

TANK-ANTIBIOTIC RESISTANCE

Antibiotic non-susceptibility in ICU (TNIS)

X 軸: Year

Y 軸: Non-susceptibility (%)

對話框: Percentage + isolated tested*

選題	選項
Pathogens (8) :	<i>Acinetobacter baumannii complex</i> <i>Enterobacter spp.</i> <i>Enterococcus faecalis</i> <i>Enterococcus faecium</i> <i>Escherichia coli</i> <i>Klebsiella pneumoniae</i> <i>Pseudomonas aeruginosa</i> <i>Staphylococcus aureus</i>
Antibiotic class 與 Pathogens 連動 (Pathogen 會對應到不同的抗生素)	參考 introduction and methodology 20191215 - Table
Hospital settings (2)	Medical centers Regional and local hospitals
Ages (3)	0-18, 19-64, >64
Infection types (2+all): 個別選+全選	Bloodstream infections Non-bloodstream infections

定義:

針對 TNIS 資料，依不同細菌、不同抗生素等變數組合，計算抗藥比例(non_susceptibility)

p.s. 僅擣出有做特定抗生素檢測的菌株數大於 30 的

計算方式: 分子(number_of_ir): 特定細菌抗生素敏感度檢測為 I or R 的個數

分母(Number_of_isolates_tested): 有做特定抗生素檢測的菌株數

選取規則:

Pathogen: 只能單選

Antibiotic class: 會根據所選擇的 Pathogen 出現特定抗生素，而出現的抗生素可再依需求選取是否要全部列出

Ages , hospital settings, infection types: 可單選，可複選

Isolated tested* = Number_of_isolates_tested (EXCEL)

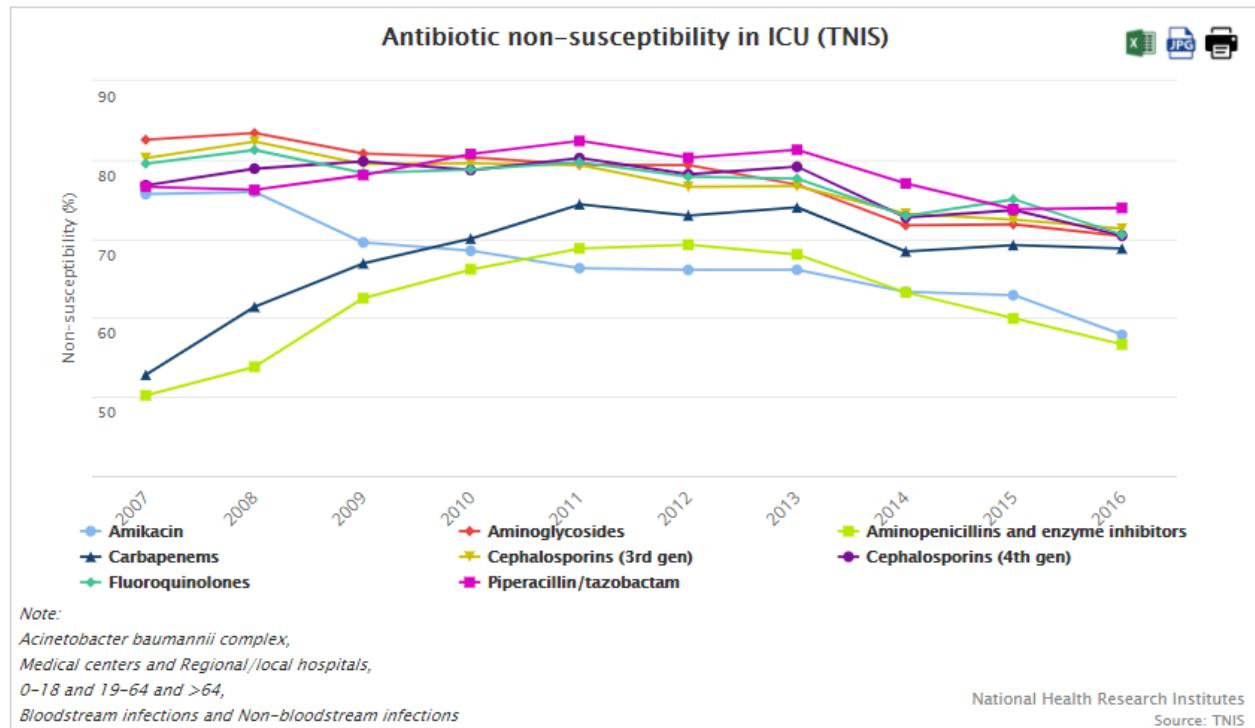
*僅在 Hospital settings & ages & Infection types 皆全選時才出現

p.s. 從資料中心擣出資料時，未免疑慮，只要擣出 number_of_ir 跟 Non-susceptibility 即可， ≤ 3 的用 ≤ 3 表示，拿到資料之後再改為 1~3, Number_of_isolates_tested 也是之後回推

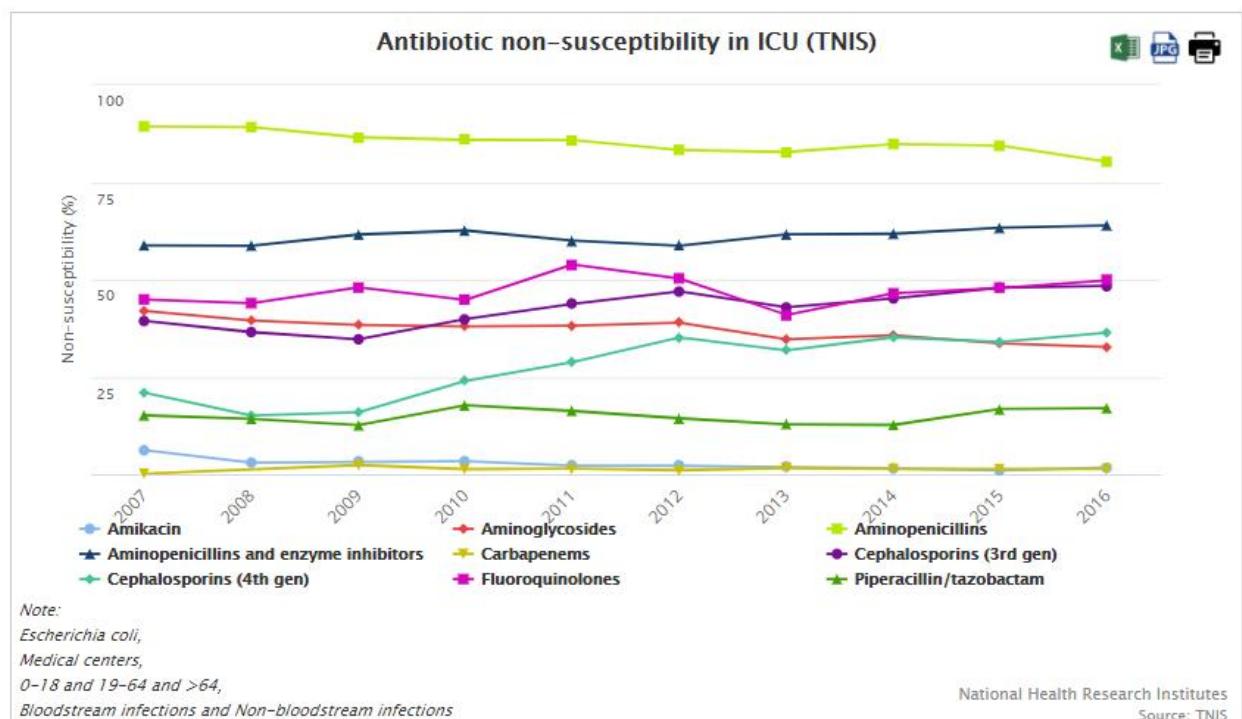
■ Age 全選 or 單選 - non_susceptibility_2019Feb27.xlsx

圖表呈現: 圖+對話框 (Isolates tested + Percentage)

EX1: final31_d_check (EXCEL) → *Acinetobacter baumannii* complex → ages, hospital setting, infection type 皆全選



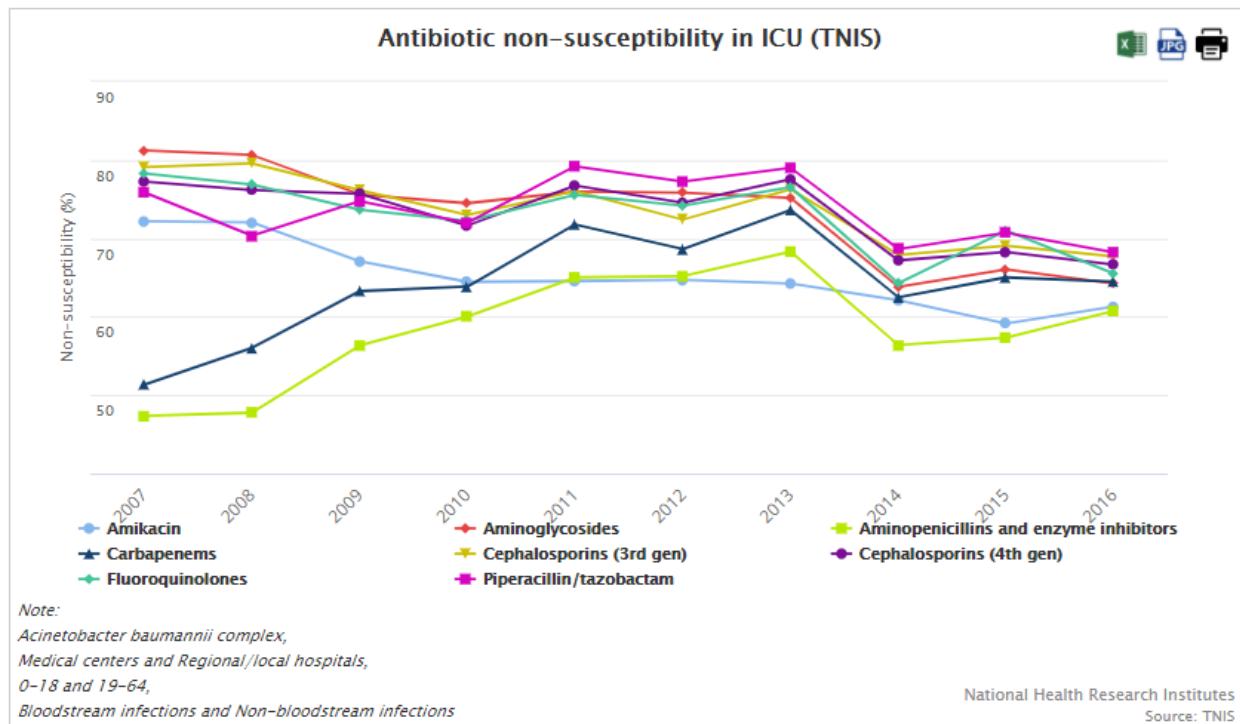
Ex2: final41 (EXCEL) → *Escherichia coli* → ages, infection type 全選 / hospital setting: Medical centers



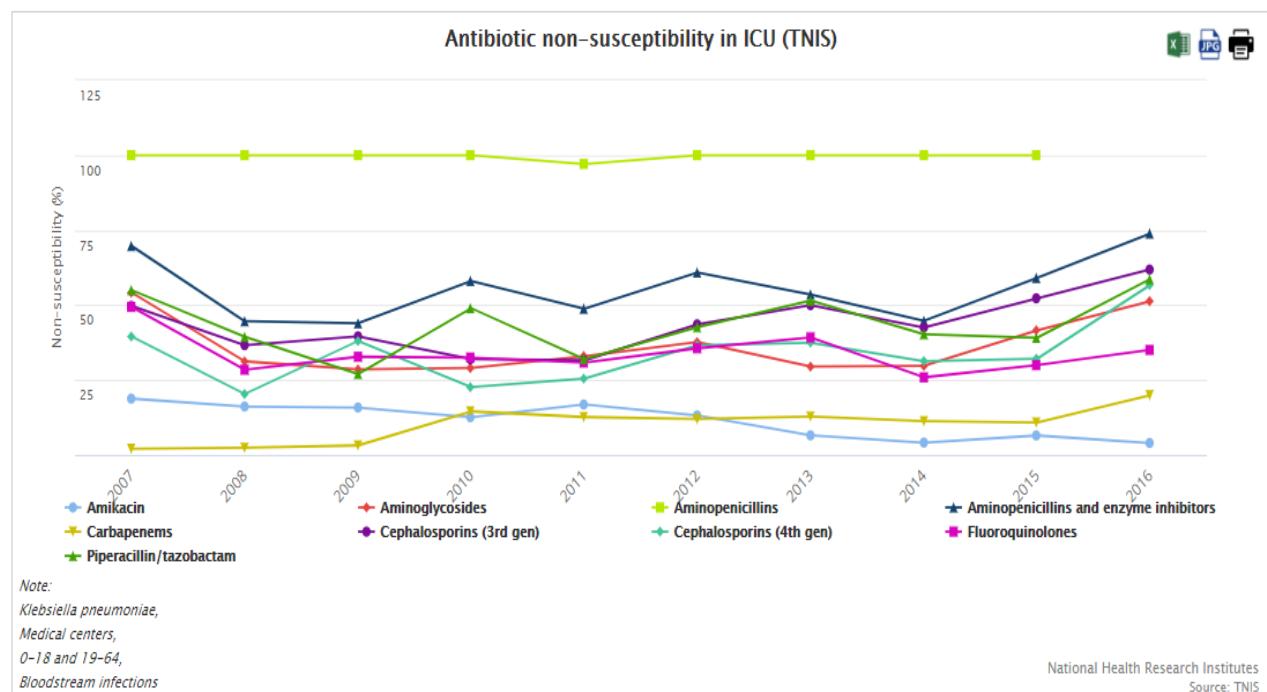
■ Age 組合 (不含全選) - non_susceptibility_agecom_2019Feb27.xlsx

圖表呈現: 圖+對話框 (Pathogen percentage)

EX1: final42_com1 (EXCEL) → *Acinetobacter baumannii complex* → hospital setting, infection type 全選 /ages: 0-18 & 19-64



EX2: final6_com1 (EXCEL) → *Klebsiella pneumonia* → ages: 0-18 & 19-64, medical centers, bloodstream infections



TANK-ANTIBIOTIC RESISTANCE

Antibiotic non-susceptibility in ICU/WARD/ER OPD (TSAR)

X 軸: Year (每兩年收集一次)

Y 軸: Non-susceptibility (%)

對話框: Percentage + isolated tested

選題	選項
CLSI criteria (2) 抗藥性標準	2018, 2019
Pathogens (4)	<i>Acinetobacter baumannii complex (V)</i> <i>Enterococcus faecalis (X)</i> <i>Enterococcus faecium (X)</i> <i>Escherichia coli (V)</i> <i>Klebsiella pneumonia (V)</i> <i>Pseudomonas aeruginosa (V)</i> <i>Staphylococcus aureus (X)</i>
Antibiotic class 與 Pathogens 連動 (Pathogen 會對應到不同的抗生素)	參考 introduction and methodology 20191215 - Table

定義: 針對 TSAR 資料, 利用 CLSI breakpoint 抗生素的抗藥標準 (S/I/R), 計算抗藥比例 (每年度可能會有些許不同), 只要區分 S or R (include I)

p.s. TSAR 資料及 CLSI 資料由郭醫師提供