

Antimicrobial Activity of 1HZ ODFWDP OD , QKLELWRU & RPELQD Pseudomonas aeruginosa and (QWHURED FWHUDOHV ZLWK 3QHXP RQLD LQ & DUH 8QLWV

Helio S. Sader, Rodrigo E. Mendes, Cecilia G. Carvalhaes, Mariana Castanheira
JMI Laboratories, North Liberty, Iowa, USA

CONCLUSIONS



7KH QRYHO %/ %/,V UHSUHVHQW YD
RSWLRQV IRU *UDP QHJDWLYH SQHX
FDXVHG ER. aeruginosa and Enterobacterales for
which limited treatment options were available.



&HIWDJLGLPH DYLED FWDP GHPRQVW
coverage against P. aeruginosa and Enterobacterales
and may represent a better option for empiric therapy
FRPSDUHG WR RWKHU %/ %/,V

&RQWDFW ,QIRUPDWLRQ \$FNQRZOHGJHPHQWV
+HOLR 6 6DGHU 0' 3K'),'6\$
-0, /DERUDWRULHV
%HDYHU UHHN &HQWU 6XLWH \$
1RUWK /LEHU\ , \$
3KRQH
)D[
(PDLO KHOLR VDGHU#MPLODEV FRP



References

- &OLQLFDO DQG /DERUDWRU\ 6MMZHQGEDMHWLQV IRU WHHWLWLRQV
for bacteria that grow aerobically; approved standard: eleventh edition. :D\QH 3\$ &/6,
&OLQLFDO DQG /DERUDWRU\ 6MMZHQGEDMHWLQV IRU WHHWLWLRQV
susceptibility testing; 32nd informational supplement. :D\QH 3\$ &/6,
0DJLRUDNRV \$3 6ULQLYDVDQ \$ &DUH\ 5% HW DO 0XOWLGUXJ UHT
UHVLVWDQW EDFWHULD DQ LQWHUQDWRULRQDO H[SHUW SURSRQDO IRU LQ
Microbiol Infect ±
6DGHU +6 &DVWDQKHLUD 0 0HQGHV 5()ODPP 5.)UHTXHQF\ DQG
QHJDWLYH EDFWHULD LVR0DWHG IURP SDWLHQWV ZLWK SQHXPRQLD KR
J Antimicrob Chemother



INTRODUCTION

- The initial antimicrobial therapy of patients with pneumonia is frequently empirical, and timely and effective antimicrobial therapy is critical to decrease complications and mortality.
- 7KH PRVW SURPLQH QW JURXS RI QHZ DQWLPLFURELDO DJHQWV ZLWK EURDG VSHFWUXP DFWLYLW\ DUH WKH ODFWDP ODFWDPDVH LQKLELWRU FRPELQDWLRQV %/ %/,V DQG VXFK FRPELQDWLRQV KDYH EHHQ DSSURYHG LQ UHFHQW \HDUV FHIWDJLGLPH DYLED FWDP &\$= \$9, FHIWRORJDQH WDJREDFWDP & 7 PHURSHQHP YDERUED FWDP 0(0 9\$% DQG LPLSHQHP UHOHED FWDP ,0, 5(/
- We evaluated the in vitro DFWLYLWLHV RI WKHVH %/ %/,V DSDUHQV (QWHURED FWHUDOHV DQG aeruginosa LVR0DWHV UHFHYHUHG IURP ,&8 DQG QRQ ,&8 SDWLHQWV ZLWK SQHXPRQLD LQ 8QLWHG 6WDWHV KRVS LWDOV

MATERIALS AND METHODS

- \$ WRWDO RI LVR0DWHV LQFOXGLQJ IURP ,&8 DQG IURP QRQ ,&8 SDWLHQWV ZHUH FRQVHFXWLYHO\ FROOHFWHG IURP WKH ORZHU UHVS LUDWRU\ WUDFW RI SDWLHQWV ZLWK SQHXPRQLD LQ 86 KRVS LWDOV LQ ±
- 2QO\ LVR0DWHV GHWHUPLQH G WR EH VLJQL¿FDQW E\ ORFDO FULWHULD DV WKH UHSRUWHG SUREDEOH FDXVH RI LQIHFWLRQ ZHUH included in the program.
- Organisms were tested for susceptibility by reference broth microdilution methods in a central laboratory DFFRUGLQJ WR WKH FXUUHQW &/6, GRFXPHQWV
-)URJHQ IRUP 0,& SDQH0V ZHUH PDQXIDFWXUHG DW -0, /DERUDWRULHV
- 6XVFHWSWLELOLW\ SHUFHQW DJHV ZHUH EDVHG RQ 86)'\$ DQG &/6, EUHDNSRLQWV
- 7KH 0(0 9\$% VXVFHWSWLEOH EUHDNSRLQW RI " PJ / IRU (QWHURED FWHUDOHV ZDV DSSOLHG IRU FRPSDULVRQ SXUSRVHV to P. aeruginosa.

RESULTS

- &\$= \$9, & 7 DQG ,0, 5(/ ZHUH WKH PRVW DFWDYH H7DEOH W DQG DJLDX
- &\$= \$9, DQG 0(0 9\$% ZHUH WKH PRVW DFWLYH ODFWDPV DJDLQV