

there is no significant association between DID and the proportion of resistant pathogens ( $p = 0.14$ ), but a significant association between DID and the incidence density of HAls ( $p = 0.015$ ).

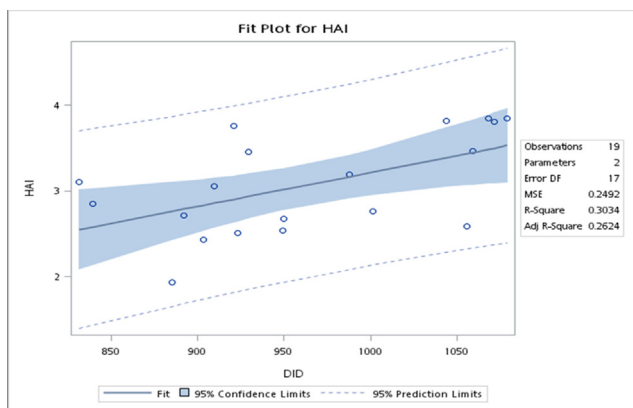


Figure: Linear regression analysis for antimicrobial DDD/1000 inpatient-days and incidence density of healthcare-associated infections.

**Conclusions:** Implementation of ASP showed rapid impacts on antibiotic consumption, and the associated decrease of HAI, whether long-term effects sustained deserved closely monitoring.

**PS 2-324**

**FALSE POSITIVE VENEREAL DISEASE RESEARCH LABORATORY OF CEREBROSPINAL FLUID**

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**Purpose:** Venereal disease research laboratory (VDRL) test is a nontreponemal test, used for screening of syphilis. Cerebrospinal fluid (CSF) VDRL test is very specific for neurosyphilis, but its sensitivity is low. Neurosyphilis needed to be excluded in patients with unexplained dementia and psychosis. False positive VRDL of CSF was found in clinical practice and we aim to evaluate the features.

**Methods:** We retrospectively reviewed all adult patients received CSF VDRL examination in a tertiary hospital in Taiwan from January 2011 to December 2012. The CSF VDRL test positive without positive result of serum VDRL and Treponema pallidum hemagglutination assay (TPHA) test was defined as false positive CSF VDRL.

**Results:** During the study period, total 494 patients received CSF VDRL examination. Among them, five patients had positive CSF VDRL. One patient met the diagnosis of neurosyphilis, and the other four had false positive CSF VDRL. All of the four patients had lung adenocarcinoma with suspicious of meningeal carcinomatosis. Forty-five patients in this study have active malignancy, and meningeal carcinomatosis was suspected in ten of them.

Table: The characteristic of patients with false positive of CSF VRDL (PS 2-324).

Case	Age /gender	Data of CSF study				TMN stage
		Cell count (/cumm) (PMN/mono%)	Sugar (mg/dL) (CSF/serum)	Protein (mg/dl)	Cytology	
1	68 Female	32(0/100)	34/121	78	Positive	T1bN3M1b
2	66 Female	23(11/89)	58/131	88	Suspicious	cT4N0M1a
3	63 Male	6(0/100)	56/179	32	Suspicious	T4N3M1
4	54 Male	12(0/100)	31/184	74	Suspicious	T4N1M1

**Conclusion**

Although CSF VDRL has high specificity and rare false positive, the diagnosis of neurosyphilis still needs to correlate with clinical feature. Meningeal carcinomatosis should be considered for false-positive CSF VDRL, especial in patient with lung adenocarcinoma.

**PS 2-325**

**IMPACT OF INTERFERON GAMMA-INDUCED PROTEIN 10 FOR THE ACCURACY OF TUBERCULOSIS DIAGNOSIS**

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**Purpose:** It is crucial for early diagnosis and treatment of TB. However, diverse clinical presentations combined with paucibacillary infection, making bacteriological confirmation for TB diagnosis challenging. Number of studies consider Interferon gamma-induced protein 10 (IP-10) to be a marker for the diagnosis of TB, but conflicting results have been reported and the exact role of IP-10 remains unclear. Here we evaluate the diagnostic accuracy of IP-10 for TB.

**Methods:** Acquiring systematic review (SR) of studies with reference standard and blinding is prior for diagnostic questions. "IP-10 AND tuberculosis" were used as keywords to search prefiltered Cochrane Library and then, unfiltered PubMed database. One latest published (2014) relevant SR and Meta-Analysis (14 case-control studies, 2075 cases were included) was chosen for critical appraisal: The quality of studies was evaluated using the Quality Assessment for Studies of Diagnostic Accuracy (QUADAS) tool. TB culture or smear was used as gold standard. The causes of high heterogeneity ( $I^2$  for sensitivity 88.7% and specificity 92.9%) were explored and the possible reasons included different cutoff values, different specimen and selected bias. Besides, in Deeks' funnel plot asymmetry test,  $p$  value of 0.17, suggesting no publication bias.

**Results:** IP-10 in the diagnosis of TB was: sensitivity 0.73 (95% CI, 0.71–0.76), specificity 0.83 (95% CI, 0.81–0.86), positive likelihood ratio 7.08 (95% CI, 3.94–12.72), negative likelihood ratio 0.26 (95% CI, 0.20–0.35), diagnostic odds ratio 29.50 (95% CI, 14.43–60.30), and the AUC was 0.88.

**Conclusions:** IP-10 may improve the accuracy of TB diagnosis. IP-10 can increase diagnostic accuracy when combined with other tests while the results of IP-10 assays should be interpreted in parallel with conventional test results and other clinical findings.

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**COMPARISON OF THREE SELECTIVE AGAR MEDIA FOR THE DETECTION MULTIPLE DRUG RESISTANT ACINETOBACTER (MDRA)**

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**Purpose:** *Acinetobacter baumannii* is commonly implicated in hospital-acquired infections. Multiple drug resistant Acinetobacter (MDRA), defined as co-resistant to all commonly prescribed antibiotics and poses a serious challenge. Without reliable screening, effective infection control is impossible. We evaluated the performance of three MDRA selective agars: (1) modified-Leeds Acinetobacter Medium (m-LAM), which is LAM agar modified by adding 8 mcg/ml imipenem and 2 mcg/ml amphotericin B; (2) MDR Acinebacter Medium (Hardy diagnostics), and; (3) CHROMagar MDR Acinetobacter (CHROMagar).

**Methods**

In part 1, we challenged the Hardy and CHROMagar with 52 confirmed MDRA isolates previously picked up by LAM agar, and seven ATCC strains as

negative controls. In part 2, we prospectively challenged the three agars with 40 clinical specimens: Throat swab ( $n = 15$ ), Tracheal aspirate ( $n = 14$ ), urine ( $n = 6$ ), sputum ( $n = 4$ ), and rectal swab ( $n = 1$ ). All the agar plates were incubated in  $35 \pm 2^\circ\text{C}$  for 48 hours before regarding as negative.