulcers	9.3
Amputations	1.2
Carcinomas	3.0

- 2015年 全球市場值933億美元





ON101 Global Patents



Milestone of ON101

- **Taiwan :**
  - **Phase III Interim Analysis (2016)**
  - **NDA Submission (2017)**
- **USA :**
  - **2nd Phase III IND Submission (2016.Q4)**
- **China :**
  - **Phase III Clinical Trial (2016.Q4)**
- **EU :**
  - **Phase III IND Submission (2016.Q3)**


Anti-Cancer New Drug
Hepatocellular Carcinoma
OB318

Target: Hepatocellular Carcinoma (HCC)

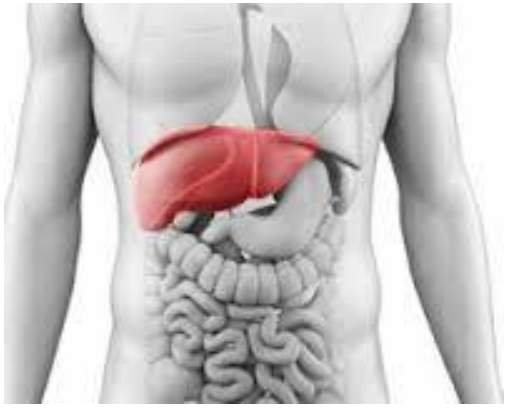
Global Unmet Medical Need

Liver cancer is the second leading cause of cancer-related deaths globally and has an incidence of approximately 850,000 new cases per year.

Almost 400,000 new cases are diagnosed annually in China, Japan and South Korea, 52,000 in the EU and about 30,000 in the US.

HCC is the most common form of liver cancer (90%).

In Europe, less than 10% of patients live for more than 5 years after diagnosis.



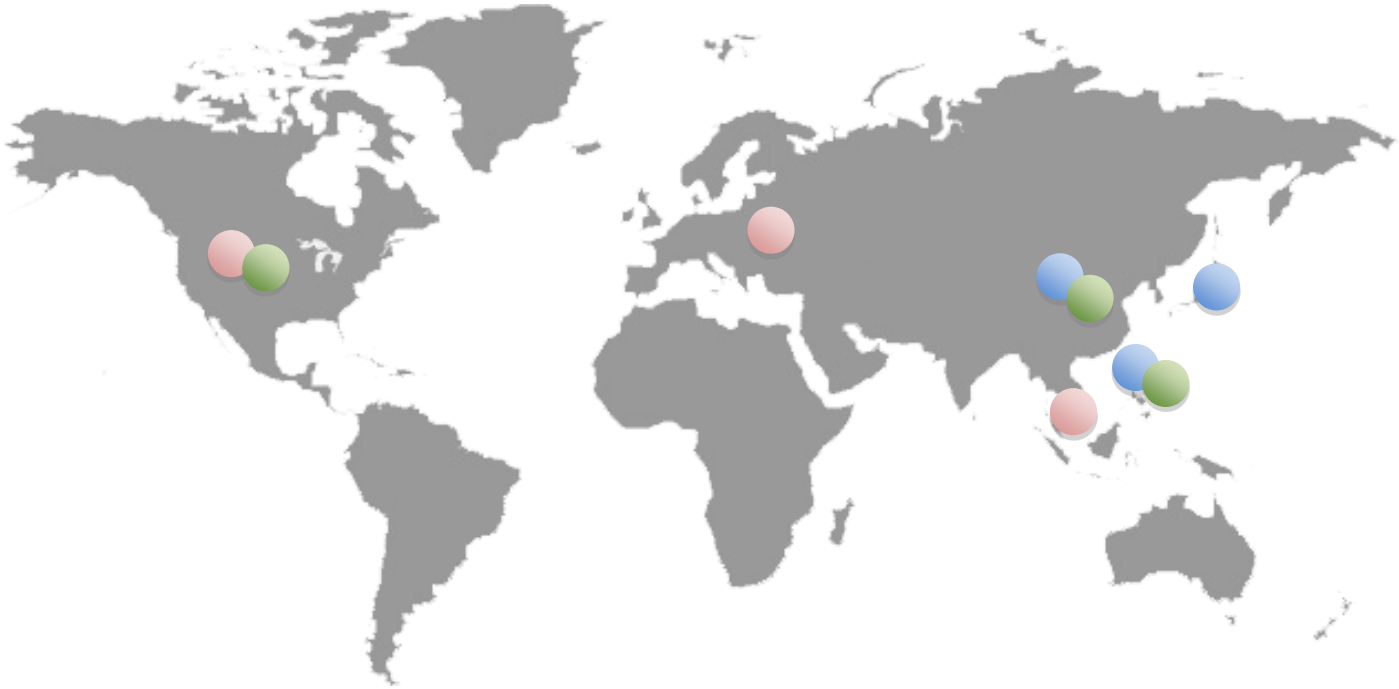
Unmet Medical Need

Symptoms usually do not occur until the disease has reached an advanced.

OB318 HCC Therapeutic New Drug

Advantages	• Effective against multiple cancer cell lines • Multiple mechanisms of action
Competitive Edge	• *Antrodia camphorata* is a parasitic fungus indigenous to Taiwan, providing exclusive advantage over foreign competitors
Potential Market	• High unmet medical needs with Nexavar being the only FDA approved target therapy for advanced liver cancer. • The Global Liver Cancer Market to grow at a CAGR of 7-15% over the period, 2015-2020. • The market is valued at USD 707 million, as per 2015.

OB318 Global Patent Portfolio



OB318 IND Clinical Status

- **Taiwan :**

  Phase I IND Approval (2015)

- **USA :**

  Phase I IND Approval (2014)

Conclusion

- ON101 is a potential new drug and hopes to the global DFU patients. The estimated market size will exceed USD 93.3 billion.
- OB318 is a new drug for HCC patients, with more than 850,000 new cases per year.
- More importantly, these estimated number of patients are not increasing year by year, but also getting young age.
- **These 2 indications are global warning for UNMET MEDICAL NEEDS.**
- We are totally committed and we are well equipped with international manufacturing standard (GAP, PIC/s GMP).
- We have patents that protect us globally
- **We are READY for "Partnering" to introduce these 2 unique and high demand new drugs to the global market.**

Open to Global Partnerships