Evaluation of the Activity of Ceftaroline and Comparators against

Isolates from the **United States: Results from 10** Years of the AWARE Surveillance **Program (2011–2020)**

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Ceftaroline was very active against from $WUA \{ \Delta a a \& a | A \& A \} c \land b \in EA a \} \& | \Delta a a \} & | \Delta a a \} & | \Delta a a \} & | \Delta a a B \& a A Y O UA a \bullet [| a c \land \bullet A]$ æ}åÁã•[|æc^•Á}[}•~•&^]cãà|^Ác[Á&^~c¦ãæ¢[}^Áæ}åÁ[c@^¦Á æ}cã { ã&¦[àãæ|Áæ*^}c•Á&[{ { [}|^Á~•^åÁc[Ác¦^æcÁԌӌ



Ceftaroline has consistently retained potency since its US clinical introduction.



The results of this investigation also indicate that antimicrobial susceptibility of Áã {] ¦ [ç^åÁã } Ác@^ÁG€FF . G€F Í Á]^¦ã[åÁæ}åÁc@^}Á¦^{ æã}^åÁ∙cæà|^Áã}Ác@^ÁG€FÍ.G€G€Á]^¦ã[åÁã}Á WÙÁ { ^åã&æ|Á&^}c^¦•Á]æ¦cã&ã]æcã} *Áã}Ác@^ÁŒYŒÜÒÁ]¦[*¦æ { È



Increases in susceptibility rates could be related to the æ}cãË]}^~ { [&[&&@|Áçæ&&ã}^ÁÚXÔËFHÁã}c¦[å~&^åÁã}ÁG€F€ÈÁ



Continued surveillance is crucial since resistance clones

Contact Information

P^|ā[ÁÙĖÁÙæå^łĖÁTÖĖÁÚ@ÖĖÁØQÖÙŒ RTŴŠæà[¦æc[¦å^∙ HI Í ÁÓ^æç^¦ÁЦ^^\ÁÔ^}c¦^ÈÀÙ ˘ăc^ÁŒ Þ [¦c@ÁŠià^¦c^ÊÁŒÁ Í GHF Ï Ú@[}^KÁÇHFJDÁÎÎÍÍËHHÏ€

Øæ¢KÁÇHFJDÁÎÎÍÉHHÏF Ò { æå|KÁ@^|å[Ë∙æå^¦ Ob { å|æà∙Ė&[{

`Ù&æ}ÁÛÜÁ&[å^Á[¦Á`cāļā:^Ác@^Á~[||[, ā}*; |ā} \Ác[Áå[, }|[æåÁæ}Á^|^&c¦[}ā&Áç^!•ā[} [~Ác@ā•Á]¦^•^}cæcā[}Áæ}åÁ[c@^¦ÁŒààXā^ ÔPÒÙVÁG€GFÁ∙&ã^}cã~ã&Á]¦^∙^}cæcã[}•ŀ @cc]•KDDæààçå^FÉ[če^•c^{•^}c^!]¦å•^ È&[{ ĐÕTŒÒç^}cÚ`à|å&æcå[}•ĐŒ••^c• Ėæ•]¢ÑÔ[}~^¦^}&^QåMGÎF

UUA&[å^A^¢]䦿ci[}KAU&c[à^¦AFIEAG€GG To submit a medical question, please visit www.abbviemedinfo.com

INTRODUCTION

- in the US is constantly changing, requiring continuous monitoring of • The epidemiology of the antimicrobial resistance profile of this organism.
- $A\tilde{a} = [|ac^{A}|^{c}, ac^{A}|^{c}, ac^{A} = [|ac^{A}|^{c}, ac^{A}|^{c}, ac^{A}|^{c}, ac^{A}|^{c}]$ • The superior activity of ceftaroline against has been attributed to ceftaroline's higher affinity for altered penicillin binding protein targets, including
- Ô^~cæ¦[|ã}^Á~[•æ{ã|Áã•Áæ]]¦[ç^åÁà^Ác@^ÁWÙÁØÖŒÁæ}åÁc@^ÁÒ`¦[]^æ}ÁT^åã&ã}^•ÁŒ*^}&^ÁÇÒ⊤ŒDÁ~[¦Ác¦^æcã}*Á $\left\{ \left\{ \left\{ \right\} \tilde{a}c^{\ddot{b}} \tilde{a}c^{\ddot{b}} \tilde{a}d^{\dot{b}} \tilde{a$ ÇŒÓÙÙÙQDÁã}Áæå˘|c●Áæ}åÁ&@ã|å¦^}ÁGÁ{[}c@●Á[~Áæ*^Áæ}åÁ[|å^¦ÊÁã}&|˘åã}*ÁŒÓÙÙÙQÁ&æ˘●^åÁà^Á⊤ÜÙŒÈ
- V@^ÁŒ●●^●●ã} *Á Y [¦|å ¸ãå^ÁŒ} cã {ã&¦[àãæ|ÁÜ^●ã●cæ}&^ÁÒçæ|˘æcã[}ÁÇŒ Y ŒÜÒDÁÚ¦[*¦æ {Á@æ●Á {[}ãc[¦^åÁ &^~cæ¦[|ã}^Áæ&cãçãc^Áæ*æã}●cÁàæ&c^¦ãæ|Á[¦*æ}ã● { ●Áã}ÁWÙÁ { ^åã&æ|Á&^}c^¦●Á●ã}&^ÁG€€ÌÈ
- The aim of this investigation is to describe the activity of ceftaroline and comparator agents against ā}&|`åā}*Á{`|cāå¦`*˦^•ã•cæ}cÁÇTÖÜDÁæ}åÁ^¢c^}•ãç^|^Áå¦`*˦^•ã•cæ}cÁÇÝÖÜDÁã•[|æc^•ÊÁ
- &[||^&c^åÁ~¦[{ ÁWÙÁ { ^åã&æ|Á&^}c^¦●Á]æ¦cã&ã]æcã} *Áã}Ác@^ÁŒYŒÜÒÁÚ¦[*¦æ { Á~¦[{ ÁG€FFÁc@¦[` *@ÁG€G€È

MATERIALS AND METHODS

Bacterial isolates

- ÏÊJ€FÁ Áã•[|æc^•Á, ^¦^Á&[||^&c^åÁ~¦[{ Á] æcã^}c•Áã}ÁGÌÁ { ^åã&æ|Á&^}c^¦•Ác@æcÁ]æ¦cã&ã]æc^åÁã}Ác@^Á $\mathbb{E} \times \mathbb{E} = \mathbb{E} \left\{ A^{*} = A^{*} + A^{*}$ ÇÌÁ&^}c^¦●DÈ
- $U \} | ^{Ai} = [|ac^{Ai} Ai^{Ai} + Ai^{Ai} + Ai^{Ai} Ai^{Ai} + Ai^{Ai$] æcã^ } cÁã } ~^&cã [} Á^] ã• [å^DÈ
- V@^Áã•[|æc^•Á,^¦^Á~¦[{ Á¦^•]ã¦æc[¦^Ác¦æ&cÁã}~^&cã[} •ÁÇÌÌÈÍÃDÊÁà|[[å•c¦^æ { Áã}~^&cã[} •ÁÇÌÈIÃDÊÁæ}åÁ[c@^¦Á \tilde{a} ~^&ca [} Ác^] ^•ÁÇHÈF \tilde{A} DÈ
- Q•[|æc^•Á, ^!^Á•`à { ãcc^åÁc[Ác@^Á&^}c!æ|Á { [}ãc[!ã}*Á|æà[!æc[!^ÁÇR⊤QÁŠæà[!æc[!ã^•ÊÁÞ[!c@ÁŠãà^!c^ÊÁQ[, æÊÁ ₩ÙŒDÁ~[¦Áãå^}cã~ã&æcã[}ÊÁ●`●&^]cãàã|ãc^Ác^●cã}*ÊÁæ}åÁ { [|^&`|æ¦Á&@æ¦æ&c^¦ã:æcã[}ÊÁæ●Á}^^å^åÈ

Antimicrobial susceptibility testing

- Ó¦[c@Á { ã&¦[åã]čã[}Ác^•c•Á ^!^Á&[}å ~&c^åÁæcÁc@^Á&^}c¦æ|Á¦^~^!^}&^Á|æà[¦æc[¦^Áæ&&[¦åã}*Ác[ÁÔŠÙQÁ { ^c@[å•Ác[Á determine the susceptibility to ceftaroline and comparator antimicrobial agents.
- Xæ|ãåæc^åÅ⊤QÔÅ]æ}^|●Ÿ^¦^Á{æ}`~æ&c`¦^åÁæcÁR⊤QÁŠæà[¦æc[¦ã^●ÁÇG€FÍ.G€G€DÁ[¦Áà^ÁV@^¦{[Øã●@^¦Á Ù&ã^ } cã~ã&ÁÇG€FF . G€F I DÁÇÔ|^ç^|æ } åÊÁU@ã [ÊÁWÙŒDÈ
- Áã•[|æc^•Á 、^¦^Ác^•c^åÁã}Á&æcã[}Ëæåb˘•c^åÁT˘^||^¦ËPã}c[}Áà¦[c@Á•˘]]|^{ { ^}c^åÁ 、ãc@Á ĠĖĹĹĹÃÁ|^•^åÁ@[¦•^Áà|[[åÁæ&&[¦åã}*Ác[ÁÔŠÙQÁ⊤€ÏÁÇG€FÌDÈ
- V@^Á $\tilde{}$ ælác^Á&[}c:[lÁÇÛÔDÁ•c:æã}Á ÁŒVÔÔÁIJÎFJÁ , æ•Ác^•c^åÁ&[}&~;!\^}c|^Á , ãc@Á&|ã}ã&æ|Á $\tilde{a} \bullet [|æc^{\bullet}Aæ \} åAæ||A|^{\bullet} |c^{\bullet}A]^{A} \tilde{a} c@\tilde{a} AÔŠÙQAÛÔA|a { ac^è$
- ____V@^Á&^~cæ¦[|ã}^Á•`•&^]cãàã|ãc^Áà¦^æ\][ã}cÁæ]]|ã^åÁã}Ác@ã•Á•c`å^Á¸æ•Ám€ÈÍÁ{*ЊÁæ•Á]`à|ã•@^åÁà^ÁÔŠÙQÊÁ WÙØÖŒÊÁæ}åÁÒWÔŒÙVÈ
- TÖÜÁ•cæc˘•Á¸æ•Áå^c^¦{ã}^åÁàæ•^åÁ[}Á}[}•˘•&^]cãàã|ãc^Ác[Á⁻HÁ&|æ••^•Á[~Ác@^Á~[||[¸ã}*Áæ}cã{ã&¦[àãæ|Áæ*^}c•KÁ]^}ã&ã||ã}ÁÇ⊤QÔÊÁ⁻IÁ { *ЊDÊÁ&^~c¦ãæ¢[}^ÁḈŢQÔÊÁ⁻GÁ { *ĐŠDÊÁ^¦^c@¦[{ ^&ã}ÁÇ⊤QÔÊÁ⁻€ÈÍÁ { *ĐŠDÊÁ&|ã} åæ { ^&ã}ÁÇ⊤QÔÉÁ [−]€ĖĺÁ{ *ĐŠDÊÁ|^ç[~|[¢æ&ã}ÁÇ⊤QÔÊÁ[−]IÁ{ *ĐŠDÊÁc^c¦æ&^&|ã}^ÁÇ⊤QÔÊÁ[−]GÅ{ *ĐŠĎÊÁæ}åÁc¦ã{ ^c@[]¦ã{ Ё•˘|~æ { ^c@[¢æ:[|^Á $CVTÚËÙTÝLÁTQÔÊÁ^FÁ { *ĐŠDĚ}$
- ÝÖÜÁ•cæcč•Á æ•Áå^c^¦ { ã } ^åÁàæ•^åÁ [} Á } [} č•&^] cãàã|ãc^Ác [Á⁻ Í Áæ } cã { ã&! [àãæ|Á&|æ••^•È
- Further susceptibility analyses were performed for isolates that tested as nonsusceptible to &^~c¦ãæ¢[}^ÊÁ]^}ã&ã||ã}ÊÁæ{[¢ã&ã||ã}Ë&|æçĭ|æ}æc^ÊÁ^¦^c@¦[{^&ã}ÊÁ&|ã}åæ{^&ã}ÊÁc^c¦æ&^&|ã}^ÊÁæ}åÐ[¦Á|^ç[~|[¢æ&ã}È

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