

# Como detectar KPC en el Laboratorio Clínico?

Dra.Verónica Seija

A stylized silhouette of a mountain range in a darker shade of teal, located at the bottom right corner of the slide.

# Screening KPC

Sistema automatizado

Disco difusión

A stylized silhouette of a mountain range in a darker shade of teal, located in the bottom right corner of the slide.

# Sistemas automatizados



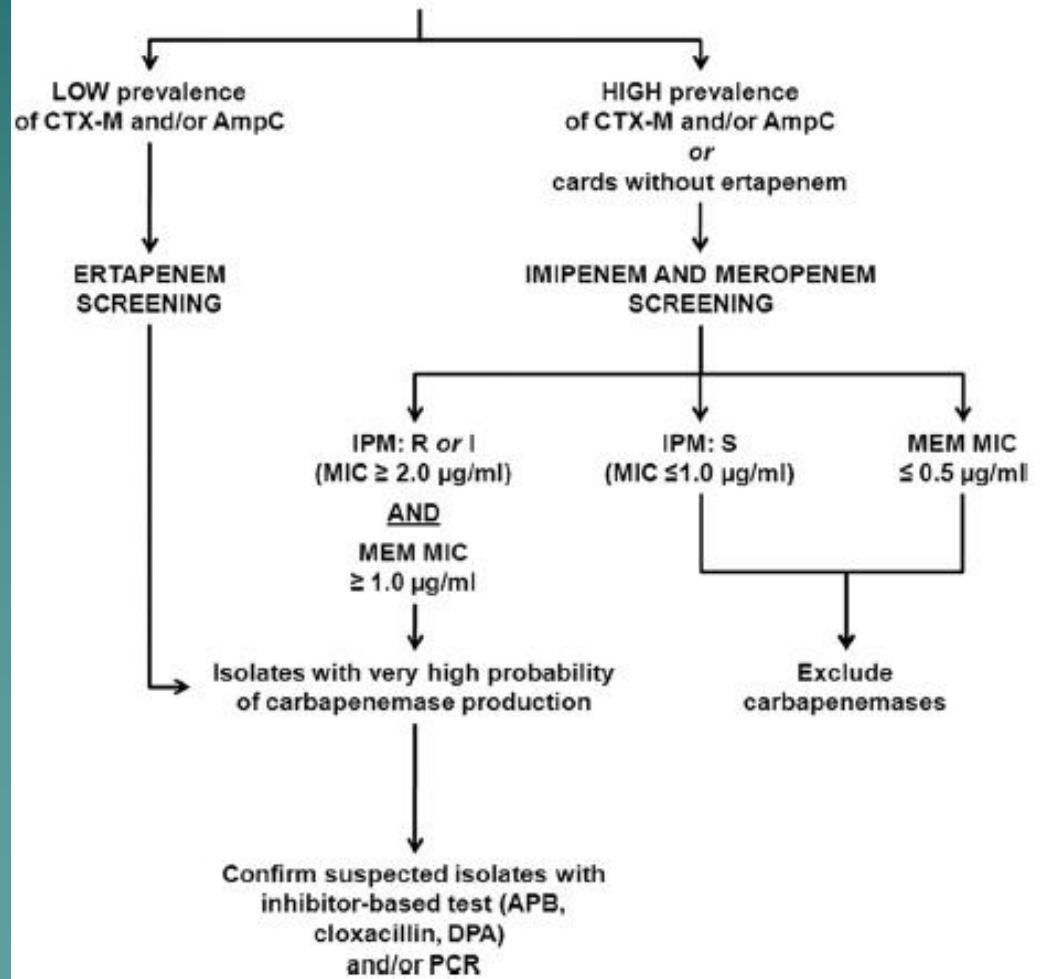
CIM IMIPENEM  $\geq 2 \mu\text{g/ml}$   
CIM MEROPENEM  $\geq 1 \mu\text{g/ml}$

ESPECIFICIDAD 97%  
SENSIBILIDAD 100%

# Can We Use Imipenem and Meropenem Vitek 2 MICs for Detection of Suspected KPC and Other-Carbapenemase Producers among Species of *Enterobacteriaceae*?<sup>∇</sup>

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## Routine VITEK 2 AST



CIM IMI  $\geq 2 \mu\text{g/ml}$   
+  
CIM MER  $\geq 1 \mu\text{g/ml}$

ESPECIFICIDAD 97%  
SENSIBILIDAD 100%

# Disco difusión-detección de KPC

- Halo a imipenem
- $\leq 22$  mm (excepciones Proteus y Salmonella), sospecha de carbapenemasa
- $\geq 23$  mm- no carbapenemasa

# *Flia Enterobacteriaceae*

	ATB	Carga disco	Diámetro (mm)			CIM			ECO Off
			S	I	R	S	I	R	
CLSI	IMIPENEM	10	≥ 23	22-20	≤ 19	≤1	2	≥ 4	
EUCAST	IMIPENEM	10	≥ 21	19-17	<15	≤2	4-8	>8	1
CLSI	MEROPENEM	10	≥ 23	22-20	≤ 19	≤1	2	≥ 4	
EUCAST	MEROPENEM	10	≥ 22	21-16	<16	≤4	8	≥ 16	0,125

# **METODOS DE APROXIMACION CONFIRMATORIA**

# CLSI-Test confirmatorio-Hodge

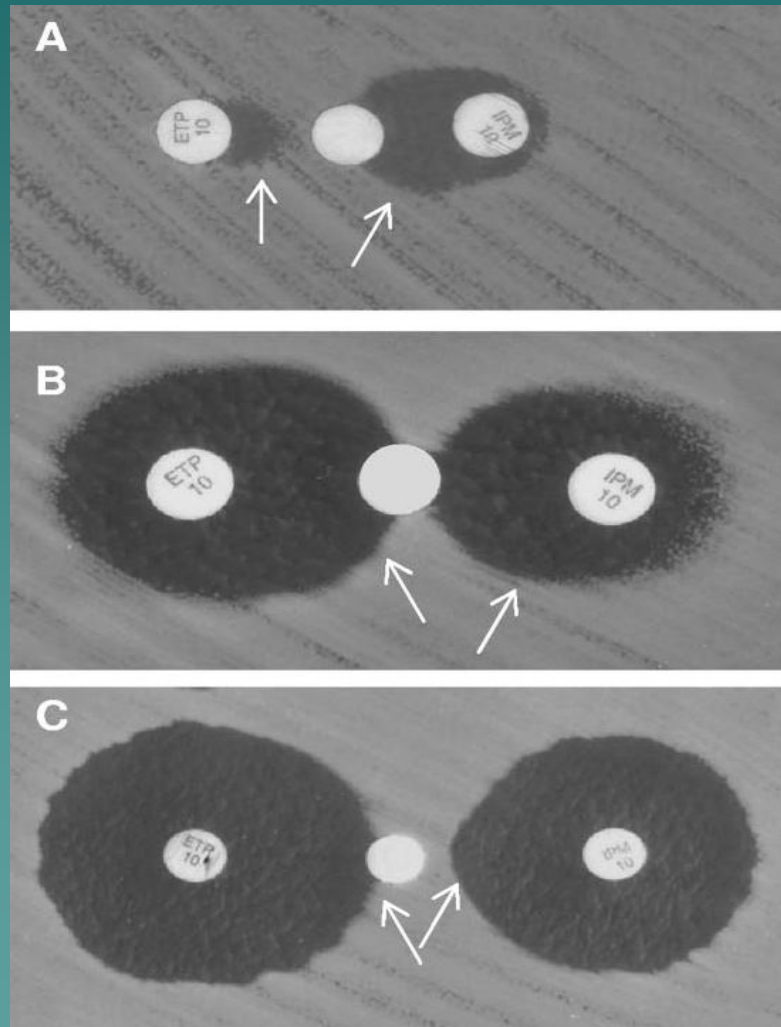
## A) Hodge Test



Sensibilidad: 93% y Especificidad: 76%

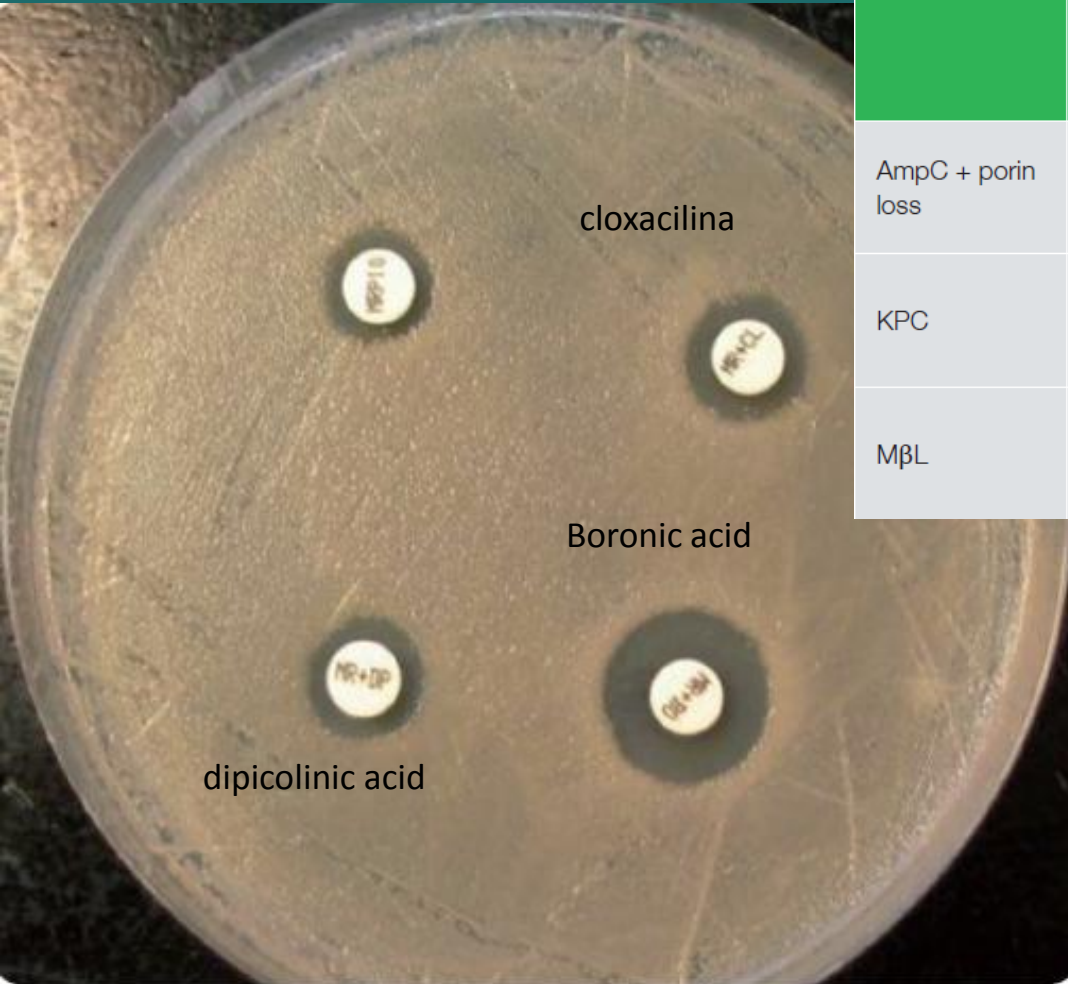


# Detección KPC- ácido borónico



OJO  
AC BORONICO  
INHIBE  
ENZIMAS DE TIPO AmpC  
FALSOS POSITIVOS EN.....

# Detección KPC



		Meropenem + Boronic MR+BO	Meropenem + DPA MR+DP	Meropenem + Cloxacillin MR+CX
AmpC + porin loss	Meropenem 10 µg MRP10	≥ 5mm AND	< 5mm	≥ 5mm
KPC	Meropenem 10 µg MRP10	≥ 5mm	< 5mm	< 5mm
MβL	Meropenem 10 µg MRP10	< 5mm	≥ 5mm	< 5mm

**Muchas gracias**

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PMP10

PIPRA

CEP30

CXP30

CFO30

CR230

ZI+TZ

CIPRS

CEX13

RMC30

FEP30

NAL30

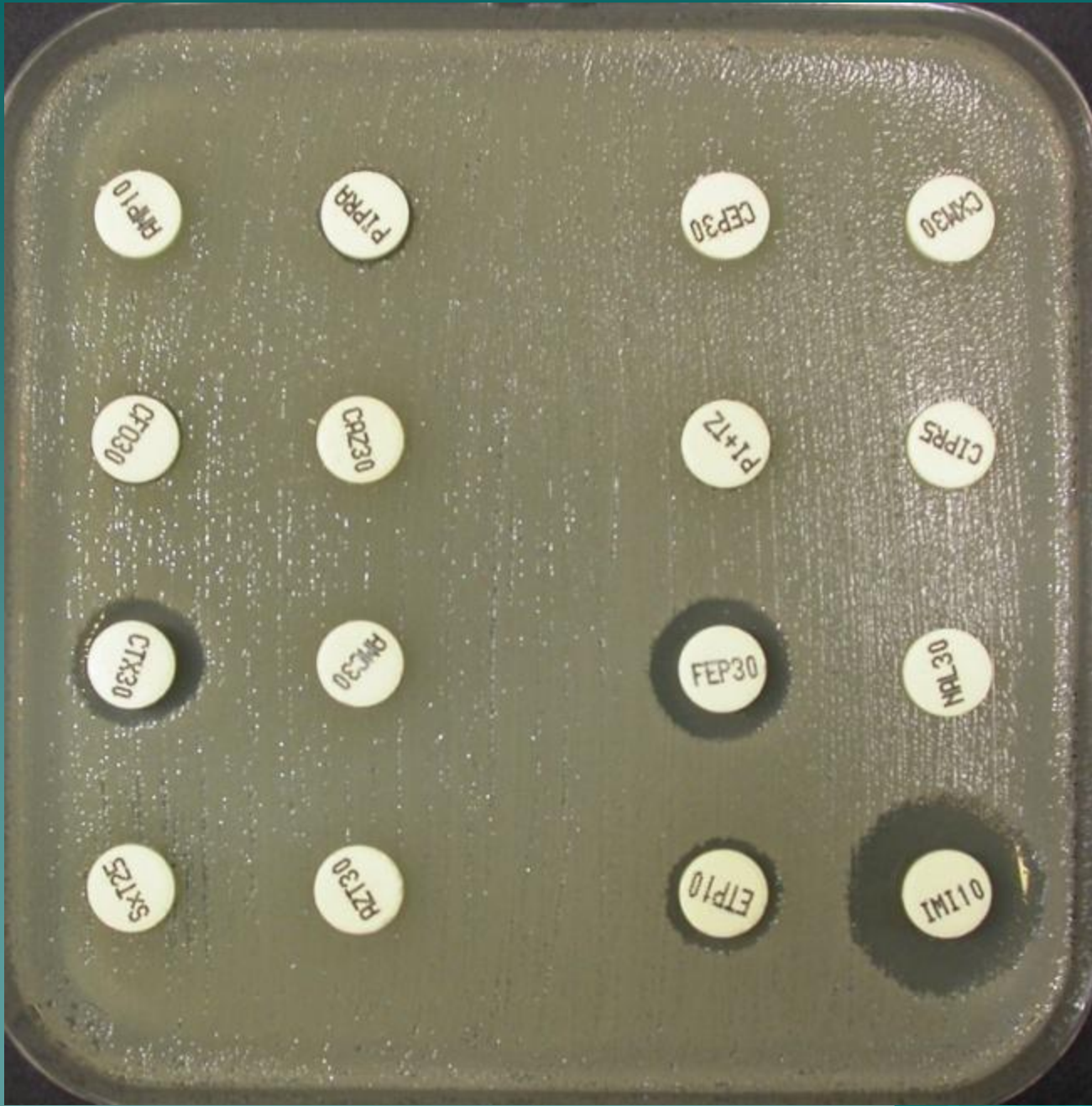
SX725

RZT30

EPI10

IMI10





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